



Project 32 Percy Street, London W1T 2DE
Project no. 0341
Subject Ground Movement Assessment (GMA)

Status	Date	Ref	Issued by	Checked by	Approved by
Ground Movement Assessment (GMA) – supporting design note	09/12/16	0341-TN-01-00	Silvia Autuori	Alex Nikolic	Tony Suckling
Revision 01	15/12/16	0341-TN-01-01	Silvia Autuori	Alex Nikolic	Tony Suckling
Revision 02 – includes SSI review and revised assessment	26/02/17	0341-TN-01-02	Silvia Autuori	Alex Nikolic	Tony Suckling

1. Introduction

A ground movement and impact assessment has been carried out in order to estimate the potential damage induced by the proposed redevelopment of 32 Percy Street on selected surrounding properties.

Above ground, the scheme comprises the redevelopment/refurbishment of the existing terraced property and partial demolition and redevelopment of the extension to the rear of the property. Below ground, the scheme includes a new basement at the rear of the property comprising both the deepening of existing basement elements and construction of new below ground space in areas where no existing basement is present.

The assessment includes properties located within the zone of influence of the proposed scheme. As part of the ground movement assessment (GMA), *greenfield* ground movements have been considered.

The assessment and findings presented herein have been prepared in support of the existing Basement Impact Assessment (BIA) prepared by others. It is intended for this GMA to be read in conjunction with the relevant submissions and documentation, including but not limited to the *Desk Study, Ground Investigation and Basement Impact Assessment* prepared by Jomas Associates Ltd (V1.1, dated 1st July 2016, document job number P9273J732) and *Description of Existing Structure & Method Statement for carrying out Internal Alterations and Extensions* (dated August 2016).

2. Impact assessment evaluation

The assessment has been undertaken using proprietary spreadsheets and the commercially available software Plaxis 2d, Oasys Pdisp and Xdisp, which consider the three dimensional ground movement field induced by the proposed works.

Ground movements will arise as a result of various mechanisms which are mobilised as part of the implementation of the proposed scheme. In the first instance, the works will involve the partial demolition of the existing rear extension alongside selected below ground elements. The demolition phase will be followed by basement excavation operations and the construction of the proposed substructure and application of the permanent works building loadings. The basement excavation process will induce ground movements arising from the overburden removal. The permanent condition loading will partially reinstate a portion of the removed overburden, yielding settlements across the foundation system.

These ground movements will extend over a given zone of influence surrounding the building footprint. The assessment presented herein adopts the normalised ground displacement curves reported in CIRIA C580 and general principles of elasticity. This procedure comprises the current industry standard/best practice for this type of analytical assessment. The adequacy of the adopted CIRIA C580 ground movement profiles for the specific construction sequence proposed has been validated by undertaking a plane strain soil-structure interaction analysis.

An idealised ground model has been evaluated based on the site specific investigation information reported in the site investigation report prepared by Jomas Associates Ltd (as referenced previously in section 1).

Table 1 summarises the representative base condition ground model adopted for ground movement assessment purposes.

Table 1 - Ground model summary and key geotechnical parameters adopted for analysis purposes (base condition)

Stratum	Top of stratum (m bgl)	Angle of shearing resistance, ϕ' (deg)	Cohesion, c' (kPa)	Assumed undrained strength, S_u (kPa)	Undrained Young's Modulus, E_u (MPa)	Drained Young's Modulus, E' (MPa)
Made Ground	0.00	30	0	-	-	10
Soft to very stiff gravelly sandy silty CLAY	-4.20	25	0	75	30	24
Medium dense very sandy silty GRAVEL	-6.25	35	0	-	-	24
Silty gravelly sandy CLAY	-8.35	25	0	75	30	24
Stiff slightly gravelly sandy CLAY	-9.00	25	0	$50 + 6 z^{[1]}$	$20 + 2.4 z^{[1]}$	$16 + 1.9 z^{[1]}$
Thanet Sand	-39.60	35	0	-	-	300

- Notes:
1. z is the depth in metres below top of stratum concerned.
 2. Rigid boundary assumed at -45.40 m AOD for analytical purposes.
 3. Refer to ground investigation report prepared by Jomas for further supporting information.
 4. The stiffness data (E_u and E') has been evaluated empirically taking into consideration the nature of the geotechnical/soil-structure interaction mechanisms and level of anticipated strain within the soil mass.

2.1 – Pdisp/Xdisp analyses

A series of three dimensional models of the proposed scheme have been developed in Pdisp and Xdisp and have been combined by means of superposition, in order to represent the various ground displacement fields related to the key stages of the proposed works. An indicative plot of the analytical model is presented below in Figure 1.

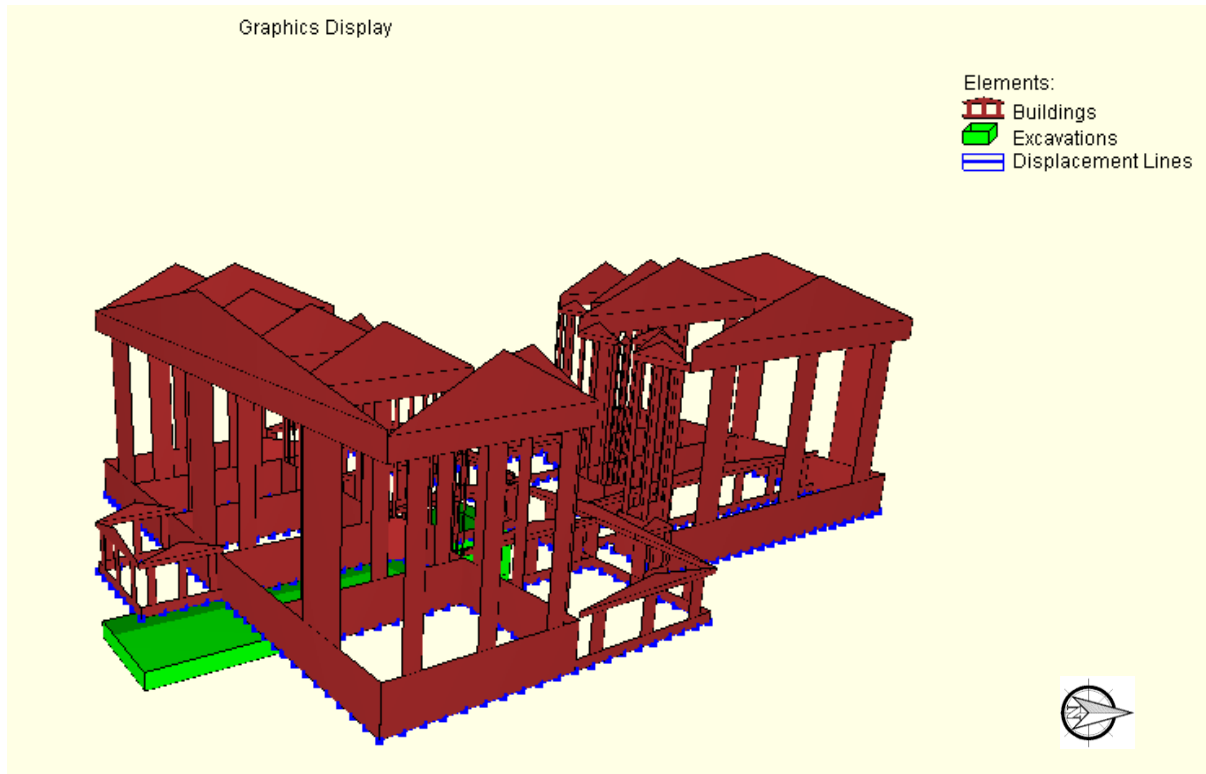


Figure 1 - Indicative plot of the three-dimensional analytical model using the Oasys software suite (soil removed for clarity of presentation).

The following primary construction stages have been discretised and included in the assessment:

- **Partial demolition of the existing single storey rear extension**

The demolition of the existing rear extension has been modelled in Pdisp adopting an average representative uniformly distributed load (UDL) of 10kPa, whilst the demolition of the brick vault area has been modelled considering an enhanced average representative UDL of 20kPa. The effects of the evaluated displacement field on the existing structure and nearby buildings have been considered with the aid of Xdisp.

- **Basement excavation condition**

The excavation has been considered from the presumed existing ground floor elevation of approximately -3.13mAOD for the main building and from -0.60mAOD for the existing rear extension down to the formation level (adopting a level of -4.20mAOD). The proposed basement excavation is simulated by means of two alternative methods (in order to capture and bind the differing mechanisms, which may arise from the proposed underpinning and excavation operations):

1. Adopting empirical analytical methods within Xdisp, thus capturing horizontal and vertical ground movement fields (method 1). The assessment adopts an empirical database of ground movement information, which is readily adopted for impact assessment purposes of this type. The excavation analysis adopts the normalised ground movement data curves presented in CIRIA C580 for *excavation in front of a high stiffness wall in stiff clay* (CIRIA C580, Figure 2.11 a/b). The stiffening effect provided by the building structures and any other built elements was neglected. It is acknowledged that this methodology does not reflect the precise means and methods proposed, however it is considered this provides a robust means of examining representative mechanisms alongside alternative analytical approaches undertaken. A plane strain finite element analysis has been undertaken for the purpose of indicative validation of the adopted horizontal ground movement profile. Details of this analysis are presented in the following section.
2. Adopting an unloading/overburden removal elastic assessment using Pdisp, thus capturing the potential impact of heave movements (method 2). This alternative assessment conservatively assumes the installation means and methods do not result in lateral deflections (enabling the evaluation of peak resultant heave deflections). The excavation is modelled as an overburden removal representative UDL. The façade deflection data is imported into Pdisp in order to perform the impact/damage assessment.

- **Long term condition**

The proposed building loadings are applied upon completion of the development (as presented in Figure 2). This phase of the assessment is undertaken using Pdisp and taking into consideration the previously reported scenario covering both the demolition and excavation phases of the project. The loading applied for ground movement and impact assessment purposes comprises an average representative UDL of 10kPa. This phase of the assessment assumes long-term (drained) conditions.

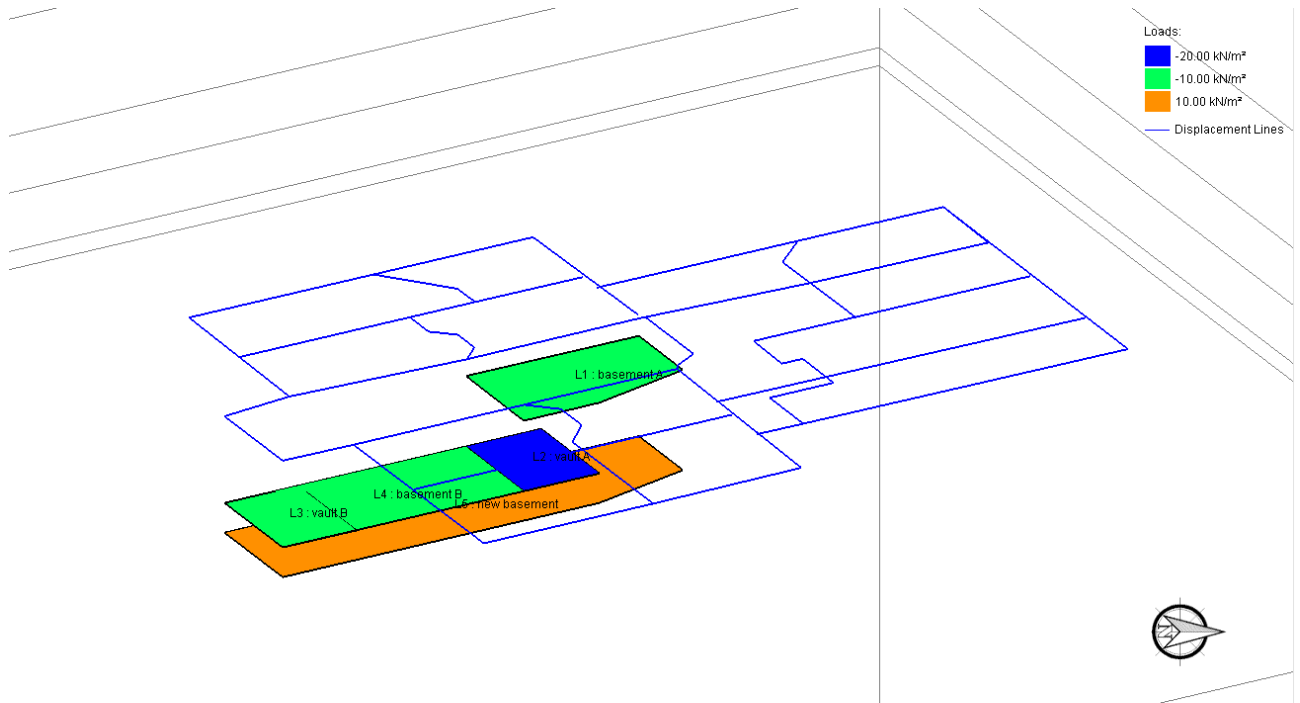


Figure 2 - Long term phase loading scheme (3D perspective view; green shading represents existing slab unloading based on average UDL; blue shading represents existing vaults unloading based on average UDL; orange shading represents proposed loading due to new basement based on average UDL; blue *displacement lines* correspond to façade lines of interest captured within the analysis).

The potential impact/damage induced on primary façade/wall elements of the buildings within the zone of influence of the proposed scheme has been evaluated on the basis of the calculated ground movement field. The masonry walls of concern are shown in Figure 3, including the wall nomenclature/reference system adopted. The arrangement is based on the currently available survey information and presents a reasonable array of primary structures both perpendicular and parallel to the proposed basement (covering the key deformation mechanisms).

Each wall has been assumed to behave as an equivalent beam subject to a bending and extension/compression deformation mechanism, based on the evaluated *greenfield* ground movement, as outlined previously.

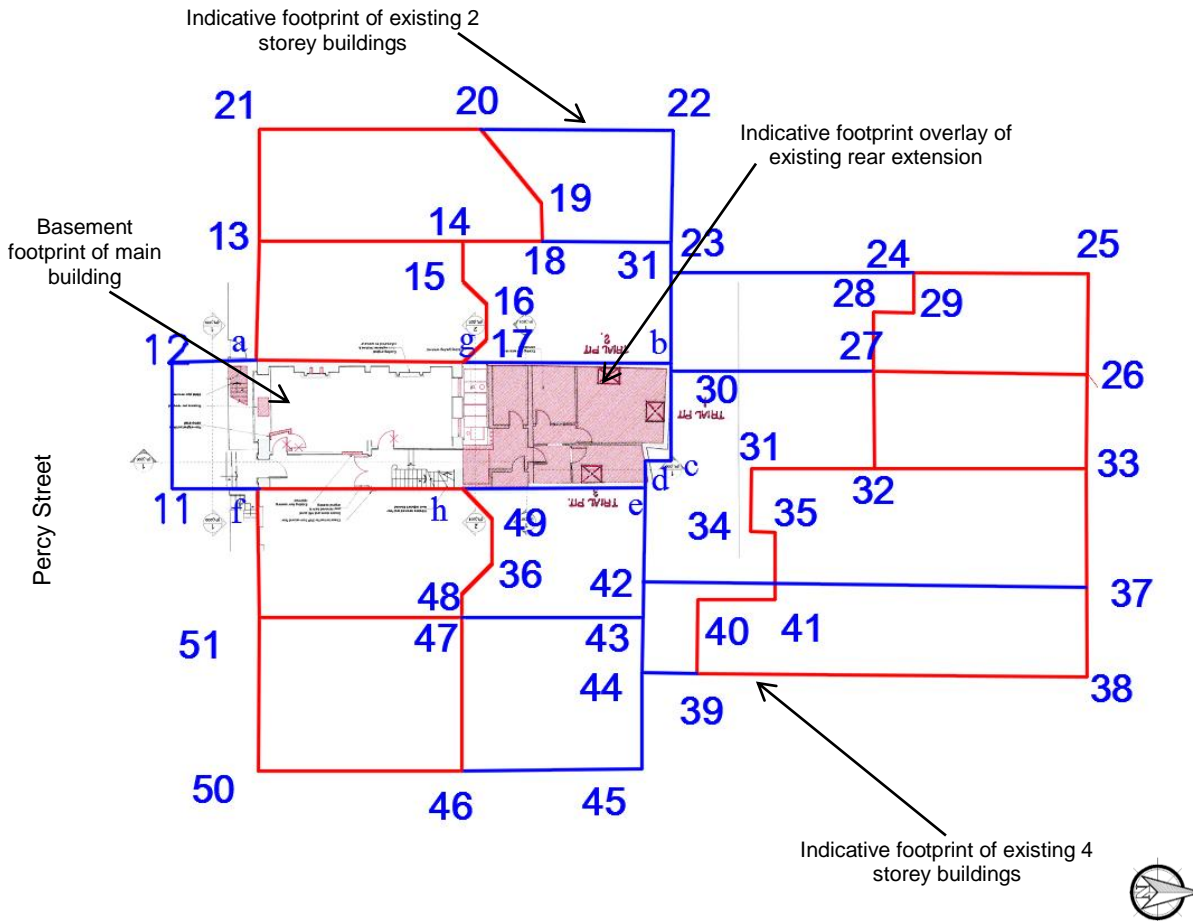


Figure 3 – Simplified scheme and nomenclature for building façade/masonry wall elements (node/intersect reference numbers denoted)

Tensile strains induced within the building masonry walls have been evaluated based on the deflection ratios Δ/L estimated from the analyses. The assessment considers the well-established Burland (1997) damage classification method, as presented and summarised in Figures 4 and 5. This method involves a simple but robust means of assessment, which widely adopted and is considered to comprise an industry standard/best practice basis for impact assessments of this typology.

Potential damage categories are directly related to the tensile strains induced by the assessed interim (short-term) and long-term phases of construction, arising from a combination of direct tension and bending induced tension mechanisms, as reported in Table 3.

Building damage classification, after Burland et al 1977 and Boscardin and Cording 1989				
Category of damage		Description of typical damage (ease of repair is underlined)	Approximate crack width (mm)	Limiting tensile strain %
0	Negligible	Hairline cracks of less than about 0.1mm are classes as negligible.	< 0.1	0.0-0.05
1	Very Slight	<u>Fine cracks that can easily be treated during normal decoration.</u> Perhaps isolated slight fracture in building. Cracks in external brickwork visible on inspection.	< 1	0.05-0.075
2	Slight	<u>Cracks easily filled. Redecoration probably required.</u> Several slight fractures showing inside of building. Cracks are visible externally and <u>some repointing may be required externally</u> to ensure weathertightness. Doors and windows may stick slightly.	< 5	0.075-0.15
3	Moderate	<u>The cracks require some opening up and can be patched by a mason. Recurrent cracks can be masked by suitable linings. Repointing of external brickwork and possibly a small amount of brickwork to be replaced.</u> Doors and windows sticking. Service pipes may fracture. Weather-tightness often impaired.	5-15 or a number of cracks >3	0.15-0.3
4	Severe	<u>Extensive repair work involving breaking-out and replacing sections of walls, especially over doors and windows.</u> Windows and frames distorted, floors sloping noticeably. Walls leaning or bulging noticeably, some loss of bearing in beams. Service pipes disrupted.	15-25 but also depends on number of cracks	>0.3
5	Very Severe	<u>This requires a major repair involving partial or complete rebuilding.</u> Beams lose bearings, walls lean badly and require shoring. Windows broken with distortion. Danger of instability.	Usually >25 but depends on number of cracks	

Figure 4 – Damage categorisation - relationship between category of damage and limiting strain ϵ_{lim}

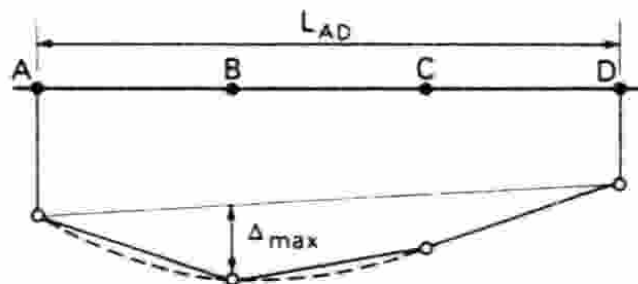


Figure 5 – Definition of relative deflection Δ and deflection ratio Δ/L

2.2 – Plaxis 2d validation analysis

A finite element (FE) soil-structure interaction analysis has been carried out considering a representative cross-section through the northern part of the site area, in which it is proposed to excavate from approximately 0.6m to 4.2m below ground level, for the construction of the proposed basement. The aim of the analysis is to evaluate likely ground movements induced by the proposed excavation means and methods in the area surrounding the site, and in turn indicatively confirm the adequacy of the CIRIA C580 horizontal ground movement profile adopted in the method 1 type of assessment presented in the previous section.

Half of the cross-section has been modelled, in view of the broadly symmetric geometry. A view of the Plaxis 2d model is presented in Figure 6. All strata have been modelled as linear elastic perfectly plastic (Mohr-Coulomb failure criterion) materials, using the strength and stiffness properties summarised in Table 1.

The analysis simulates the proposed excavation works. The mass concrete underpinning is wished-into-place, assuming that means and methods implemented will prevent/minimise ground movements during the underpin construction. A level of temporary props has been modelled at approximately 1m below ground level, with an assumed equivalent axial stiffness of 50,000kN/m/m.

Horizontal ground movements arising as a result of the excavation works are presented in Figure 7. Displacements increasing with depth, up to approximately 4mm, are predicted. The maximum horizontal displacement at ground level, according to the CIRIA C580 diagram adopted, is 0.15% of the excavation depth, resulting in approximately 5mm. The use of the CIRIA C580 profile is deemed appropriate (and conservative), considering that all façades have been modelled at ground level as part of the Pdisp/Xdisp analyses. The vertical movement mechanisms are captured by the two alternative analyses described in section 2.1.

2.3 – Ground model sensitivity assessment

The material immediately underlying the Made Ground is described as *soft to very stiff gravelly sandy silty clay*, with an undrained shear strength ranging from 27 to 153kPa. Whilst this description is particularly unusual (and potentially spurious), this facet has been considered by means of a parametric assessment. An alternative set of analyses has been undertaken, modelling the upper 1m of this stratum (between 4.2 and 5.2m below ground level) with a reduced Young's Modulus (E') of 8.6MPa (corresponding to $E_u=10.8\text{MPa}$). The findings of the sensitivity study, in terms of impact on the existing façades, are presented in Table 3.

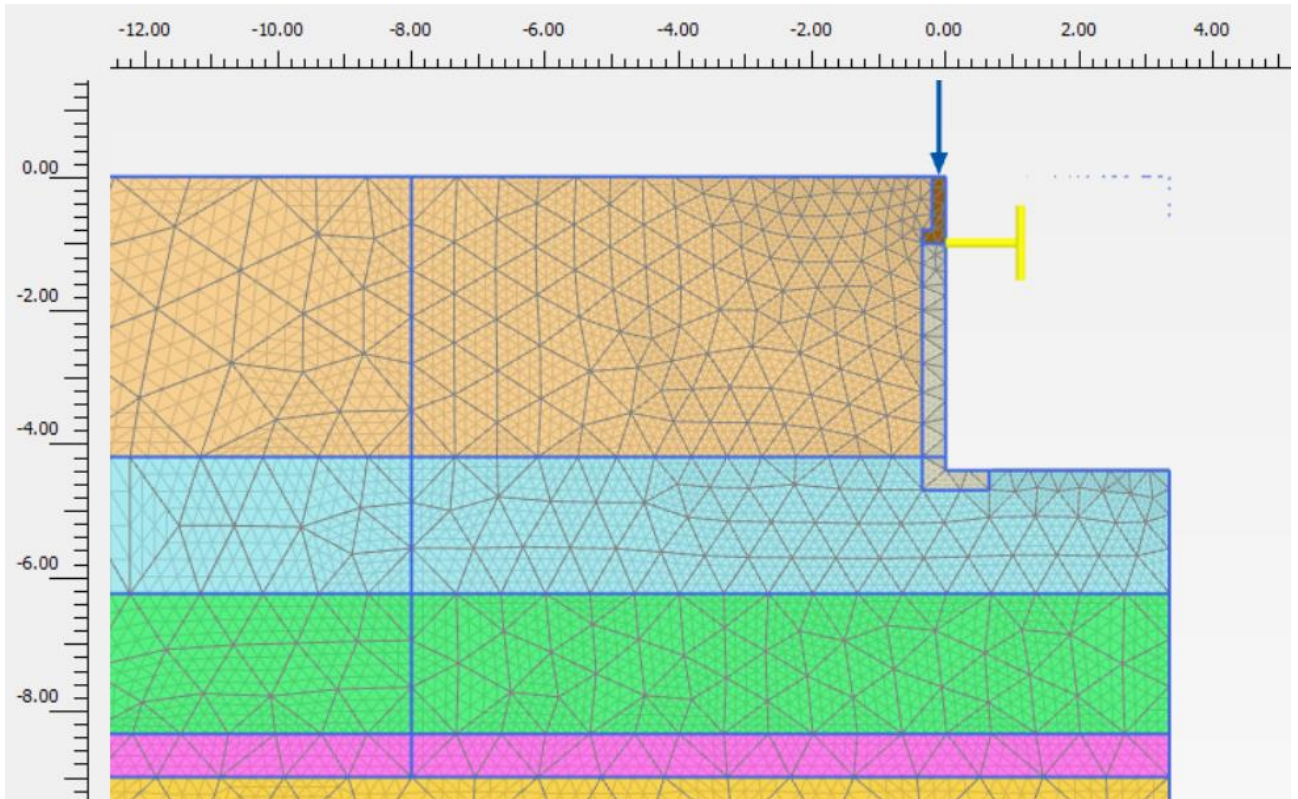


Figure 6 – Indicative view of the Plaxis 2d model

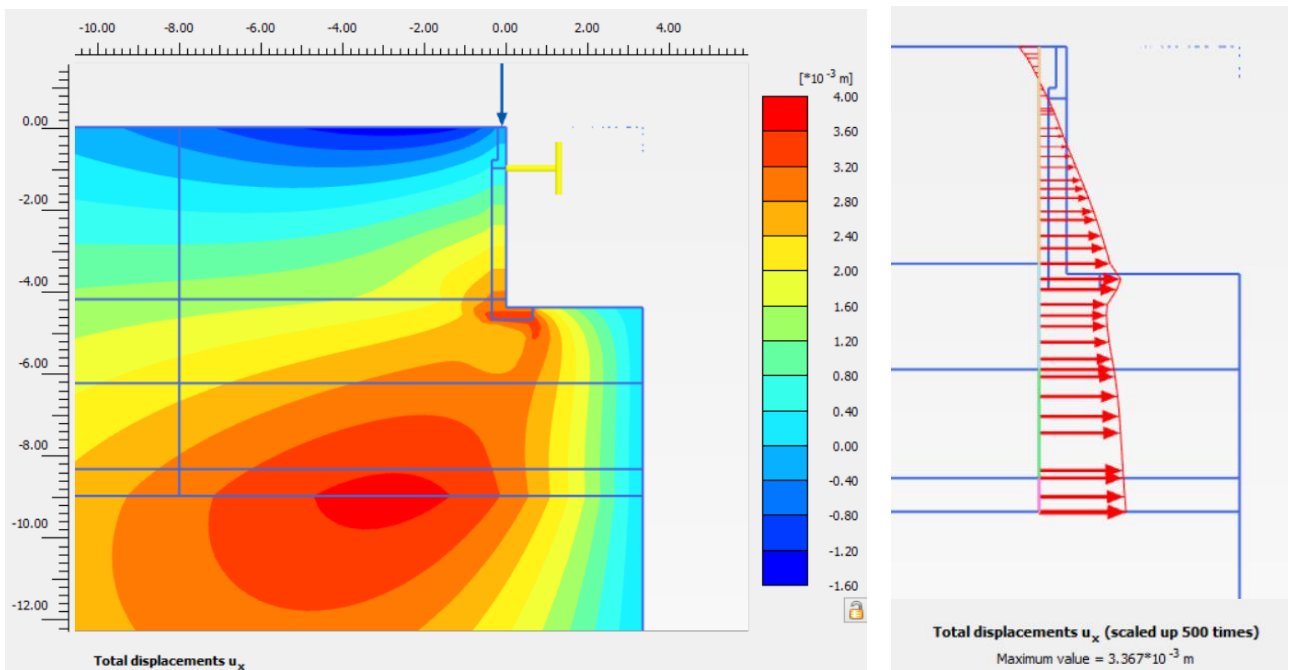


Figure 7 – Horizontal ground movements predicted in Plaxis 2d

Table 3 – Evaluated damage categories for demolition, excavation and long term condition stages (refer to Figure 3 for wall nomenclature)

Method 1

Wall reference	Damage category envelope		
	Demolition	Excavation	Long term
21-20	0 (Negligible)	0 (Negligible)	0 (Negligible)
19-20	0 (Negligible)	0 (Negligible)	0 (Negligible)
19-18	0 (Negligible)	0 (Negligible)	0 (Negligible)
18-13	0 (Negligible)	0 (Negligible)	0 (Negligible)
21-a	0 (Negligible)	0 (Negligible)	0 (Negligible)
f-50	0 (Negligible)	1 (Very Slight)	1 (Very Slight)
14-15	0 (Negligible)	0 (Negligible)	0 (Negligible)
15-16	0 (Negligible)	0 (Negligible)	0 (Negligible)
16-17	0 (Negligible)	0 (Negligible)	0 (Negligible)
17-g	0 (Negligible)	0 (Negligible)	0 (Negligible)
h-49	0 (Negligible)	0 (Negligible)	0 (Negligible)
49-36	0 (Negligible)	0 (Negligible)	0 (Negligible)
36-48	0 (Negligible)	0 (Negligible)	0 (Negligible)
48-47	0 (Negligible)	0 (Negligible)	0 (Negligible)
47-51	0 (Negligible)	0 (Negligible)	0 (Negligible)
50-46	0 (Negligible)	0 (Negligible)	0 (Negligible)
46-47	0 (Negligible)	0 (Negligible)	0 (Negligible)
24-25	0 (Negligible)	0 (Negligible)	0 (Negligible)
25-26	0 (Negligible)	0 (Negligible)	0 (Negligible)
26-27	0 (Negligible)	0 (Negligible)	0 (Negligible)
27-28	0 (Negligible)	0 (Negligible)	0 (Negligible)
28-29	0 (Negligible)	0 (Negligible)	0 (Negligible)
27-32	0 (Negligible)	0 (Negligible)	0 (Negligible)
33-31	0 (Negligible)	0 (Negligible)	0 (Negligible)
31-34	0 (Negligible)	0 (Negligible)	0 (Negligible)
34-35	0 (Negligible)	0 (Negligible)	0 (Negligible)
35-41	0 (Negligible)	0 (Negligible)	0 (Negligible)
41-40	0 (Negligible)	0 (Negligible)	0 (Negligible)
40-39	0 (Negligible)	0 (Negligible)	0 (Negligible)
39-38	0 (Negligible)	0 (Negligible)	0 (Negligible)
38-25	0 (Negligible)	0 (Negligible)	0 (Negligible)
20-22	0 (Negligible)	0 (Negligible)	0 (Negligible)
22-b	0 (Negligible)	1 (Very Slight)	1 (Very Slight)
e-45	0 (Negligible)	1 (Very Slight)	1 (Very Slight)
18-31	0 (Negligible)	0 (Negligible)	0 (Negligible)
23-24	0 (Negligible)	0 (Negligible)	0 (Negligible)
b-27	0 (Negligible)	0 (Negligible)	0 (Negligible)
42-37	0 (Negligible)	0 (Negligible)	0 (Negligible)
47-43	0 (Negligible)	0 (Negligible)	0 (Negligible)
44-39	0 (Negligible)	0 (Negligible)	0 (Negligible)

Wall reference	Damage category envelope		
	Demolition	Excavation	Long term
46-45	0 (Negligible)	0 (Negligible)	0 (Negligible)
a-12	0 (Negligible)	0 (Negligible)	0 (Negligible)
12-11	0 (Negligible)	0 (Negligible)	0 (Negligible)
11-f	0 (Negligible)	0 (Negligible)	0 (Negligible)
Ag	0 (Negligible)	0 (Negligible)	0 (Negligible)
Gb	0 (Negligible)	0 (Negligible)	0 (Negligible)
Bc	0 (Negligible)	0 (Negligible)	0 (Negligible)
Cd	0 (Negligible)	0 (Negligible)	0 (Negligible)
Eh	0 (Negligible)	0 (Negligible)	0 (Negligible)
Hf	0 (Negligible)	0 (Negligible)	0 (Negligible)
De	0 (Negligible)	0 (Negligible)	0 (Negligible)

Method 2

Wall reference	Damage category envelope		
	Demolition	Excavation	Long term
21-20	0 (Negligible)	0 (Negligible)	0 (Negligible)
19-20	0 (Negligible)	0 (Negligible)	0 (Negligible)
19-18	0 (Negligible)	0 (Negligible)	0 (Negligible)
18-13	0 (Negligible)	0 (Negligible)	0 (Negligible)
21-a	0 (Negligible)	0 (Negligible)	0 (Negligible)
f-50	0 (Negligible)	0 (Negligible)	0 (Negligible)
14-15	0 (Negligible)	0 (Negligible)	0 (Negligible)
15-16	0 (Negligible)	0 (Negligible)	0 (Negligible)
16-17	0 (Negligible)	0 (Negligible)	0 (Negligible)
17-g	0 (Negligible)	0 (Negligible)	0 (Negligible)
h-49	0 (Negligible)	0 (Negligible)	0 (Negligible)
49-36	0 (Negligible)	0 (Negligible)	0 (Negligible)
36-48	0 (Negligible)	0 (Negligible)	0 (Negligible)
48-47	0 (Negligible)	0 (Negligible)	0 (Negligible)
47-51	0 (Negligible)	0 (Negligible)	0 (Negligible)
50-46	0 (Negligible)	0 (Negligible)	0 (Negligible)
46-47	0 (Negligible)	0 (Negligible)	0 (Negligible)
24-25	0 (Negligible)	0 (Negligible)	0 (Negligible)
25-26	0 (Negligible)	0 (Negligible)	0 (Negligible)
26-27	0 (Negligible)	0 (Negligible)	0 (Negligible)
27-28	0 (Negligible)	0 (Negligible)	0 (Negligible)
28-29	0 (Negligible)	0 (Negligible)	0 (Negligible)
27-32	0 (Negligible)	0 (Negligible)	0 (Negligible)
33-31	0 (Negligible)	0 (Negligible)	0 (Negligible)
31-34	0 (Negligible)	0 (Negligible)	0 (Negligible)
34-35	0 (Negligible)	0 (Negligible)	0 (Negligible)
35-41	0 (Negligible)	0 (Negligible)	0 (Negligible)
41-40	0 (Negligible)	0 (Negligible)	0 (Negligible)
40-39	0 (Negligible)	0 (Negligible)	0 (Negligible)

Wall reference	Damage category envelope		
	Demolition	Excavation	Long term
39-38	0 (Negligible)	0 (Negligible)	0 (Negligible)
38-25	0 (Negligible)	0 (Negligible)	0 (Negligible)
20-22	0 (Negligible)	0 (Negligible)	0 (Negligible)
22-b	0 (Negligible)	0 (Negligible)	0 (Negligible)
e-45	0 (Negligible)	0 (Negligible)	0 (Negligible)
18-31	0 (Negligible)	0 (Negligible)	0 (Negligible)
23-24	0 (Negligible)	0 (Negligible)	0 (Negligible)
b-27	0 (Negligible)	0 (Negligible)	0 (Negligible)
42-37	0 (Negligible)	0 (Negligible)	0 (Negligible)
47-43	0 (Negligible)	0 (Negligible)	0 (Negligible)
44-39	0 (Negligible)	0 (Negligible)	0 (Negligible)
46-45	0 (Negligible)	0 (Negligible)	0 (Negligible)
a-12	0 (Negligible)	0 (Negligible)	0 (Negligible)
12-11	0 (Negligible)	0 (Negligible)	1 (Very Slight)
11-f	0 (Negligible)	0 (Negligible)	0 (Negligible)
ag	0 (Negligible)	0 (Negligible)	0 (Negligible)
gb	0 (Negligible)	0 (Negligible)	1 (Very Slight)
bc	0 (Negligible)	0 (Negligible)	0 (Negligible)
cd	0 (Negligible)	0 (Negligible)	0 (Negligible)
eh	0 (Negligible)	0 (Negligible)	0 (Negligible)
hf	0 (Negligible)	0 (Negligible)	0 (Negligible)
de	0 (Negligible)	0 (Negligible)	0 (Negligible)

Method 1 – 1m ground model sensitivity assessment

Wall reference	Damage category envelope		
	Demolition	Excavation	Long term
21-20	0 (Negligible)	0 (Negligible)	0 (Negligible)
19-20	0 (Negligible)	0 (Negligible)	0 (Negligible)
19-18	0 (Negligible)	0 (Negligible)	0 (Negligible)
18-13	0 (Negligible)	0 (Negligible)	0 (Negligible)
21-a	0 (Negligible)	0 (Negligible)	0 (Negligible)
f-50	0 (Negligible)	1 (Very Slight)	1 (Very Slight)
14-15	0 (Negligible)	0 (Negligible)	0 (Negligible)
15-16	0 (Negligible)	0 (Negligible)	0 (Negligible)
16-17	0 (Negligible)	0 (Negligible)	0 (Negligible)
17-g	0 (Negligible)	0 (Negligible)	0 (Negligible)
h-49	0 (Negligible)	0 (Negligible)	0 (Negligible)
49-36	0 (Negligible)	0 (Negligible)	0 (Negligible)
36-48	0 (Negligible)	0 (Negligible)	0 (Negligible)
48-47	0 (Negligible)	0 (Negligible)	0 (Negligible)
47-51	0 (Negligible)	0 (Negligible)	0 (Negligible)
50-46	0 (Negligible)	0 (Negligible)	0 (Negligible)
46-47	0 (Negligible)	0 (Negligible)	0 (Negligible)
24-25	0 (Negligible)	0 (Negligible)	0 (Negligible)
25-26	0 (Negligible)	0 (Negligible)	0 (Negligible)

Wall reference	Damage category envelope		
	Demolition	Excavation	Long term
26-27	0 (Negligible)	0 (Negligible)	0 (Negligible)
27-28	0 (Negligible)	0 (Negligible)	0 (Negligible)
28-29	0 (Negligible)	0 (Negligible)	0 (Negligible)
27-32	0 (Negligible)	0 (Negligible)	0 (Negligible)
33-31	0 (Negligible)	0 (Negligible)	0 (Negligible)
31-34	0 (Negligible)	0 (Negligible)	0 (Negligible)
34-35	0 (Negligible)	0 (Negligible)	0 (Negligible)
35-41	0 (Negligible)	0 (Negligible)	0 (Negligible)
41-40	0 (Negligible)	0 (Negligible)	0 (Negligible)
40-39	0 (Negligible)	0 (Negligible)	0 (Negligible)
39-38	0 (Negligible)	0 (Negligible)	0 (Negligible)
38-25	0 (Negligible)	0 (Negligible)	0 (Negligible)
20-22	0 (Negligible)	0 (Negligible)	0 (Negligible)
22-b	0 (Negligible)	1 (Very Slight)	1 (Very Slight)
e-45	0 (Negligible)	1 (Very Slight)	1 (Very Slight)
18-31	0 (Negligible)	0 (Negligible)	0 (Negligible)
23-24	0 (Negligible)	0 (Negligible)	0 (Negligible)
b-27	0 (Negligible)	0 (Negligible)	0 (Negligible)
42-37	0 (Negligible)	0 (Negligible)	0 (Negligible)
47-43	0 (Negligible)	0 (Negligible)	0 (Negligible)
44-39	0 (Negligible)	0 (Negligible)	0 (Negligible)
46-45	0 (Negligible)	0 (Negligible)	0 (Negligible)
a-12	0 (Negligible)	0 (Negligible)	0 (Negligible)
12-11	0 (Negligible)	0 (Negligible)	0 (Negligible)
11-f	0 (Negligible)	0 (Negligible)	0 (Negligible)
ag	0 (Negligible)	0 (Negligible)	0 (Negligible)
gb	0 (Negligible)	0 (Negligible)	0 (Negligible)
bc	0 (Negligible)	0 (Negligible)	0 (Negligible)
cd	0 (Negligible)	0 (Negligible)	0 (Negligible)
eh	0 (Negligible)	0 (Negligible)	0 (Negligible)
hf	0 (Negligible)	0 (Negligible)	0 (Negligible)
de	0 (Negligible)	0 (Negligible)	0 (Negligible)

Method 2 – 1m ground model sensitivity assessment

Wall reference	Damage category envelope		
	Demolition	Excavation	Long term
21-20	0 (Negligible)	0 (Negligible)	0 (Negligible)
19-20	0 (Negligible)	0 (Negligible)	0 (Negligible)
19-18	0 (Negligible)	0 (Negligible)	0 (Negligible)
18-13	0 (Negligible)	0 (Negligible)	0 (Negligible)
21-a	0 (Negligible)	0 (Negligible)	0 (Negligible)
f-50	0 (Negligible)	0 (Negligible)	0 (Negligible)
14-15	0 (Negligible)	0 (Negligible)	0 (Negligible)

Wall reference	Damage category envelope		
	Demolition	Excavation	Long term
15-16	0 (Negligible)	0 (Negligible)	0 (Negligible)
16-17	0 (Negligible)	0 (Negligible)	0 (Negligible)
17-g	0 (Negligible)	0 (Negligible)	0 (Negligible)
h-49	0 (Negligible)	0 (Negligible)	0 (Negligible)
49-36	0 (Negligible)	0 (Negligible)	0 (Negligible)
36-48	0 (Negligible)	0 (Negligible)	0 (Negligible)
48-47	0 (Negligible)	0 (Negligible)	0 (Negligible)
47-51	0 (Negligible)	0 (Negligible)	0 (Negligible)
50-46	0 (Negligible)	0 (Negligible)	0 (Negligible)
46-47	0 (Negligible)	0 (Negligible)	0 (Negligible)
24-25	0 (Negligible)	0 (Negligible)	0 (Negligible)
25-26	0 (Negligible)	0 (Negligible)	0 (Negligible)
26-27	0 (Negligible)	0 (Negligible)	0 (Negligible)
27-28	0 (Negligible)	0 (Negligible)	0 (Negligible)
28-29	0 (Negligible)	0 (Negligible)	0 (Negligible)
27-32	0 (Negligible)	0 (Negligible)	0 (Negligible)
33-31	0 (Negligible)	0 (Negligible)	0 (Negligible)
31-34	0 (Negligible)	0 (Negligible)	0 (Negligible)
34-35	0 (Negligible)	0 (Negligible)	0 (Negligible)
35-41	0 (Negligible)	0 (Negligible)	0 (Negligible)
41-40	0 (Negligible)	0 (Negligible)	0 (Negligible)
40-39	0 (Negligible)	0 (Negligible)	0 (Negligible)
39-38	0 (Negligible)	0 (Negligible)	0 (Negligible)
38-25	0 (Negligible)	0 (Negligible)	0 (Negligible)
20-22	0 (Negligible)	0 (Negligible)	0 (Negligible)
22-b	0 (Negligible)	0 (Negligible)	0 (Negligible)
e-45	0 (Negligible)	0 (Negligible)	0 (Negligible)
18-31	0 (Negligible)	0 (Negligible)	0 (Negligible)
23-24	0 (Negligible)	0 (Negligible)	0 (Negligible)
b-27	0 (Negligible)	0 (Negligible)	0 (Negligible)
42-37	0 (Negligible)	0 (Negligible)	0 (Negligible)
47-43	0 (Negligible)	0 (Negligible)	0 (Negligible)
44-39	0 (Negligible)	0 (Negligible)	0 (Negligible)
46-45	0 (Negligible)	0 (Negligible)	0 (Negligible)
a-12	0 (Negligible)	0 (Negligible)	0 (Negligible)
12-11	0 (Negligible)	0 (Negligible)	1 (Very Slight)
11-f	0 (Negligible)	0 (Negligible)	0 (Negligible)
ag	0 (Negligible)	0 (Negligible)	0 (Negligible)
gb	0 (Negligible)	0 (Negligible)	1 (Very Slight)
bc	0 (Negligible)	0 (Negligible)	1 (Very Slight)
cd	0 (Negligible)	0 (Negligible)	0 (Negligible)
eh	0 (Negligible)	0 (Negligible)	0 (Negligible)
hf	0 (Negligible)	0 (Negligible)	0 (Negligible)
de	0 (Negligible)	0 (Negligible)	0 (Negligible)

3. Conclusions & closing remarks

The interaction between the proposed development and the nearby buildings has been reviewed as part of the GMA study presented herein. The proposed development construction operations comprise a series of stages, including demolition of the existing rear extension and vaults, basement deepening/excavation and construction of the proposed elements.

The impact of the excavation stages of construction have been reviewed on the basis of two alternative methods (i.e. evaluating the excavation unloading effect using the CIRIA empirical curves within Xdisp (method 1) and overburden removal/unloading using Pdisp (method 2)). The two methods aim to capture alternative mechanisms of lateral and vertical ground movement, which will be in part dependent on construction means and methods (including workmanship).

A plane strain finite element analysis has been undertaken in order to validate the CIRIA ground movement profiles adopted as part of the method 1 assessment. The results from the analyses are presented in Table 3 (denoting the evaluated damage categorisation in accordance with the Burland criteria presented herein). All façades fall within Categories 0 and 1, representative of *Negligible* and *Very Slight* damage classification respectively.

It is noted that the predicted ground movements, the associated wall tensile strains and level of damage categorisation are considered to be moderately conservative in view of the relatively cautious ground model assumptions and *greenfield* nature of the assessment undertaken. This includes a further ground model sensitivity assessment (as presented in section 2)

It is also noted that the GMA will be supplemented by a project specific monitoring regime and Action Plan, which will delineate lines of responsibility, monitoring trigger levels and appropriate mitigation measures. The assessment presented herein is dependent and reliant on the works being undertaken by an experienced contractor, high quality workmanship and appropriate supervision of construction means and methods by experienced personnel.

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Appendix A – Pdisp/Xdisp input and output data

Displacement Data

Type of intervals across extrusion/line	Name of Extrusion	Direction No. of intervals of extrusion along	Calculate Surface of extrusion	Point/Line/Line for extrusion type for	No.					
				tunnels						
				First point	Second point					
				X	Y	Z(level)	X	Y	Z(level)	
				[m]	[m]	[m]	[m]	[m]	[m]	
Grid 99	Grid 1 70.00000	Global X 99	Yes	Surface	30.00000	35.00000	0.00000	-	80.00000	0.00000
Line 11	21-20	-	Yes	Surface	55.96000	70.70000	0.00000	44.21000	70.72000	0.00000
Line 5	19-20	-	Yes	Surface	59.14000	66.79000	0.00000	55.96000	70.70000	0.00000
Line 2	19-18	-	Yes	Surface	59.14000	66.79000	0.00000	59.17000	64.78000	0.00000
Line 14	18-13	-	Yes	Surface	59.17000	64.78000	0.00000	44.21000	64.80000	0.00000
Line 34	21-a	-	Yes	Surface	44.21000	70.72000	0.00000	44.06000	58.90000	0.00000
Line 15	f-50	-	Yes	Surface	44.10000	51.60000	0.00000	44.16000	36.71000	0.00000
Line 2	14-15	-	Yes	Surface	55.00000	64.76000	0.00000	55.00000	62.62000	0.00000
Line 1	15-16	-	Yes	Surface	55.00000	62.62000	0.00000	56.23000	61.46000	0.00000
Line 1	16-17	-	Yes	Surface	56.23000	61.46000	0.00000	56.22000	59.56000	0.00000
Line 1	17-g	-	Yes	Surface	56.22000	59.56000	0.00000	55.10000	58.40000	0.00000
Line 2	h-49	-	Yes	Surface	54.98000	51.60000	0.00000	56.50000	50.10000	0.00000
Line 2	49-36	-	Yes	Surface	56.50000	50.10000	0.00000	56.50000	47.71000	0.00000
Line 2	36-48	-	Yes	Surface	56.50000	47.71000	0.00000	54.96000	46.00000	0.00000
Line 1	48-47	-	Yes	Surface	54.96000	46.00000	0.00000	54.96000	44.83000	0.00000
Line 10	47-51	-	Yes	Surface	54.96000	44.83000	0.00000	44.21000	44.83000	0.00000
Line 10	50-46	-	Yes	Surface	44.16000	36.71000	0.00000	54.96000	36.71000	0.00000
Line 8	46-47	-	Yes	Surface	54.96000	36.71000	0.00000	54.96000	44.83000	0.00000
Line 9	24-25	-	Yes	Surface	78.82000	63.10000	0.00000	88.08000	63.07000	0.00000
Line 5	25-26	-	Yes	Surface	88.08000	63.07000	0.00000	88.00000	57.75000	0.00000
Line 11	26-27	-	Yes	Surface	88.00000	57.75000	0.00000	76.73000	57.90000	0.00000
Line 3	27-28	-	Yes	Surface	76.73000	57.90000	0.00000	76.71000	61.07000	0.00000
Line 2	28-29	-	Yes	Surface	76.71000	61.07000	0.00000	78.82000	63.10000	0.00000
Line 5	27-32	-	Yes	Surface	76.73000	57.90000	0.00000	76.75000	52.75000	0.00000
Line 17	33-31	-	Yes	Surface	87.93000	52.75000	0.00000	70.25000	52.75000	0.00000
Line 3	31-34	-	Yes	Surface	70.25000	52.75000	0.00000	70.18000	49.38000	0.00000
Line 1	34-35	-	Yes	Surface	70.18000	49.38000	0.00000	71.51000	49.37000	0.00000
Line 3	35-41	-	Yes	Surface	71.51000	49.37000	0.00000	71.48000	45.77000	0.00000
Line 4	41-40	-	Yes	Surface	71.48000	45.77000	0.00000	67.41000	45.77000	0.00000
Line 3	40-39	-	Yes	Surface	67.41000	45.77000	0.00000	67.39000	41.87000	0.00000

Line 39-38	-	-	67.39000	41.87000	0.00000	88.00000	41.70000	0.00000
20	-	Yes	Surface					
Line 38-25	-	-	88.00000	41.70000	0.00000	88.08000	63.07000	0.00000
21	-	Yes	Surface					
Line 20-22	-	-	55.96000	70.70000	0.00000	66.13000	70.69000	0.00000
10	-	Yes	Surface					
Line 22-b	-	-	66.13000	70.69000	0.00000	66.30000	58.90000	0.00000
17	-	Yes	Surface					
Line e-45	-	-	64.74000	51.60000	0.00000	64.48000	36.84000	0.00000
15	-	Yes	Surface					
Line 18-31	-	-	59.17000	64.78000	0.00000	66.00000	64.74000	0.00000
6	-	Yes	Surface					
Line 23-24	-	-	66.00000	63.14000	0.00000	78.82000	63.10000	0.00000
12	-	Yes	Surface					
Line b-27	-	-	66.10000	58.46000	0.00000	76.73000	57.90000	0.00000
10	-	Yes	Surface					
Line 42-37	-	-	64.54000	46.73000	0.00000	87.96000	46.45000	0.00000
23	-	Yes	Surface					
Line 47-43	-	-	54.96000	44.83000	0.00000	64.50000	44.83000	0.00000
9	-	Yes	Surface					
Line 44-39	-	-	64.44000	41.91000	0.00000	67.39000	41.87000	0.00000
2	-	Yes	Surface					
Line 46-45	-	-	54.96000	36.71000	0.00000	64.48000	36.84000	0.00000
9	-	Yes	Surface					
Line a-12	-	-	44.06000	58.90000	0.00000	39.63000	58.38000	0.00000
4	-	Yes	Surface					
Line 12-11	-	-	39.63000	58.38000	0.00000	39.63000	51.68000	0.00000
6	-	Yes	Surface					
Line 11-f	-	-	39.63000	51.68000	0.00000	44.10000	51.60000	0.00000
8	-	Yes	Surface					
Line ag	-	-	44.06000	58.90000	0.00000	55.10000	58.40000	0.00000
11	-	Yes	Surface					
Line gb	-	-	55.10000	58.40000	0.00000	66.50000	58.46000	0.00000
20	-	Yes	Surface					
Line bc	-	-	66.50000	58.46000	0.00000	66.50000	52.90000	0.00000
20	-	Yes	Surface					
Line cd	-	-	66.50000	52.90000	0.00000	65.00000	52.00000	0.00000
1	-	Yes	Surface					
Line eh	-	-	64.74000	51.60000	0.00000	54.98000	51.60000	0.00000
9	-	Yes	Surface					
Line hf	-	-	54.98000	51.60000	0.00000	44.10000	51.60000	0.00000
10	-	Yes	Surface					
Line de	-	-	65.00000	52.00000	0.00000	64.74000	51.60000	0.00000
4	-	Yes	Surface					

Vertical Ground Movement Curves

Curve Name: No vertical ground movement
Coordinates: [Distance from wall / wall depth or max. excavation depth (x), Depth / wall depth or max. excavation depth (y), Settlement / wall depth or max. excavation depth (z) (%)]
[0.000,0.000,0.000] [1.000,0.000,0.000] [0.000,1.000,0.000] [1.000,1.000,0.000]
Curve Fitting Method: Polynomial
x Order: 1
y Order: 0
Polynomial: $z = 0.0x + 0.0$
Coeff. of Determination: -2147483648.E+2147483647

Curve Name: Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11 (b))
Coordinates: [Distance from wall / wall depth or max. excavation depth (x), Depth / wall depth or max. excavation depth (y), Settlement / wall depth or max. excavation depth (z) (%)]
[0.000,0.000,0.039] [0.100,0.000,0.049] [0.200,0.000,0.056] [0.300,0.000,0.062] [0.400,0.000,0.067] [0.500,0.000,0.070] [0.600,0.000,0.072] [0.700,0.000,0.073] [0.800,0.000,0.073] [0.900,0.000,0.072] [1.000,0.000,0.070] [1.100,0.000,0.068] [1.200,0.000,0.065] [1.300,0.000,0.061] [1.400,0.000,0.058] [1.500,0.000,0.054] [1.600,0.000,0.050] [1.700,0.000,0.046] [1.800,0.000,0.042] [1.900,0.000,0.038] [2.000,0.000,0.034] [2.100,0.000,0.030] [2.200,0.000,0.027] [2.300,0.000,0.023] [2.400,0.000,0.020] [2.500,0.000,0.017] [2.600,0.000,0.014] [2.700,0.000,0.012]

[2.800,0.000,0.010] [2.900,0.000,0.008] [3.000,0.000,0.007] [3.100,0.000,0.005]
 [3.200,0.000,0.004] [3.300,0.000,0.004] [3.400,0.000,0.003] [3.500,0.000,0.002]
 [3.600,0.000,0.002] [3.700,0.000,0.002] [3.800,0.000,0.001] [3.900,0.000,0.001]
 [4.000,0.000,0.000]
 Curve Fitting Polynomial
 Method:
 x Order: 4
 y Order: 0
 Polynomial: $z = -2.6455E-3x^4 + 2.8495E-2x^3 - 1.0051E-1x^2 + 1.0569E-1x + 3.8990E-2$
 Coeff. of 9.9991E-1
 Determination:

Horizontal Ground Movement Curves

Curve Name: No horizontal ground movement
Coordinates: [Distance from wall / wall depth or max. excavation depth (x), Depth / wall depth or max. excavation depth (y), Horizontal movement / wall depth or max. excavation depth (z) (%)]
 [0.000,0.000,0.000] [1.000,0.000,0.000] [0.000,1.000,0.000] [1.000,1.000,0.000]
 Curve Fitting Polynomial
 Method:
 x Order: 0
 y Order: 0
 Polynomial: $z = 0.0$
 Coeff. of -2147483648.E+2147483647
 Determination:

Curve Name: Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(a))
Coordinates: [Distance from wall / wall depth or max. excavation depth (x), Depth / wall depth or max. excavation depth (y), Horizontal movement / wall depth or max. excavation depth (z) (%)]
 [0.000,0.000,0.150] [4.000,0.000,0.000]
 Curve Fitting Polynomial
 Method:
 x Order: 1
 y Order: 0
 Polynomial: $z = -3.75E-2x + 1.50E-1$
 Coeff. of 1.00
 Determination:

Polygonal Excavations

Excavation Name: Excavation 1
 Surface level [m]: 0.0
 Contribution: Positive
 Enabled: No
 Surface movement curves which are selected are applied between surface and [m]: -10.000

Corner	x	y	Base Level	Stiffened	Previous Side			Next Side		
					d	p1	p2*	d	p1	p2*
	[m]	[m]	[m]		[m]	[%]	[%]	[m]	[%]	[%]
1	66.020	58.310	-1.0700	No	-	-	-	-	-	-
2	66.000	53.200	-1.0700	No	-	-	-	-	-	-
3	59.820	51.680	-1.0700	No	-	-	-	-	-	-
4	39.630	51.680	-1.0700	No	-	-	-	-	-	-
5	39.630	58.380	-1.0700	No	-	-	-	-	-	-

Side	Corner 1		Corner 2		Ground Movement Curve	
	x	y	x	y	Vertical	Horizontal
	[m]	[m]	[m]	[m]		
1	66.020	58.310	66.000	53.200	Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(b))	Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(a))
2	66.000	53.200	59.820	51.680	Excavation in front of high stiffness wall in stiff clay	Excavation in front of high stiffness wall in stiff clay

(CIRIA 580 Fig. 2.11(b) (CIRIA 580 Fig.

2.11(a))
 3 59.820 51.680 39.630 51.680 Excavation in front of high
 of high stiffness wall in stiff clay
 stiff clay (CIRIA 580 Fig. 2.11(b) (CIRIA 580 Fig.

2.11(a))
 4 39.630 51.680 39.630 58.380 Excavation in front of high
 of high stiffness wall in stiff clay
 stiff clay (CIRIA 580 Fig. 2.11(b) (CIRIA 580 Fig.

2.11(a))
 5 39.630 58.380 66.020 58.310 Excavation in front of high
 of high stiffness wall in stiff clay
 stiff clay (CIRIA 580 Fig. 2.11(b) (CIRIA 580 Fig.

2.11(a))

Excavation Name: **Excavation 2**
 Surface level [m]: 0.0
 Contribution: Positive
 Enabled: No
 Surface movement curves which are selected are applied between surface and [m]: -5.0000

Corner	x	y	Base Level	Stiffened	Previous Side	Next Side
	[m]	[m]	[m]		d	p1 p2*
					[m]	[%] [%]
1	59.820	58.310	-3.6000	No	-	- -
2	66.020	58.310	-3.6000	No	-	- -
3	66.000	53.200	-3.6000	No	-	- -
4	59.820	51.680	-3.6000	No	-	- -

Side	Corner 1		Corner 2		Ground Movement Curve	
	x	y	x	y	Vertical	Horizontal
	[m]	[m]	[m]	[m]		
1 of high stiff clay	59.820	58.310	66.020	58.310	Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(b)	Excavation in front stiffness wall in (CIRIA 580 Fig.
2.11(a)) 2 of high stiff clay	66.020	58.310	66.000	53.200	Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(b)	Excavation in front stiffness wall in (CIRIA 580 Fig.
2.11(a)) 3 of high stiff clay	66.000	53.200	59.820	51.680	Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(b)	Excavation in front stiffness wall in (CIRIA 580 Fig.
2.11(a)) 4 movement	59.820	51.680	59.820	58.310	No vertical ground movement	No horizontal ground

Excavation Name: **Excavation 3**
 Surface level [m]: 0.0
 Contribution: Negative
 Enabled: No
 Surface movement curves which are selected are applied between surface and [m]: -5.0000

Corner	x	y	Base Level	Stiffened	Previous Side	Next Side
	[m]	[m]	[m]		d	p1 p2*
					[m]	[%] [%]
1	59.820	58.310	-1.0700	No	-	- -
2	66.020	58.310	-1.0700	No	-	- -
3	66.000	53.200	-1.0700	No	-	- -

4 59.820 51.680 -1.0700 No - - - - -

Side	Corner 1		Corner 2		Ground Movement Curve	
	x [m]	y [m]	x [m]	y [m]	Vertical	Horizontal
1 of high stiff clay 2.11(a))	59.820	58.310	66.020	58.310	Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(b))	Excavation in front stiffness wall in (CIRIA 580 Fig.
2 of high stiff clay 2.11(a))	66.020	58.310	66.000	53.200	Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(b))	Excavation in front stiffness wall in (CIRIA 580 Fig.
3 of high stiff clay 2.11(a))	66.000	53.200	59.820	51.680	Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(b))	Excavation in front stiffness wall in (CIRIA 580 Fig.
4 movement	59.820	51.680	59.820	58.310	No vertical ground movement	No horizontal ground

Damage Category Strains

Name	0 (Negligible) to 1 (Very Slight)	1 (Very Slight) to 2 (Slight)	2 (Slight) to 3 (Moderate)	3 (Moderate) to 4 (Severe)
Burland Strain Limits	0.0	500.00E-6	750.00E-6	0.0015000

Specific Structures - Geometry

Structure Name	Sub-Structure Name	Displacement Poisson's E/G	Start Distance	End Distance	Vertical Offsets from Line for Vertical Movement Calculations	Vertical Displacement Limit Sensitivity
21-20		21-20	0.00000	11.74902	0.0	0.10000
Burland Strain Limits		0.20000 2.6000				
19-20		19-20	0.00000	5.03889	0.0	0.10000
Burland Strain Limits		0.20000 2.6000				
19-18		19-18	0.00000	2.00922	0.0	0.10000
Burland Strain Limits		0.20000 2.6000				
18-13		18-13	0.00000	14.95901	0.0	0.10000
Burland Strain Limits		0.20000 2.6000				
21-a		21-a	0.00000	11.81995	0.0	0.10000
Burland Strain Limits		0.20000 2.6000				
f-50		f-50	0.00000	14.88912	0.0	0.10000
Burland Strain Limits		0.20000 2.6000				
14-15		14-15	0.00000	2.13900	0.0	0.10000
Burland Strain Limits		0.20000 2.6000				
15-16		15-16	0.00000	1.68971	0.0	0.10000
Burland Strain Limits		0.20000 2.6000				
16-17		16-17	0.00000	1.89903	0.0	0.10000
Burland Strain Limits		0.20000 2.6000				
17-g		17-g	0.00000	1.61145	0.0	0.10000
Burland Strain Limits		0.20000 2.6000				
h-49		h-49	0.00000	2.13451	0.0	0.10000
Burland Strain Limits		0.20000 2.6000				
49-36		49-36	0.00000	2.38900	0.0	0.10000
Burland Strain Limits		0.20000 2.6000				
36-48		36-48	0.00000	2.30024	0.0	0.10000
Burland Strain Limits		0.20000 2.6000				
48-47		48-47	0.00000	1.16900	0.0	0.10000
Burland Strain Limits		0.20000 2.6000				
47-51		47-51	0.00000	10.74900	0.0	0.10000
Burland Strain Limits		0.20000 2.6000				

50-46	50-46	0.00000	10.79900	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
46-47	46-47	0.00000	8.11900	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
24-25	24-25	0.00000	9.25905	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
25-26	25-26	0.00000	5.31960	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
26-27	26-27	0.00000	11.27000	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
27-28	27-28	0.00000	3.16906	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
28-29	28-29	0.00000	2.92697	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
27-32	27-32	0.00000	5.14904	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
33-31	33-31	0.00000	17.67900	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
31-34	31-34	0.00000	3.36973	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
34-35	34-35	0.00000	1.32904	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
35-41	35-41	0.00000	3.59912	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
41-40	41-40	0.00000	4.06900	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
40-39	40-39	0.00000	3.89905	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
39-38	39-38	0.00000	20.60970	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
38-25	38-25	0.00000	21.36915	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
20-22	20-22	0.00000	10.16900	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
22-b	22-b	0.00000	11.79023	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
e-45	e-45	0.00000	14.76129	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
18-31	18-31	0.00000	6.82912	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
23-24	23-24	0.00000	12.81906	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
b-27	b-27	0.00000	10.64374	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
42-37	42-37	0.00000	23.42067	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
47-43	47-43	0.00000	9.53900	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
44-39	44-39	0.00000	2.94927	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
46-45	46-45	0.00000	9.51989	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
a-12	a-12	0.00000	4.45941	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
12-11	12-11	0.00000	6.69900	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
11-f	11-f	0.00000	4.46972	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
ag	ag	0.00000	11.05032	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
gb	gb	0.00000	11.39916	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
bc	bc	0.00000	5.55900	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
cd	cd	0.00000	1.74829	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
eh	eh	0.00000	9.75900	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
hf	hf	0.00000	10.87900	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
de	de	0.00000	0.47607	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				

Specific Structures - Bending Parameters

Structure Name	Sub-Structure	Height	Default	Hogging			
Sagging	Name	Properties		2nd Moment	Distance	Distance	2nd Moment
Distance	Distance			of Area	of Bending	of N.A.	of Area
of Bending	of N.A.			(per unit	Strain	from Edge	(per unit
Strain	from Edge			width)	from N.A.	of Beam in	width)
from N.A.	of Beam in					Tension	
Tension							
[m]	[m]	[m]		[m ³]	[m]	[m]	[m ³]
21-20		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
19-20		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
19-18		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
18-13		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
21-a		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
f-50		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
14-15		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
15-16		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
16-17		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
17-g		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
h-49		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
49-36		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
36-48		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
48-47		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
47-51		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
50-46		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
46-47		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
24-25		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
25-26		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
26-27		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
27-28		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
28-29		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
27-32		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
33-31		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
31-34		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
34-35		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
35-41		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
41-40		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
40-39		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
39-38		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
38-25		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						

20-22			3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000							
22-b			3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000							
e-45			3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000							
18-31			3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000							
23-24			3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000							
b-27			3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000							
42-37			3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000							
47-43			3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000							
44-39			3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000							
46-45			3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000							
a-12			3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000							
12-11			3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000							
11-f			3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000							
ag			13.0000	Yes	732.33	13.0000	13.0000	183.08
6.5000	6.5000							
gb			3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000							
bc			3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000							
cd			3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000							
eh			3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000							
hf			13.0000	Yes	732.33	13.0000	13.0000	183.08
6.5000	6.5000							
de			3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000							

Building Segment Combinations

Structure Name	Sub-Structure Name	Vertical Offset from Line for Vertical Movement Calculations	Segment Start	Length	Curvature	Combined Segment
		[m]	[m]	[m]	[m]	

No structures have segments combined.

Utility Strain Calculation Options

Neglect beneficial contribution of axial strains : No

Specific Building Damage Results - Horizontal Displacements

Structure: 21-20 | Sub-structure:

Dist.	Coordinates			Displacements		Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
	x	y	z	x	y		
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	55.96000	70.70000	0.00000	0.0	0.0	0.0	0.0 d
1.0682	54.89182	70.70182	0.00000	0.0	0.0	0.0	0.0 d
2.1364	53.82364	70.70364	0.00000	0.0	0.0	0.0	0.0 d
3.2046	52.75545	70.70545	0.00000	0.0	0.0	0.0	0.0 d
4.2727	51.68727	70.70727	0.00000	0.0	0.0	0.0	0.0 d
5.3409	50.61909	70.70909	0.00000	0.0	0.0	0.0	0.0 d

6.4091	49.55091	70.71091	0.00000	0.0	0.0	0.0	0.0	d
7.4773	48.48273	70.71273	0.00000	0.0	0.0	0.0	0.0	d
8.5455	47.41455	70.71455	0.00000	0.0	0.0	0.0	0.0	d
9.6137	46.34636	70.71636	0.00000	0.0	0.0	0.0	0.0	d
10.682	45.27818	70.71818	0.00000	0.0	0.0	0.0	0.0	d
11.750	44.21000	70.72000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 19-20 | Sub-structure:

Dist.	Coordinates			Displacements		Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	x	y	z	x	y			
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
	0.0	59.14000	66.79000	0.00000	0.0	0.0	0.0	d
1.0080	58.50400	67.57200	0.00000	0.0	0.0	0.0	0.0	d
2.0160	57.86800	68.35400	0.00000	0.0	0.0	0.0	0.0	d
3.0239	57.23200	69.13600	0.00000	0.0	0.0	0.0	0.0	d
4.0319	56.59600	69.91800	0.00000	0.0	0.0	0.0	0.0	d
5.0399	55.96000	70.70000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 19-18 | Sub-structure:

Dist.	Coordinates			Displacements		Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	x	y	z	x	y			
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
	0.0	59.14000	66.79000	0.00000	0.0	0.0	0.0	d
1.0051	59.15500	65.78500	0.00000	0.0	0.0	0.0	0.0	d
2.0102	59.17000	64.78000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 18-13 | Sub-structure:

Dist.	Coordinates			Displacements		Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	x	y	z	x	y			
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
	0.0	59.17000	64.78000	0.00000	0.0	0.0	0.0	d
1.0686	58.10143	64.78143	0.00000	0.0	0.0	0.0	0.0	d
2.1371	57.03286	64.78286	0.00000	0.0	0.0	0.0	0.0	d
3.2057	55.96429	64.78429	0.00000	0.0	0.0	0.0	0.0	d
4.2743	54.89571	64.78571	0.00000	0.0	0.0	0.0	0.0	d
5.3429	53.82714	64.78714	0.00000	0.0	0.0	0.0	0.0	d
6.4114	52.75857	64.78857	0.00000	0.0	0.0	0.0	0.0	d
7.4800	51.69000	64.79000	0.00000	0.0	0.0	0.0	0.0	d
8.5486	50.62143	64.79143	0.00000	0.0	0.0	0.0	0.0	d
9.6172	49.55286	64.79286	0.00000	0.0	0.0	0.0	0.0	d
10.686	48.48429	64.79429	0.00000	0.0	0.0	0.0	0.0	d
11.754	47.41571	64.79571	0.00000	0.0	0.0	0.0	0.0	d
12.823	46.34714	64.79714	0.00000	0.0	0.0	0.0	0.0	d
13.891	45.27857	64.79857	0.00000	0.0	0.0	0.0	0.0	d
14.960	44.21000	64.80000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 21-a | Sub-structure:

Dist.	Coordinates			Displacements		Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	x	y	z	x	y			
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
	0.0	44.21000	70.72000	0.00000	0.0	0.0	0.0	d
0.34768	44.20559	70.37235	0.00000	0.0	0.0	0.0	0.0	d
0.69535	44.20118	70.02471	0.00000	0.0	0.0	0.0	0.0	d

1.0430	44.19676	69.67706	0.00000	0.0	0.0	0.0	0.0	0.0	d
1.3907	44.19235	69.32941	0.00000	0.0	0.0	0.0	0.0	0.0	d
1.7384	44.18794	68.98176	0.00000	0.0	0.0	0.0	0.0	0.0	d
2.0861	44.18353	68.63412	0.00000	0.0	0.0	0.0	0.0	0.0	d
2.4337	44.17912	68.28647	0.00000	0.0	0.0	0.0	0.0	0.0	d
2.7814	44.17471	67.93882	0.00000	0.0	0.0	0.0	0.0	0.0	d
3.1291	44.17029	67.59118	0.00000	0.0	0.0	0.0	0.0	0.0	d
3.4768	44.16588	67.24353	0.00000	0.0	0.0	0.0	0.0	0.0	d
3.8244	44.16147	66.89588	0.00000	0.0	0.0	0.0	0.0	0.0	d
4.1721	44.15706	66.54824	0.00000	0.0	0.0	0.0	0.0	0.0	d
4.5198	44.15265	66.20059	0.00000	0.0	0.0	0.0	0.0	0.0	d
4.8675	44.14824	65.85294	0.00000	0.0	0.0	0.0	0.0	0.0	d
5.2151	44.14382	65.50529	0.00000	0.0	0.0	0.0	0.0	0.0	d
5.5628	44.13941	65.15765	0.00000	0.0	0.0	0.0	0.0	0.0	d
5.9105	44.13500	64.81000	0.00000	0.0	0.0	0.0	0.0	0.0	d
6.2582	44.13059	64.46235	0.00000	0.0	0.0	0.0	0.0	0.0	d
6.6058	44.12618	64.11471	0.00000	0.0	0.0	0.0	0.0	0.0	d
6.9535	44.12176	63.76706	0.00000	0.0	0.0	0.0	0.0	0.0	d
7.3012	44.11735	63.41941	0.00000	0.0	0.0	0.0	0.0	0.0	d
7.6489	44.11294	63.07176	0.00000	0.0	0.0	0.0	0.0	0.0	d
7.9965	44.10853	62.72412	0.00000	0.0	0.0	0.0	0.0	0.0	d
8.3442	44.10412	62.37647	0.00000	0.0	0.0	0.0	0.0	0.0	d
8.6919	44.09971	62.02882	0.00000	0.0	0.0	0.0	0.0	0.0	d
9.0396	44.09529	61.68118	0.00000	0.0	0.0	0.0	0.0	0.0	d
9.3872	44.09088	61.33353	0.00000	0.0	0.0	0.0	0.0	0.0	d
9.7349	44.08647	60.98588	0.00000	0.0	0.0	0.0	0.0	0.0	d
10.083	44.08206	60.63824	0.00000	0.0	0.0	0.0	0.0	0.0	d
10.430	44.07765	60.29059	0.00000	0.0	0.0	0.0	0.0	0.0	d
10.778	44.07324	59.94294	0.00000	0.0	0.0	0.0	0.0	0.0	d
11.126	44.06882	59.59529	0.00000	0.0	0.0	0.0	0.0	0.0	d
11.473	44.06441	59.24765	0.00000	0.0	0.0	0.0	0.0	0.0	d
11.821	44.06000	58.90000	0.00000	0.0	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: f-50 | Sub-structure:

Dist.	Coordinates			Displacements					
	x	y	z	x	y	Horizontal displacement along the Line		Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]
0.0	44.10000	51.60000	0.00000	0.0	0.0	0.0	0.0	0.0	0.0
0.99267	44.10400	50.60733	0.00000	0.0	0.0	0.0	0.0	0.0	0.0
1.9853	44.10800	49.61467	0.00000	0.0	0.0	0.0	0.0	0.0	0.0
2.9780	44.11200	48.62200	0.00000	0.0	0.0	0.0	0.0	0.0	0.0
3.9707	44.11600	47.62933	0.00000	0.0	0.0	0.0	0.0	0.0	0.0
4.9634	44.12000	46.63667	0.00000	0.0	0.0	0.0	0.0	0.0	0.0
5.9560	44.12400	45.64400	0.00000	0.0	0.0	0.0	0.0	0.0	0.0
6.9487	44.12800	44.65133	0.00000	0.0	0.0	0.0	0.0	0.0	0.0
7.9414	44.13200	43.65867	0.00000	0.0	0.0	0.0	0.0	0.0	0.0
8.9341	44.13600	42.66600	0.00000	0.0	0.0	0.0	0.0	0.0	0.0
9.9267	44.14000	41.67333	0.00000	0.0	0.0	0.0	0.0	0.0	0.0
10.919	44.14400	40.68067	0.00000	0.0	0.0	0.0	0.0	0.0	0.0
11.912	44.14800	39.68800	0.00000	0.0	0.0	0.0	0.0	0.0	0.0
12.905	44.15200	38.69533	0.00000	0.0	0.0	0.0	0.0	0.0	0.0
13.897	44.15600	37.70267	0.00000	0.0	0.0	0.0	0.0	0.0	0.0
14.890	44.16000	36.71000	0.00000	0.0	0.0	0.0	0.0	0.0	0.0

d - Displacements include imported displacements.

Structure: 14-15 | Sub-structure:

Dist.	Coordinates			Displacements					
	x	y	z	x	y	Horizontal displacement along the Line		Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]
0.0	55.00000	64.76000	0.00000	0.0	0.0	0.0	0.0	0.0	0.0
1.0700	55.00000	63.69000	0.00000	0.0	0.0	0.0	0.0	0.0	0.0
2.1400	55.00000	62.62000	0.00000	0.0	0.0	0.0	0.0	0.0	0.0

d - Displacements include imported displacements.

Structure: 15-16 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	55.00000	62.62000	0.00000	0.0	0.0	0.0	0.0	d
1.6907	56.23000	61.46000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 16-17 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	56.23000	61.46000	0.00000	0.0	0.0	0.0	0.0	d
1.9000	56.22000	59.56000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 17-g | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	56.22000	59.56000	0.00000	0.0	0.0	0.0	0.0	d
1.6125	55.10000	58.40000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: h-49 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	54.98000	51.60000	0.00000	0.0	0.0	0.0	0.0	d
1.0678	55.74000	50.85000	0.00000	0.0	0.0	0.0	0.0	d
2.1355	56.50000	50.10000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 49-36 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	56.50000	50.10000	0.00000	0.0	0.0	0.0	0.0	d
1.1950	56.50000	48.90500	0.00000	0.0	0.0	0.0	0.0	d
2.3900	56.50000	47.71000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 36-48 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	56.50000	47.71000	0.00000	0.0	0.0	0.0	0.0	d
1.1506	55.73000	46.85500	0.00000	0.0	0.0	0.0	0.0	d
2.3012	54.96000	46.00000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 48-47 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
	0.0	54.96000	46.00000	0.00000	0.0	0.0	0.0	0.0 d
	1.1700	54.96000	44.83000	0.00000	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: 47-51 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
	0.0	54.96000	44.83000	0.00000	0.0	0.0	0.0	0.0 d
	1.0750	53.88500	44.83000	0.00000	0.0	0.0	0.0	0.0 d
	2.1500	52.81000	44.83000	0.00000	0.0	0.0	0.0	0.0 d
	3.2250	51.73500	44.83000	0.00000	0.0	0.0	0.0	0.0 d
	4.3000	50.66000	44.83000	0.00000	0.0	0.0	0.0	0.0 d
	5.3750	49.58500	44.83000	0.00000	0.0	0.0	0.0	0.0 d
	6.4500	48.51000	44.83000	0.00000	0.0	0.0	0.0	0.0 d
	7.5250	47.43500	44.83000	0.00000	0.0	0.0	0.0	0.0 d
	8.6000	46.36000	44.83000	0.00000	0.0	0.0	0.0	0.0 d
	9.6750	45.28500	44.83000	0.00000	0.0	0.0	0.0	0.0 d
	10.750	44.21000	44.83000	0.00000	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: 50-46 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
	0.0	44.16000	36.71000	0.00000	0.0	0.0	0.0	0.0 d
	1.0800	45.24000	36.71000	0.00000	0.0	0.0	0.0	0.0 d
	2.1600	46.32000	36.71000	0.00000	0.0	0.0	0.0	0.0 d
	3.2400	47.40000	36.71000	0.00000	0.0	0.0	0.0	0.0 d
	4.3200	48.48000	36.71000	0.00000	0.0	0.0	0.0	0.0 d
	5.4000	49.56000	36.71000	0.00000	0.0	0.0	0.0	0.0 d
	6.4800	50.64000	36.71000	0.00000	0.0	0.0	0.0	0.0 d
	7.5600	51.72000	36.71000	0.00000	0.0	0.0	0.0	0.0 d
	8.6400	52.80000	36.71000	0.00000	0.0	0.0	0.0	0.0 d
	9.7200	53.88000	36.71000	0.00000	0.0	0.0	0.0	0.0 d
	10.800	54.96000	36.71000	0.00000	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: 46-47 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
	0.0	54.96000	36.71000	0.00000	0.0	0.0	0.0	0.0 d
	1.0150	54.96000	37.72500	0.00000	0.0	0.0	0.0	0.0 d
	2.0300	54.96000	38.74000	0.00000	0.0	0.0	0.0	0.0 d
	3.0450	54.96000	39.75500	0.00000	0.0	0.0	0.0	0.0 d
	4.0600	54.96000	40.77000	0.00000	0.0	0.0	0.0	0.0 d
	5.0750	54.96000	41.78500	0.00000	0.0	0.0	0.0	0.0 d
	6.0900	54.96000	42.80000	0.00000	0.0	0.0	0.0	0.0 d
	7.1050	54.96000	43.81500	0.00000	0.0	0.0	0.0	0.0 d
	8.1200	54.96000	44.83000	0.00000	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: 24-25 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
	0.0	78.82000	63.10000	0.00000	0.0	0.0	0.0	0.0 d
1.0289	79.84889	63.09667	0.00000	0.0	0.0	0.0	0.0	0.0 d
2.0578	80.87778	63.09333	0.00000	0.0	0.0	0.0	0.0	0.0 d
3.0867	81.90667	63.09000	0.00000	0.0	0.0	0.0	0.0	0.0 d
4.1156	82.93556	63.08667	0.00000	0.0	0.0	0.0	0.0	0.0 d
5.1445	83.96444	63.08333	0.00000	0.0	0.0	0.0	0.0	0.0 d
6.1734	84.99333	63.08000	0.00000	0.0	0.0	0.0	0.0	0.0 d
7.2023	86.02222	63.07667	0.00000	0.0	0.0	0.0	0.0	0.0 d
8.2312	87.05111	63.07333	0.00000	0.0	0.0	0.0	0.0	0.0 d
9.2600	88.08000	63.07000	0.00000	0.0	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: 25-26 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
	0.0	88.08000	63.07000	0.00000	0.0	0.0	0.0	0.0 d
1.0641	88.06400	62.00600	0.00000	0.0	0.0	0.0	0.0	0.0 d
2.1282	88.04800	60.94200	0.00000	0.0	0.0	0.0	0.0	0.0 d
3.1924	88.03200	59.87800	0.00000	0.0	0.0	0.0	0.0	0.0 d
4.2565	88.01600	58.81400	0.00000	0.0	0.0	0.0	0.0	0.0 d
5.3206	88.00000	57.75000	0.00000	0.0	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: 26-27 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
	0.0	88.00000	57.75000	0.00000	0.0	0.0	0.0	0.0 d
1.0246	86.97545	57.76364	0.00000	0.0	0.0	0.0	0.0	0.0 d
2.0493	85.95091	57.77727	0.00000	0.0	0.0	0.0	0.0	0.0 d
3.0739	84.92636	57.79091	0.00000	0.0	0.0	0.0	0.0	0.0 d
4.0985	83.90182	57.80455	0.00000	0.0	0.0	0.0	0.0	0.0 d
5.1232	82.87727	57.81818	0.00000	0.0	0.0	0.0	0.0	0.0 d
6.1478	81.85273	57.83182	0.00000	0.0	0.0	0.0	0.0	0.0 d
7.1725	80.82818	57.84545	0.00000	0.0	0.0	0.0	0.0	0.0 d
8.1971	79.80364	57.85909	0.00000	0.0	0.0	0.0	0.0	0.0 d
9.2217	78.77909	57.87273	0.00000	0.0	0.0	0.0	0.0	0.0 d
10.246	77.75455	57.88636	0.00000	0.0	0.0	0.0	0.0	0.0 d
11.271	76.73000	57.90000	0.00000	0.0	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: 27-28 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
	0.0	76.73000	57.90000	0.00000	0.0	0.0	0.0	0.0 d
1.0567	76.72333	58.95667	0.00000	0.0	0.0	0.0	0.0	0.0 d
2.1134	76.71667	60.01333	0.00000	0.0	0.0	0.0	0.0	0.0 d
3.1701	76.71000	61.07000	0.00000	0.0	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: 28-29 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
	0.0	76.71000	61.07000	0.00000	0.0	0.0	0.0	0.0 d
1.4640	77.76500	62.08500	0.00000	0.0	0.0	0.0	0.0	0.0 d
2.9280	78.82000	63.10000	0.00000	0.0	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: 27-32 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
	0.0	76.73000	57.90000	0.00000	0.0	0.0	0.0	0.0 d
1.0300	76.73400	56.87000	0.00000	0.0	0.0	0.0	0.0	0.0 d
2.0600	76.73800	55.84000	0.00000	0.0	0.0	0.0	0.0	0.0 d
3.0900	76.74200	54.81000	0.00000	0.0	0.0	0.0	0.0	0.0 d
4.1200	76.74600	53.78000	0.00000	0.0	0.0	0.0	0.0	0.0 d
5.1500	76.75000	52.75000	0.00000	0.0	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: 33-31 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
	0.0	87.93000	52.75000	0.00000	0.0	0.0	0.0	0.0 d
1.0400	86.89000	52.75000	0.00000	0.0	0.0	0.0	0.0	0.0 d
2.0800	85.85000	52.75000	0.00000	0.0	0.0	0.0	0.0	0.0 d
3.1200	84.81000	52.75000	0.00000	0.0	0.0	0.0	0.0	0.0 d
4.1600	83.77000	52.75000	0.00000	0.0	0.0	0.0	0.0	0.0 d
5.2000	82.73000	52.75000	0.00000	0.0	0.0	0.0	0.0	0.0 d
6.2400	81.69000	52.75000	0.00000	0.0	0.0	0.0	0.0	0.0 d
7.2800	80.65000	52.75000	0.00000	0.0	0.0	0.0	0.0	0.0 d
8.3200	79.61000	52.75000	0.00000	0.0	0.0	0.0	0.0	0.0 d
9.3600	78.57000	52.75000	0.00000	0.0	0.0	0.0	0.0	0.0 d
10.400	77.53000	52.75000	0.00000	0.0	0.0	0.0	0.0	0.0 d
11.440	76.49000	52.75000	0.00000	0.0	0.0	0.0	0.0	0.0 d
12.480	75.45000	52.75000	0.00000	0.0	0.0	0.0	0.0	0.0 d
13.520	74.41000	52.75000	0.00000	0.0	0.0	0.0	0.0	0.0 d
14.560	73.37000	52.75000	0.00000	0.0	0.0	0.0	0.0	0.0 d
15.600	72.33000	52.75000	0.00000	0.0	0.0	0.0	0.0	0.0 d
16.640	71.29000	52.75000	0.00000	0.0	0.0	0.0	0.0	0.0 d
17.680	70.25000	52.75000	0.00000	0.0	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: 31-34 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
	0.0	70.25000	52.75000	0.00000	0.0	0.0	0.0	0.0 d
1.1236	70.22667	51.62667	0.00000	0.0	0.0	0.0	0.0	0.0 d
2.2472	70.20333	50.50333	0.00000	0.0	0.0	0.0	0.0	0.0 d
3.3707	70.18000	49.38000	0.00000	0.0	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: 34-35 | Sub-structure:

Dist.	Coordinates			Displacements			
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
	0.0	70.18000	49.38000	0.00000	0.0	0.0	0.0 d
1.3300	71.51000	49.37000	0.00000	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: 35-41 | Sub-structure:

Dist.	Coordinates			Displacements			
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
	0.0	71.51000	49.37000	0.00000	0.0	0.0	0.0 d
1.2000	71.50000	48.17000	0.00000	0.0	0.0	0.0	0.0 d
2.4001	71.49000	46.97000	0.00000	0.0	0.0	0.0	0.0 d
3.6001	71.48000	45.77000	0.00000	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: 41-40 | Sub-structure:

Dist.	Coordinates			Displacements			
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
	0.0	71.48000	45.77000	0.00000	0.0	0.0	0.0 d
1.0175	70.46250	45.77000	0.00000	0.0	0.0	0.0	0.0 d
2.0350	69.44500	45.77000	0.00000	0.0	0.0	0.0	0.0 d
3.0525	68.42750	45.77000	0.00000	0.0	0.0	0.0	0.0 d
4.0700	67.41000	45.77000	0.00000	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: 40-39 | Sub-structure:

Dist.	Coordinates			Displacements			
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
	0.0	67.41000	45.77000	0.00000	0.0	0.0	0.0 d
1.3000	67.40333	44.47000	0.00000	0.0	0.0	0.0	0.0 d
2.6000	67.39667	43.17000	0.00000	0.0	0.0	0.0	0.0 d
3.9001	67.39000	41.87000	0.00000	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: 39-38 | Sub-structure:

Dist.	Coordinates			Displacements			
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
	0.0	67.39000	41.87000	0.00000	0.0	0.0	0.0 d
1.0305	68.42050	41.86150	0.00000	0.0	0.0	0.0	0.0 d
2.0611	69.45100	41.85300	0.00000	0.0	0.0	0.0	0.0 d
3.0916	70.48150	41.84450	0.00000	0.0	0.0	0.0	0.0 d
4.1221	71.51200	41.83600	0.00000	0.0	0.0	0.0	0.0 d
5.1527	72.54250	41.82750	0.00000	0.0	0.0	0.0	0.0 d
6.1832	73.57300	41.81900	0.00000	0.0	0.0	0.0	0.0 d
7.2137	74.60350	41.81050	0.00000	0.0	0.0	0.0	0.0 d
8.2443	75.63400	41.80200	0.00000	0.0	0.0	0.0	0.0 d
9.2748	76.66450	41.79350	0.00000	0.0	0.0	0.0	0.0 d

10.305	77.69500	41.78500	0.00000	0.0	0.0	0.0	0.0	d
11.336	78.72550	41.77650	0.00000	0.0	0.0	0.0	0.0	d
12.366	79.75600	41.76800	0.00000	0.0	0.0	0.0	0.0	d
13.397	80.78650	41.75950	0.00000	0.0	0.0	0.0	0.0	d
14.427	81.81700	41.75100	0.00000	0.0	0.0	0.0	0.0	d
15.458	82.84750	41.74250	0.00000	0.0	0.0	0.0	0.0	d
16.489	83.87800	41.73400	0.00000	0.0	0.0	0.0	0.0	d
17.519	84.90850	41.72550	0.00000	0.0	0.0	0.0	0.0	d
18.550	85.93900	41.71700	0.00000	0.0	0.0	0.0	0.0	d
19.580	86.96950	41.70850	0.00000	0.0	0.0	0.0	0.0	d
20.611	88.00000	41.70000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 38-25 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	88.00000	41.70000	0.00000	0.0	0.0	0.0	0.0	d
1.0176	88.00381	42.71762	0.00000	0.0	0.0	0.0	0.0	d
2.0353	88.00762	43.73524	0.00000	0.0	0.0	0.0	0.0	d
3.0529	88.01143	44.75286	0.00000	0.0	0.0	0.0	0.0	d
4.0705	88.01524	45.77048	0.00000	0.0	0.0	0.0	0.0	d
5.0881	88.01905	46.78810	0.00000	0.0	0.0	0.0	0.0	d
6.1058	88.02286	47.80571	0.00000	0.0	0.0	0.0	0.0	d
7.1234	88.02667	48.82333	0.00000	0.0	0.0	0.0	0.0	d
8.1410	88.03048	49.84095	0.00000	0.0	0.0	0.0	0.0	d
9.1586	88.03429	50.85857	0.00000	0.0	0.0	0.0	0.0	d
10.176	88.03810	51.87619	0.00000	0.0	0.0	0.0	0.0	d
11.194	88.04190	52.89381	0.00000	0.0	0.0	0.0	0.0	d
12.212	88.04571	53.91143	0.00000	0.0	0.0	0.0	0.0	d
13.229	88.04952	54.92905	0.00000	0.0	0.0	0.0	0.0	d
14.247	88.05333	55.94667	0.00000	0.0	0.0	0.0	0.0	d
15.264	88.05714	56.96429	0.00000	0.0	0.0	0.0	0.0	d
16.282	88.06095	57.98190	0.00000	0.0	0.0	0.0	0.0	d
17.300	88.06476	58.99952	0.00000	0.0	0.0	0.0	0.0	d
18.317	88.06857	60.01714	0.00000	0.0	0.0	0.0	0.0	d
19.335	88.07238	61.03476	0.00000	0.0	0.0	0.0	0.0	d
20.353	88.07619	62.05238	0.00000	0.0	0.0	0.0	0.0	d
21.370	88.08000	63.07000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 20-22 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	55.96000	70.70000	0.00000	0.0	0.0	0.0	0.0	d
1.0170	56.97700	70.69900	0.00000	0.0	0.0	0.0	0.0	d
2.0340	57.99400	70.69800	0.00000	0.0	0.0	0.0	0.0	d
3.0510	59.01100	70.69700	0.00000	0.0	0.0	0.0	0.0	d
4.0680	60.02800	70.69600	0.00000	0.0	0.0	0.0	0.0	d
5.0850	61.04500	70.69500	0.00000	0.0	0.0	0.0	0.0	d
6.1020	62.06200	70.69400	0.00000	0.0	0.0	0.0	0.0	d
7.1190	63.07900	70.69300	0.00000	0.0	0.0	0.0	0.0	d
8.1360	64.09600	70.69200	0.00000	0.0	0.0	0.0	0.0	d
9.1530	65.11300	70.69100	0.00000	0.0	0.0	0.0	0.0	d
10.170	66.13000	70.69000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 22-b | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	

0.0	66.13000	70.69000	0.00000	0.0	0.0	0.0	0.0	d
0.69360	66.14000	69.99647	0.00000	0.0	0.0	0.0	0.0	d
1.3872	66.15000	69.30294	0.00000	0.0	0.0	0.0	0.0	d
2.0808	66.16000	68.60941	0.00000	0.0	0.0	0.0	0.0	d
2.7744	66.17000	67.91588	0.00000	0.0	0.0	0.0	0.0	d
3.4680	66.18000	67.22235	0.00000	0.0	0.0	0.0	0.0	d
4.1616	66.19000	66.52882	0.00000	0.0	0.0	0.0	0.0	d
4.8552	66.20000	65.83529	0.00000	0.0	0.0	0.0	0.0	d
5.5488	66.21000	65.14176	0.00000	0.0	0.0	0.0	0.0	d
6.2424	66.22000	64.44824	0.00000	0.0	0.0	0.0	0.0	d
6.9360	66.23000	63.75471	0.00000	0.0	0.0	0.0	0.0	d
7.6296	66.24000	63.06118	0.00000	0.0	0.0	0.0	0.0	d
8.3232	66.25000	62.36765	0.00000	0.0	0.0	0.0	0.0	d
9.0168	66.26000	61.67412	0.00000	0.0	0.0	0.0	0.0	d
9.7104	66.27000	60.98059	0.00000	0.0	0.0	0.0	0.0	d
10.404	66.28000	60.28706	0.00000	0.0	0.0	0.0	0.0	d
11.098	66.29000	59.59353	0.00000	0.0	0.0	0.0	0.0	d
11.791	66.30000	58.90000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: e-45 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	64.74000	51.60000	0.00000	0.0	0.0	0.0	0.0	d
0.98415	64.72267	50.61600	0.00000	0.0	0.0	0.0	0.0	d
1.9683	64.70533	49.63200	0.00000	0.0	0.0	0.0	0.0	d
2.9525	64.68800	48.64800	0.00000	0.0	0.0	0.0	0.0	d
3.9366	64.67067	47.66400	0.00000	0.0	0.0	0.0	0.0	d
4.9208	64.65333	46.68000	0.00000	0.0	0.0	0.0	0.0	d
5.9049	64.63600	45.69600	0.00000	0.0	0.0	0.0	0.0	d
6.8891	64.61867	44.71200	0.00000	0.0	0.0	0.0	0.0	d
7.8732	64.60133	43.72800	0.00000	0.0	0.0	0.0	0.0	d
8.8574	64.58400	42.74400	0.00000	0.0	0.0	0.0	0.0	d
9.8415	64.56667	41.76000	0.00000	0.0	0.0	0.0	0.0	d
10.826	64.54933	40.77600	0.00000	0.0	0.0	0.0	0.0	d
11.810	64.53200	39.79200	0.00000	0.0	0.0	0.0	0.0	d
12.794	64.51467	38.80800	0.00000	0.0	0.0	0.0	0.0	d
13.778	64.49733	37.82400	0.00000	0.0	0.0	0.0	0.0	d
14.762	64.48000	36.84000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 18-31 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	59.17000	64.78000	0.00000	0.0	0.0	0.0	0.0	d
1.1384	60.30833	64.77333	0.00000	0.0	0.0	0.0	0.0	d
2.2767	61.44667	64.76667	0.00000	0.0	0.0	0.0	0.0	d
3.4151	62.58500	64.76000	0.00000	0.0	0.0	0.0	0.0	d
4.5534	63.72333	64.75333	0.00000	0.0	0.0	0.0	0.0	d
5.6918	64.86167	64.74667	0.00000	0.0	0.0	0.0	0.0	d
6.8301	66.00000	64.74000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 23-24 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	66.00000	63.14000	0.00000	0.0	0.0	0.0	0.0	d
1.0683	67.06833	63.13667	0.00000	0.0	0.0	0.0	0.0	d
2.1367	68.13667	63.13333	0.00000	0.0	0.0	0.0	0.0	d

3.2050	69.20500	63.13000	0.00000	0.0	0.0	0.0	0.0	d
4.2734	70.27333	63.12667	0.00000	0.0	0.0	0.0	0.0	d
5.3417	71.34167	63.12333	0.00000	0.0	0.0	0.0	0.0	d
6.4100	72.41000	63.12000	0.00000	0.0	0.0	0.0	0.0	d
7.4784	73.47833	63.11667	0.00000	0.0	0.0	0.0	0.0	d
8.5467	74.54667	63.11333	0.00000	0.0	0.0	0.0	0.0	d
9.6150	75.61500	63.11000	0.00000	0.0	0.0	0.0	0.0	d
10.683	76.68333	63.10667	0.00000	0.0	0.0	0.0	0.0	d
11.752	77.75167	63.10333	0.00000	0.0	0.0	0.0	0.0	d
12.820	78.82000	63.10000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: b-27 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	66.10000	58.46000	0.00000	0.0	0.0	0.0	0.0	d
1.0645	67.16300	58.40400	0.00000	0.0	0.0	0.0	0.0	d
2.1289	68.22600	58.34800	0.00000	0.0	0.0	0.0	0.0	d
3.1934	69.28900	58.29200	0.00000	0.0	0.0	0.0	0.0	d
4.2579	70.35200	58.23600	0.00000	0.0	0.0	0.0	0.0	d
5.3224	71.41500	58.18000	0.00000	0.0	0.0	0.0	0.0	d
6.3868	72.47800	58.12400	0.00000	0.0	0.0	0.0	0.0	d
7.4513	73.54100	58.06800	0.00000	0.0	0.0	0.0	0.0	d
8.5158	74.60400	58.01200	0.00000	0.0	0.0	0.0	0.0	d
9.5803	75.66700	57.95600	0.00000	0.0	0.0	0.0	0.0	d
10.645	76.73000	57.90000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 42-37 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	64.54000	46.73000	0.00000	0.0	0.0	0.0	0.0	d
1.0183	65.55826	46.71783	0.00000	0.0	0.0	0.0	0.0	d
2.0367	66.57652	46.70565	0.00000	0.0	0.0	0.0	0.0	d
3.0550	67.59478	46.69348	0.00000	0.0	0.0	0.0	0.0	d
4.0733	68.61304	46.68130	0.00000	0.0	0.0	0.0	0.0	d
5.0917	69.63130	46.66913	0.00000	0.0	0.0	0.0	0.0	d
6.1100	70.64957	46.65696	0.00000	0.0	0.0	0.0	0.0	d
7.1283	71.66783	46.64478	0.00000	0.0	0.0	0.0	0.0	d
8.1467	72.68609	46.63261	0.00000	0.0	0.0	0.0	0.0	d
9.1650	73.70435	46.62043	0.00000	0.0	0.0	0.0	0.0	d
10.183	74.72261	46.60826	0.00000	0.0	0.0	0.0	0.0	d
11.202	75.74087	46.59609	0.00000	0.0	0.0	0.0	0.0	d
12.220	76.75913	46.58391	0.00000	0.0	0.0	0.0	0.0	d
13.238	77.77739	46.57174	0.00000	0.0	0.0	0.0	0.0	d
14.257	78.79565	46.55957	0.00000	0.0	0.0	0.0	0.0	d
15.275	79.81391	46.54739	0.00000	0.0	0.0	0.0	0.0	d
16.293	80.83217	46.53522	0.00000	0.0	0.0	0.0	0.0	d
17.312	81.85043	46.52304	0.00000	0.0	0.0	0.0	0.0	d
18.330	82.86870	46.51087	0.00000	0.0	0.0	0.0	0.0	d
19.348	83.88696	46.49870	0.00000	0.0	0.0	0.0	0.0	d
20.367	84.90522	46.48652	0.00000	0.0	0.0	0.0	0.0	d
21.385	85.92348	46.47435	0.00000	0.0	0.0	0.0	0.0	d
22.403	86.94174	46.46217	0.00000	0.0	0.0	0.0	0.0	d
23.422	87.96000	46.45000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 47-43 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	

[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	54.96000	44.83000	0.00000	0.0	0.0	0.0	0.0 d
1.0600	56.02000	44.83000	0.00000	0.0	0.0	0.0	0.0 d
2.1200	57.08000	44.83000	0.00000	0.0	0.0	0.0	0.0 d
3.1800	58.14000	44.83000	0.00000	0.0	0.0	0.0	0.0 d
4.2400	59.20000	44.83000	0.00000	0.0	0.0	0.0	0.0 d
5.3000	60.26000	44.83000	0.00000	0.0	0.0	0.0	0.0 d
6.3600	61.32000	44.83000	0.00000	0.0	0.0	0.0	0.0 d
7.4200	62.38000	44.83000	0.00000	0.0	0.0	0.0	0.0 d
8.4800	63.44000	44.83000	0.00000	0.0	0.0	0.0	0.0 d
9.5400	64.50000	44.83000	0.00000	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: 44-39 | Sub-structure:

Dist.	Coordinates			Displacements			
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	64.44000	41.91000	0.00000	0.0	0.0	0.0	0.0 d
1.4751	65.91500	41.89000	0.00000	0.0	0.0	0.0	0.0 d
2.9503	67.39000	41.87000	0.00000	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: 46-45 | Sub-structure:

Dist.	Coordinates			Displacements			
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	54.96000	36.71000	0.00000	0.0	0.0	0.0	0.0 d
1.0579	56.01778	36.72444	0.00000	0.0	0.0	0.0	0.0 d
2.1158	57.07556	36.73889	0.00000	0.0	0.0	0.0	0.0 d
3.1736	58.13333	36.75333	0.00000	0.0	0.0	0.0	0.0 d
4.2315	59.19111	36.76778	0.00000	0.0	0.0	0.0	0.0 d
5.2894	60.24889	36.78222	0.00000	0.0	0.0	0.0	0.0 d
6.3473	61.30667	36.79667	0.00000	0.0	0.0	0.0	0.0 d
7.4051	62.36444	36.81111	0.00000	0.0	0.0	0.0	0.0 d
8.4630	63.42222	36.82556	0.00000	0.0	0.0	0.0	0.0 d
9.5209	64.48000	36.84000	0.00000	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: a-12 | Sub-structure:

Dist.	Coordinates			Displacements			
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	44.06000	58.90000	0.00000	0.0	0.0	0.0	0.0 d
1.1151	42.95250	58.77000	0.00000	0.0	0.0	0.0	0.0 d
2.2302	41.84500	58.64000	0.00000	0.0	0.0	0.0	0.0 d
3.3453	40.73750	58.51000	0.00000	0.0	0.0	0.0	0.0 d
4.4604	39.63000	58.38000	0.00000	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: 12-11 | Sub-structure:

Dist.	Coordinates			Displacements			
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	39.63000	58.38000	0.00000	0.0	0.0	0.0	0.0 d
1.1167	39.63000	57.26333	0.00000	0.0	0.0	0.0	0.0 d
2.2333	39.63000	56.14667	0.00000	0.0	0.0	0.0	0.0 d
3.3500	39.63000	55.03000	0.00000	0.0	0.0	0.0	0.0 d

Dist.	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
4.4667	39.63000	53.91333	0.00000	0.0	0.0	0.0	0.0 d
5.5833	39.63000	52.79667	0.00000	0.0	0.0	0.0	0.0 d
6.7000	39.63000	51.68000	0.00000	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: 11-f | Sub-structure:

Dist.	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.55884	40.18875	51.67000	0.00000	0.0	0.0	0.0	0.0 d
1.1177	40.74750	51.66000	0.00000	0.0	0.0	0.0	0.0 d
1.6765	41.30625	51.65000	0.00000	0.0	0.0	0.0	0.0 d
2.2354	41.86500	51.64000	0.00000	0.0	0.0	0.0	0.0 d
2.7942	42.42375	51.63000	0.00000	0.0	0.0	0.0	0.0 d
3.3530	42.98250	51.62000	0.00000	0.0	0.0	0.0	0.0 d
3.9119	43.54125	51.61000	0.00000	0.0	0.0	0.0	0.0 d
4.4707	44.10000	51.60000	0.00000	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: ag | Sub-structure:

Dist.	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
1.0047	45.06364	58.85455	0.00000	0.0	0.0	0.0	0.0 d
2.0093	46.06727	58.80909	0.00000	0.0	0.0	0.0	0.0 d
3.0140	47.07091	58.76364	0.00000	0.0	0.0	0.0	0.0 d
4.0187	48.07455	58.71818	0.00000	0.0	0.0	0.0	0.0 d
5.0233	49.07818	58.67273	0.00000	0.0	0.0	0.0	0.0 d
6.0280	50.08182	58.62727	0.00000	0.0	0.0	0.0	0.0 d
7.0327	51.08545	58.58182	0.00000	0.0	0.0	0.0	0.0 d
8.0373	52.08909	58.53636	0.00000	0.0	0.0	0.0	0.0 d
9.0420	53.09273	58.49091	0.00000	0.0	0.0	0.0	0.0 d
10.047	54.09636	58.44545	0.00000	0.0	0.0	0.0	0.0 d
11.051	55.10000	58.40000	0.00000	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: gb | Sub-structure:

Dist.	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.57001	55.67000	58.40300	0.00000	0.0	0.0	0.0	0.0 d
1.1400	56.24000	58.40600	0.00000	0.0	0.0	0.0	0.0 d
1.7100	56.81000	58.40900	0.00000	0.0	0.0	0.0	0.0 d
2.2800	57.38000	58.41200	0.00000	0.0	0.0	0.0	0.0 d
2.8500	57.95000	58.41500	0.00000	0.0	0.0	0.0	0.0 d
3.4200	58.52000	58.41800	0.00000	0.0	0.0	0.0	0.0 d
3.9901	59.09000	58.42100	0.00000	0.0	0.0	0.0	0.0 d
4.5601	59.66000	58.42400	0.00000	0.0	0.0	0.0	0.0 d
5.1301	60.23000	58.42700	0.00000	0.0	0.0	0.0	0.0 d
5.7001	60.80000	58.43000	0.00000	0.0	0.0	0.0	0.0 d
6.2701	61.37000	58.43300	0.00000	0.0	0.0	0.0	0.0 d
6.8401	61.94000	58.43600	0.00000	0.0	0.0	0.0	0.0 d
7.4101	62.51000	58.43900	0.00000	0.0	0.0	0.0	0.0 d
7.9801	63.08000	58.44200	0.00000	0.0	0.0	0.0	0.0 d
8.5501	63.65000	58.44500	0.00000	0.0	0.0	0.0	0.0 d
9.1201	64.22000	58.44800	0.00000	0.0	0.0	0.0	0.0 d
9.6901	64.79000	58.45100	0.00000	0.0	0.0	0.0	0.0 d
10.260	65.36000	58.45400	0.00000	0.0	0.0	0.0	0.0 d
10.830	65.93000	58.45700	0.00000	0.0	0.0	0.0	0.0 d

11.400 66.50000 58.46000 0.00000 0.0 0.0 0.0 0.0 d
d - Displacements include imported displacements.

Structure: bc | Sub-structure:

Dist.	Coordinates			Displacements		Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	x	y	z	x	y			
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	66.50000	58.46000	0.00000	0.0	0.0	0.0	0.0	d
0.27800	66.50000	58.18200	0.00000	0.0	0.0	0.0	0.0	d
0.55600	66.50000	57.90400	0.00000	0.0	0.0	0.0	0.0	d
0.83400	66.50000	57.62600	0.00000	0.0	0.0	0.0	0.0	d
1.11200	66.50000	57.34800	0.00000	0.0	0.0	0.0	0.0	d
1.39000	66.50000	57.07000	0.00000	0.0	0.0	0.0	0.0	d
1.66800	66.50000	56.79200	0.00000	0.0	0.0	0.0	0.0	d
1.94600	66.50000	56.51400	0.00000	0.0	0.0	0.0	0.0	d
2.22400	66.50000	56.23600	0.00000	0.0	0.0	0.0	0.0	d
2.50200	66.50000	55.95800	0.00000	0.0	0.0	0.0	0.0	d
2.78000	66.50000	55.68000	0.00000	0.0	0.0	0.0	0.0	d
3.05800	66.50000	55.40200	0.00000	0.0	0.0	0.0	0.0	d
3.33600	66.50000	55.12400	0.00000	0.0	0.0	0.0	0.0	d
3.61400	66.50000	54.84600	0.00000	0.0	0.0	0.0	0.0	d
3.89200	66.50000	54.56800	0.00000	0.0	0.0	0.0	0.0	d
4.17000	66.50000	54.29000	0.00000	0.0	0.0	0.0	0.0	d
4.44800	66.50000	54.01200	0.00000	0.0	0.0	0.0	0.0	d
4.72600	66.50000	53.73400	0.00000	0.0	0.0	0.0	0.0	d
5.00400	66.50000	53.45600	0.00000	0.0	0.0	0.0	0.0	d
5.28200	66.50000	53.17800	0.00000	0.0	0.0	0.0	0.0	d
5.56000	66.50000	52.90000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: cd | Sub-structure:

Dist.	Coordinates			Displacements		Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	x	y	z	x	y			
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	66.50000	52.90000	0.00000	0.0	0.0	0.0	0.0	d
1.7493	65.00000	52.00000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: eh | Sub-structure:

Dist.	Coordinates			Displacements		Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	x	y	z	x	y			
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	64.74000	51.60000	0.00000	0.0	0.0	0.0	0.0	d
1.0844	63.65556	51.60000	0.00000	0.0	0.0	0.0	0.0	d
2.1689	62.57111	51.60000	0.00000	0.0	0.0	0.0	0.0	d
3.2533	61.48667	51.60000	0.00000	0.0	0.0	0.0	0.0	d
4.3378	60.40222	51.60000	0.00000	0.0	0.0	0.0	0.0	d
5.4222	59.31778	51.60000	0.00000	0.0	0.0	0.0	0.0	d
6.5067	58.23333	51.60000	0.00000	0.0	0.0	0.0	0.0	d
7.5911	57.14889	51.60000	0.00000	0.0	0.0	0.0	0.0	d
8.6756	56.06444	51.60000	0.00000	0.0	0.0	0.0	0.0	d
9.7600	54.98000	51.60000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: hf | Sub-structure:

Dist.	Coordinates			Displacements		Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	x	y	z	x	y			

[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	54.98000	51.60000	0.00000	0.0	0.0	0.0	0.0 d
1.0880	53.89200	51.60000	0.00000	0.0	0.0	0.0	0.0 d
2.1760	52.80400	51.60000	0.00000	0.0	0.0	0.0	0.0 d
3.2640	51.71600	51.60000	0.00000	0.0	0.0	0.0	0.0 d
4.3520	50.62800	51.60000	0.00000	0.0	0.0	0.0	0.0 d
5.4400	49.54000	51.60000	0.00000	0.0	0.0	0.0	0.0 d
6.5280	48.45200	51.60000	0.00000	0.0	0.0	0.0	0.0 d
7.6160	47.36400	51.60000	0.00000	0.0	0.0	0.0	0.0 d
8.7040	46.27600	51.60000	0.00000	0.0	0.0	0.0	0.0 d
9.7920	45.18800	51.60000	0.00000	0.0	0.0	0.0	0.0 d
10.880	44.10000	51.60000	0.00000	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: de | Sub-structure:

Dist.	Coordinates			Displacements		Horizontal displacement along the Line [mm]	Horizontal displacement perpendicular to Line [mm]
	x	y	z	x	y		
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	65.00000	52.00000	0.00000	0.0	0.0	0.0	0.0 d
0.11927	64.93500	51.90000	0.00000	0.0	0.0	0.0	0.0 d
0.23854	64.87000	51.80000	0.00000	0.0	0.0	0.0	0.0 d
0.35781	64.80500	51.70000	0.00000	0.0	0.0	0.0	0.0 d
0.47707	64.74000	51.60000	0.00000	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Specific Building Damage Results - Vertical Displacements

Structure: 21-20 | Sub-structure:

Dist.	Coordinates			Displacements	
	x	y	z	z	
[m]	[m]	[m]	[m]	[mm]	
Vertical Offset 1					
0.0	55.96000	70.70000	0.00000	-0.11099 d	
1.0682	54.89182	70.70182	0.00000	-0.11252 d	
2.1364	53.82364	70.70364	0.00000	-0.11308 d	
3.2046	52.75545	70.70545	0.00000	-0.11278 d	
4.2727	51.68727	70.70727	0.00000	-0.11176 d	
5.3409	50.61909	70.70909	0.00000	-0.11012 d	
6.4091	49.55091	70.71091	0.00000	-0.10795 d	
7.4773	48.48273	70.71273	0.00000	-0.10527 d	
8.5455	47.41455	70.71455	0.00000	-0.10209 d	
9.6137	46.34636	70.71636	0.00000	-0.098366 d	
10.682	45.27818	70.71818	0.00000	-0.094032 d	
11.750	44.21000	70.72000	0.00000	-0.089026 d	

d - Displacements include imported displacements.

Structure: 19-20 | Sub-structure:

Dist.	Coordinates			Displacements	
	x	y	z	z	
[m]	[m]	[m]	[m]	[mm]	
Vertical Offset 1					
0.0	59.14000	66.79000	0.00000	-0.28357 d	
1.0080	58.50400	67.57200	0.00000	-0.23877 d	
2.0160	57.86800	68.35400	0.00000	-0.19971 d	
3.0239	57.23200	69.13600	0.00000	-0.16579 d	
4.0319	56.59600	69.91800	0.00000	-0.13641 d	
5.0399	55.96000	70.70000	0.00000	-0.11099 d	

d - Displacements include imported displacements.

Structure: 19-18 | Sub-structure:

Dist.	Coordinates			Displacements	
	x	y	z	z	
[m]	[m]	[m]	[m]	[mm]	

[m] [m] [m] [m] [mm]

Vertical Offset 1

0.0 59.14000 66.79000 0.00000 -0.28357 d
1.0051 59.15500 65.78500 0.00000 -0.36493 d
2.0102 59.17000 64.78000 0.00000 -0.47011 d
d - Displacements include imported displacements.

Structure: 18-13 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0 59.17000 64.78000 0.00000 -0.47011 d
1.0686 58.10143 64.78143 0.00000 -0.48945 d
2.1371 57.03286 64.78286 0.00000 -0.50106 d
3.2057 55.96429 64.78429 0.00000 -0.50519 d
4.2743 54.89571 64.78571 0.00000 -0.50296 d
5.3429 53.82714 64.78714 0.00000 -0.49618 d
6.4114 52.75857 64.78857 0.00000 -0.48689 d
7.4800 51.69000 64.79000 0.00000 -0.47690 d
8.5486 50.62143 64.79143 0.00000 -0.46757 d
9.6172 49.55286 64.79286 0.00000 -0.45965 d
10.686 48.48429 64.79429 0.00000 -0.45329 d
11.754 47.41571 64.79571 0.00000 -0.44803 d
12.823 46.34714 64.79714 0.00000 -0.44287 d
13.891 45.27857 64.79857 0.00000 -0.43627 d
14.960 44.21000 64.80000 0.00000 -0.42639 d
d - Displacements include imported displacements.

Structure: 21-a | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0 44.21000 70.72000 0.00000 -0.089026 d
0.34768 44.20559 70.37235 0.00000 -0.098808 d
0.69535 44.20118 70.02471 0.00000 -0.10934 d
1.0430 44.19676 69.67706 0.00000 -0.12067 d
1.3907 44.19235 69.32941 0.00000 -0.13289 d
1.7384 44.18794 68.98176 0.00000 -0.14606 d
2.0861 44.18353 68.63412 0.00000 -0.16029 d
2.4337 44.17912 68.28647 0.00000 -0.17566 d
2.7814 44.17471 67.93882 0.00000 -0.19228 d
3.1291 44.17029 67.59118 0.00000 -0.21028 d
3.4768 44.16588 67.24353 0.00000 -0.22980 d
3.8244 44.16147 66.89588 0.00000 -0.25098 d
4.1721 44.15706 66.54824 0.00000 -0.27400 d
4.5198 44.15265 66.20059 0.00000 -0.29906 d
4.8675 44.14824 65.85294 0.00000 -0.32637 d
5.2151 44.14382 65.50529 0.00000 -0.35618 d
5.5628 44.13941 65.15765 0.00000 -0.38877 d
5.9105 44.13500 64.81000 0.00000 -0.42446 d
6.2582 44.13059 64.46235 0.00000 -0.46360 d
6.6058 44.12618 64.11471 0.00000 -0.50661 d
6.9535 44.12176 63.76706 0.00000 -0.55395 d
7.3012 44.11735 63.41941 0.00000 -0.60617 d
7.6489 44.11294 63.07176 0.00000 -0.66386 d
7.9965 44.10853 62.72412 0.00000 -0.72775 d
8.3442 44.10412 62.37647 0.00000 -0.79865 d
8.6919 44.09971 62.02882 0.00000 -0.87751 d
9.0396 44.09529 61.68118 0.00000 -0.96547 d
9.3872 44.09088 61.33353 0.00000 -1.0639 d
9.7349 44.08647 60.98588 0.00000 -1.1745 d
10.083 44.08206 60.63824 0.00000 -1.2995 d
10.430 44.07765 60.29059 0.00000 -1.4421 d
10.778 44.07324 59.94294 0.00000 -1.6070 d
11.126 44.06882 59.59529 0.00000 -1.8032 d
11.473 44.06441 59.24765 0.00000 -2.0499 d
11.821 44.06000 58.90000 0.00000 -2.3993 d
d - Displacements include imported displacements.

Structure: f-50 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]
Vertical Offset 1				
0.0	44.10000	51.60000	0.00000	-3.4154 d
0.99267	44.10400	50.60733	0.00000	-1.9105 d
1.9853	44.10800	49.61467	0.00000	-1.3858 d
2.9780	44.11200	48.62200	0.00000	-1.0403 d
3.9707	44.11600	47.62933	0.00000	-0.79242 d
4.9634	44.12000	46.63667	0.00000	-0.60940 d
5.9560	44.12400	45.64400	0.00000	-0.47184 d
6.9487	44.12800	44.65133	0.00000	-0.36685 d
7.9414	44.13200	43.65867	0.00000	-0.28562 d
8.9341	44.13600	42.66600	0.00000	-0.22200 d
9.9267	44.14000	41.67333	0.00000	-0.17162 d
10.919	44.14400	40.68067	0.00000	-0.13137 d
11.912	44.14800	39.68800	0.00000	-0.098950 d
12.905	44.15200	38.69533	0.00000	-0.072682 d
13.897	44.15600	37.70267	0.00000	-0.051295 d
14.890	44.16000	36.71000	0.00000	-0.033819 d

d - Displacements include imported displacements.

Structure: 14-15 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]
Vertical Offset 1				
0.0	55.00000	64.76000	0.00000	-0.50657 d
1.0700	55.00000	63.69000	0.00000	-0.65968 d
2.1400	55.00000	62.62000	0.00000	-0.86503 d

d - Displacements include imported displacements.

Structure: 15-16 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]
Vertical Offset 1				
0.0	55.00000	62.62000	0.00000	-0.86503 d
1.6907	56.23000	61.46000	0.00000	-1.2185 d

d - Displacements include imported displacements.

Structure: 16-17 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]
Vertical Offset 1				
0.0	56.23000	61.46000	0.00000	-1.2185 d
1.9000	56.22000	59.56000	0.00000	-2.2939 d

d - Displacements include imported displacements.

Structure: 17-g | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]
Vertical Offset 1				
0.0	56.22000	59.56000	0.00000	-2.2939 d
1.6125	55.10000	58.40000	0.00000	-3.9293 d

d - Displacements include imported displacements.

Structure: h-49 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	54.98000	51.60000	0.00000	-3.6970	d
1.0678	55.74000	50.85000	0.00000	-2.6219	d
2.1355	56.50000	50.10000	0.00000	-2.0008	d

d - Displacements include imported displacements.

Structure: 49-36 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	56.50000	50.10000	0.00000	-2.0008	d
1.1950	56.50000	48.90500	0.00000	-1.3388	d
2.3900	56.50000	47.71000	0.00000	-0.94554	d

d - Displacements include imported displacements.

Structure: 36-48 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	56.50000	47.71000	0.00000	-0.94554	d
1.1506	55.73000	46.85500	0.00000	-0.74976	d
2.3012	54.96000	46.00000	0.00000	-0.59943	d

d - Displacements include imported displacements.

Structure: 48-47 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	54.96000	46.00000	0.00000	-0.59943	d
1.1700	54.96000	44.83000	0.00000	-0.44907	d

d - Displacements include imported displacements.

Structure: 47-51 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	54.96000	44.83000	0.00000	-0.44907	d
1.0750	53.88500	44.83000	0.00000	-0.44563	d
2.1500	52.81000	44.83000	0.00000	-0.43936	d
3.2250	51.73500	44.83000	0.00000	-0.43187	d
4.3000	50.66000	44.83000	0.00000	-0.42438	d
5.3750	49.58500	44.83000	0.00000	-0.41764	d
6.4500	48.51000	44.83000	0.00000	-0.41186	d
7.5250	47.43500	44.83000	0.00000	-0.40670	d
8.6000	46.36000	44.83000	0.00000	-0.40133	d
9.6750	45.28500	44.83000	0.00000	-0.39450	d
10.750	44.21000	44.83000	0.00000	-0.38470	d

d - Displacements include imported displacements.

Structure: 50-46 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	44.16000	36.71000	0.00000	-0.033819	d
1.0800	45.24000	36.71000	0.00000	-0.036845	d
2.1600	46.32000	36.71000	0.00000	-0.039487	d
3.2400	47.40000	36.71000	0.00000	-0.041745	d
4.3200	48.48000	36.71000	0.00000	-0.043621	d
5.4000	49.56000	36.71000	0.00000	-0.045115	d
6.4800	50.64000	36.71000	0.00000	-0.046213	d
7.5600	51.72000	36.71000	0.00000	-0.046896	d
8.6400	52.80000	36.71000	0.00000	-0.047131	d
9.7200	53.88000	36.71000	0.00000	-0.046879	d
10.800	54.96000	36.71000	0.00000	-0.046102	d

d - Displacements include imported displacements.

Structure: 46-47 | Sub-structure:

Dist.	Coordinates			Displacements	
	x	y	z	z	
[m]	[m]	[m]	[m]	[mm]	

Vertical Offset 1

0.0	54.96000	36.71000	0.00000	-0.046102	d
1.0150	54.96000	37.72500	0.00000	-0.066903	d
2.0300	54.96000	38.74000	0.00000	-0.092484	d
3.0450	54.96000	39.75500	0.00000	-0.12404	d
4.0600	54.96000	40.77000	0.00000	-0.16315	d
5.0750	54.96000	41.78500	0.00000	-0.21187	d
6.0900	54.96000	42.80000	0.00000	-0.27299	d
7.1050	54.96000	43.81500	0.00000	-0.35030	d
8.1200	54.96000	44.83000	0.00000	-0.44907	d

d - Displacements include imported displacements.

Structure: 24-25 | Sub-structure:

Dist.	Coordinates			Displacements	
	x	y	z	z	
[m]	[m]	[m]	[m]	[mm]	

Vertical Offset 1

0.0	78.82000	63.10000	0.00000	0.0032396	d
1.0289	79.84889	63.09667	0.00000	0.010013	d
2.0578	80.87778	63.09333	0.00000	0.015492	d
3.0867	81.90667	63.09000	0.00000	0.019894	d
4.1156	82.93556	63.08667	0.00000	0.023399	d
5.1445	83.96444	63.08333	0.00000	0.026156	d
6.1734	84.99333	63.08000	0.00000	0.028292	d
7.2023	86.02222	63.07667	0.00000	0.029909	d
8.2312	87.05111	63.07333	0.00000	0.031095	d
9.2600	88.08000	63.07000	0.00000	0.031921	d

d - Displacements include imported displacements.

Structure: 25-26 | Sub-structure:

Dist.	Coordinates			Displacements	
	x	y	z	z	
[m]	[m]	[m]	[m]	[mm]	

Vertical Offset 1

0.0	88.08000	63.07000	0.00000	0.031921	d
1.0641	88.06400	62.00600	0.00000	0.031669	d
2.1282	88.04800	60.94200	0.00000	0.031428	d
3.1924	88.03200	59.87800	0.00000	0.031209	d
4.2565	88.01600	58.81400	0.00000	0.031019	d
5.3206	88.00000	57.75000	0.00000	0.030868	d

d - Displacements include imported displacements.

Structure: 26-27 | Sub-structure:

Dist.	Coordinates			Displacements	
	x	y	z	z	
[m]	[m]	[m]	[m]	[mm]	

Vertical Offset 1

0.0	88.00000	57.75000	0.00000	0.030868	d
1.0246	86.97545	57.76364	0.00000	0.029599	d
2.0493	85.95091	57.77727	0.00000	0.027853	d
3.0739	84.92636	57.79091	0.00000	0.025525	d
4.0985	83.90182	57.80455	0.00000	0.022485	d
5.1232	82.87727	57.81818	0.00000	0.018573	d
6.1478	81.85273	57.83182	0.00000	0.013586	d
7.1725	80.82818	57.84545	0.00000	0.0072723	d
8.1971	79.80364	57.85909	0.00000	-689.73E-6	d
9.2217	78.77909	57.87273	0.00000	-0.010711	d
10.246	77.75455	57.88636	0.00000	-0.023320	d
11.271	76.73000	57.90000	0.00000	-0.039210	d

d - Displacements include imported displacements.

Structure: 27-28 | Sub-structure:

Dist.	Coordinates			Displacements	
	x	y	z	z	
[m]	[m]	[m]	[m]	[mm]	

Vertical Offset 1

0.0	76.73000	57.90000	0.00000	-0.039210	d
1.0567	76.72333	58.95667	0.00000	-0.035787	d
2.1134	76.71667	60.01333	0.00000	-0.031491	d
3.1701	76.71000	61.07000	0.00000	-0.026543	d

d - Displacements include imported displacements.

Structure: 28-29 | Sub-structure:

Dist.	Coordinates			Displacements	
	x	y	z	z	
[m]	[m]	[m]	[m]	[mm]	

Vertical Offset 1

0.0	76.71000	61.07000	0.00000	-0.026543	d
1.4640	77.76500	62.08500	0.00000	-0.0094733	d
2.9280	78.82000	63.10000	0.00000	0.0032396	d

d - Displacements include imported displacements.

Structure: 27-32 | Sub-structure:

Dist.	Coordinates			Displacements	
	x	y	z	z	
[m]	[m]	[m]	[m]	[mm]	

Vertical Offset 1

0.0	76.73000	57.90000	0.00000	-0.039210	d
1.0300	76.73400	56.87000	0.00000	-0.041569	d
2.0600	76.73800	55.84000	0.00000	-0.042787	d
3.0900	76.74200	54.81000	0.00000	-0.042793	d
4.1200	76.74600	53.78000	0.00000	-0.041592	d
5.1500	76.75000	52.75000	0.00000	-0.039255	d

d - Displacements include imported displacements.

Structure: 33-31 | Sub-structure:

Dist.	Coordinates			Displacements	
	x	y	z	z	
[m]	[m]	[m]	[m]	[mm]	

Vertical Offset 1

0.0	87.93000	52.75000	0.00000	0.030810	d
1.0400	86.89000	52.75000	0.00000	0.029484	d
2.0800	85.85000	52.75000	0.00000	0.027657	d
3.1200	84.81000	52.75000	0.00000	0.025215	d
4.1600	83.77000	52.75000	0.00000	0.022019	d
5.2000	82.73000	52.75000	0.00000	0.017894	d
6.2400	81.69000	52.75000	0.00000	0.012622	d
7.2800	80.65000	52.75000	0.00000	0.0059241	d
8.3200	79.61000	52.75000	0.00000	-0.0025518	d
9.3600	78.57000	52.75000	0.00000	-0.013260	d
10.400	77.53000	52.75000	0.00000	-0.026793	d

11.440	76.49000	52.75000	0.00000	-0.043928	d
12.480	75.45000	52.75000	0.00000	-0.065700	d
13.520	74.41000	52.75000	0.00000	-0.093514	d
14.560	73.37000	52.75000	0.00000	-0.12932	d
15.600	72.33000	52.75000	0.00000	-0.17589	d
16.640	71.29000	52.75000	0.00000	-0.23742	d
17.680	70.25000	52.75000	0.00000	-0.32072	d

d - Displacements include imported displacements.

Structure: 31-34 | Sub-structure:

Dist.	Coordinates			Displacements	
	x	y	z	z	
[m]	[m]	[m]	[m]	[mm]	

Vertical Offset 1

0.0	70.25000	52.75000	0.00000	-0.32072	d
1.1236	70.22667	51.62667	0.00000	-0.28984	d
2.2472	70.20333	50.50333	0.00000	-0.25416	d
3.3707	70.18000	49.38000	0.00000	-0.21757	d

d - Displacements include imported displacements.

Structure: 34-35 | Sub-structure:

Dist.	Coordinates			Displacements	
	x	y	z	z	
[m]	[m]	[m]	[m]	[mm]	

Vertical Offset 1

0.0	70.18000	49.38000	0.00000	-0.21757	d
1.3300	71.51000	49.37000	0.00000	-0.15519	d

d - Displacements include imported displacements.

Structure: 35-41 | Sub-structure:

Dist.	Coordinates			Displacements	
	x	y	z	z	
[m]	[m]	[m]	[m]	[mm]	

Vertical Offset 1

0.0	71.51000	49.37000	0.00000	-0.15519	d
1.2000	71.50000	48.17000	0.00000	-0.12963	d
2.4001	71.49000	46.97000	0.00000	-0.10548	d
3.6001	71.48000	45.77000	0.00000	-0.083411	d

d - Displacements include imported displacements.

Structure: 41-40 | Sub-structure:

Dist.	Coordinates			Displacements	
	x	y	z	z	
[m]	[m]	[m]	[m]	[mm]	

Vertical Offset 1

0.0	71.48000	45.77000	0.00000	-0.083411	d
1.0175	70.46250	45.77000	0.00000	-0.10683	d
2.0350	69.44500	45.77000	0.00000	-0.13369	d
3.0525	68.42750	45.77000	0.00000	-0.16410	d
4.0700	67.41000	45.77000	0.00000	-0.19797	d

d - Displacements include imported displacements.

Structure: 40-39 | Sub-structure:

Dist.	Coordinates			Displacements	
	x	y	z	z	
[m]	[m]	[m]	[m]	[mm]	

Vertical Offset 1

0.0	67.41000	45.77000	0.00000	-0.19797	d
1.3000	67.40333	44.47000	0.00000	-0.14872	d
2.6000	67.39667	43.17000	0.00000	-0.10927	d
3.9001	67.39000	41.87000	0.00000	-0.077694	d

d - Displacements include imported displacements.

Structure: 39-38 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]
Vertical Offset 1				
0.0	67.39000	41.87000	0.00000	-0.077694 d
1.0305	68.42050	41.86150	0.00000	-0.063438 d
2.0611	69.45100	41.85300	0.00000	-0.050204 d
3.0916	70.48150	41.84450	0.00000	-0.038093 d
4.1221	71.51200	41.83600	0.00000	-0.027155 d
5.1527	72.54250	41.82750	0.00000	-0.017395 d
6.1832	73.57300	41.81900	0.00000	-0.0087829 d
7.2137	74.60350	41.81050	0.00000	-0.0012613 d
8.2443	75.63400	41.80200	0.00000	0.0052432 d
9.2748	76.66450	41.79350	0.00000	0.010815 d
10.305	77.69500	41.78500	0.00000	0.015541 d
11.336	78.72550	41.77650	0.00000	0.019509 d
12.366	79.75600	41.76800	0.00000	0.022805 d
13.397	80.78650	41.75950	0.00000	0.025507 d
14.427	81.81700	41.75100	0.00000	0.027690 d
15.458	82.84750	41.74250	0.00000	0.029419 d
16.489	83.87800	41.73400	0.00000	0.030756 d
17.519	84.90850	41.72550	0.00000	0.031753 d
18.550	85.93900	41.71700	0.00000	0.032459 d
19.580	86.96950	41.70850	0.00000	0.032916 d
20.611	88.00000	41.70000	0.00000	0.033160 d

d - Displacements include imported displacements.

Structure: 38-25 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]
Vertical Offset 1				
0.0	88.00000	41.70000	0.00000	0.033160 d
1.0176	88.00381	42.71762	0.00000	0.032988 d
2.0353	88.00762	43.73524	0.00000	0.032788 d
3.0529	88.01143	44.75286	0.00000	0.032566 d
4.0705	88.01524	45.77048	0.00000	0.032330 d
5.0881	88.01905	46.78810	0.00000	0.032086 d
6.1058	88.02286	47.80571	0.00000	0.031842 d
7.1234	88.02667	48.82333	0.00000	0.031608 d
8.1410	88.03048	49.84095	0.00000	0.031390 d
9.1586	88.03429	50.85857	0.00000	0.031197 d
10.176	88.03810	51.87619	0.00000	0.031035 d
11.194	88.04190	52.89381	0.00000	0.030911 d
12.212	88.04571	53.91143	0.00000	0.030829 d
13.229	88.04952	54.92905	0.00000	0.030792 d
14.247	88.05333	55.94667	0.00000	0.030802 d
15.264	88.05714	56.96429	0.00000	0.030857 d
16.282	88.06095	57.98190	0.00000	0.030956 d
17.300	88.06476	58.99952	0.00000	0.031094 d
18.317	88.06857	60.01714	0.00000	0.031267 d
19.335	88.07238	61.03476	0.00000	0.031468 d
20.353	88.07619	62.05238	0.00000	0.031688 d
21.370	88.08000	63.07000	0.00000	0.031921 d

d - Displacements include imported displacements.

Structure: 20-22 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]
Vertical Offset 1				
0.0	55.96000	70.70000	0.00000	-0.11099 d
1.0170	56.97700	70.69900	0.00000	-0.10850 d
2.0340	57.99400	70.69800	0.00000	-0.10498 d
3.0510	59.01100	70.69700	0.00000	-0.10043 d
4.0680	60.02800	70.69600	0.00000	-0.094868 d

5.0850 61.04500 70.69500 0.00000 -0.088401 d
6.1020 62.06200 70.69400 0.00000 -0.081155 d
7.1190 63.07900 70.69300 0.00000 -0.073287 d
8.1360 64.09600 70.69200 0.00000 -0.064978 d
9.1530 65.11300 70.69100 0.00000 -0.056412 d
10.170 66.13000 70.69000 0.00000 -0.047771 d
d - Displacements include imported displacements.

Structure: 22-b | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]
Vertical Offset 1				
0.0	66.13000	70.69000	0.00000	-0.047771 d
0.69360	66.14000	69.99647	0.00000	-0.060484 d
1.3872	66.15000	69.30294	0.00000	-0.074937 d
2.0808	66.16000	68.60941	0.00000	-0.091377 d
2.7744	66.17000	67.91588	0.00000	-0.11009 d
3.4680	66.18000	67.22235	0.00000	-0.13140 d
4.1616	66.19000	66.52882	0.00000	-0.15571 d
4.8552	66.20000	65.83529	0.00000	-0.18347 d
5.5488	66.21000	65.14176	0.00000	-0.21522 d
6.2424	66.22000	64.44824	0.00000	-0.25165 d
6.9360	66.23000	63.75471	0.00000	-0.29362 d
7.6296	66.24000	63.06118	0.00000	-0.34229 d
8.3232	66.25000	62.36765	0.00000	-0.39932 d
9.0168	66.26000	61.67412	0.00000	-0.46730 d
9.7104	66.27000	60.98059	0.00000	-0.55055 d
10.404	66.28000	60.28706	0.00000	-0.65675 d
11.098	66.29000	59.59353	0.00000	-0.80012 d
11.791	66.30000	58.90000	0.00000	-1.0082 d

d - Displacements include imported displacements.

Structure: e-45 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]
Vertical Offset 1				
0.0	64.74000	51.60000	0.00000	-1.4076 d
0.98415	64.72267	50.61600	0.00000	-0.98124 d
1.9683	64.70533	49.63200	0.00000	-0.74450 d
2.9525	64.68800	48.64800	0.00000	-0.58549 d
3.9366	64.67067	47.66400	0.00000	-0.46712 d
4.9208	64.65333	46.68000	0.00000	-0.37440 d
5.9049	64.63600	45.69600	0.00000	-0.29999 d
6.8891	64.61867	44.71200	0.00000	-0.23956 d
7.8732	64.60133	43.72800	0.00000	-0.19017 d
8.8574	64.58400	42.74400	0.00000	-0.14963 d
9.8415	64.56667	41.76000	0.00000	-0.11625 d
10.826	64.54933	40.77600	0.00000	-0.088689 d
11.810	64.53200	39.79200	0.00000	-0.065891 d
12.794	64.51467	38.80800	0.00000	-0.046999 d
13.778	64.49733	37.82400	0.00000	-0.031325 d
14.762	64.48000	36.84000	0.00000	-0.018315 d

d - Displacements include imported displacements.

Structure: 18-31 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]
Vertical Offset 1				
0.0	59.17000	64.78000	0.00000	-0.47011 d
1.1384	60.30833	64.77333	0.00000	-0.44235 d
2.2767	61.44667	64.76667	0.00000	-0.40812 d
3.4151	62.58500	64.76000	0.00000	-0.36932 d
4.5534	63.72333	64.75333	0.00000	-0.32786 d
5.6918	64.86167	64.74667	0.00000	-0.28543 d
6.8301	66.00000	64.74000	0.00000	-0.24354 d

d - Displacements include imported displacements.

Structure: 23-24 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	66.00000	63.14000	0.00000	-0.34977 d
1.0683	67.06833	63.13667	0.00000	-0.29175 d
2.1367	68.13667	63.13333	0.00000	-0.23884 d
3.2050	69.20500	63.13000	0.00000	-0.19206 d
4.2734	70.27333	63.12667	0.00000	-0.15169 d
5.3417	71.34167	63.12333	0.00000	-0.11746 d
6.4100	72.41000	63.12000	0.00000	-0.088807 d
7.4784	73.47833	63.11667	0.00000	-0.065022 d
8.5467	74.54667	63.11333	0.00000	-0.045407 d
9.6150	75.61500	63.11000	0.00000	-0.029309 d
10.683	76.68333	63.10667	0.00000	-0.016153 d
11.752	77.75167	63.10333	0.00000	-0.0054435 d
12.820	78.82000	63.10000	0.00000	0.0032396 d

d - Displacements include imported displacements.

Structure: b-27 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	66.10000	58.46000	0.00000	-1.3236 d
1.0645	67.16300	58.40400	0.00000	-0.82800 d
2.1289	68.22600	58.34800	0.00000	-0.56862 d
3.1934	69.28900	58.29200	0.00000	-0.40920 d
4.2579	70.35200	58.23600	0.00000	-0.30095 d
5.3224	71.41500	58.18000	0.00000	-0.22298 d
6.3868	72.47800	58.12400	0.00000	-0.16485 d
7.4513	73.54100	58.06800	0.00000	-0.12061 d
8.5158	74.60400	58.01200	0.00000	-0.086508 d
9.5803	75.66700	57.95600	0.00000	-0.059979 d
10.645	76.73000	57.90000	0.00000	-0.039210 d

d - Displacements include imported displacements.

Structure: 42-37 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	64.54000	46.73000	0.00000	-0.38479 d
1.0183	65.55826	46.71783	0.00000	-0.33013 d
2.0367	66.57652	46.70565	0.00000	-0.27911 d
3.0550	67.59478	46.69348	0.00000	-0.23247 d
4.0733	68.61304	46.68130	0.00000	-0.19068 d
5.0917	69.63130	46.66913	0.00000	-0.15391 d
6.1100	70.64957	46.65696	0.00000	-0.12206 d
7.1283	71.66783	46.64478	0.00000	-0.094795 d
8.1467	72.68609	46.63261	0.00000	-0.071683 d
9.1650	73.70435	46.62043	0.00000	-0.052235 d
10.183	74.72261	46.60826	0.00000	-0.035968 d
11.202	75.74087	46.59609	0.00000	-0.022427 d
12.220	76.75913	46.58391	0.00000	-0.011207 d
13.238	77.77739	46.57174	0.00000	-0.0019488 d
14.257	78.79565	46.55957	0.00000	0.0056554 d
15.275	79.81391	46.54739	0.00000	0.011869 d
16.293	80.83217	46.53522	0.00000	0.016916 d
17.312	81.85043	46.52304	0.00000	0.020983 d
18.330	82.86870	46.51087	0.00000	0.024231 d
19.348	83.88696	46.49870	0.00000	0.026790 d
20.367	84.90522	46.48652	0.00000	0.028773 d
21.385	85.92348	46.47435	0.00000	0.030274 d
22.403	86.94174	46.46217	0.00000	0.031372 d

23.422 87.96000 46.45000 0.00000 0.032133 d
d - Displacements include imported displacements.

Structure: 47-43 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	54.96000	44.83000	0.00000	-0.44907	d
1.0600	56.02000	44.83000	0.00000	-0.44803	d
2.1200	57.08000	44.83000	0.00000	-0.44122	d
3.1800	58.14000	44.83000	0.00000	-0.42786	d
4.2400	59.20000	44.83000	0.00000	-0.40796	d
5.3000	60.26000	44.83000	0.00000	-0.38231	d
6.3600	61.32000	44.83000	0.00000	-0.35222	d
7.4200	62.38000	44.83000	0.00000	-0.31921	d
8.4800	63.44000	44.83000	0.00000	-0.28476	d
9.5400	64.50000	44.83000	0.00000	-0.25009	d

d - Displacements include imported displacements.

Structure: 44-39 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	64.44000	41.91000	0.00000	-0.12293	d
1.4751	65.91500	41.89000	0.00000	-0.099746	d
2.9503	67.39000	41.87000	0.00000	-0.077694	d

d - Displacements include imported displacements.

Structure: 46-45 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	54.96000	36.71000	0.00000	-0.046102	d
1.0579	56.01778	36.72444	0.00000	-0.045064	d
2.1158	57.07556	36.73889	0.00000	-0.043460	d
3.1736	58.13333	36.75333	0.00000	-0.041283	d
4.2315	59.19111	36.76778	0.00000	-0.038546	d
5.2894	60.24889	36.78222	0.00000	-0.035281	d
6.3473	61.30667	36.79667	0.00000	-0.031546	d
7.4051	62.36444	36.81111	0.00000	-0.027413	d
8.4630	63.42222	36.82556	0.00000	-0.022971	d
9.5209	64.48000	36.84000	0.00000	-0.018315	d

d - Displacements include imported displacements.

Structure: a-12 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	44.06000	58.90000	0.00000	-2.3993	d
1.1151	42.95250	58.77000	0.00000	-2.7685	d
2.2302	41.84500	58.64000	0.00000	-3.0164	d
3.3453	40.73750	58.51000	0.00000	-3.1498	d
4.4604	39.63000	58.38000	0.00000	-2.5115	d

d - Displacements include imported displacements.

Structure: 12-11 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	39.63000	58.38000	0.00000	-2.5115	d
1.1167	39.63000	57.26333	0.00000	-3.6154	d
2.2333	39.63000	56.14667	0.00000	-3.9420	d
3.3500	39.63000	55.03000	0.00000	-4.0498	d
4.4667	39.63000	53.91333	0.00000	-3.9747	d
5.5833	39.63000	52.79667	0.00000	-3.6797	d
6.7000	39.63000	51.68000	0.00000	-2.5818	d

d - Displacements include imported displacements.

Structure: 11-f | Sub-structure:

Dist.	Coordinates			Displacements	
	x	y	z	z	
[m]	[m]	[m]	[m]	[mm]	

Vertical Offset 1

0.0	39.63000	51.68000	0.00000	-2.5818	d
0.55884	40.18875	51.67000	0.00000	-3.3767	d
1.1177	40.74750	51.66000	0.00000	-3.6603	d
1.6765	41.30625	51.65000	0.00000	-3.8091	d
2.2354	41.86500	51.64000	0.00000	-3.8834	d
2.7942	42.42375	51.63000	0.00000	-3.8976	d
3.3530	42.98250	51.62000	0.00000	-3.8520	d
3.9119	43.54125	51.61000	0.00000	-3.7284	d
4.4707	44.10000	51.60000	0.00000	-3.4154	d

d - Displacements include imported displacements.

Structure: ag | Sub-structure:

Dist.	Coordinates			Displacements	
	x	y	z	z	
[m]	[m]	[m]	[m]	[mm]	

Vertical Offset 1

0.0	44.06000	58.90000	0.00000	-2.3993	d
1.0047	45.06364	58.85455	0.00000	-2.1904	d
2.0093	46.06727	58.80909	0.00000	-2.0705	d
3.0140	47.07091	58.76364	0.00000	-2.0116	d
4.0187	48.07455	58.71818	0.00000	-1.9957	d
5.0233	49.07818	58.67273	0.00000	-2.0172	d
6.0280	50.08182	58.62727	0.00000	-2.0756	d
7.0327	51.08545	58.58182	0.00000	-2.1748	d
8.0373	52.08909	58.53636	0.00000	-2.3260	d
9.0420	53.09273	58.49091	0.00000	-2.5556	d
10.047	54.09636	58.44545	0.00000	-2.9379	d
11.051	55.10000	58.40000	0.00000	-3.9293	d

d - Displacements include imported displacements.

Structure: gb | Sub-structure:

Dist.	Coordinates			Displacements	
	x	y	z	z	
[m]	[m]	[m]	[m]	[mm]	

Vertical Offset 1

0.0	55.10000	58.40000	0.00000	-3.9293	d
0.57001	55.67000	58.40300	0.00000	-4.4063	d
1.1400	56.24000	58.40600	0.00000	-4.6039	d
1.7100	56.81000	58.40900	0.00000	-4.6866	d
2.2800	57.38000	58.41200	0.00000	-4.6956	d
2.8500	57.95000	58.41500	0.00000	-4.6452	d
3.4200	58.52000	58.41800	0.00000	-4.5371	d
3.9901	59.09000	58.42100	0.00000	-4.3545	d
4.5601	59.66000	58.42400	0.00000	-3.9977	d
5.1301	60.23000	58.42700	0.00000	-3.4385	d
5.7001	60.80000	58.43000	0.00000	-3.1560	d
6.2701	61.37000	58.43300	0.00000	-2.9602	d
6.8401	61.94000	58.43600	0.00000	-2.7950	d
7.4101	62.51000	58.43900	0.00000	-2.6443	d
7.9801	63.08000	58.44200	0.00000	-2.4994	d
8.5501	63.65000	58.44500	0.00000	-2.3523	d
9.1201	64.22000	58.44800	0.00000	-2.1934	d

9.6901 64.79000 58.45100 0.00000 -2.0087 d
 10.260 65.36000 58.45400 0.00000 -1.7738 d
 10.830 65.93000 58.45700 0.00000 -1.4434 d
 11.400 66.50000 58.46000 0.00000 -1.0862 d
 d - Displacements include imported displacements.

Structure: bc | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0 66.50000 58.46000 0.00000 -1.0862 d
 0.27800 66.50000 58.18200 0.00000 -1.1878 d
 0.55600 66.50000 57.90400 0.00000 -1.2830 d
 0.83400 66.50000 57.62600 0.00000 -1.3652 d
 1.1120 66.50000 57.34800 0.00000 -1.4335 d
 1.3900 66.50000 57.07000 0.00000 -1.4892 d
 1.6680 66.50000 56.79200 0.00000 -1.5338 d
 1.9460 66.50000 56.51400 0.00000 -1.5686 d
 2.2240 66.50000 56.23600 0.00000 -1.5948 d
 2.5020 66.50000 55.95800 0.00000 -1.6132 d
 2.7800 66.50000 55.68000 0.00000 -1.6242 d
 3.0580 66.50000 55.40200 0.00000 -1.6283 d
 3.3360 66.50000 55.12400 0.00000 -1.6256 d
 3.6140 66.50000 54.84600 0.00000 -1.6159 d
 3.8920 66.50000 54.56800 0.00000 -1.5991 d
 4.1700 66.50000 54.29000 0.00000 -1.5747 d
 4.4480 66.50000 54.01200 0.00000 -1.5419 d
 4.7260 66.50000 53.73400 0.00000 -1.4998 d
 5.0040 66.50000 53.45600 0.00000 -1.4472 d
 5.2820 66.50000 53.17800 0.00000 -1.3828 d
 5.5600 66.50000 52.90000 0.00000 -1.3054 d
 d - Displacements include imported displacements.

Structure: cd | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0 66.50000 52.90000 0.00000 -1.3054 d
 1.7493 65.00000 52.00000 0.00000 -1.6318 d
 d - Displacements include imported displacements.

Structure: eh | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0 64.74000 51.60000 0.00000 -1.4076 d
 1.0844 63.65556 51.60000 0.00000 -1.6696 d
 2.1689 62.57111 51.60000 0.00000 -1.9244 d
 3.2533 61.48667 51.60000 0.00000 -2.2318 d
 4.3378 60.40222 51.60000 0.00000 -2.7488 d
 5.4222 59.31778 51.60000 0.00000 -4.1812 d
 6.5067 58.23333 51.60000 0.00000 -4.6184 d
 7.5911 57.14889 51.60000 0.00000 -4.6809 d
 8.6756 56.06444 51.60000 0.00000 -4.4783 d
 9.7600 54.98000 51.60000 0.00000 -3.6970 d
 d - Displacements include imported displacements.

Structure: hf | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0 54.98000 51.60000 0.00000 -3.6970 d
 1.0880 53.89200 51.60000 0.00000 -2.9105 d
 2.1760 52.80400 51.60000 0.00000 -2.6109 d
 3.2640 51.71600 51.60000 0.00000 -2.4508 d
 4.3520 50.62800 51.60000 0.00000 -2.3633 d
 5.4400 49.54000 51.60000 0.00000 -2.3253 d
 6.5280 48.45200 51.60000 0.00000 -2.3298 d
 7.6160 47.36400 51.60000 0.00000 -2.3780 d
 8.7040 46.27600 51.60000 0.00000 -2.4806 d
 9.7920 45.18800 51.60000 0.00000 -2.6783 d
 10.880 44.10000 51.60000 0.00000 -3.4154 d
 d - Displacements include imported displacements.

Structure: de | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]
Vertical Offset 1				
0.0	65.00000	52.00000	0.00000	-1.6318 d
0.11927	64.93500	51.90000	0.00000	-1.5666 d
0.23854	64.87000	51.80000	0.00000	-1.5082 d
0.35781	64.80500	51.70000	0.00000	-1.4555 d
0.47707	64.74000	51.60000	0.00000	-1.4076 d
d - Displacements include imported displacements.				

Specific Building Damage Results - All Segments

Structure: 21-20 | Sub-structure:

Vertical Offset	Segment	Start Length	Curvature	Deflection	Average	Max	Max
Gradient Max	Min	Damage		Ratio	Horizontal	Tensile	of
from Line for	Category				Strain	Strain	
of Vertical	Radius of	Curvature					
Vertical	Displacement	Curve					
Horizontal	Movement						
Displacement	Calculations						
Curve							
[m]	[m]	[m]	[m]	[%]	[%]	[%]	
0.0	0.0	1	0.0	8.5455 Hogging	61.009E-6	0.0	59.330E-6
0.0	-3.4879E-6	1.1295E+6	0				

(Negligible)
 Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 19-20 | Sub-structure:

Vertical Offset	Segment	Start Length	Curvature	Deflection	Average	Max	Max
Gradient Max	Min	Damage		Ratio	Horizontal	Tensile	of
from Line for	Category				Strain	Strain	
of Vertical	Radius of	Curvature					
Vertical	Displacement	Curve					
Horizontal	Movement						
Displacement	Calculations						
Curve							
[m]	[m]	[m]	[m]	[%]	[%]	[%]	
0.0	0.0	1	0.0	5.0389 Sagging	293.87E-6	0.0	282.99E-6
0.0	-44.437E-6	172880.	0				

(Negligible)
 Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 19-18 | Sub-structure:

Vertical Offset Segment Start Length Curvature Deflection Average Max Max
 Gradient Max Gradient Min Damage Ratio Horizontal Tensile of
 from Line for of Vertical Radius of Category
 of Vertical Vertical
 Vertical
 Horizontal Displacement Curvature
 Movement
 Displacement Curve
 Calculations
 Curve

[m]	[m]	[m]	[m]	[m]	[m]	[%]	[%]	[%]
0.0	104.65E-6	42389.	1	0.0	2.0092	Sagging	586.81E-6	0.0 583.26E-6

(Negligible)
 Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 18-13 | Sub-structure:

Vertical Offset Segment Start Length Curvature Deflection Average Max Max
 Gradient Max Gradient Min Damage Ratio Horizontal Tensile
 from Line for of Vertical Radius of Category
 of Vertical Vertical
 Horizontal Displacement Curvature
 Movement
 Displacement Curve
 Calculations
 Curve

[m]	[m]	[m]	[m]	[m]	[m]	[%]	[%]	[%]
0.0	18.099E-6	146770.	1	0.0	7.0688	Hogging	427.65E-6	0.0 419.68E-6

0.0	-9.3470E-6	811090.	2	7.0688	4.6444	Sagging	70.053E-6	0.0 67.842E-6
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0.0	-9.2461E-6	305420.	3	11.713	3.2458	Hogging	82.564E-6	0.0 82.219E-6
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(Negligible)
 Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 21-a | Sub-structure:

Vertical Offset Segment Start Length Curvature Deflection Average Max Max
 Gradient Max Gradient Min Damage Ratio Horizontal Tensile
 from Line for of Vertical Radius of Category
 of Vertical Vertical
 Horizontal Displacement Curvature
 Movement
 Displacement Curve
 Calculations
 Curve

[m]	[m]	[m]	[m]	[m]	[m]	[%]	[%]	[%]
0.0	0.0010049	1042.6	1	0.69535	11.125	Sagging	0.0079505	0.0 0.0088123

(Negligible)
 Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: f-50 | Sub-structure:

Vertical Offset Segment Start Length Curvature Deflection Average Max Max
 Gradient Max Gradient Min Damage Ratio Horizontal Tensile of
 from Line for of Vertical Radius of Category
 of Vertical Vertical
 Horizontal Displacement Curvature

Movement Displacement Calculations		Curve							Curve
[m]	[m]	[m]	[m]	[m]	[%]	[%]	[%]		
0.0	0.0	1	0.0	10.919	Sagging	0.013549	0.0	0.014826	
0.0	-0.0015161	834.71		0					

(Negligible)
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 14-15 | Sub-structure:

Vertical Gradient from Line of Vertical Movement Displacement Calculations	Offset Max Gradient	Segment Min Radius of Curvature	Start Length Damage	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of	
0.0	191.92E-6	21905.	1	0.0	2.1390	Sagging	0.0012089	0.0	0.0012005

(Negligible)
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 15-16 | Sub-structure:

Vertical Gradient from Line of Vertical Movement Displacement Calculations	Offset Max Gradient	Segment Min Radius of Curvature	Start Length Damage	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of	
0.0	209.09E-6	-	1	0.0	1.6897	None	0.0	0.0	0.0

(Negligible)
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 16-17 | Sub-structure:

Vertical Gradient from Line of Vertical Movement Displacement Calculations	Offset Max Gradient	Segment Min Radius of Curvature	Start Length Damage	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of	
0.0	565.96E-6	-	1	0.0	1.8990	None	0.0	0.0	0.0

(Negligible)
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 17-g | Sub-structure:

Vertical Gradient from Line of Vertical Movement Displacement Calculations	Offset Max Gradient	Segment Min Radius of Curvature	Start Length Damage	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of
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from Line for of Vertical Horizontal Movement Displacement Calculations	Radius of Vertical Displacement Curve	Category	Start	Length	Curvature	Deflection	Average	Max	Max
			Damage			Ratio	Horizontal	Tensile	of
							Strain	Strain	Curve
[m]	[m]		[m]	[m]		[%]	[%]	[%]	Curve
0.0	0.0010143	-	1	0.0	1.6115	None	0.0	0.0	0.0

(Negligible)
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: h-49 | Sub-structure:

Vertical Offset Gradient Max from Line for of Vertical Horizontal Movement Displacement Calculations	Segment Max Gradient Radius of Vertical Displacement Curve	Min	Start	Length	Curvature	Deflection	Average	Max	Max
			Damage			Ratio	Horizontal	Tensile	of
							Strain	Strain	Curve
[m]	[m]		[m]	[m]		[%]	[%]	[%]	Curve
0.0	-0.0010069	2510.1	1	0.0	2.1345	Sagging	0.010527	0.0	0.010455

(Negligible)
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 49-36 | Sub-structure:

Vertical Offset Gradient Max from Line for of Vertical Horizontal Movement Displacement Calculations	Segment Max Gradient Radius of Vertical Displacement Curve	Min	Start	Length	Curvature	Deflection	Average	Max	Max
			Damage			Ratio	Horizontal	Tensile	of
							Strain	Strain	Curve
[m]	[m]		[m]	[m]		[%]	[%]	[%]	Curve
0.0	-553.91E-6	5314.0	1	0.0	2.3890	Sagging	0.0055652	0.0	0.0055174

(Negligible)
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 36-48 | Sub-structure:

Vertical Offset Gradient Max from Line for of Vertical Horizontal Movement Displacement Calculations	Segment Max Gradient Radius of Vertical Displacement Curve	Min	Start	Length	Curvature	Deflection	Average	Max	Max
			Damage			Ratio	Horizontal	Tensile	of
							Strain	Strain	Curve
[m]	[m]		[m]	[m]		[%]	[%]	[%]	Curve
0.0	-170.15E-6	29117.	1	0.0	2.3002	Sagging	977.93E-6	0.0	970.14E-6

(Negligible)
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 48-47 | Sub-structure:

Vertical Offset Gradient Max from Line for of Vertical Vertical Horizontal Movement Displacement Calculations	Segment Max Gradient Radius of Category	Start Min Damage	Length [m]	Curvature [m]	Deflection Ratio [%]	Average Horizontal Strain [%]	Max Tensile Strain [%]	Max of Curve
0.0	1	0.0	1.1690	None	0.0	0.0	0.0	
0.0				0				

(Negligible)
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 47-51 | Sub-structure:

Vertical Offset Gradient Max from Line for of Vertical Vertical Horizontal Movement Displacement Calculations Curve	Segment Max Gradient Radius of Category	Start Min Damage	Length [m]	Curvature [m]	Deflection Ratio [%]	Average Horizontal Strain [%]	Max Tensile Strain [%]	Max
0.0	1	0.0	3.3949	Hogging	69.887E-6	0.0	69.559E-6	
0.0				0				
(Negligible)								
0.0	2	3.3949	3.7150	Sagging	35.337E-6	0.0	34.583E-6	
0.0				0				
(Negligible)								
0.0	3	7.1099	3.6391	Hogging	74.348E-6	0.0	73.993E-6	
0.0				0				

(Negligible)
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 50-46 | Sub-structure:

Vertical Offset Gradient Max from Line for of Vertical Vertical Horizontal Movement Displacement Calculations Curve	Segment Max Gradient Radius of Category	Start Min Damage	Length [m]	Curvature [m]	Deflection Ratio [%]	Average Horizontal Strain [%]	Max Tensile Strain [%]	Max of
0.0								

All settlements are less than the Settlement Trough Limit Sensitivity.
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 46-47 | Sub-structure:

Vertical Offset Gradient Max from Line for of Vertical Vertical Horizontal Displacement Curvature	Segment Max Gradient Radius of Category	Start Min Damage	Length [m]	Curvature [m]	Deflection Ratio [%]	Average Horizontal Strain [%]	Max Tensile Strain [%]	Max
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Movement Displacement Calculations Curve

[m]	[m]	[m]	[m]	[%]	[%]	[%]	
0.0	97.305E-6	45223.	1 3.0450	5.0740	Sagging	905.92E-6	0.0 871.86E-6

(Negligible)
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 24-25 | Sub-structure:

Vertical Gradient from of Horizontal Displacement Calculations Curve	Offset Max Gradient Line for Vertical Displacement Curve	Segment Max Gradient Radius of Category	Start Min Damage	Length Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of
[m]	[m]	[m]	[m]	[m]	[%]	[%]	[%]	

0.0 All settlements are less than the Settlement Trough Limit Sensitivity.
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 25-26 | Sub-structure:

Vertical Gradient from of Horizontal Displacement Calculations Curve	Offset Max Gradient Line for Vertical Displacement Curve	Segment Max Gradient Radius of Category	Start Min Damage	Length Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of
[m]	[m]	[m]	[m]	[m]	[%]	[%]	[%]	

0.0 All settlements are less than the Settlement Trough Limit Sensitivity.
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 26-27 | Sub-structure:

Vertical Gradient from of Horizontal Displacement Calculations Curve	Offset Max Gradient Line for Vertical Displacement Curve	Segment Max Gradient Radius of Category	Start Min Damage	Length Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of
[m]	[m]	[m]	[m]	[m]	[%]	[%]	[%]	

0.0 All settlements are less than the Settlement Trough Limit Sensitivity.
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 27-28 | Sub-structure:

Vertical Gradient from of Horizontal Displacement Calculations Curve	Offset Max Gradient Line for Vertical Displacement Curve	Segment Max Gradient Radius of Category	Start Min Damage	Length Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of
[m]	[m]	[m]	[m]	[m]	[%]	[%]	[%]	

Calculations

Curve

[m] [m] [m] [m] [%] [%] [%]
 [m] 0.0 All settlements are less than the Settlement Trough Limit Sensitivity.
 Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 28-29 | Sub-structure:

Vertical Offset Gradient Max from Line for of Vertical Horizontal Movement Displacement Calculations Curve	Segment Max Gradient Radius of Vertical Displacement Curve	Start Min Damage	Length Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of
[m]	[m]	[m]	[m]	[m]	[%]	[%]	[%]

0.0 All settlements are less than the Settlement Trough Limit Sensitivity.
 Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 27-32 | Sub-structure:

Vertical Offset Gradient Max from Line for of Vertical Horizontal Movement Displacement Calculations Curve	Segment Max Gradient Radius of Vertical Displacement Curve	Start Min Damage	Length Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of
[m]	[m]	[m]	[m]	[m]	[%]	[%]	[%]

0.0 All settlements are less than the Settlement Trough Limit Sensitivity.
 Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 33-31 | Sub-structure:

Vertical Offset Gradient Max from Line for of Vertical Horizontal Movement Displacement Calculations Curve	Segment Max Gradient Radius of Vertical Displacement Curve	Start Min Damage	Length Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of
[m]	[m]	[m]	[m]	[m]	[%]	[%]	[%]

0.0 80.093E-6 46071. 1 14.560 3.1190 Sagging 624.61E-6 0.0 615.51E-6

(Negligible)
 Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 31-34 | Sub-structure:

Vertical Offset Gradient Max from Line for of Vertical Horizontal Movement Displacement Calculations Curve	Segment Max Gradient Radius of Vertical Displacement Curve	Start Min Damage	Length Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of
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[m]	[m]	[m]	[m]	[m]	[m]	[%]	[%]	[%]
0.0	0.0	1	0.0	3.3333	Hogging	103.47E-6	0.0	103.03E-6
0.0	-32.562E-6	218950.	0					

(Negligible)

0.0	-32.562E-6	20.027E+6	2	3.3333	0.036434	None	0.0	0.0	0.0

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 34-35 | Sub-structure:

Vertical Offset	Segment	Start	Length	Curvature	Deflection	Average	Max	Max
Gradient Max Gradient	Min	Damage			Ratio	Horizontal	Tensile	
from Line for	of Vertical	Radius of	Category			Strain	Strain	of
of Vertical	Vertical	Curvature						Curve
Horizontal Displacement	Horizontal Displacement	Curvature						
Movement	Curve							
Displacement	Calculations							
Calculations								

[m]	[m]	[m]	[m]	[m]	[m]	[%]	[%]	[%]
0.0	0.0	1	0.0	1.3290	None	0.0	0.0	0.0
0.0	-46.900E-6	-						

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 35-41 | Sub-structure:

Vertical Offset	Segment	Start	Length	Curvature	Deflection	Average	Max	Max
Gradient Max Gradient	Min	Damage			Ratio	Horizontal	Tensile	
from Line for	of Vertical	Radius of	Category			Strain	Strain	of
of Vertical	Vertical	Curvature						Curve
Horizontal Displacement	Horizontal Displacement	Curvature						
Movement	Curve							
Displacement	Calculations							
Calculations								

[m]	[m]	[m]	[m]	[m]	[m]	[%]	[%]	[%]
0.0	0.0	1	0.0	2.4001	Sagging	28.924E-6	0.0	28.646E-6
0.0	-21.299E-6	749680.						

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 41-40 | Sub-structure:

Vertical Offset	Segment	Start	Length	Curvature	Deflection	Average	Max	Max
Gradient Max Gradient	Min	Damage			Ratio	Horizontal	Tensile	
from Line for	of Vertical	Radius of	Category			Strain	Strain	of
of Vertical	Vertical	Curvature						Curve
Horizontal Displacement	Horizontal Displacement	Curvature						
Movement	Curve							
Displacement	Calculations							
Calculations								

[m]	[m]	[m]	[m]	[m]	[m]	[%]	[%]	[%]
0.0	0.0	1	1.0175	3.0515	Sagging	115.23E-6	0.0	113.62E-6
0.0	33.293E-6	295790.						

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 40-39 | Sub-structure:

Vertical Offset Gradient from Line of Vertical	Max Gradient	Segment Min	Start Damage	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max	of
0.0	-37.886E-6	164260.	1	0.0	2.6000	Sagging	186.66E-6	0.0	184.79E-6	

(Negligible)
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 39-38 | Sub-structure:

Vertical Offset Gradient from Line of Vertical	Max Gradient	Segment Min	Start Damage	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max	of
0.0										

All settlements are less than the Settlement Trough Limit Sensitivity.
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 38-25 | Sub-structure:

Vertical Offset Gradient from Line of Vertical	Max Gradient	Segment Min	Start Damage	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max	of
0.0										

All settlements are less than the Settlement Trough Limit Sensitivity.
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 20-22 | Sub-structure:

Vertical Offset Gradient from Line of Vertical	Max Gradient	Segment Min	Start Damage	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max	of
0.0	-5.4645E-6	1.0001E+6	1	0.0	3.0510	Hogging	34.000E-6	0.0	31.865E-6	

(Negligible)
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 22-b | Sub-structure:

Vertical Offset Segment Start Length Curvature Deflection Average Max Max
 Gradient Max Gradient Min Damage Ratio Horizontal Tensile
 from Line for of Vertical Radius of Category Strain Strain
 of Vertical Movement
 Horizontal Displacement Curvature
 Displacement Curve
 Calculations
 Curve

[m]	[m]	[m]	[m]	[m]	[%]	[%]	[%]
0.0	0.0	1	2.7744	9.0158	Sagging	0.0029318	0.0 0.0040880
0.0	299.97E-6	6717.1	0				

(Negligible)
 Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: e-45 | Sub-structure:

Vertical Offset Segment Start Length Curvature Deflection Average Max Max
 Gradient Max Gradient Min Damage Ratio Horizontal Tensile of
 from Line for of Vertical Radius of Category Strain Strain
 of Vertical Movement
 Horizontal Displacement Curvature
 Displacement Curve
 Calculations
 Curve

[m]	[m]	[m]	[m]	[m]	[%]	[%]	[%]
0.0	0.0	1	0.0	9.8415	Sagging	0.0044138	0.0 0.0059254
0.0	-433.23E-6	4451.2	0				

(Negligible)
 Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 18-31 | Sub-structure:

Vertical Offset Segment Start Length Curvature Deflection Average Max Max
 Gradient Max Gradient Min Damage Ratio Horizontal Tensile
 from Line for of Vertical Radius of Category Strain Strain
 of Vertical Movement
 Horizontal Displacement Curvature
 Displacement Curve
 Calculations
 Curve

[m]	[m]	[m]	[m]	[m]	[%]	[%]	[%]
0.0	0.0	1	0.0	5.5299	Hogging	208.63E-6	0.0 242.94E-6
0.0	-37.274E-6	186010.	0				
0.0	-37.274E-6	1.4029E+6	2	5.5299	1.2992 Sagging	5.1857E-6	0.0 4.9710E-6

(Negligible)
 Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 23-24 | Sub-structure:

Vertical Offset Segment Start Length Curvature Deflection Average Max Max
 Gradient Max Gradient Min Damage Ratio Horizontal Tensile of
 from Line for of Vertical Radius of Category Strain Strain
 of Vertical Movement
 Horizontal Displacement Curvature
 Displacement Curve

Calculations

Curve	[m]	[m]	[m]	[m]	[%]	[%]	[%]
[m]	0.0		1	0.0	5.3417	Sagging	342.93E-6
0.0	-54.303E-6	182100.		0			0.0 518.17E-6

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: b-27 | Sub-structure:

Vertical Offset	Segment	Start Length	Curvature	Deflection	Average	Max	Max
Gradient Max Gradient	Min	Damage		Ratio	Horizontal	Tensile	of
from Line for	Category				Strain	Strain	
of Vertical	Radius of	Curvature					
Vertical	Displacement	Curve					
Horizontal	Movement						
Displacement	Calculations						
Curve							

[m]	[m]	[m]	[m]	[%]	[%]	[%]
[m]	0.0		1	0.0	7.4513	Sagging
0.0	-465.62E-6	4191.3		0		0.0055114
						0.0 0.0081570

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 42-37 | Sub-structure:

Vertical Offset	Segment	Start Length	Curvature	Deflection	Average	Max	Max
Gradient Max Gradient	Min	Damage		Ratio	Horizontal	Tensile	of
from Line for	Category				Strain	Strain	
of Vertical	Radius of	Curvature					
Vertical	Displacement	Curve					
Horizontal	Movement						
Displacement	Calculations						
Curve							

[m]	[m]	[m]	[m]	[%]	[%]	[%]
[m]	0.0		1	0.0	6.1100	Sagging
0.0	-53.681E-6	209350.		0		341.99E-6
						0.0 519.24E-6

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 47-43 | Sub-structure:

Vertical Offset	Segment	Start Length	Curvature	Deflection	Average	Max	Max
Gradient Max Gradient	Min	Damage		Ratio	Horizontal	Tensile	of
from Line for	Category				Strain	Strain	
of Vertical	Radius of	Curvature					
Vertical	Displacement	Curve					
Horizontal	Movement						
Displacement	Calculations						
Curve							

[m]	[m]	[m]	[m]	[%]	[%]	[%]
[m]	0.0		1	0.0	9.3739	Hogging
0.0	-32.706E-6	176840.		0		494.64E-6
						0.0 731.24E-6

(Negligible)

0.0	-32.706E-6	11.640E+6	2	9.3739	0.16506	Sagging	0.0	0.0	0.0
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(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 44-39 | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Radius of Vertical Horizontal Displacement Movement Displacement Calculations	Segment Min Category	Start Length Damage	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of Curve
[m]		[m]	[m]	[%]	[%]	[%]	
0.0 -15.714E-6	1	0.0	0.0	None	0.0	0.0	0.0

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 46-45 | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Radius of Vertical Horizontal Displacement Movement Displacement Calculations	Segment Min Category	Start Length Damage	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of Curve
[m]		[m]	[m]	[%]	[%]	[%]	
0.0							

All settlements are less than the Settlement Trough Limit Sensitivity.
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: a-12 | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Radius of Vertical Horizontal Displacement Movement Displacement Calculations	Segment Min Category	Start Length Damage	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of Curve
[m]		[m]	[m]	[%]	[%]	[%]	
0.0 -572.43E-6	1	0.0	4.4594	Hogging	0.014908	0.0	0.014931

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 12-11 | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Radius of Vertical Horizontal Displacement Movement Displacement Calculations	Segment Min Category	Start Length Damage	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of Curve
[m]		[m]	[m]	[%]	[%]	[%]	
0.0 988.56E-6	1	0.0	6.6990	Hogging	0.022393	0.0	0.029147

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 11-f | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Vertical Horizontal Displacement Movement Displacement Calculations	Segment Min Radius of Category	Start Length Damage	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max	Max	
[m]	[m]	[m]	[m]	[%]	[%]	[%]		Curve	
0.0	0.0014225	515.76	1	0.0	4.4697	Hogging	0.020447	0.0	0.020515
0.0									

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: ag | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Vertical Horizontal Displacement Movement Displacement Calculations	Segment Min Radius of Category	Start Length Damage	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max	Max	
[m]	[m]	[m]	[m]	[%]	[%]	[%]		Curve	
0.0	986.83E-6	1394.9	1	0.0	11.050	Sagging	0.010837	0.0	0.011957
0.0									

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: gb | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Vertical Horizontal Displacement Movement Displacement Calculations Curve	Segment Min Radius of Category	Start Length Damage	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max	Max	
[m]	[m]	[m]	[m]	[%]	[%]	[%]		Curve	
0.0	-981.06E-6	1014.2	1	0.0	4.7929	Hogging	0.017571	0.0	0.018558
(Negligible)									
0.0	-981.06E-6	2714.2	2	4.7929	3.0149	Sagging	0.0080904	0.0	0.0099357
(Negligible)									
0.0	-626.61E-6	4882.8	3	7.8078	3.5914	Hogging	0.0063712	0.0	0.0058352
(Negligible)									

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: bc | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Vertical Horizontal Displacement Movement Displacement Calculations	Segment Min Radius of Category	Start Length Damage	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max	Max
[m]	[m]	[m]	[m]	[%]	[%]	[%]		Curve

Vertical Horizontal Displacement Calculations Curve	Displacement	Curvature	Start	Length	Curvature	Deflection	Average	Max	Max
	[m]	[m]	[m]	[m]	[m]	[%]	[%]	[%]	[%]
	0.0		1	0.0	5.5590	Hogging	0.0077045	0.0	0.0090007
	0.0	365.42E-6			5795.2				

(Negligible)
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: cd | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Horizontal Displacement Calculations Curve	Segment Min	Start Damage	Length	Curvature	Deflection	Average	Max	Max
	Radius of	Category	[m]	[m]	Ratio	Horizontal	Tensile	of
	Vertical					Strain	Strain	Curve
	Displacement	Curvature						
	[m]	[m]	[m]	[m]	[%]	[%]	[%]	
	0.0		1	0.0	1.7483	Sagging	0.0	0.0
	0.0	186.64E-6						

(Negligible)
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: eh | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Horizontal Displacement Calculations Curve	Segment Min	Start Damage	Length	Curvature	Deflection	Average	Max	Max
	Radius of	Category	[m]	[m]	Ratio	Horizontal	Tensile	of
	Vertical					Strain	Strain	Curve
	Displacement	Curvature						
	[m]	[m]	[m]	[m]	[%]	[%]	[%]	
	0.0		1	0.0	0.80461	None	0.0	0.0
	0.0	241.63E-6			53048.			
	0.0	0.0013208		2	0.80461	3.9875	Sagging	0.011102
								0.0
	0.0	0.0013208		3	4.7921	4.9669	Hogging	0.023124
								0.0

(Negligible)
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: hf | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Horizontal Displacement Calculations Curve	Segment Min	Start Damage	Length	Curvature	Deflection	Average	Max	Max
	Radius of	Category	[m]	[m]	Ratio	Horizontal	Tensile	of
	Vertical					Strain	Strain	Curve
	Displacement	Curvature						
	[m]	[m]	[m]	[m]	[%]	[%]	[%]	

0.0 1 0.0 10.879 Sagging 0.011307 0.0 0.012341
 0.0 -722.96E-6 1819.1 0

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: de | Sub-structure:

Vertical Offset from Line of Vertical Movement Displacement Calculations	Segment Min Radius of Curvature	Start Length	Damage Category	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max
[m]		[m]	[m]		[%]	[%]	[%]	
0.0	1	0.0	0.47607	Sagging	0.0024089	0.0	0.0023935	
0.0 -546.98E-6	2013.2		0					

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Specific Building Damage Results - Critical Values for All Segments within Each Sub-Structure

Structure: 21-20 | Sub-structure:

Vertical Offset from Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[%]	[%]		[mm]	[%]		
0.0	61.009E-6	0.0	-3.4879E-6	0.11307	59.330E-6	0.0	-3.4879E-6
1.1295E+6	- 0 (Negligible)						

Structure: 19-20 | Sub-structure:

Vertical Offset from Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[%]	[%]		[mm]	[%]		
0.0	293.87E-6	0.0	-44.437E-6	0.28357	282.99E-6	0.0	-44.437E-6
- 172880.0	0 (Negligible)						

Structure: 19-18 | Sub-structure:

Vertical Offset from Radius of Line for Curvature	Deflection Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement	Max Gradient of Vertical Displacement
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Vertical (Hogging) (Sagging) Movement Calculations
 Displacement Curve
 Curve
 [m] [m] [%] [%] [mm] [%]
 0.0 586.81E-6 0.0 104.65E-6 0.47000 583.26E-6 0.0 104.65E-6
 - 42389.0 (Negligible)

Structure: 18-13 | Sub-structure:

Vertical Deflection Average Max Slope Max Max Max Gradient Max Gradient
Min Min Damage Category
Offset from Ratio Horizontal Settlement Tensile of of Vertical
Radius of Radius of Strain Strain Horizontal Displacement
Line for Strain Strain Horizontal Displacement
Curvature Curvature Displacement Curve
Vertical (Hogging) (Sagging) Movement Calculations
 Curve
 [m] [m] [%] [%] [mm] [%]
 0.0 427.65E-6 0.0 18.099E-6 0.50517 419.68E-6 0.0 18.099E-6
 146770. 811090.0 (Negligible)

Structure: 21-a | Sub-structure:

Vertical Deflection Average Max Slope Max Max Max Gradient Max Gradient
Min Min Damage Category
Offset from Ratio Horizontal Settlement Tensile of of Vertical
Radius of Radius of Strain Strain Horizontal Displacement
Line for Strain Strain Horizontal Displacement
Curvature Curvature Displacement Curve
Vertical (Hogging) (Sagging) Movement Calculations
 Curve
 [m] [m] [%] [%] [mm] [%]
 0.0 0.0079505 0.0 0.0010049 2.3983 0.0088123 0.0 0.0010049
 - 1042.6 0 (Negligible)

Structure: f-50 | Sub-structure:

Vertical Deflection Average Max Slope Max Max Max Gradient Max Gradient
Min Min Damage Category
Offset from Ratio Horizontal Settlement Tensile of of Vertical
Radius of Radius of Strain Strain Horizontal Displacement
Line for Strain Strain Horizontal Displacement
Curvature Curvature Displacement Curve
Vertical (Hogging) (Sagging) Movement Calculations
 Curve
 [m] [m] [%] [%] [mm] [%]
 0.0 0.013549 0.0 -0.0015161 3.4154 0.014826 0.0 -0.0015161
 - 834.71 0 (Negligible)

Structure: 14-15 | Sub-structure:

Vertical Deflection Average Max Slope Max Max Max Gradient Max Gradient
Min Min Damage Category
Offset from Ratio Horizontal Settlement Tensile of of Vertical
Radius of Radius of Strain Strain Horizontal Displacement
Line for Strain Strain Horizontal Displacement
Curvature Curvature Displacement Curve
Vertical (Hogging) (Sagging) Movement Calculations
 Curve

	[m]		[%]		[%]		[mm]		[%]	
[m]	0.0	[m]	0.0012089		0.0	191.92E-6	0.86484	0.0012005	0.0	191.92E-6
-	21905.0		(Negligible)							

Structure: 15-16 | Sub-structure:

Vertical	Deflection	Average	Max Slope	Max	Max	Max Gradient	Max Gradient		
Min	Min	Damage	Category	Settlement	Tensile	of	of Vertical		
Offset from	Ratio	Horizontal				of	Displacement		
Radius of	Radius of	Strain			Strain	Horizontal	Displacement		
Line for	Curvature	Curvature				Displacement	Curve		
Vertical	Vertical					Displacement	Curve		
(Hogging)	(Sagging)					Displacement	Curve		
Movement						Displacement	Curve		
Calculations						Displacement	Curve		
	[m]		[%]		[%]				
[m]	0.0	[m]	0.0		0.0	209.09E-6	1.2183	0.0	209.09E-6
-		-	0			(Negligible)			

Structure: 16-17 | Sub-structure:

Vertical	Deflection	Average	Max Slope	Max	Max	Max Gradient	Max Gradient		
Min	Min	Damage	Category	Settlement	Tensile	of	of Vertical		
Offset from	Ratio	Horizontal				of	Displacement		
Radius of	Radius of	Strain			Strain	Horizontal	Displacement		
Line for	Curvature	Curvature				Displacement	Curve		
Vertical	Vertical					Displacement	Curve		
(Hogging)	(Sagging)					Displacement	Curve		
Movement						Displacement	Curve		
Calculations						Displacement	Curve		
	[m]		[%]		[%]				
[m]	0.0	[m]	0.0		0.0	565.96E-6	2.2933	0.0	565.96E-6
-		-	0			(Negligible)			

Structure: 17-g | Sub-structure:

Vertical	Deflection	Average	Max Slope	Max	Max	Max Gradient	Max Gradient		
Min	Min	Damage	Category	Settlement	Tensile	of	of Vertical		
Offset from	Ratio	Horizontal				of	Displacement		
Radius of	Radius of	Strain			Strain	Horizontal	Displacement		
Line for	Curvature	Curvature				Displacement	Curve		
Vertical	Vertical					Displacement	Curve		
(Hogging)	(Sagging)					Displacement	Curve		
Movement						Displacement	Curve		
Calculations						Displacement	Curve		
	[m]		[%]		[%]				
[m]	0.0	[m]	0.0		0.0	0.0010143	3.9283	0.0	0.0010143
-		-	0			(Negligible)			

Structure: h-49 | Sub-structure:

Vertical	Deflection	Average	Max Slope	Max	Max	Max Gradient	Max Gradient			
Min	Min	Damage	Category	Settlement	Tensile	of	of Vertical			
Offset from	Ratio	Horizontal				of	Displacement			
Radius of	Radius of	Strain			Strain	Horizontal	Displacement			
Line for	Curvature	Curvature				Displacement	Curve			
Vertical	Vertical					Displacement	Curve			
(Hogging)	(Sagging)					Displacement	Curve			
Movement						Displacement	Curve			
Calculations						Displacement	Curve			
	[m]		[%]		[%]					
[m]	0.0	[m]	0.010527		0.0	-0.0010069	3.6970	0.010455	0.0	-0.0010069
-	2510.1		0			(Negligible)				

Structure: 49-36 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0	0.0055652	0.0	-553.91E-6	2.0008	0.0055174	0.0	-553.91E-6
- 5314.0	0	0 (Negligible)					

Structure: 36-48 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0	977.93E-6	0.0	-170.15E-6	0.94554	970.14E-6	0.0	-170.15E-6
- 29117.0	0	0 (Negligible)					

Structure: 48-47 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0	0.0	0.0	-128.51E-6	0.59943	0.0	0.0	-128.51E-6
- 0	0	0 (Negligible)					

Structure: 47-51 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0	74.348E-6	0.0	-9.1153E-6	0.44907	73.993E-6	0.0	-9.1153E-6
345450.0	1.4152E+6	0 (Negligible)					

Structure: 50-46 | Sub-structure:

Vertical Min	Deflection Min	Average Damage Category	Max	Max	Max	Max Gradient	Max Gradient	Min
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Offset from of Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Ratio Curvature	Horizontal Strain	Slope	Settlement	Tensile Strain	of Horizontal Displacement Curve	of Vertical Displacement Curve	Radius
[m]	[%]	[%]		[mm]	[%]			[m]

Structure: 46-47 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve	Min Radius
[m]	[m]	[%]	[%]	[mm]	[%]			[m]
0.0	45223.0	905.92E-6 (Negligible)	0.0	97.305E-6	0.44897	871.86E-6	0.0	97.305E-6

Structure: 24-25 | Sub-structure:

Vertical Min Offset from of Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Damage Category Ratio	Average Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve	Min Radius
[m]	[%]	[%]		[mm]	[%]			[m]

Structure: 25-26 | Sub-structure:

Vertical Min Offset from of Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Damage Category Ratio	Average Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve	Min Radius
[m]	[%]	[%]		[mm]	[%]			[m]

Structure: 26-27 | Sub-structure:

Vertical Min Offset from of Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Damage Category Ratio	Average Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve	Min Radius
[m]	[%]	[%]		[mm]	[%]			[m]

Structure: 27-28 | Sub-structure:

Vertical Min Offset of Radius of Line for Curvature (Hogging) Movement Calculations	Deflection Ratio	Average Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve	Min Radius
[m]	[%]	[%]		[mm]	[%]			[m]

Structure: 28-29 | Sub-structure:

Vertical Min Offset of Radius of Line for Curvature (Hogging) Movement Calculations	Deflection Ratio	Average Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve	Min Radius
[m]	[%]	[%]		[mm]	[%]			[m]

Structure: 27-32 | Sub-structure:

Vertical Min Offset of Radius of Line for Curvature (Hogging) Movement Calculations	Deflection Ratio	Average Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve	Min Radius
[m]	[%]	[%]		[mm]	[%]			[m]

Structure: 33-31 | Sub-structure:

Vertical Min Offset of Radius of Line for Curvature (Hogging) Movement Calculations	Deflection Ratio	Average Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve	Min Radius
[m]	[%]	[%]		[mm]	[%]			[m]
0.0	624.61E-6	0.0	80.093E-6	0.32064	615.51E-6	0.0	80.093E-6	
- 46071.0	(Negligible)							

Structure: 31-34 | Sub-structure:

Vertical Min Offset of Radius of Line for Curvature (Hogging) Movement Calculations	Deflection Ratio	Average Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve	Min Radius
[m]	[%]	[%]		[mm]	[%]			[m]

0.0 186.66E-6 0.0 -37.886E-6 0.19797 184.79E-6 0.0 -37.886E-6
 - 164260.0 (Negligible)

Structure: 39-38 | Sub-structure:

Vertical Min Offset of Radius of Line for Curvature (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve	Min Radius
[m]	[%]	[%]		[mm]	[%]			[m]

Structure: 38-25 | Sub-structure:

Vertical Min Offset of Radius of Line for Curvature (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve	Min Radius
[m]	[%]	[%]		[mm]	[%]			[m]

Structure: 20-22 | Sub-structure:

Vertical Min Offset of Radius of Line for Curvature (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve	Min Radius
[m]	[m]	[%]	[%]	[mm]	[%]			
0.0	0.0	34.000E-6	0.0	-5.4645E-6	0.11099	31.865E-6	0.0	-5.4645E-6
1.0001E+6		- 0 (Negligible)						

Structure: 22-b | Sub-structure:

Vertical Min Offset of Radius of Line for Curvature (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve	Min Radius
[m]	[m]	[%]	[%]	[mm]	[%]			
0.0	0.0	0.0029318	0.0	299.97E-6	1.0079	0.0040880	0.0	299.97E-6
- 6717.1	0	(Negligible)						

Structure: e-45 | Sub-structure:

Vertical Min	Deflection Min	Average Damage Category	Max Slope	Max	Max	Max Gradient	Max Gradient	Min
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Offset from Radius of Curvature Vertical (Hogging) Movement Calculations	Ratio of Radius of Curvature	Horizontal Strain	Average Damage Category	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]		[mm]	[%]		
0.0	0.0044138	0.0	-433.23E-6	1.4076	0.0059254	0.0	-433.23E-6	
- 4451.2 0 (Negligible)								

Structure: 18-31 | Sub-structure:

Vertical Min Offset from Radius of Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]		[mm]	[%]	
0.0	208.63E-6	0.0	-37.274E-6	0.47011	242.94E-6	0.0	-37.274E-6
186010. 1.4029E+6 0 (Negligible)							

Structure: 23-24 | Sub-structure:

Vertical Min Offset from Radius of Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]		[mm]	[%]	
0.0	342.93E-6	0.0	-54.303E-6	0.34977	518.17E-6	0.0	-54.303E-6
- 182100. 0 (Negligible)							

Structure: b-27 | Sub-structure:

Vertical Min Offset from Radius of Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]		[mm]	[%]	
0.0	0.0055114	0.0	-465.62E-6	1.3236	0.0081570	0.0	-465.62E-6
- 4191.3 0 (Negligible)							

Structure: 42-37 | Sub-structure:

Vertical Min Offset from Radius of Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]		[mm]	[%]	
0.0	0.0055114	0.0	-465.62E-6	1.3236	0.0081570	0.0	-465.62E-6
- 4191.3 0 (Negligible)							

Vertical (Hogging) (Sagging) Displacement Curve
 Movement Curve
 Calculations
 [m] [%] [%] [%] [mm] [%]
 [m] [m] 0.0 341.99E-6 0.0 -53.681E-6 0.38479 519.24E-6 0.0 -53.681E-6
 - 209350.0 (Negligible)

Structure: 47-43 | Sub-structure:

Vertical Deflection Average Max Slope Max Max Max Gradient Max Gradient
 Min Min Damage Category
 Offset from Ratio Horizontal Settlement Tensile of of Vertical
 Radius of Radius of Strain Strain Horizontal Displacement
 Line for Curvature Curvature
 Vertical Displacement Curve
 (Hogging) (Sagging)
 Movement Curve
 Calculations
 [m] [%] [%] [mm] [%]
 [m] [m] 0.0 494.64E-6 0.0 -32.706E-6 0.44907 731.24E-6 0.0 -32.706E-6
 176840. 11.640E+6 0 (Negligible)

Structure: 44-39 | Sub-structure:

Vertical Deflection Average Max Slope Max Max Max Gradient Max Gradient
 Min Min Damage Category
 Offset from Ratio Horizontal Settlement Tensile of of Vertical
 Radius of Radius of Strain Strain Horizontal Displacement
 Line for Curvature Curvature
 Vertical Displacement Curve
 (Hogging) (Sagging)
 Movement Curve
 Calculations
 [m] [%] [%] [mm] [%]
 [m] [m] 0.0 0.0 0.0 -15.714E-6 0.12293 0.0 0.0 -15.714E-6
 - 0 (Negligible)

Structure: 46-45 | Sub-structure:

Vertical Deflection Average Max Max Max Max Gradient Max Gradient Min
 Min Damage Category
 Offset from Ratio Horizontal Slope Settlement Tensile of of Vertical Radius
 of Radius of Strain Strain Horizontal Displacement
 Line for Curvature Curvature
 Vertical Displacement Curve
 (Hogging) (Sagging)
 Movement Curve
 Calculations
 [m] [%] [%] [mm] [%] [m]
 [m]

Structure: a-12 | Sub-structure:

Vertical Deflection Average Max Slope Max Max Max Gradient Max Gradient
 Min Min Damage Category
 Offset from Ratio Horizontal Settlement Tensile of of Vertical
 Radius of Radius of Strain Strain Horizontal Displacement
 Line for Curvature Curvature
 Vertical Displacement Curve
 (Hogging) (Sagging)
 Movement Curve
 Calculations
 [m] [%] [%] [mm] [%]
 [m] [m]

0.0 0.014908 0.0 -572.43E-6 3.1484 0.014931 0.0 -572.43E-6
 1327.8 - 0 (Negligible)

Structure: 12-11 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0 1313.9	0.022393 - 0 (Negligible)	0.0	988.56E-6	4.0476	0.029147	0.0	988.56E-6

Structure: 11-f | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0 515.76	0.020447 - 0 (Negligible)	0.0	0.0014225	3.8972	0.020515	0.0	0.0014225

Structure: ag | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0 - 1394.9 0	0.010837 (Negligible)	0.0	986.83E-6	3.9284	0.011957	0.0	986.83E-6

Structure: gb | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0 1014.2	0.017571 2714.2 0 (Negligible)	0.0	-981.06E-6	4.6955	0.018558	0.0	-981.06E-6

Structure: bc | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[%]	[%]		[mm]	[%]		
5795.2	0.0	0.0077045	0.0	365.42E-6	1.6280	0.0090007	0.0
		- 0 (Negligible)					365.42E-6

Structure: cd | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[%]	[%]		[mm]	[%]		
-	0.0	0.0	0.0	186.64E-6	1.6317	0.0	186.64E-6
		- 0 (Negligible)					

Structure: eh | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[%]	[%]		[mm]	[%]		
1789.1	0.0	0.023124	0.0	0.0013208	4.6790	0.025048	0.0
		3397.2 0 (Negligible)					0.0013208

Structure: hf | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[%]	[%]		[mm]	[%]		
-	0.0	0.011307	0.0	-722.96E-6	3.6970	0.012341	0.0
		1819.1 0 (Negligible)					-722.96E-6

Structure: de | Sub-structure:

Vertical Min Offset from Radius of	Deflection Min Ratio	Average Damage Category Horizontal	Max Slope	Max Settlement	Max Tensile	Max Gradient of	Max Gradient of Vertical
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Line for	Strain	Strain	Horizontal Displacement	Displacement	Displacement
Curvature	Curvature	Curvature	Curve	Curve	Curve
Vertical					
(Hogging)	(Sagging)				
Movement					
Calculations					
[m]	[m]	[%]	[%]	[mm]	[%]
0.0	0.0024089	0.0	-546.98E-6	1.6318	0.0023935
2013.2	0 (Negligible)				

Specific Building Damage Results - Critical Segments within Each Structure

Structure Name	Parameter	Critical	Critical	Start	End	Curvature	Max Slope
Max	Max	Min	Min				
Settlement	Tensile	Radius of	Radius of				
Strain	Curvature	Curvature					
(Hogging)	(Sagging)						
[mm]	[%]	[m]	[m]	[m]	[m]		
21-20	Max Slope			1	0.0	8.5455	Hogging
0.11307	59.330E-6	1.1295E+6	- 0 (Negligible)				
	Max Settlement			1	0.0	8.5455	Hogging
0.11307	59.330E-6	1.1295E+6	- 0 (Negligible)				3.4879E-6
	Max Tensile			1	0.0	8.5455	Hogging
0.11307	59.330E-6	1.1295E+6	- 0 (Negligible)				3.4879E-6
	Strain			1	0.0	8.5455	Hogging
0.11307	59.330E-6	1.1295E+6	- 0 (Negligible)				3.4879E-6
	Min Radius of						
	Curvature						
	(Hogging)						
	Min Radius of						
	Curvature						
	(Sagging)						
19-20	Max Slope			1	0.0	5.0389	Sagging
0.28357	282.99E-6	- 172880.0	0 (Negligible)				
	Max Settlement			1	0.0	5.0389	Sagging
0.28357	282.99E-6	- 172880.0	0 (Negligible)				44.437E-6
	Max Tensile			1	0.0	5.0389	Sagging
0.28357	282.99E-6	- 172880.0	0 (Negligible)				44.437E-6
	Strain						
	Min Radius of						
	Curvature						
	(Hogging)						
	Min Radius of			1	0.0	5.0389	Sagging
0.28357	282.99E-6	- 172880.0	0 (Negligible)				44.437E-6
	Curvature						
	(Sagging)						
19-18	Max Slope			1	0.0	2.0092	Sagging
0.47000	583.26E-6	- 42389.0	0 (Negligible)				
	Max Settlement			1	0.0	2.0092	Sagging
0.47000	583.26E-6	- 42389.0	0 (Negligible)				104.65E-6
	Max Tensile			1	0.0	2.0092	Sagging
0.47000	583.26E-6	- 42389.0	0 (Negligible)				104.65E-6
	Strain						
	Min Radius of						
	Curvature						
	(Hogging)						
	Min Radius of			1	0.0	2.0092	Sagging
0.47000	583.26E-6	- 42389.0	0 (Negligible)				104.65E-6
	Curvature						
	(Sagging)						
18-13	Max Slope			1	0.0	7.0688	Hogging
0.50517	419.68E-6	146770.	- 0 (Negligible)				
	Max Settlement			1	0.0	7.0688	Hogging
0.50517	419.68E-6	146770.	- 0 (Negligible)				18.099E-6
	Max Tensile			1	0.0	7.0688	Hogging
0.50517	419.68E-6	146770.	- 0 (Negligible)				18.099E-6
	Strain						

0.50517	419.68E-6	Min Radius of Curvature (Hogging)	146770.	- 0 (Negligible)	1	0.0	7.0688	Hogging	18.099E-6
0.48074	67.842E-6	Min Radius of Curvature (Sagging)	811090.	0 (Negligible)	2	7.0688	11.713	Sagging	9.3470E-6
21-a	2.3983	Max Slope	0.0088123	1042.6 0 (Negligible)	1	0.69535	11.820	Sagging	0.0010049
2.3983	0.0088123	Max Settlement	-	1042.6 0 (Negligible)	1	0.69535	11.820	Sagging	0.0010049
2.3983	0.0088123	Max Tensile	-	1042.6 0 (Negligible)	1	0.69535	11.820	Sagging	0.0010049
-	-	Strain	-	-	-	-	-	-	-
-	-	Min Radius of Curvature (Hogging)	-	-	-	-	-	-	-
2.3983	0.0088123	Min Radius of Curvature (Sagging)	1042.6	0 (Negligible)	1	0.69535	11.820	Sagging	0.0010049
f-50	3.4154	Max Slope	0.014826	834.71 0 (Negligible)	1	0.0	10.919	Sagging	0.0015161
3.4154	0.014826	Max Settlement	-	834.71 0 (Negligible)	1	0.0	10.919	Sagging	0.0015161
3.4154	0.014826	Max Tensile	-	834.71 0 (Negligible)	1	0.0	10.919	Sagging	0.0015161
3.4154	0.014826	Strain	-	-	-	-	-	-	-
-	-	Min Radius of Curvature (Hogging)	-	-	-	-	-	-	-
3.4154	0.014826	Min Radius of Curvature (Sagging)	834.71	0 (Negligible)	1	0.0	10.919	Sagging	0.0015161
14-15	0.86484	Max Slope	0.0012005	21905. 0 (Negligible)	1	0.0	2.1390	Sagging	191.92E-6
0.86484	0.0012005	Max Settlement	-	21905. 0 (Negligible)	1	0.0	2.1390	Sagging	191.92E-6
0.86484	0.0012005	Max Tensile	-	21905. 0 (Negligible)	1	0.0	2.1390	Sagging	191.92E-6
0.86484	0.0012005	Strain	-	-	-	-	-	-	-
-	-	Min Radius of Curvature (Hogging)	-	-	-	-	-	-	-
0.86484	0.0012005	Min Radius of Curvature (Sagging)	21905.	0 (Negligible)	1	0.0	2.1390	Sagging	191.92E-6
15-16	1.2183	Max Slope	0.0	- 0 (Negligible)	1	0.0	1.6897	Sagging	209.09E-6
1.2183	0.0	Max Settlement	-	- 0 (Negligible)	1	0.0	1.6897	Sagging	209.09E-6
1.2183	0.0	Max Tensile	-	- 0 (Negligible)	1	0.0	1.6897	Sagging	209.09E-6
1.2183	0.0	Strain	-	-	-	-	-	-	-
-	-	Min Radius of Curvature (Hogging)	-	-	-	-	-	-	-
-	-	Min Radius of Curvature (Sagging)	-	-	-	-	-	-	-
16-17	2.2933	Max Slope	0.0	- 0 (Negligible)	1	0.0	1.8990	Sagging	565.96E-6
2.2933	0.0	Max Settlement	-	- 0 (Negligible)	1	0.0	1.8990	Sagging	565.96E-6
2.2933	0.0	Max Tensile	-	- 0 (Negligible)	1	0.0	1.8990	Sagging	565.96E-6
2.2933	0.0	Strain	-	-	-	-	-	-	-
-	-	Min Radius of	-	-	-	-	-	-	-

			Curvature (Hogging) Min Radius of	-	-	-	-	-
			Curvature (Sagging) Max Slope	1	0.0	1.6115	Sagging	0.0010143
17-g 3.9283	0.0	-	- 0 (Negligible)	1	0.0	1.6115	Sagging	0.0010143
3.9283	0.0	-	- 0 (Negligible)	1	0.0	1.6115	Sagging	0.0010143
3.9283	0.0	-	- 0 (Negligible)	1	0.0	1.6115	Sagging	0.0010143
			Strain Min Radius of	-	-	-	-	-
			Curvature (Hogging) Min Radius of	-	-	-	-	-
			Curvature (Sagging) Max Slope	1	0.0	2.1345	Sagging	0.0010069
h-49 3.6970	0.010455	-	2510.1 0 (Negligible)	1	0.0	2.1345	Sagging	0.0010069
3.6970	0.010455	-	2510.1 0 (Negligible)	1	0.0	2.1345	Sagging	0.0010069
3.6970	0.010455	-	2510.1 0 (Negligible)	1	0.0	2.1345	Sagging	0.0010069
			Strain Min Radius of	-	-	-	-	-
			Curvature (Hogging) Min Radius of	1	0.0	2.1345	Sagging	0.0010069
3.6970	0.010455	-	2510.1 0 (Negligible)	1	0.0	2.1345	Sagging	0.0010069
			Curvature (Sagging) Max Slope	1	0.0	2.3890	Sagging	553.91E-6
49-36 2.0008	0.0055174	-	5314.0 0 (Negligible)	1	0.0	2.3890	Sagging	553.91E-6
2.0008	0.0055174	-	5314.0 0 (Negligible)	1	0.0	2.3890	Sagging	553.91E-6
2.0008	0.0055174	-	5314.0 0 (Negligible)	1	0.0	2.3890	Sagging	553.91E-6
			Strain Min Radius of	-	-	-	-	-
			Curvature (Hogging) Min Radius of	1	0.0	2.3890	Sagging	553.91E-6
2.0008	0.0055174	-	5314.0 0 (Negligible)	1	0.0	2.3890	Sagging	553.91E-6
			Curvature (Sagging) Max Slope	1	0.0	2.3002	Sagging	170.15E-6
36-48 0.94554	970.14E-6	-	29117. 0 (Negligible)	1	0.0	2.3002	Sagging	170.15E-6
0.94554	970.14E-6	-	29117. 0 (Negligible)	1	0.0	2.3002	Sagging	170.15E-6
0.94554	970.14E-6	-	29117. 0 (Negligible)	1	0.0	2.3002	Sagging	170.15E-6
			Strain Min Radius of	-	-	-	-	-
			Curvature (Hogging) Min Radius of	1	0.0	2.3002	Sagging	170.15E-6
0.94554	970.14E-6	-	29117. 0 (Negligible)	1	0.0	2.3002	Sagging	170.15E-6
			Curvature (Sagging) Max Slope	1	0.0	1.1690	Sagging	128.51E-6
48-47 0.59943	0.0	-	- 0 (Negligible)	1	0.0	1.1690	Sagging	128.51E-6
0.59943	0.0	-	- 0 (Negligible)	1	0.0	1.1690	Sagging	128.51E-6
0.59943	0.0	-	- 0 (Negligible)	1	0.0	1.1690	Sagging	128.51E-6
			Strain Min Radius of	-	-	-	-	-
			Curvature (Hogging)					

		Min Radius of		-	-	-	-	-
		Curvature						
		(Sagging)						
47-51		Max Slope		3	7.1099	10.749	Hogging	9.1153E-6
0.40869	73.993E-6	345450.	- 0 (Negligible)					
		Max Settlement		1	0.0	3.3949	Hogging	6.9710E-6
0.44907	69.559E-6	358030.	- 0 (Negligible)					
		Max Tensile		3	7.1099	10.749	Hogging	9.1153E-6
0.40869	73.993E-6	345450.	- 0 (Negligible)					
		Strain						
		Min Radius of		3	7.1099	10.749	Hogging	9.1153E-6
0.40869	73.993E-6	345450.	- 0 (Negligible)					
		Curvature						
		(Hogging)						
		Min Radius of		2	3.3949	7.1099	Sagging	6.9628E-6
0.43068	34.583E-6	- 1.4152E+6	0 (Negligible)					
		Curvature						
		(Sagging)						
50-46		All settlements are less than the Settlement Trough Limit Sensitivity.						
		All settlements are less than the Settlement Trough Limit Sensitivity.						
		All settlements are less than the Settlement Trough Limit Sensitivity.						
		All settlements are less than the Settlement Trough Limit Sensitivity.						
		All settlements are less than the Settlement Trough Limit Sensitivity.						
46-47		Max Slope		1	3.0450	8.1190	Sagging	97.305E-6
0.44897	871.86E-6	- 45223. 0 (Negligible)						
		Max Settlement		1	3.0450	8.1190	Sagging	97.305E-6
0.44897	871.86E-6	- 45223. 0 (Negligible)						
		Max Tensile		1	3.0450	8.1190	Sagging	97.305E-6
0.44897	871.86E-6	- 45223. 0 (Negligible)						
		Strain						
		Min Radius of		-	-	-	-	-
		Curvature						
		(Hogging)						
		Min Radius of		1	3.0450	8.1190	Sagging	97.305E-6
0.44897	871.86E-6	- 45223. 0 (Negligible)						
		Curvature						
		(Sagging)						
24-25		All settlements are less than the Settlement Trough Limit Sensitivity.						
		All settlements are less than the Settlement Trough Limit Sensitivity.						
		All settlements are less than the Settlement Trough Limit Sensitivity.						
		All settlements are less than the Settlement Trough Limit Sensitivity.						
		All settlements are less than the Settlement Trough Limit Sensitivity.						
25-26		All settlements are less than the Settlement Trough Limit Sensitivity.						
		All settlements are less than the Settlement Trough Limit Sensitivity.						
		All settlements are less than the Settlement Trough Limit Sensitivity.						
		All settlements are less than the Settlement Trough Limit Sensitivity.						
		All settlements are less than the Settlement Trough Limit Sensitivity.						
26-27		All settlements are less than the Settlement Trough Limit Sensitivity.						
		All settlements are less than the Settlement Trough Limit Sensitivity.						
		All settlements are less than the Settlement Trough Limit Sensitivity.						
		All settlements are less than the Settlement Trough Limit Sensitivity.						
		All settlements are less than the Settlement Trough Limit Sensitivity.						
27-28		All settlements are less than the Settlement Trough Limit Sensitivity.						
		All settlements are less than the Settlement Trough Limit Sensitivity.						
		All settlements are less than the Settlement Trough Limit Sensitivity.						
		All settlements are less than the Settlement Trough Limit Sensitivity.						
		All settlements are less than the Settlement Trough Limit Sensitivity.						
28-29		All settlements are less than the Settlement Trough Limit Sensitivity.						
		All settlements are less than the Settlement Trough Limit Sensitivity.						
		All settlements are less than the Settlement Trough Limit Sensitivity.						
		All settlements are less than the Settlement Trough Limit Sensitivity.						
		All settlements are less than the Settlement Trough Limit Sensitivity.						
27-32		All settlements are less than the Settlement Trough Limit Sensitivity.						
		All settlements are less than the Settlement Trough Limit Sensitivity.						
		All settlements are less than the Settlement Trough Limit Sensitivity.						
		All settlements are less than the Settlement Trough Limit Sensitivity.						
		All settlements are less than the Settlement Trough Limit Sensitivity.						
33-31		Max Slope		1	14.560	17.679	Sagging	80.093E-6
0.32064	615.51E-6	- 46071. 0 (Negligible)						
		Max Settlement		1	14.560	17.679	Sagging	80.093E-6
0.32064	615.51E-6	- 46071. 0 (Negligible)						
		Max Tensile		1	14.560	17.679	Sagging	80.093E-6
0.32064	615.51E-6	- 46071. 0 (Negligible)						
		Strain						

-	-	Min Radius of	-	-	-	-	-	-
-	-	Curvature	-	-	-	-	-	-
		(Hogging)						
0.32064	615.51E-6	Min Radius of	46071.0	0	(Negligible)	1	14.560	17.679 Sagging 80.093E-6
		Curvature						
		(Sagging)						
31-34		Max Slope				1	0.0	3.3333 Hogging 32.562E-6
0.32072	103.03E-6	218950.	-	0	(Negligible)	1	0.0	3.3333 Hogging 32.562E-6
0.32072	103.03E-6	218950.	-	0	(Negligible)	1	0.0	3.3333 Hogging 32.562E-6
		Max Settlement						
0.32072	103.03E-6	218950.	-	0	(Negligible)	1	0.0	3.3333 Hogging 32.562E-6
		Max Tensile						
		Strain						
0.32072	103.03E-6	Min Radius of	218950.	-	0 (Negligible)	1	0.0	3.3333 Hogging 32.562E-6
		Curvature						
		(Hogging)						
-	-	Min Radius of	-	-	-	-	-	-
-	-	Curvature	-	-	-	-	-	-
-	-	(Sagging)	-	-	-	-	-	-
34-35		Max Slope				1	0.0	1.3290 Sagging 46.900E-6
0.21757	0.0	-	-	0	(Negligible)	1	0.0	1.3290 Sagging 46.900E-6
0.21757	0.0	-	-	0	(Negligible)	1	0.0	1.3290 Sagging 46.900E-6
		Max Settlement						
0.21757	0.0	-	-	0	(Negligible)	1	0.0	1.3290 Sagging 46.900E-6
		Max Tensile						
		Strain						
-	-	Min Radius of	-	-	-	-	-	-
-	-	Curvature	-	-	-	-	-	-
-	-	(Hogging)	-	-	-	-	-	-
-	-	Min Radius of	-	-	-	-	-	-
-	-	Curvature	-	-	-	-	-	-
-	-	(Sagging)	-	-	-	-	-	-
35-41		Max Slope				1	0.0	2.4001 Sagging 21.299E-6
0.15519	28.646E-6	-	749680.0	0	(Negligible)	1	0.0	2.4001 Sagging 21.299E-6
0.15519	28.646E-6	-	749680.0	0	(Negligible)	1	0.0	2.4001 Sagging 21.299E-6
		Max Settlement						
0.15519	28.646E-6	-	749680.0	0	(Negligible)	1	0.0	2.4001 Sagging 21.299E-6
		Max Tensile						
		Strain						
-	-	Min Radius of	-	-	-	-	-	-
-	-	Curvature	-	-	-	-	-	-
-	-	(Hogging)	-	-	-	-	-	-
-	-	Min Radius of	-	-	-	-	-	-
0.15519	28.646E-6	-	749680.0	0	(Negligible)	1	0.0	2.4001 Sagging 21.299E-6
		Curvature						
		(Sagging)						
41-40		Max Slope				1	1.0175	4.0690 Sagging 33.293E-6
0.19794	113.62E-6	-	295790.0	0	(Negligible)	1	1.0175	4.0690 Sagging 33.293E-6
0.19794	113.62E-6	-	295790.0	0	(Negligible)	1	1.0175	4.0690 Sagging 33.293E-6
		Max Settlement						
0.19794	113.62E-6	-	295790.0	0	(Negligible)	1	1.0175	4.0690 Sagging 33.293E-6
		Max Tensile						
		Strain						
-	-	Min Radius of	-	-	-	-	-	-
-	-	Curvature	-	-	-	-	-	-
-	-	(Hogging)	-	-	-	-	-	-
-	-	Min Radius of	-	-	-	-	-	-
0.19794	113.62E-6	-	295790.0	0	(Negligible)	1	1.0175	4.0690 Sagging 33.293E-6
		Curvature						
		(Sagging)						
40-39		Max Slope				1	0.0	2.6000 Sagging 37.886E-6
0.19797	184.79E-6	-	164260.0	0	(Negligible)	1	0.0	2.6000 Sagging 37.886E-6
0.19797	184.79E-6	-	164260.0	0	(Negligible)	1	0.0	2.6000 Sagging 37.886E-6
		Max Settlement						
0.19797	184.79E-6	-	164260.0	0	(Negligible)	1	0.0	2.6000 Sagging 37.886E-6
		Max Tensile						
		Strain						
-	-	Min Radius of	-	-	-	-	-	-
-	-	Curvature	-	-	-	-	-	-
-	-	(Hogging)	-	-	-	-	-	-
-	-	Min Radius of	-	-	-	-	-	-

23-24		Max Slope		1	0.0	5.3417	Sagging	54.303E-6
0.34977	518.17E-6	-	182100.0 (Negligible)					
		Max Settlement		1	0.0	5.3417	Sagging	54.303E-6
0.34977	518.17E-6	-	182100.0 (Negligible)					
		Max Tensile		1	0.0	5.3417	Sagging	54.303E-6
0.34977	518.17E-6	-	182100.0 (Negligible)					
		Strain		-	-	-	-	-
		Min Radius of		-	-	-	-	-
		Curvature (Hogging)						
		Min Radius of		1	0.0	5.3417	Sagging	54.303E-6
0.34977	518.17E-6	-	182100.0 (Negligible)					
		Curvature (Sagging)						
b-27		Max Slope		1	0.0	7.4513	Sagging	465.62E-6
1.3236	0.0081570	-	4191.3 0 (Negligible)					
		Max Settlement		1	0.0	7.4513	Sagging	465.62E-6
1.3236	0.0081570	-	4191.3 0 (Negligible)					
		Max Tensile		1	0.0	7.4513	Sagging	465.62E-6
1.3236	0.0081570	-	4191.3 0 (Negligible)					
		Strain		-	-	-	-	-
		Min Radius of		-	-	-	-	-
		Curvature (Hogging)						
		Min Radius of		1	0.0	7.4513	Sagging	465.62E-6
1.3236	0.0081570	-	4191.3 0 (Negligible)					
		Curvature (Sagging)						
42-37		Max Slope		1	0.0	6.1100	Sagging	53.681E-6
0.38479	519.24E-6	-	209350.0 (Negligible)					
		Max Settlement		1	0.0	6.1100	Sagging	53.681E-6
0.38479	519.24E-6	-	209350.0 (Negligible)					
		Max Tensile		1	0.0	6.1100	Sagging	53.681E-6
0.38479	519.24E-6	-	209350.0 (Negligible)					
		Strain		-	-	-	-	-
		Min Radius of		-	-	-	-	-
		Curvature (Hogging)						
		Min Radius of		1	0.0	6.1100	Sagging	53.681E-6
0.38479	519.24E-6	-	209350.0 (Negligible)					
		Curvature (Sagging)						
47-43		Max Slope		1	0.0	9.3739	Hogging	32.706E-6
0.44907	731.24E-6	176840.	- 0 (Negligible)					
		Max Settlement		1	0.0	9.3739	Hogging	32.706E-6
0.44907	731.24E-6	176840.	- 0 (Negligible)					
		Max Tensile		1	0.0	9.3739	Hogging	32.706E-6
0.44907	731.24E-6	176840.	- 0 (Negligible)					
		Strain		-	-	-	-	-
		Min Radius of		1	0.0	9.3739	Hogging	32.706E-6
0.44907	731.24E-6	176840.	- 0 (Negligible)					
		Curvature (Hogging)						
		Min Radius of		2	9.3739	9.5390	Sagging	32.706E-6
0.25552	0.0	-	11.640E+6 0 (Negligible)					
		Curvature (Sagging)						
44-39		Max Slope		1	0.0	0.0	Sagging	15.714E-6
0.12293	0.0	-	1.9290E+6 0 (Negligible)					
		Max Settlement		1	0.0	0.0	Sagging	15.714E-6
0.12293	0.0	-	1.9290E+6 0 (Negligible)					
		Max Tensile		1	0.0	0.0	Sagging	15.714E-6
0.12293	0.0	-	1.9290E+6 0 (Negligible)					
		Strain		-	-	-	-	-
		Min Radius of		-	-	-	-	-
		Curvature (Hogging)						
		Min Radius of		-	-	-	-	-
		Curvature (Sagging)						
46-45		All settlements are less than the Settlement Trough Limit Sensitivity.						
		All settlements are less than the Settlement Trough Limit Sensitivity.						

All settlements are less than the Settlement Trough Limit Sensitivity.
 All settlements are less than the Settlement Trough Limit Sensitivity.
 All settlements are less than the Settlement Trough Limit Sensitivity.

a-12					1	0.0	4.4594	Hogging	572.43E-6
3.1484	0.014931	1327.8	- 0 (Negligible)						
		Max Settlement		1	0.0	4.4594	Hogging	572.43E-6	
3.1484	0.014931	1327.8	- 0 (Negligible)						
		Max Tensile		1	0.0	4.4594	Hogging	572.43E-6	
3.1484	0.014931	1327.8	- 0 (Negligible)						
		Strain							
3.1484	0.014931	Min Radius of		1	0.0	4.4594	Hogging	572.43E-6	
		1327.8	- 0 (Negligible)						
		Curvature							
		(Hogging)							
		Min Radius of		-	-	-	-	-	-
		Curvature							
		(Sagging)							
12-11		Max Slope		1	0.0	6.6990	Hogging	988.56E-6	
4.0476	0.029147	1313.9	- 0 (Negligible)						
		Max Settlement		1	0.0	6.6990	Hogging	988.56E-6	
4.0476	0.029147	1313.9	- 0 (Negligible)						
		Max Tensile		1	0.0	6.6990	Hogging	988.56E-6	
4.0476	0.029147	1313.9	- 0 (Negligible)						
		Strain							
		Min Radius of		1	0.0	6.6990	Hogging	988.56E-6	
4.0476	0.029147	1313.9	- 0 (Negligible)						
		Curvature							
		(Hogging)							
		Min Radius of		-	-	-	-	-	-
		Curvature							
		(Sagging)							
11-f		Max Slope		1	0.0	4.4697	Hogging	0.0014225	
3.8972	0.020515	515.76	- 0 (Negligible)						
		Max Settlement		1	0.0	4.4697	Hogging	0.0014225	
3.8972	0.020515	515.76	- 0 (Negligible)						
		Max Tensile		1	0.0	4.4697	Hogging	0.0014225	
3.8972	0.020515	515.76	- 0 (Negligible)						
		Strain							
		Min Radius of		1	0.0	4.4697	Hogging	0.0014225	
3.8972	0.020515	515.76	- 0 (Negligible)						
		Curvature							
		(Hogging)							
		Min Radius of		-	-	-	-	-	-
		Curvature							
		(Sagging)							
ag		Max Slope		1	0.0	11.050	Sagging	986.83E-6	
3.9284	0.011957	- 1394.9 0	(Negligible)						
		Max Settlement		1	0.0	11.050	Sagging	986.83E-6	
3.9284	0.011957	- 1394.9 0	(Negligible)						
		Max Tensile		1	0.0	11.050	Sagging	986.83E-6	
3.9284	0.011957	- 1394.9 0	(Negligible)						
		Strain							
		Min Radius of		-	-	-	-	-	-
		Curvature							
		(Hogging)							
		Min Radius of		1	0.0	11.050	Sagging	986.83E-6	
3.9284	0.011957	- 1394.9 0	(Negligible)						
		Curvature							
		(Sagging)							
gb		Max Slope		1	0.0	4.7929	Hogging	981.06E-6	
4.6955	0.018558	1014.2	- 0 (Negligible)						
		Max Settlement		1	0.0	4.7929	Hogging	981.06E-6	
4.6955	0.018558	1014.2	- 0 (Negligible)						
		Max Tensile		1	0.0	4.7929	Hogging	981.06E-6	
4.6955	0.018558	1014.2	- 0 (Negligible)						
		Strain							
		Min Radius of		1	0.0	4.7929	Hogging	981.06E-6	
4.6955	0.018558	1014.2	- 0 (Negligible)						
		Curvature							
		(Hogging)							
		Min Radius of		2	4.7929	7.8078	Sagging	981.06E-6	
3.7693	0.0099357	- 2714.2 0	(Negligible)						
		Curvature							

Specific Building Damage Results - All Combined Segments

Structure: 21-20 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]	[%]	[%]	[%]	
No structures have segments combined.							

Structure: 19-20 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]	[%]	[%]	[%]	
No structures have segments combined.							

Structure: 19-18 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]	[%]	[%]	[%]	
No structures have segments combined.							

Structure: 18-13 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]	[%]	[%]	[%]	
No structures have segments combined.							

Structure: 21-a | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]	[%]	[%]	[%]	
No structures have segments combined.							

Structure: f-50 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]	[%]	[%]	[%]	
No structures have segments combined.							

Structure: 14-15 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: 15-16 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: 16-17 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: 17-g | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: h-49 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: 49-36 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: 36-48 | Sub-structure:

Vertical Offset from Line for	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
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Vertical Movement Calculations
 [m] [m] [m] [%] [%] [%]
 No structures have segments combined.

Structure: 48-47 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 47-51 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 50-46 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 46-47 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 24-25 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 25-26 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 26-27 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: 27-28 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: 28-29 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: 27-32 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: 33-31 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: 31-34 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: 34-35 | Sub-structure:

Vertical	Combined	Start	Length	Curvature	Deflection	Average	Max	Damage Category
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Offset from Line for Vertical Movement Calculations	Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 35-41 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 41-40 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 40-39 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 39-38 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 38-25 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 20-22 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

[m] [m] [m] [%] [%] [%]
No structures have segments combined.

Structure: 22-b | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]	[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: e-45 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]	[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 18-31 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]	[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 23-24 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]	[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: b-27 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]	[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 42-37 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]	[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 47-43 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: 44-39 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: 46-45 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: a-12 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: 12-11 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: 11-f | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: ag | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Movement Calculations

[m] [m] [m] [%] [%] [%]
No structures have segments combined.

Structure: gb | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
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[m] [m] [m] [%] [%] [%]
No structures have segments combined.

Structure: bc | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
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[m] [m] [m] [%] [%] [%]
No structures have segments combined.

Structure: cd | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
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[m] [m] [m] [%] [%] [%]
No structures have segments combined.

Structure: eh | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
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[m] [m] [m] [%] [%] [%]
No structures have segments combined.

Structure: hf | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
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[m] [m] [m] [%] [%] [%]
No structures have segments combined.

Structure: de | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
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[m] [m] [m] [%] [%] [%]
No structures have segments combined.

DEMOLITION + EXCAVATION

Analysis Options

Analysis: Boussinesq
 Global Poisson's ratio: 0.50
 Maximum allowable ratio between values of E: 1.5
 Horizontal rigid boundary level: -45.40 [m OD]
 Displacements at area centroids calculated.

Soil Profiles Soil Profile 1

Layer	Level at top	Number of intermediate displacement levels	Youngs Modulus	Poissons ratio	Non-linear curve	
	[mOD]		Top [kN/m ²]	Btm [kN/m ²]		
1	0.0	8	10000.	10000.	0.20000	None
2	-4.2000	4	30000.	30000.	0.50000	None
3	-6.2500	4	24000.	24000.	0.20000	None
4	-8.3500	1	30000.	30000.	0.50000	None
5	-9.0000	61	20000.	94160.	0.50000	None
6	-39.600	11	300000.	300000.	0.20000	None

Soil Zones

Zone	Name	X coordinates min max	Y coordinates min max	Profile
		[m] [m]	[m] [m]	
1	demo	0.0 110.00	0.0 110.00	Soil Profile 1

Load Data

Load Name	Load value ref.	Shape Polygon	Orientation of Plane	Centre of load (Global) (local x) (local y) (local z)	Angle of Tangential local x from	Width x or Radius	Length	
				Number Normal (local x) Y Z	(local y)			
1 basement A	(66,58.3) (66,53.2)	Polygonal	Horizontal	N/A	N/A	-0.60000	N/A	N/A
	(59.8,51.7) (55,51.6)			2	N/A	-10.000	N/A	N/A
	(55,58.4)							
2 vault A	(55,58.4) (59.8,58.4)	Polygonal	Horizontal	N/A	N/A	-3.1300	N/A	N/A
	(59.8,51.6) (55,51.6)			1	N/A	-20.000	N/A	N/A
	(59.8,51.6) (55,51.6)							
3 vault B	(44.3,58.4) (44.3,51.6)	Polygonal	Horizontal	N/A	N/A	-3.1300	N/A	N/A
	(39.6,51.7) (39.6,58.4)			1	N/A	-20.000	N/A	N/A
	(39.6,51.7) (39.6,58.4)							
4 basement B	(55,58.4) (55,51.6)	Polygonal	Horizontal	N/A	N/A	-3.1300	N/A	N/A
	(39.6,51.7) (39.6,58.4)			1	N/A	-10.000	N/A	N/A
	(39.6,51.7) (39.6,58.4)							

Problem Type

Problem Type : Tunnelling and Embedded Wall Excavations

Displacement Data

Type of intervals across extrusion/line	Name of Extrusion	Direction No. of intervals of extrusion along	Calculate Surface of	Point/Line/Line type for extrusion	Second point			No.
					tunnels			
					First point			
					X	Y	Z(level)	
					[m]	[m]	[m]	
					X	Y	Z(level)	
					[m]	[m]	[m]	
[m]								
Grid 99	Grid 1 70.00000	Global X 99 Yes	X	Surface	30.00000	35.00000	0.00000	-
Line 11	21-20	- Yes		Surface	55.96000	70.70000	0.00000	44.21000
Line 5	19-20	- Yes		Surface	59.14000	66.79000	0.00000	55.96000
Line 2	19-18	- Yes		Surface	59.14000	66.79000	0.00000	59.17000
Line 14	18-13	- Yes		Surface	59.17000	64.78000	0.00000	44.21000
Line 34	21-a	- Yes		Surface	44.21000	70.72000	0.00000	44.06000
Line 15	f-50	- Yes		Surface	44.10000	51.60000	0.00000	44.16000
Line 2	14-15	- Yes		Surface	55.00000	64.76000	0.00000	55.00000
Line 1	15-16	- Yes		Surface	55.00000	62.62000	0.00000	56.23000
Line 1	16-17	- Yes		Surface	56.23000	61.46000	0.00000	56.22000
Line 1	17-g	- Yes		Surface	56.22000	59.56000	0.00000	55.10000
Line 2	h-49	- Yes		Surface	54.98000	51.60000	0.00000	56.50000
Line 2	49-36	- Yes		Surface	56.50000	50.10000	0.00000	56.50000
Line 2	36-48	- Yes		Surface	56.50000	47.71000	0.00000	54.96000
Line 1	48-47	- Yes		Surface	54.96000	46.00000	0.00000	54.96000
Line 10	47-51	- Yes		Surface	54.96000	44.83000	0.00000	44.21000
Line 10	50-46	- Yes		Surface	44.16000	36.71000	0.00000	54.96000
Line 8	46-47	- Yes		Surface	54.96000	36.71000	0.00000	54.96000
Line 9	24-25	- Yes		Surface	78.82000	63.10000	0.00000	88.08000
Line 5	25-26	- Yes		Surface	88.08000	63.07000	0.00000	88.00000
Line 11	26-27	- Yes		Surface	88.00000	57.75000	0.00000	76.73000
Line 3	27-28	- Yes		Surface	76.73000	57.90000	0.00000	76.71000
Line 2	28-29	- Yes		Surface	76.71000	61.07000	0.00000	78.82000
Line 5	27-32	- Yes		Surface	76.73000	57.90000	0.00000	76.75000
Line 17	33-31	- Yes		Surface	87.93000	52.75000	0.00000	70.25000
Line 3	31-34	- Yes		Surface	70.25000	52.75000	0.00000	70.18000
Line 1	34-35	- Yes		Surface	70.18000	49.38000	0.00000	71.51000
Line 3	35-41	- Yes		Surface	71.51000	49.37000	0.00000	71.48000
Line 4	41-40	- Yes		Surface	71.48000	45.77000	0.00000	67.41000
Line 3	40-39	- Yes		Surface	67.41000	45.77000	0.00000	67.39000
Line 20	39-38	- Yes		Surface	67.39000	41.87000	0.00000	88.00000
Line 21	38-25	- Yes		Surface	88.00000	41.70000	0.00000	88.08000

Line 10	20-22	-	-	55.96000	70.70000	0.00000	66.13000	70.69000	0.00000
	-	-	Yes	Surface					
Line 17	22-b	-	-	66.13000	70.69000	0.00000	66.30000	58.90000	0.00000
	-	-	Yes	Surface					
Line 15	e-45	-	-	64.74000	51.60000	0.00000	64.48000	36.84000	0.00000
	-	-	Yes	Surface					
Line 6	18-31	-	-	59.17000	64.78000	0.00000	66.00000	64.74000	0.00000
	-	-	Yes	Surface					
Line 12	23-24	-	-	66.00000	63.14000	0.00000	78.82000	63.10000	0.00000
	-	-	Yes	Surface					
Line 10	b-27	-	-	66.10000	58.46000	0.00000	76.73000	57.90000	0.00000
	-	-	Yes	Surface					
Line 23	42-37	-	-	64.54000	46.73000	0.00000	87.96000	46.45000	0.00000
	-	-	Yes	Surface					
Line 9	47-43	-	-	54.96000	44.83000	0.00000	64.50000	44.83000	0.00000
	-	-	Yes	Surface					
Line 2	44-39	-	-	64.44000	41.91000	0.00000	67.39000	41.87000	0.00000
	-	-	Yes	Surface					
Line 9	46-45	-	-	54.96000	36.71000	0.00000	64.48000	36.84000	0.00000
	-	-	Yes	Surface					
Line 4	a-12	-	-	44.06000	58.90000	0.00000	39.63000	58.38000	0.00000
	-	-	Yes	Surface					
Line 6	12-11	-	-	39.63000	58.38000	0.00000	39.63000	51.68000	0.00000
	-	-	Yes	Surface					
Line 8	11-f	-	-	39.63000	51.68000	0.00000	44.10000	51.60000	0.00000
	-	-	Yes	Surface					
Line 11	ag	-	-	44.06000	58.90000	0.00000	55.10000	58.40000	0.00000
	-	-	Yes	Surface					
Line 20	gb	-	-	55.10000	58.40000	0.00000	66.50000	58.46000	0.00000
	-	-	Yes	Surface					
Line 20	bc	-	-	66.50000	58.46000	0.00000	66.50000	52.90000	0.00000
	-	-	Yes	Surface					
Line 1	cd	-	-	66.50000	52.90000	0.00000	65.00000	52.00000	0.00000
	-	-	Yes	Surface					
Line 9	eh	-	-	64.74000	51.60000	0.00000	54.98000	51.60000	0.00000
	-	-	Yes	Surface					
Line 10	hf	-	-	54.98000	51.60000	0.00000	44.10000	51.60000	0.00000
	-	-	Yes	Surface					
Line 4	de	-	-	65.00000	52.00000	0.00000	64.74000	51.60000	0.00000
	-	-	Yes	Surface					

Vertical Ground Movement Curves

Curve Name: No vertical ground movement

Coordinates: [Distance from wall / wall depth or max. excavation depth (x), Depth / wall depth or max. excavation depth (y), Settlement / wall depth or max. excavation

depth (z) (%)]

[0.000,0.000,0.000] [1.000,0.000,0.000] [0.000,1.000,0.000] [1.000,1.000,0.000]

Curve Fitting Polynomial

Method:

x Order: 1

y Order: 0

Polynomial: $z = 0.0x + 0.0$

Coeff. of -2147483648.E+2147483647

Determination:

Curve Name: Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11 (b))

Coordinates: [Distance from wall / wall depth or max. excavation depth (x), Depth / wall depth or max. excavation depth (y), Settlement / wall depth or max.

excavation

depth (z) (%)]

[0.000,0.000,0.039] [0.100,0.000,0.049] [0.200,0.000,0.056] [0.300,0.000,0.062]
 [0.400,0.000,0.067] [0.500,0.000,0.070] [0.600,0.000,0.072] [0.700,0.000,0.073]
 [0.800,0.000,0.073] [0.900,0.000,0.072] [1.000,0.000,0.070] [1.100,0.000,0.068]
 [1.200,0.000,0.065] [1.300,0.000,0.061] [1.400,0.000,0.058] [1.500,0.000,0.054]
 [1.600,0.000,0.050] [1.700,0.000,0.046] [1.800,0.000,0.042] [1.900,0.000,0.038]
 [2.000,0.000,0.034] [2.100,0.000,0.030] [2.200,0.000,0.027] [2.300,0.000,0.023]
 [2.400,0.000,0.020] [2.500,0.000,0.017] [2.600,0.000,0.014] [2.700,0.000,0.012]
 [2.800,0.000,0.010] [2.900,0.000,0.008] [3.000,0.000,0.007] [3.100,0.000,0.005]
 [3.200,0.000,0.004] [3.300,0.000,0.004] [3.400,0.000,0.003] [3.500,0.000,0.002]
 [3.600,0.000,0.002] [3.700,0.000,0.002] [3.800,0.000,0.001] [3.900,0.000,0.001]
 [4.000,0.000,0.000]

Curve Fitting Polynomial
 Method:
 x Order: 4
 y Order: 0
 Polynomial: $z = -2.6455E-3x^4 + 2.8495E-2x^3 - 1.0051E-1x^2 + 1.0569E-1x + 3.8990E-2$
 Coeff. of 9.9991E-1
 Determination:

Horizontal Ground Movement Curves

Curve Name: No horizontal ground movement
Coordinates: [Distance from wall / wall depth or max. excavation depth (x), Depth / wall depth or max. excavation depth (y), Horizontal movement / wall depth or max. excavation depth (z) (%)]
 [0.000,0.000,0.000][1.000,0.000,0.000][0.000,1.000,0.000][1.000,1.000,0.000]
 Curve Fitting Polynomial
 Method:
 x Order: 0
 y Order: 0
 Polynomial: $z = 0.0$
 Coeff. of -2147483648.E+2147483647
 Determination:

Curve Name: Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(a))
Coordinates: [Distance from wall / wall depth or max. excavation depth (x), Depth / wall depth or max. excavation depth (y), Horizontal movement / wall depth or max. excavation depth (z) (%)]
 [0.000,0.000,0.150][4.000,0.000,0.000]
 Curve Fitting Polynomial
 Method:
 x Order: 1
 y Order: 0
 Polynomial: $z = -3.75E-2x + 1.50E-1$
 Coeff. of 1.00
 Determination:

Polygonal Excavations

Excavation Name: Excavation 1
 Surface level [m]: 0.0
 Contribution: Positive
 Enabled: Yes
 Surface movement curves which are selected are applied between surface and [m]: -10.000

Corner	x	y	Base Level	Stiffened	Previous Side			Next Side		
					d	p1	p2*	d	p1	p2*
	[m]	[m]	[m]		[m]	[%]	[%]	[m]	[%]	[%]
1	66.020	58.310	-1.0700	No	-	-	-	-	-	-
2	66.000	53.200	-1.0700	No	-	-	-	-	-	-
3	59.820	51.680	-1.0700	No	-	-	-	-	-	-
4	39.630	51.680	-1.0700	No	-	-	-	-	-	-
5	39.630	58.380	-1.0700	No	-	-	-	-	-	-

Side	Corner 1		Corner 2		Ground Movement Curve	
	x	y	x	y	Vertical	Horizontal
	[m]	[m]	[m]	[m]		
1	66.020	58.310	66.000	53.200	Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(b))	Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(a))
2	66.000	53.200	59.820	51.680	Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(b))	Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(a))
3	59.820	51.680	39.630	51.680	Excavation in front of high	Excavation in front of high

	[m]	[m]	[m]	[m]		
1	59.820	58.310	66.020	58.310	Excavation in front of high stiffness wall in stiff clay	Excavation in front of high stiffness wall in stiff clay
2.11(a))					(CIRIA 580 Fig. 2.11(b))	(CIRIA 580 Fig. 2.11(b))
2	66.020	58.310	66.000	53.200	Excavation in front of high stiffness wall in stiff clay	Excavation in front of high stiffness wall in stiff clay
2.11(a))					(CIRIA 580 Fig. 2.11(b))	(CIRIA 580 Fig. 2.11(b))
3	66.000	53.200	59.820	51.680	Excavation in front of high stiffness wall in stiff clay	Excavation in front of high stiffness wall in stiff clay
2.11(a))					(CIRIA 580 Fig. 2.11(b))	(CIRIA 580 Fig. 2.11(b))
4	59.820	51.680	59.820	58.310	No vertical ground movement	No horizontal ground movement

Damage Category Strains

Name	0 (Negligible) to 1 (Very Slight)	1 (Very Slight) to 2 (Slight)	2 (Slight) to 3 (Moderate)	3 (Moderate) to 4 (Severe)
Burland Strain Limits	0.0	500.00E-6	750.00E-6	0.0015000

Specific Structures - Geometry

Structure Name	Sub-Structure Name	Displacement	Start Distance	End Distance	Vertical Offsets from	Vertical Displacement
Damage Category	Poisson's Ratio	E/G	Along Line	Along Line	Line for Vertical Movement Calculations	Limit Sensitivity
			[m]	[m]	[m]	[mm]
21-20		21-20	0.00000	11.74902	0.0	0.10000
Burland Strain Limits	0.20000	2.6000				
19-20		19-20	0.00000	5.03889	0.0	0.10000
Burland Strain Limits	0.20000	2.6000				
19-18		19-18	0.00000	2.00922	0.0	0.10000
Burland Strain Limits	0.20000	2.6000				
18-13		18-13	0.00000	14.95901	0.0	0.10000
Burland Strain Limits	0.20000	2.6000				
21-a		21-a	0.00000	11.81995	0.0	0.10000
Burland Strain Limits	0.20000	2.6000				
f-50		f-50	0.00000	14.88912	0.0	0.10000
Burland Strain Limits	0.20000	2.6000				
14-15		14-15	0.00000	2.13900	0.0	0.10000
Burland Strain Limits	0.20000	2.6000				
15-16		15-16	0.00000	1.68971	0.0	0.10000
Burland Strain Limits	0.20000	2.6000				
16-17		16-17	0.00000	1.89903	0.0	0.10000
Burland Strain Limits	0.20000	2.6000				
17-g		17-g	0.00000	1.61145	0.0	0.10000
Burland Strain Limits	0.20000	2.6000				
h-49		h-49	0.00000	2.13451	0.0	0.10000
Burland Strain Limits	0.20000	2.6000				
49-36		49-36	0.00000	2.38900	0.0	0.10000
Burland Strain Limits	0.20000	2.6000				
36-48		36-48	0.00000	2.30024	0.0	0.10000
Burland Strain Limits	0.20000	2.6000				
48-47		48-47	0.00000	1.16900	0.0	0.10000
Burland Strain Limits	0.20000	2.6000				
47-51		47-51	0.00000	10.74900	0.0	0.10000
Burland Strain Limits	0.20000	2.6000				
50-46		50-46	0.00000	10.79900	0.0	0.10000
Burland Strain Limits	0.20000	2.6000				
46-47		46-47	0.00000	8.11900	0.0	0.10000
Burland Strain Limits	0.20000	2.6000				

24-25	24-25	0.00000	9.25905	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
25-26	25-26	0.00000	5.31960	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
26-27	26-27	0.00000	11.27000	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
27-28	27-28	0.00000	3.16906	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
28-29	28-29	0.00000	2.92697	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
27-32	27-32	0.00000	5.14904	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
33-31	33-31	0.00000	17.67900	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
31-34	31-34	0.00000	3.36973	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
34-35	34-35	0.00000	1.32904	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
35-41	35-41	0.00000	3.59912	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
41-40	41-40	0.00000	4.06900	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
40-39	40-39	0.00000	3.89905	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
39-38	39-38	0.00000	20.60970	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
38-25	38-25	0.00000	21.36915	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
20-22	20-22	0.00000	10.16900	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
22-b	22-b	0.00000	11.79023	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
e-45	e-45	0.00000	14.76129	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
18-31	18-31	0.00000	6.82912	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
23-24	23-24	0.00000	12.81906	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
b-27	b-27	0.00000	10.64374	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
42-37	42-37	0.00000	23.42067	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
47-43	47-43	0.00000	9.53900	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
44-39	44-39	0.00000	2.94927	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
46-45	46-45	0.00000	9.51989	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
a-12	a-12	0.00000	4.45941	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
12-11	12-11	0.00000	6.69900	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
11-f	11-f	0.00000	4.46972	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
ag	ag	0.00000	11.05032	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
gb	gb	0.00000	11.39916	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
bc	bc	0.00000	5.55900	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
cd	cd	0.00000	1.74829	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
eh	eh	0.00000	9.75900	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
hf	hf	0.00000	10.87900	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
de	de	0.00000	0.47607	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				

Specific Structures - Bending Parameters

Structure Name	Sub-Structure	Height	Default	Hogging
Sagging	Name		Properties	

Distance of Bending Strain from N.A.	Distance of N.A. of Beam in Tension		2nd Moment of Area (per unit width)	Distance of Bending Strain from N.A.	Distance of N.A. of Beam in Tension	2nd Moment of Area (per unit width)
[m]	[m]	[m]	[m ³]	[m]	[m]	[m ³]
21-20		13.000	Yes	732.33	13.000	183.08
6.5000	6.5000					
19-20		13.000	Yes	732.33	13.000	183.08
6.5000	6.5000					
19-18		13.000	Yes	732.33	13.000	183.08
6.5000	6.5000					
18-13		13.000	Yes	732.33	13.000	183.08
6.5000	6.5000					
21-a		13.000	Yes	732.33	13.000	183.08
6.5000	6.5000					
f-50		13.000	Yes	732.33	13.000	183.08
6.5000	6.5000					
14-15		13.000	Yes	732.33	13.000	183.08
6.5000	6.5000					
15-16		13.000	Yes	732.33	13.000	183.08
6.5000	6.5000					
16-17		13.000	Yes	732.33	13.000	183.08
6.5000	6.5000					
17-g		13.000	Yes	732.33	13.000	183.08
6.5000	6.5000					
h-49		13.000	Yes	732.33	13.000	183.08
6.5000	6.5000					
49-36		13.000	Yes	732.33	13.000	183.08
6.5000	6.5000					
36-48		13.000	Yes	732.33	13.000	183.08
6.5000	6.5000					
48-47		13.000	Yes	732.33	13.000	183.08
6.5000	6.5000					
47-51		13.000	Yes	732.33	13.000	183.08
6.5000	6.5000					
50-46		13.000	Yes	732.33	13.000	183.08
6.5000	6.5000					
46-47		13.000	Yes	732.33	13.000	183.08
6.5000	6.5000					
24-25		13.000	Yes	732.33	13.000	183.08
6.5000	6.5000					
25-26		13.000	Yes	732.33	13.000	183.08
6.5000	6.5000					
26-27		13.000	Yes	732.33	13.000	183.08
6.5000	6.5000					
27-28		13.000	Yes	732.33	13.000	183.08
6.5000	6.5000					
28-29		13.000	Yes	732.33	13.000	183.08
6.5000	6.5000					
27-32		13.000	Yes	732.33	13.000	183.08
6.5000	6.5000					
33-31		13.000	Yes	732.33	13.000	183.08
6.5000	6.5000					
31-34		13.000	Yes	732.33	13.000	183.08
6.5000	6.5000					
34-35		13.000	Yes	732.33	13.000	183.08
6.5000	6.5000					
35-41		13.000	Yes	732.33	13.000	183.08
6.5000	6.5000					
41-40		13.000	Yes	732.33	13.000	183.08
6.5000	6.5000					
40-39		13.000	Yes	732.33	13.000	183.08
6.5000	6.5000					
39-38		13.000	Yes	732.33	13.000	183.08
6.5000	6.5000					
38-25		13.000	Yes	732.33	13.000	183.08
6.5000	6.5000					
20-22		3.0000	Yes	9.0000	3.0000	2.2500
1.5000	1.5000					

22-b		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						
e-45		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						
18-31		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						
23-24		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						
b-27		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						
42-37		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						
47-43		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						
44-39		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						
46-45		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						
a-12		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						
12-11		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						
11-f		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						
ag		13.0000	Yes	732.33	13.0000	13.0000	183.08
6.5000	6.5000						
gb		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						
bc		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						
cd		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						
eh		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						
hf		13.0000	Yes	732.33	13.0000	13.0000	183.08
6.5000	6.5000						
de		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						

Building Segment Combinations

Structure Name	Sub-Structure Name	Vertical Offset from Line for Vertical Movement Calculations	Segment Start	Length	Curvature	Combined Segment
		[m]	[m]	[m]		
No structures have segments combined.						

Utility Strain Calculation Options

Neglect beneficial contribution of axial strains : No

Specific Building Damage Results - Horizontal Displacements

Structure: 21-20 | Sub-structure:

Dist.	Coordinates			Displacements			
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	55.96000	70.70000	0.00000	0.12817	-0.41142	-0.12887	0.41120 d
1.0682	54.89182	70.70182	0.00000	0.11194	-0.28146	-0.11242	0.28127 d
2.1364	53.82364	70.70364	0.00000	0.073605	-0.15213	-0.073864	0.15201 d
3.2046	52.75545	70.70545	0.00000	0.016518	-0.028982	-0.016567	0.028954 d
4.2727	51.68727	70.70727	0.00000	0.0	0.0	0.0	0.0 d
5.3409	50.61909	70.70909	0.00000	0.0	0.0	0.0	0.0 d
6.4091	49.55091	70.71091	0.00000	0.0	0.0	0.0	0.0 d
7.4773	48.48273	70.71273	0.00000	0.0	0.0	0.0	0.0 d

8.5455	47.41455	70.71455	0.00000	0.0	0.0	0.0	0.0	0.0	d
9.6137	46.34636	70.71636	0.00000	0.0	0.0	0.0	0.0	0.0	d
10.682	45.27818	70.71818	0.00000	0.0	0.0	0.0	0.0	0.0	d
11.750	44.21000	70.72000	0.00000	0.0	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 19-20 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	59.14000	66.79000	0.00000	0.16764	-2.0905	-1.7276	1.1890	d
1.0080	58.50400	67.57200	0.00000	0.24222	-1.7048	-1.4754	0.88772	d
2.0160	57.86800	68.35400	0.00000	0.26175	-1.3468	-1.2100	0.64673	d
3.0239	57.23200	69.13600	0.00000	0.24244	-1.0142	-0.93977	0.45181	d
4.0319	56.59600	69.91800	0.00000	0.19537	-0.70344	-0.66901	0.29228	d
5.0399	55.96000	70.70000	0.00000	0.12817	-0.41142	-0.40005	0.16015	d

d - Displacements include imported displacements.

Structure: 19-18 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	59.14000	66.79000	0.00000	0.16764	-2.0905	2.0928	0.13642	d
1.0051	59.15500	65.78500	0.00000	0.21619	-2.4301	2.4331	0.17990	d
2.0102	59.17000	64.78000	0.00000	0.27717	-2.7589	2.7627	0.23596	d

d - Displacements include imported displacements.

Structure: 18-13 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	59.17000	64.78000	0.00000	0.27717	-2.7589	-0.28085	2.7585	d
1.0686	58.10143	64.78143	0.00000	0.61900	-2.3309	-0.62211	2.3301	d
2.1371	57.03286	64.78286	0.00000	0.80818	-1.8769	-0.81069	1.8758	d
3.2057	55.96429	64.78429	0.00000	0.86676	-1.4554	-0.86870	1.4542	d
4.2743	54.89571	64.78571	0.00000	0.83344	-1.0960	-0.83491	1.0949	d
5.3429	53.82714	64.78714	0.00000	0.74509	-0.80530	-0.74617	0.80430	d
6.4114	52.75857	64.78857	0.00000	0.62906	-0.57714	-0.62983	0.57629	d
7.4800	51.69000	64.79000	0.00000	0.50296	-0.40088	-0.50349	0.40021	d
8.5486	50.62143	64.79143	0.00000	0.37701	-0.26565	-0.37737	0.26514	d
9.6172	49.55286	64.79286	0.00000	0.25664	-0.16205	-0.25686	0.16171	d
10.686	48.48429	64.79429	0.00000	0.14436	-0.082578	-0.14447	0.082384	d
11.754	47.41571	64.79571	0.00000	0.041021	-0.021448	-0.041050	0.021393	d
12.823	46.34714	64.79714	0.00000	0.0	0.0	0.0	0.0	d
13.891	45.27857	64.79857	0.00000	0.0	0.0	0.0	0.0	d
14.960	44.21000	64.80000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 21-a | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	44.21000	70.72000	0.00000	0.0	0.0	0.0	0.0	d
0.34768	44.20559	70.37235	0.00000	0.0	0.0	0.0	0.0	d
0.69535	44.20118	70.02471	0.00000	0.0	0.0	0.0	0.0	d
1.0430	44.19676	69.67706	0.00000	0.0	0.0	0.0	0.0	d
1.3907	44.19235	69.32941	0.00000	0.0	0.0	0.0	0.0	d

1.7384	44.18794	68.98176	0.00000	0.0	0.0	0.0	0.0	d
2.0861	44.18353	68.63412	0.00000	0.0	0.0	0.0	0.0	d
2.4337	44.17912	68.28647	0.00000	0.0	0.0	0.0	0.0	d
2.7814	44.17471	67.93882	0.00000	0.0	0.0	0.0	0.0	d
3.1291	44.17029	67.59118	0.00000	0.0	0.0	0.0	0.0	d
3.4768	44.16588	67.24353	0.00000	0.0	0.0	0.0	0.0	d
3.8244	44.16147	66.89588	0.00000	0.0	0.0	0.0	0.0	d
4.1721	44.15706	66.54824	0.00000	0.0	0.0	0.0	0.0	d
4.5198	44.15265	66.20059	0.00000	0.0	0.0	0.0	0.0	d
4.8675	44.14824	65.85294	0.00000	0.0	0.0	0.0	0.0	d
5.2151	44.14382	65.50529	0.00000	0.0	0.0	0.0	0.0	d
5.5628	44.13941	65.15765	0.00000	0.0	0.0	0.0	0.0	d
5.9105	44.13500	64.81000	0.00000	0.0	0.0	0.0	0.0	d
6.2582	44.13059	64.46235	0.00000	0.0	0.0	0.0	0.0	d
6.6058	44.12618	64.11471	0.00000	0.0	0.0	0.0	0.0	d
6.9535	44.12176	63.76706	0.00000	0.0	0.0	0.0	0.0	d
7.3012	44.11735	63.41941	0.00000	0.0	0.0	0.0	0.0	d
7.6489	44.11294	63.07176	0.00000	0.0	0.0	0.0	0.0	d
7.9965	44.10853	62.72412	0.00000	0.0	0.0	0.0	0.0	d
8.3442	44.10412	62.37647	0.00000	-270.23E-6	-0.10188	0.10187	0.0010226	d
8.6919	44.09971	62.02882	0.00000	-616.05E-6	-0.23225	0.23224	0.0023311	d
9.0396	44.09529	61.68118	0.00000	-961.86E-6	-0.36262	0.36260	0.0036396	d
9.3872	44.09088	61.33353	0.00000	-0.0013077	-0.49299	0.49297	0.0049482	d
9.7349	44.08647	60.98588	0.00000	-0.0016535	-0.62336	0.62333	0.0062567	d
10.083	44.08206	60.63824	0.00000	-0.0019993	-0.75373	0.75370	0.0075652	d
10.430	44.07765	60.29059	0.00000	-0.0023451	-0.88410	0.88406	0.0088738	d
10.778	44.07324	59.94294	0.00000	-0.0026909	-1.0145	1.0144	0.010182	d
11.126	44.06882	59.59529	0.00000	-0.0030367	-1.1448	1.1448	0.011491	d
11.473	44.06441	59.24765	0.00000	-0.0033825	-1.2752	1.2752	0.012799	d
11.821	44.06000	58.90000	0.00000	-0.0037284	-1.4056	1.4055	0.014108	d

d - Displacements include imported displacements.

Structure: f-50 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	44.10000	51.60000	0.00000	0.0	1.5750	-1.5750	0.0063465	d
0.99267	44.10400	50.60733	0.00000	0.0	1.2028	-1.2027	0.0048465	d
1.9853	44.10800	49.61467	0.00000	0.0	0.83050	-0.83049	0.0033465	d
2.9780	44.11200	48.62200	0.00000	0.0	0.45825	-0.45825	0.0018465	d
3.9707	44.11600	47.62933	0.00000	0.0	0.086000	-0.085999	346.54E-6	d
4.9634	44.12000	46.63667	0.00000	0.0	0.0	0.0	0.0	d
5.9560	44.12400	45.64400	0.00000	0.0	0.0	0.0	0.0	d
6.9487	44.12800	44.65133	0.00000	0.0	0.0	0.0	0.0	d
7.9414	44.13200	43.65867	0.00000	0.0	0.0	0.0	0.0	d
8.9341	44.13600	42.66600	0.00000	0.0	0.0	0.0	0.0	d
9.9267	44.14000	41.67333	0.00000	0.0	0.0	0.0	0.0	d
10.919	44.14400	40.68067	0.00000	0.0	0.0	0.0	0.0	d
11.912	44.14800	39.68800	0.00000	0.0	0.0	0.0	0.0	d
12.905	44.15200	38.69533	0.00000	0.0	0.0	0.0	0.0	d
13.897	44.15600	37.70267	0.00000	0.0	0.0	0.0	0.0	d
14.890	44.16000	36.71000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 14-15 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	55.00000	64.76000	0.00000	0.84279	-1.1278	1.1278	0.84279	d
1.0700	55.00000	63.69000	0.00000	0.96061	-1.0722	1.0722	0.96061	d
2.1400	55.00000	62.62000	0.00000	1.0302	-0.92116	0.92116	1.0302	d

d - Displacements include imported displacements.

Structure: 15-16 | Sub-structure:

Dist. Coordinates Displacements

	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	
	0.0	55.00000	62.62000	0.00000	1.0302	-0.92116	1.3815	0.036647 d
	1.6907	56.23000	61.46000	0.00000	1.2426	-1.5248	1.9502	-0.25675 d

d - Displacements include imported displacements.

Structure: 16-17 | Sub-structure:

Dist.	Coordinates			Displacements		Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	x	y	z	x	y			
	[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	
	0.0	56.23000	61.46000	0.00000	1.2426	-1.5248	1.5183	1.2507 d
	1.9000	56.22000	59.56000	0.00000	0.75970	-1.4108	1.4068	0.76712 d

d - Displacements include imported displacements.

Structure: 17-g | Sub-structure:

Dist.	Coordinates			Displacements		Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	x	y	z	x	y			
	[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	
	0.0	56.22000	59.56000	0.00000	0.75970	-1.4108	0.48727	1.5265 d
	1.6125	55.10000	58.40000	0.00000	0.039851	-1.5829	1.1111	1.1282 d

d - Displacements include imported displacements.

Structure: h-49 | Sub-structure:

Dist.	Coordinates			Displacements		Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	x	y	z	x	y			
	[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	
	0.0	54.98000	51.60000	0.00000	0.032693	1.5755	-1.0834	1.1444 d
	1.0678	55.74000	50.85000	0.00000	0.41190	1.3775	-0.67442	1.2698 d
	2.1355	56.50000	50.10000	0.00000	0.84003	1.4123	-0.39408	1.5953 d

d - Displacements include imported displacements.

Structure: 49-36 | Sub-structure:

Dist.	Coordinates			Displacements		Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	x	y	z	x	y			
	[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	
	0.0	56.50000	50.10000	0.00000	0.84003	1.4123	-1.4123	0.84003 d
	1.1950	56.50000	48.90500	0.00000	1.1136	1.4952	-1.4952	1.1136 d
	2.3900	56.50000	47.71000	0.00000	1.0708	1.3967	-1.3967	1.0708 d

d - Displacements include imported displacements.

Structure: 36-48 | Sub-structure:

Dist.	Coordinates			Displacements		Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	x	y	z	x	y			
	[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	
	0.0	56.50000	47.71000	0.00000	1.0708	1.3967	-1.7545	-0.13899 d
	1.1506	55.73000	46.85500	0.00000	0.93757	1.1061	-1.4493	-0.043491 d
	2.3012	54.96000	46.00000	0.00000	0.80409	0.93976	-1.2364	-0.031390 d

d - Displacements include imported displacements.

Structure: 48-47 | Sub-structure:

Dist.	Coordinates			Displacements			
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	54.96000	46.00000	0.00000	0.80409	0.93976	-0.93976	0.80409 d
1.1700	54.96000	44.83000	0.00000	0.68541	0.96606	-0.96606	0.68541 d

d - Displacements include imported displacements.

Structure: 47-51 | Sub-structure:

Dist.	Coordinates			Displacements			
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	54.96000	44.83000	0.00000	0.68541	0.96606	-0.68541	-0.96606 d
1.0750	53.88500	44.83000	0.00000	0.61968	0.71522	-0.61968	-0.71522 d
2.1500	52.81000	44.83000	0.00000	0.52678	0.51476	-0.52678	-0.51476 d
3.2250	51.73500	44.83000	0.00000	0.42213	0.35765	-0.42213	-0.35765 d
4.3000	50.66000	44.83000	0.00000	0.31522	0.23573	-0.31522	-0.23573 d
5.3750	49.58500	44.83000	0.00000	0.21143	0.14150	-0.21143	-0.14150 d
6.4500	48.51000	44.83000	0.00000	0.11350	0.068740	-0.11350	-0.068740 d
7.5250	47.43500	44.83000	0.00000	0.022589	0.012493	-0.022589	-0.012493 d
8.6000	46.36000	44.83000	0.00000	0.0	0.0	0.0	0.0 d
9.6750	45.28500	44.83000	0.00000	0.0	0.0	0.0	0.0 d
10.750	44.21000	44.83000	0.00000	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: 50-46 | Sub-structure:

Dist.	Coordinates			Displacements			
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	44.16000	36.71000	0.00000	0.0	0.0	0.0	0.0 d
1.0800	45.24000	36.71000	0.00000	0.0	0.0	0.0	0.0 d
2.1600	46.32000	36.71000	0.00000	0.0	0.0	0.0	0.0 d
3.2400	47.40000	36.71000	0.00000	0.0	0.0	0.0	0.0 d
4.3200	48.48000	36.71000	0.00000	0.0	0.0	0.0	0.0 d
5.4000	49.56000	36.71000	0.00000	0.0	0.0	0.0	0.0 d
6.4800	50.64000	36.71000	0.00000	0.0	0.0	0.0	0.0 d
7.5600	51.72000	36.71000	0.00000	0.0	0.0	0.0	0.0 d
8.6400	52.80000	36.71000	0.00000	0.0	0.0	0.0	0.0 d
9.7200	53.88000	36.71000	0.00000	0.0	0.0	0.0	0.0 d
10.800	54.96000	36.71000	0.00000	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: 46-47 | Sub-structure:

Dist.	Coordinates			Displacements			
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	54.96000	36.71000	0.00000	0.0	0.0	0.0	0.0 d
1.0150	54.96000	37.72500	0.00000	0.0	0.0	0.0	0.0 d
2.0300	54.96000	38.74000	0.00000	0.050906	0.13554	0.13554	-0.050906 d
3.0450	54.96000	39.75500	0.00000	0.14079	0.34546	0.34546	-0.14079 d
4.0600	54.96000	40.77000	0.00000	0.23826	0.53485	0.53485	-0.23826 d
5.0750	54.96000	41.78500	0.00000	0.34320	0.69876	0.69876	-0.34320 d
6.0900	54.96000	42.80000	0.00000	0.45473	0.83086	0.83086	-0.45473 d
7.1050	54.96000	43.81500	0.00000	0.57047	0.92320	0.92320	-0.57047 d
8.1200	54.96000	44.83000	0.00000	0.68541	0.96606	0.96606	-0.68541 d

d - Displacements include imported displacements.

Structure: 24-25 | Sub-structure:

Dist.	Coordinates			Displacements			
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	78.82000	63.10000	0.00000	-0.25748	-0.096352	-0.25716	-0.097186 d
1.0289	79.84889	63.09667	0.00000	0.0	0.0	0.0	0.0 d
2.0578	80.87778	63.09333	0.00000	0.0	0.0	0.0	0.0 d
3.0867	81.90667	63.09000	0.00000	0.0	0.0	0.0	0.0 d
4.1156	82.93556	63.08667	0.00000	0.0	0.0	0.0	0.0 d
5.1445	83.96444	63.08333	0.00000	0.0	0.0	0.0	0.0 d
6.1734	84.99333	63.08000	0.00000	0.0	0.0	0.0	0.0 d
7.2023	86.02222	63.07667	0.00000	0.0	0.0	0.0	0.0 d
8.2312	87.05111	63.07333	0.00000	0.0	0.0	0.0	0.0 d
9.2600	88.08000	63.07000	0.00000	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: 25-26 | Sub-structure:

Dist.	Coordinates			Displacements			
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	88.08000	63.07000	0.00000	0.0	0.0	0.0	0.0 d
1.0641	88.06400	62.00600	0.00000	0.0	0.0	0.0	0.0 d
2.1282	88.04800	60.94200	0.00000	0.0	0.0	0.0	0.0 d
3.1924	88.03200	59.87800	0.00000	0.0	0.0	0.0	0.0 d
4.2565	88.01600	58.81400	0.00000	0.0	0.0	0.0	0.0 d
5.3206	88.00000	57.75000	0.00000	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: 26-27 | Sub-structure:

Dist.	Coordinates			Displacements			
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	88.00000	57.75000	0.00000	0.0	0.0	0.0	0.0 d
1.0246	86.97545	57.76364	0.00000	0.0	0.0	0.0	0.0 d
2.0493	85.95091	57.77727	0.00000	0.0	0.0	0.0	0.0 d
3.0739	84.92636	57.79091	0.00000	0.0	0.0	0.0	0.0 d
4.0985	83.90182	57.80455	0.00000	0.0	0.0	0.0	0.0 d
5.1232	82.87727	57.81818	0.00000	0.0	0.0	0.0	0.0 d
6.1478	81.85273	57.83182	0.00000	0.0	0.0	0.0	0.0 d
7.1725	80.82818	57.84545	0.00000	0.0	0.0	0.0	0.0 d
8.1971	79.80364	57.85909	0.00000	-0.23051	902.20E-6	0.23050	0.0021657 d
9.2217	78.77909	57.87273	0.00000	-0.61473	0.0024060	0.61471	0.0057754 d
10.246	77.75455	57.88636	0.00000	-0.99895	0.0039098	0.99891	0.0093851 d
11.271	76.73000	57.90000	0.00000	-1.3832	0.0054136	1.3831	0.012995 d

d - Displacements include imported displacements.

Structure: 27-28 | Sub-structure:

Dist.	Coordinates			Displacements			
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	76.73000	57.90000	0.00000	-1.3832	0.0054136	0.014140	1.3831 d
1.0567	76.72333	58.95667	0.00000	-1.3764	-0.083160	-0.074474	1.3769 d
2.1134	76.71667	60.01333	0.00000	-1.3216	-0.21044	-0.20210	1.3229 d
3.1701	76.71000	61.07000	0.00000	-1.2198	-0.31493	-0.30723	1.2218 d

d - Displacements include imported displacements.

Structure: 28-29 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
	0.0	76.71000	61.07000	0.00000	-1.2198	-0.31493	-1.0974	0.61875 d
	1.4640	77.76500	62.08500	0.00000	-0.73660	-0.23675	-0.69497	0.34008 d
	2.9280	78.82000	63.10000	0.00000	-0.25748	-0.096352	-0.25235	0.10908 d

d - Displacements include imported displacements.

Structure: 27-32 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
	0.0	76.73000	57.90000	0.00000	-1.3832	0.0054136	-0.010785	-1.3831 d
	1.0300	76.73400	56.87000	0.00000	-1.3802	0.0054018	-0.010762	-1.3801 d
	2.0600	76.73800	55.84000	0.00000	-1.3771	0.0053900	-0.010738	-1.3771 d
	3.0900	76.74200	54.81000	0.00000	-1.3741	0.0053782	-0.010715	-1.3741 d
	4.1200	76.74600	53.78000	0.00000	-1.3711	0.0053664	-0.010691	-1.3711 d
	5.1500	76.75000	52.75000	0.00000	-1.3640	0.057099	-0.062395	-1.3638 d

d - Displacements include imported displacements.

Structure: 33-31 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
	0.0	87.93000	52.75000	0.00000	0.0	0.0	0.0	0.0 d
	1.0400	86.89000	52.75000	0.00000	0.0	0.0	0.0	0.0 d
	2.0800	85.85000	52.75000	0.00000	0.0	0.0	0.0	0.0 d
	3.1200	84.81000	52.75000	0.00000	0.0	0.0	0.0	0.0 d
	4.1600	83.77000	52.75000	0.00000	0.0	0.0	0.0	0.0 d
	5.2000	82.73000	52.75000	0.00000	0.0	0.0	0.0	0.0 d
	6.2400	81.69000	52.75000	0.00000	0.0	0.0	0.0	0.0 d
	7.2800	80.65000	52.75000	0.00000	0.0	0.0	0.0	0.0 d
	8.3200	79.61000	52.75000	0.00000	-0.29330	0.0096977	0.29330	-0.0096977 d
	9.3600	78.57000	52.75000	0.00000	-0.68279	0.024444	0.68279	-0.024444 d
	10.400	77.53000	52.75000	0.00000	-1.0721	0.041844	1.0721	-0.041844 d
	11.440	76.49000	52.75000	0.00000	-1.4613	0.062686	1.4613	-0.062686 d
	12.480	75.45000	52.75000	0.00000	-1.8501	0.088102	1.8501	-0.088102 d
	13.520	74.41000	52.75000	0.00000	-2.2385	0.11978	2.2385	-0.11978 d
	14.560	73.37000	52.75000	0.00000	-2.6262	0.16035	2.6262	-0.16035 d
	15.600	72.33000	52.75000	0.00000	-3.0127	0.21417	3.0127	-0.21417 d
	16.640	71.29000	52.75000	0.00000	-3.3968	0.28895	3.3968	-0.28895 d
	17.680	70.25000	52.75000	0.00000	-3.7762	0.39984	3.7762	-0.39984 d

d - Displacements include imported displacements.

Structure: 31-34 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
	0.0	70.25000	52.75000	0.00000	-3.7762	0.39984	-0.32133	-3.7837 d
	1.1236	70.22667	51.62667	0.00000	-3.4758	1.2938	-1.2214	-3.5019 d
	2.2472	70.20333	50.50333	0.00000	-2.9688	1.9046	-1.8426	-3.0077 d
	3.3707	70.18000	49.38000	0.00000	-2.4187	2.2104	-2.1597	-2.4641 d

d - Displacements include imported displacements.

Structure: 34-35 | Sub-structure:

Dist.	Coordinates			Displacements			
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	70.18000	49.38000	0.00000	-2.4187	2.2104	-2.4352	2.1921 d
1.3300	71.51000	49.37000	0.00000	-2.3678	1.6458	-2.3801	1.6280 d

d - Displacements include imported displacements.

Structure: 35-41 | Sub-structure:

Dist.	Coordinates			Displacements			
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	71.51000	49.37000	0.00000	-2.3678	1.6458	-1.6261	-2.3814 d
1.2000	71.50000	48.17000	0.00000	-1.9223	1.7581	-1.7420	-1.9369 d
2.4001	71.49000	46.97000	0.00000	-1.5114	1.7152	-1.7025	-1.5257 d
3.6001	71.48000	45.77000	0.00000	-1.1503	1.5596	-1.5499	-1.1632 d

d - Displacements include imported displacements.

Structure: 41-40 | Sub-structure:

Dist.	Coordinates			Displacements			
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	71.48000	45.77000	0.00000	-1.1503	1.5596	1.1503	-1.5596 d
1.0175	70.46250	45.77000	0.00000	-1.1069	1.8430	1.1069	-1.8430 d
2.0350	69.44500	45.77000	0.00000	-0.97961	2.1128	0.97961	-2.1128 d
3.0525	68.42750	45.77000	0.00000	-0.76672	2.3467	0.76672	-2.3467 d
4.0700	67.41000	45.77000	0.00000	-0.61336	2.4938	0.61336	-2.4938 d

d - Displacements include imported displacements.

Structure: 40-39 | Sub-structure:

Dist.	Coordinates			Displacements			
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	67.41000	45.77000	0.00000	-0.61336	2.4938	-2.4906	-0.62614 d
1.3000	67.40333	44.47000	0.00000	-0.50044	2.0347	-2.0321	-0.51086 d
2.6000	67.39667	43.17000	0.00000	-0.38752	1.5756	-1.5735	-0.39559 d
3.9001	67.39000	41.87000	0.00000	-0.27459	1.1164	-1.1150	-0.28032 d

d - Displacements include imported displacements.

Structure: 39-38 | Sub-structure:

Dist.	Coordinates			Displacements			
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	67.39000	41.87000	0.00000	-0.27459	1.1164	-0.28379	1.1141 d
1.0305	68.42050	41.86150	0.00000	-0.25181	1.0238	-0.26025	1.0217 d
2.0611	69.45100	41.85300	0.00000	-0.27713	0.91122	-0.28464	0.90891 d
3.0916	70.48150	41.84450	0.00000	-0.30178	0.76467	-0.30808	0.76215 d
4.1221	71.51200	41.83600	0.00000	-0.28963	0.59713	-0.29455	0.59472 d
5.1527	72.54250	41.82750	0.00000	-0.23933	0.41602	-0.24275	0.41403 d
6.1832	73.57300	41.81900	0.00000	-0.15159	0.22781	-0.15346	0.22655 d
7.2137	74.60350	41.81050	0.00000	-0.028529	0.037767	-0.028839	0.037530 d
8.2443	75.63400	41.80200	0.00000	0.0	0.0	0.0	0.0 d
9.2748	76.66450	41.79350	0.00000	0.0	0.0	0.0	0.0 d
10.305	77.69500	41.78500	0.00000	0.0	0.0	0.0	0.0 d
11.336	78.72550	41.77650	0.00000	0.0	0.0	0.0	0.0 d

12.366	79.75600	41.76800	0.00000	0.0	0.0	0.0	0.0	d
13.397	80.78650	41.75950	0.00000	0.0	0.0	0.0	0.0	d
14.427	81.81700	41.75100	0.00000	0.0	0.0	0.0	0.0	d
15.458	82.84750	41.74250	0.00000	0.0	0.0	0.0	0.0	d
16.489	83.87800	41.73400	0.00000	0.0	0.0	0.0	0.0	d
17.519	84.90850	41.72550	0.00000	0.0	0.0	0.0	0.0	d
18.550	85.93900	41.71700	0.00000	0.0	0.0	0.0	0.0	d
19.580	86.96950	41.70850	0.00000	0.0	0.0	0.0	0.0	d
20.611	88.00000	41.70000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 38-25 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	88.00000	41.70000	0.00000	0.0	0.0	0.0	0.0	d
1.0176	88.00381	42.71762	0.00000	0.0	0.0	0.0	0.0	d
2.0353	88.00762	43.73524	0.00000	0.0	0.0	0.0	0.0	d
3.0529	88.01143	44.75286	0.00000	0.0	0.0	0.0	0.0	d
4.0705	88.01524	45.77048	0.00000	0.0	0.0	0.0	0.0	d
5.0881	88.01905	46.78810	0.00000	0.0	0.0	0.0	0.0	d
6.1058	88.02286	47.80571	0.00000	0.0	0.0	0.0	0.0	d
7.1234	88.02667	48.82333	0.00000	0.0	0.0	0.0	0.0	d
8.1410	88.03048	49.84095	0.00000	0.0	0.0	0.0	0.0	d
9.1586	88.03429	50.85857	0.00000	0.0	0.0	0.0	0.0	d
10.176	88.03810	51.87619	0.00000	0.0	0.0	0.0	0.0	d
11.194	88.04190	52.89381	0.00000	0.0	0.0	0.0	0.0	d
12.212	88.04571	53.91143	0.00000	0.0	0.0	0.0	0.0	d
13.229	88.04952	54.92905	0.00000	0.0	0.0	0.0	0.0	d
14.247	88.05333	55.94667	0.00000	0.0	0.0	0.0	0.0	d
15.264	88.05714	56.96429	0.00000	0.0	0.0	0.0	0.0	d
16.282	88.06095	57.98190	0.00000	0.0	0.0	0.0	0.0	d
17.300	88.06476	58.99952	0.00000	0.0	0.0	0.0	0.0	d
18.317	88.06857	60.01714	0.00000	0.0	0.0	0.0	0.0	d
19.335	88.07238	61.03476	0.00000	0.0	0.0	0.0	0.0	d
20.353	88.07619	62.05238	0.00000	0.0	0.0	0.0	0.0	d
21.370	88.08000	63.07000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 20-22 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	55.96000	70.70000	0.00000	0.12817	-0.41142	0.12858	-0.41129	d
1.0170	56.97700	70.69900	0.00000	0.12132	-0.52867	0.12184	-0.52855	d
2.0340	57.99400	70.69800	0.00000	0.093137	-0.63186	0.093758	-0.63177	d
3.0510	59.01100	70.69700	0.00000	0.046536	-0.71253	0.047236	-0.71248	d
4.0680	60.02800	70.69600	0.00000	0.0	-0.75525	742.63E-6	-0.75525	d
5.0850	61.04500	70.69500	0.00000	0.0	-0.75563	742.99E-6	-0.75562	d
6.1020	62.06200	70.69400	0.00000	0.0	-0.75600	743.36E-6	-0.75600	d
7.1190	63.07900	70.69300	0.00000	0.0	-0.75638	743.73E-6	-0.75637	d
8.1360	64.09600	70.69200	0.00000	0.0	-0.75675	744.10E-6	-0.75675	d
9.1530	65.11300	70.69100	0.00000	0.0	-0.75713	744.47E-6	-0.75712	d
10.170	66.13000	70.69000	0.00000	-0.0067287	-0.75729	-0.0059841	-0.75729	d

d - Displacements include imported displacements.

Structure: 22-b | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	66.13000	70.69000	0.00000	-0.0067287	-0.75729	0.75711	-0.017646	d
0.69360	66.14000	69.99647	0.00000	-0.010446	-1.0173	1.0170	-0.025111	d

1.3872	66.15000	69.30294	0.00000	-0.015105	-1.2773	1.2769	-0.033518	d
2.0808	66.16000	68.60941	0.00000	-0.020895	-1.5372	1.5368	-0.043056	d
2.7744	66.17000	67.91588	0.00000	-0.028063	-1.7971	1.7965	-0.053970	d
3.4680	66.18000	67.22235	0.00000	-0.036928	-2.0570	2.0563	-0.066581	d
4.1616	66.19000	66.52882	0.00000	-0.047921	-2.3168	2.3159	-0.081318	d
4.8552	66.20000	65.83529	0.00000	-0.061627	-2.5765	2.5753	-0.098767	d
5.5488	66.21000	65.14176	0.00000	-0.078873	-2.8360	2.8346	-0.11975	d
6.2424	66.22000	64.44824	0.00000	-0.10085	-3.0953	3.0935	-0.14547	d
6.9360	66.23000	63.75471	0.00000	-0.12937	-3.3542	3.3520	-0.17772	d
7.6296	66.24000	63.06118	0.00000	-0.16728	-3.6125	3.6097	-0.21934	d
8.3232	66.25000	62.36765	0.00000	-0.21935	-3.8697	3.8662	-0.27512	d
9.0168	66.26000	61.67412	0.00000	-0.29427	-4.1248	4.1201	-0.35370	d
9.7104	66.27000	60.98059	0.00000	-0.40956	-4.3750	4.3687	-0.47259	d
10.404	66.28000	60.28706	0.00000	-0.60658	-4.6125	4.6033	-0.67302	d
11.098	66.29000	59.59353	0.00000	-1.0104	-4.8030	4.7880	-1.0795	d
11.791	66.30000	58.90000	0.00000	-2.2102	-4.6572	4.6249	-2.2771	d

d - Displacements include imported displacements.

Structure: e-45 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	64.74000	51.60000	0.00000	-1.1775	4.7875	-4.7661	-1.2617	d
0.98415	64.72267	50.61600	0.00000	-1.0923	4.4411	-4.4212	-1.1704	d
1.9683	64.70533	49.63200	0.00000	-1.0071	4.0946	-4.0763	-1.0791	d
2.9525	64.68800	48.64800	0.00000	-0.92189	3.7482	-3.7314	-0.98776	d
3.9366	64.67067	47.66400	0.00000	-0.83668	3.4018	-3.3865	-0.89646	d
4.9208	64.65333	46.68000	0.00000	-0.75147	3.0553	-3.0416	-0.80516	d
5.9049	64.63600	45.69600	0.00000	-0.66626	2.7089	-2.6967	-0.71387	d
6.8891	64.61867	44.71200	0.00000	-0.58105	2.3624	-2.3518	-0.62257	d
7.8732	64.60133	43.72800	0.00000	-0.49584	2.0160	-2.0069	-0.53127	d
8.8574	64.58400	42.74400	0.00000	-0.41063	1.6695	-1.6620	-0.43997	d
9.8415	64.56667	41.76000	0.00000	-0.32542	1.3231	-1.3172	-0.34867	d
10.826	64.54933	40.77600	0.00000	-0.24021	0.97665	-0.97227	-0.25738	d
11.810	64.53200	39.79200	0.00000	-0.15500	0.63021	-0.62738	-0.16608	d
12.794	64.51467	38.80800	0.00000	-0.069793	0.28377	-0.28249	-0.074780	d
13.778	64.49733	37.82400	0.00000	0.0	0.0	0.0	0.0	d
14.762	64.48000	36.84000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 18-31 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	59.17000	64.78000	0.00000	0.27717	-2.7589	0.29332	-2.7572	d
1.1384	60.30833	64.77333	0.00000	0.0	-2.9762	0.017430	-2.9762	d
2.2767	61.44667	64.76667	0.00000	0.0	-2.9788	0.017445	-2.9787	d
3.4151	62.58500	64.76000	0.00000	0.0	-2.9813	0.017459	-2.9812	d
4.5534	63.72333	64.75333	0.00000	0.0	-2.9838	0.017474	-2.9837	d
5.6918	64.86167	64.74667	0.00000	0.0	-2.9862	0.017489	-2.9862	d
6.8301	66.00000	64.74000	0.00000	0.0	-2.9888	0.017503	-2.9887	d

d - Displacements include imported displacements.

Structure: 23-24 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	66.00000	63.14000	0.00000	0.0	-3.5888	0.011197	-3.5887	d
1.0683	67.06833	63.13667	0.00000	-0.75301	-3.4670	-0.74219	-3.4693	d
2.1367	68.13667	63.13333	0.00000	-1.3762	-3.1361	-1.3664	-3.1403	d
3.2050	69.20500	63.13000	0.00000	-1.7826	-2.6978	-1.7742	-2.7033	d
4.2734	70.27333	63.12667	0.00000	-1.9793	-2.2415	-1.9723	-2.2476	d

5.3417	71.34167	63.12333	0.00000	-2.0092	-1.8173	-2.0036	-1.8236	d
6.4100	72.41000	63.12000	0.00000	-1.9181	-1.4438	-1.9136	-1.4498	d
7.4784	73.47833	63.11667	0.00000	-1.7422	-1.1228	-1.7386	-1.1282	d
8.5467	74.54667	63.11333	0.00000	-1.5073	-0.84913	-1.5047	-0.85383	d
9.6150	75.61500	63.11000	0.00000	-1.2313	-0.61596	-1.2294	-0.61980	d
10.683	76.68333	63.10667	0.00000	-0.92594	-0.41652	-0.92464	-0.41940	d
11.752	77.75167	63.10333	0.00000	-0.59947	-0.24493	-0.59870	-0.24680	d
12.820	78.82000	63.10000	0.00000	-0.25748	-0.096352	-0.25717	-0.097155	d

d - Displacements include imported displacements.

Structure: b-27 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	66.10000	58.46000	0.00000	-2.5112	-4.7085	-2.2600	-4.8340	d
1.0645	67.16300	58.40400	0.00000	-4.9532	-0.40735	-4.9249	-0.66737	d
2.1289	68.22600	58.34800	0.00000	-4.5719	-0.078755	-4.5615	-0.31917	d
3.1934	69.28900	58.29200	0.00000	-4.1741	0.016337	-4.1692	-0.20328	d
4.2579	70.35200	58.23600	0.00000	-3.7754	0.014776	-3.7709	-0.18386	d
5.3224	71.41500	58.18000	0.00000	-3.3767	0.013216	-3.3727	-0.16444	d
6.3868	72.47800	58.12400	0.00000	-2.9780	0.011655	-2.9745	-0.14503	d
7.4513	73.54100	58.06800	0.00000	-2.5793	0.010095	-2.5762	-0.12561	d
8.5158	74.60400	58.01200	0.00000	-2.1806	0.0085345	-2.1780	-0.10619	d
9.5803	75.66700	57.95600	0.00000	-1.7819	0.0069740	-1.7798	-0.086776	d
10.645	76.73000	57.90000	0.00000	-1.3832	0.0054136	-1.3815	-0.067360	d

d - Displacements include imported displacements.

Structure: 42-37 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	64.54000	46.73000	0.00000	-0.75824	3.0829	-0.79504	3.0736	d
1.0183	65.55826	46.71783	0.00000	-0.73540	2.9900	-0.77109	2.9810	d
2.0367	66.57652	46.70565	0.00000	-0.71256	2.8971	-0.74714	2.8884	d
3.0550	67.59478	46.69348	0.00000	-0.68972	2.8043	-0.72320	2.7958	d
4.0733	68.61304	46.68130	0.00000	-1.0293	2.5678	-1.0599	2.5553	d
5.0917	69.63130	46.66913	0.00000	-1.2624	2.2704	-1.2895	2.2552	d
6.1100	70.64957	46.65696	0.00000	-1.3844	1.9482	-1.4076	1.9315	d
7.1283	71.66783	46.64478	0.00000	-1.4064	1.6266	-1.4258	1.6097	d
8.1467	72.68609	46.63261	0.00000	-1.3451	1.3213	-1.3608	1.3051	d
9.1650	73.70435	46.62043	0.00000	-1.2172	1.0395	-1.2296	1.0249	d
10.183	74.72261	46.60826	0.00000	-1.0372	0.78381	-1.0465	0.77136	d
11.202	75.74087	46.59609	0.00000	-0.81681	0.55377	-0.82338	0.54396	d
12.220	76.75913	46.58391	0.00000	-0.56522	0.34757	-0.56933	0.34079	d
13.238	77.77739	46.57174	0.00000	-0.28939	0.16287	-0.29132	0.15940	d
14.257	78.79565	46.55957	0.00000	0.0	0.0	0.0	0.0	d
15.275	79.81391	46.54739	0.00000	0.0	0.0	0.0	0.0	d
16.293	80.83217	46.53522	0.00000	0.0	0.0	0.0	0.0	d
17.312	81.85043	46.52304	0.00000	0.0	0.0	0.0	0.0	d
18.330	82.86870	46.51087	0.00000	0.0	0.0	0.0	0.0	d
19.348	83.88696	46.49870	0.00000	0.0	0.0	0.0	0.0	d
20.367	84.90522	46.48652	0.00000	0.0	0.0	0.0	0.0	d
21.385	85.92348	46.47435	0.00000	0.0	0.0	0.0	0.0	d
22.403	86.94174	46.46217	0.00000	0.0	0.0	0.0	0.0	d
23.422	87.96000	46.45000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 47-43 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	54.96000	44.83000	0.00000	0.68541	0.96606	0.68541	0.96606	d

1.0600	56.02000	44.83000	0.00000	0.70166	1.2648	0.70166	1.2648	d
2.1200	57.08000	44.83000	0.00000	0.64246	1.6062	0.64246	1.6062	d
3.1800	58.14000	44.83000	0.00000	0.48181	1.9645	0.48181	1.9645	d
4.2400	59.20000	44.83000	0.00000	0.20776	2.2954	0.20776	2.2954	d
5.3000	60.26000	44.83000	0.00000	-0.16345	2.5446	-0.16345	2.5446	d
6.3600	61.32000	44.83000	0.00000	-0.58424	2.6680	-0.58424	2.6680	d
7.4200	62.38000	44.83000	0.00000	-0.63920	2.5989	-0.63920	2.5989	d
8.4800	63.44000	44.83000	0.00000	-0.61653	2.5067	-0.61653	2.5067	d
9.5400	64.50000	44.83000	0.00000	-0.59385	2.4145	-0.59385	2.4145	d

d - Displacements include imported displacements.

Structure: 44-39 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	64.44000	41.91000	0.00000	-0.34118	1.3872	-0.35995	1.3824	d
1.4751	65.91500	41.89000	0.00000	-0.30789	1.2518	-0.32483	1.2475	d
2.9503	67.39000	41.87000	0.00000	-0.27459	1.1164	-0.28971	1.1126	d

d - Displacements include imported displacements.

Structure: 46-45 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	54.96000	36.71000	0.00000	0.0	0.0	0.0	0.0	d
1.0579	56.01778	36.72444	0.00000	0.0	0.0	0.0	0.0	d
2.1158	57.07556	36.73889	0.00000	0.0	0.0	0.0	0.0	d
3.1736	58.13333	36.75333	0.00000	0.0	0.0	0.0	0.0	d
4.2315	59.19111	36.76778	0.00000	0.0	0.0	0.0	0.0	d
5.2894	60.24889	36.78222	0.00000	0.0	0.0	0.0	0.0	d
6.3473	61.30667	36.79667	0.00000	0.0	0.0	0.0	0.0	d
7.4051	62.36444	36.81111	0.00000	0.0	0.0	0.0	0.0	d
8.4630	63.42222	36.82556	0.00000	0.0	0.0	0.0	0.0	d
9.5209	64.48000	36.84000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: a-12 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	44.06000	58.90000	0.00000	-0.0037284	-1.4056	0.16757	1.3956	d
1.1151	42.95250	58.77000	0.00000	-0.0038606	-1.4554	0.17351	1.4451	d
2.2302	41.84500	58.64000	0.00000	-0.0039928	-1.5053	0.17945	1.4946	d
3.3453	40.73750	58.51000	0.00000	-0.0041250	-1.5551	0.18540	1.5441	d
4.4604	39.63000	58.38000	0.00000	-0.0042573	-1.6050	0.19134	1.5936	d

d - Displacements include imported displacements.

Structure: 12-11 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	39.63000	58.38000	0.00000	-0.0042573	-1.6050	1.6050	-0.0042573	d
1.1167	39.63000	57.26333	0.00000	1.6050	0.0	0.0	1.6050	d
2.2333	39.63000	56.14667	0.00000	1.6050	0.0	0.0	1.6050	d
3.3500	39.63000	55.03000	0.00000	1.6050	0.0	0.0	1.6050	d
4.4667	39.63000	53.91333	0.00000	1.6050	0.0	0.0	1.6050	d
5.5833	39.63000	52.79667	0.00000	1.6050	0.0	0.0	1.6050	d

6.7000 39.63000 51.68000 0.00000 1.6050 0.0 0.0 1.6050 d
 d - Displacements include imported displacements.

Structure: 11-f | Sub-structure:

Dist.	Coordinates			Displacements			
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	39.63000	51.68000	0.00000	1.6050	0.0	1.6047	0.028720 d
0.55884	40.18875	51.67000	0.00000	0.0	1.6013	-0.028653	1.6010 d
1.1177	40.74750	51.66000	0.00000	0.0	1.5975	-0.028586	1.5972 d
1.6765	41.30625	51.65000	0.00000	0.0	1.5938	-0.028519	1.5935 d
2.2354	41.86500	51.64000	0.00000	0.0	1.5900	-0.028452	1.5897 d
2.7942	42.42375	51.63000	0.00000	0.0	1.5863	-0.028385	1.5860 d
3.3530	42.98250	51.62000	0.00000	0.0	1.5825	-0.028318	1.5822 d
3.9119	43.54125	51.61000	0.00000	0.0	1.5788	-0.028251	1.5785 d
4.4707	44.10000	51.60000	0.00000	0.0	1.5750	-0.028183	1.5747 d

d - Displacements include imported displacements.

Structure: ag | Sub-structure:

Dist.	Coordinates			Displacements			
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	44.06000	58.90000	0.00000	-0.0037284	-1.4056	0.059869	-1.4043 d
1.0047	45.06364	58.85455	0.00000	-0.0037709	-1.4216	0.060553	-1.4204 d
2.0093	46.06727	58.80909	0.00000	0.0017098	-1.4379	0.066763	-1.4363 d
3.0140	47.07091	58.76364	0.00000	0.010084	-1.4542	0.075868	-1.4523 d
4.0187	48.07455	58.71818	0.00000	0.018044	-1.4705	0.084558	-1.4682 d
5.0233	49.07818	58.67273	0.00000	0.025472	-1.4868	0.092715	-1.4841 d
6.0280	50.08182	58.62727	0.00000	0.032204	-1.5031	0.10017	-1.5001 d
7.0327	51.08545	58.58182	0.00000	0.037999	-1.5192	0.10670	-1.5160 d
8.0373	52.08909	58.53636	0.00000	0.042493	-1.5353	0.11191	-1.5318 d
9.0420	53.09273	58.49091	0.00000	0.045102	-1.5513	0.11524	-1.5477 d
10.047	54.09636	58.44545	0.00000	0.044834	-1.5672	0.11569	-1.5636 d
11.051	55.10000	58.40000	0.00000	0.039851	-1.5829	0.11143	-1.5795 d

d - Displacements include imported displacements.

Structure: gb | Sub-structure:

Dist.	Coordinates			Displacements			
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	55.10000	58.40000	0.00000	0.039851	-1.5829	0.031519	-1.5831 d
0.57001	55.67000	58.40300	0.00000	0.049926	-1.5816	0.041601	-1.5819 d
1.1400	56.24000	58.40600	0.00000	0.060559	-1.5805	0.052241	-1.5808 d
1.7100	56.81000	58.40900	0.00000	0.075208	-1.5796	0.066893	-1.5800 d
2.2800	57.38000	58.41200	0.00000	0.096670	-1.5796	0.088355	-1.5800 d
2.8500	57.95000	58.41500	0.00000	0.13113	-1.5812	0.12280	-1.5819 d
3.4200	58.52000	58.41800	0.00000	0.19539	-1.5885	0.18703	-1.5895 d
3.9901	59.09000	58.42100	0.00000	0.35626	-1.6251	0.34770	-1.6269 d
4.5601	59.66000	58.42400	0.00000	1.2139	-2.4365	1.2011	-2.4428 d
5.1301	60.23000	58.42700	0.00000	-0.0041562	-5.3619	-0.032376	-5.3618 d
5.7001	60.80000	58.43000	0.00000	-0.0041517	-5.3602	-0.032363	-5.3601 d
6.2701	61.37000	58.43300	0.00000	-0.0041472	-5.3585	-0.032349	-5.3584 d
6.8401	61.94000	58.43600	0.00000	-0.0041248	-5.3568	-0.032336	-5.3567 d
7.4101	62.51000	58.43900	0.00000	-0.0041382	-5.3551	-0.032323	-5.3550 d
7.9801	63.08000	58.44200	0.00000	-0.0041337	-5.3534	-0.032309	-5.3533 d
8.5501	63.65000	58.44500	0.00000	-0.0041292	-5.3517	-0.032296	-5.3516 d
9.1201	64.22000	58.44800	0.00000	-0.0041248	-5.3500	-0.032282	-5.3499 d
9.6901	64.79000	58.45100	0.00000	-0.0041203	-5.3483	-0.032269	-5.3482 d
10.260	65.36000	58.45400	0.00000	-0.0041158	-5.3467	-0.032256	-5.3466 d
10.830	65.93000	58.45700	0.00000	-0.0041113	-5.3450	-0.032242	-5.3449 d
11.400	66.50000	58.46000	0.00000	-4.9742	-1.5544	-4.9823	-1.5282 d

d - Displacements include imported displacements.

Structure: bc | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	66.50000	58.46000	0.00000	-4.9742	-1.5544	1.5544	-4.9742	d
0.27800	66.50000	58.18200	0.00000	-5.2198	0.020430	-0.020430	-5.2198	d
0.55600	66.50000	57.90400	0.00000	-5.2194	0.020428	-0.020428	-5.2194	d
0.83400	66.50000	57.62600	0.00000	-5.2190	0.020426	-0.020426	-5.2190	d
1.1120	66.50000	57.34800	0.00000	-5.2185	0.020425	-0.020425	-5.2185	d
1.3900	66.50000	57.07000	0.00000	-5.2181	0.020423	-0.020423	-5.2181	d
1.6680	66.50000	56.79200	0.00000	-5.2177	0.020422	-0.020422	-5.2177	d
1.9460	66.50000	56.51400	0.00000	-5.2173	0.020420	-0.020420	-5.2173	d
2.2240	66.50000	56.23600	0.00000	-5.2169	0.020418	-0.020418	-5.2169	d
2.5020	66.50000	55.95800	0.00000	-5.2165	0.020417	-0.020417	-5.2165	d
2.7800	66.50000	55.68000	0.00000	-5.2161	0.020415	-0.020415	-5.2161	d
3.0580	66.50000	55.40200	0.00000	-5.2157	0.020414	-0.020414	-5.2157	d
3.3360	66.50000	55.12400	0.00000	-5.2153	0.020412	-0.020412	-5.2153	d
3.6140	66.50000	54.84600	0.00000	-5.2149	0.020410	-0.020410	-5.2149	d
3.8920	66.50000	54.56800	0.00000	-5.2145	0.020409	-0.020409	-5.2145	d
4.1700	66.50000	54.29000	0.00000	-5.2141	0.020407	-0.020407	-5.2141	d
4.4480	66.50000	54.01200	0.00000	-5.2137	0.020406	-0.020406	-5.2137	d
4.7260	66.50000	53.73400	0.00000	-5.2132	0.020404	-0.020404	-5.2132	d
5.0040	66.50000	53.45600	0.00000	-5.2128	0.020402	-0.020402	-5.2128	d
5.2820	66.50000	53.17800	0.00000	-5.2073	0.22912	-0.22912	-5.2073	d
5.5600	66.50000	52.90000	0.00000	-4.4430	2.6658	-2.6658	-4.4430	d

d - Displacements include imported displacements.

Structure: cd | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	66.50000	52.90000	0.00000	-4.4430	2.6658	2.4383	-4.5718	d
1.7493	65.00000	52.00000	0.00000	-1.2067	4.9064	-1.4895	-4.8280	d

d - Displacements include imported displacements.

Structure: eh | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	64.74000	51.60000	0.00000	-1.1775	4.7875	1.1775	-4.7875	d
1.0844	63.65556	51.60000	0.00000	-1.2007	4.8818	1.2007	-4.8818	d
2.1689	62.57111	51.60000	0.00000	-1.2239	4.9762	1.2239	-4.9762	d
3.2533	61.48667	51.60000	0.00000	-1.2471	5.0705	1.2471	-5.0705	d
4.3378	60.40222	51.60000	0.00000	-1.2703	5.1648	1.2703	-5.1648	d
5.4222	59.31778	51.60000	0.00000	0.32672	1.6270	-0.32672	-1.6270	d
6.5067	58.23333	51.60000	0.00000	0.10538	1.5803	-0.10538	-1.5803	d
7.5911	57.14889	51.60000	0.00000	0.062681	1.5769	-0.062681	-1.5769	d
8.6756	56.06444	51.60000	0.00000	0.044598	1.5760	-0.044598	-1.5760	d
9.7600	54.98000	51.60000	0.00000	0.032693	1.5755	-0.032693	-1.5755	d

d - Displacements include imported displacements.

Structure: hf | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	54.98000	51.60000	0.00000	0.032693	1.5755	-0.032693	-1.5755	d

1.0880	53.89200	51.60000	0.00000	0.023657	1.5753	-0.023657	-1.5753	d
2.1760	52.80400	51.60000	0.00000	0.017422	1.5752	-0.017422	-1.5752	d
3.2640	51.71600	51.60000	0.00000	0.012861	1.5751	-0.012861	-1.5751	d
4.3520	50.62800	51.60000	0.00000	0.0093794	1.5751	-0.0093794	-1.5751	d
5.4400	49.54000	51.60000	0.00000	0.0066347	1.5751	-0.0066347	-1.5751	d
6.5280	48.45200	51.60000	0.00000	0.0044153	1.5750	-0.0044153	-1.5750	d
7.6160	47.36400	51.60000	0.00000	0.0025836	1.5750	-0.0025836	-1.5750	d
8.7040	46.27600	51.60000	0.00000	0.0010461	1.5750	-0.0010461	-1.5750	d
9.7920	45.18800	51.60000	0.00000	0.0	1.5750	0.0	-1.5750	d
10.880	44.10000	51.60000	0.00000	0.0	1.5750	0.0	-1.5750	d

d - Displacements include imported displacements.

Structure: de | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	65.00000	52.00000	0.00000	-1.2067	4.9064	-3.4560	-3.6857	d
0.11927	64.93500	51.90000	0.00000	-1.1994	4.8767	-3.4351	-3.6634	d
0.23854	64.87000	51.80000	0.00000	-1.1921	4.8469	-3.4142	-3.6411	d
0.35781	64.80500	51.70000	0.00000	-1.1848	4.8172	-3.3933	-3.6187	d
0.47707	64.74000	51.60000	0.00000	-1.1775	4.7875	-3.3723	-3.5964	d

d - Displacements include imported displacements.

Specific Building Damage Results - Vertical Displacements

Structure: 21-20 | Sub-structure:

Dist.	Coordinates			Displacements	
	x	y	z	z	
[m]	[m]	[m]	[m]	[mm]	
Vertical Offset 1					
0.0	55.96000	70.70000	0.00000	-0.052277	d
1.0682	54.89182	70.70182	0.00000	-0.067500	d
2.1364	53.82364	70.70364	0.00000	-0.083564	d
3.2046	52.75545	70.70545	0.00000	-0.10412	d
4.2727	51.68727	70.70727	0.00000	-0.11176	d
5.3409	50.61909	70.70909	0.00000	-0.111012	d
6.4091	49.55091	70.71091	0.00000	-0.10795	d
7.4773	48.48273	70.71273	0.00000	-0.10527	d
8.5455	47.41455	70.71455	0.00000	-0.10209	d
9.6137	46.34636	70.71636	0.00000	-0.098366	d
10.682	45.27818	70.71818	0.00000	-0.094032	d
11.750	44.21000	70.72000	0.00000	-0.089026	d

d - Displacements include imported displacements.

Structure: 19-20 | Sub-structure:

Dist.	Coordinates			Displacements	
	x	y	z	z	
[m]	[m]	[m]	[m]	[mm]	
Vertical Offset 1					
0.0	59.14000	66.79000	0.00000	0.43479	d
1.0080	58.50400	67.57200	0.00000	0.23094	d
2.0160	57.86800	68.35400	0.00000	0.087409	d
3.0239	57.23200	69.13600	0.00000	667.86E-6	d
4.0319	56.59600	69.91800	0.00000	-0.039889	d
5.0399	55.96000	70.70000	0.00000	-0.052277	d

d - Displacements include imported displacements.

Structure: 19-18 | Sub-structure:

Dist.	Coordinates			Displacements	
	x	y	z	z	
[m]	[m]	[m]	[m]	[mm]	

Vertical Offset 1

0.0 59.14000 66.79000 0.00000 0.43479 d
1.0051 59.15500 65.78500 0.00000 0.67892 d
2.0102 59.17000 64.78000 0.00000 0.93711 d
d - Displacements include imported displacements.

Structure: 18-13 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0 59.17000 64.78000 0.00000 0.93711 d
1.0686 58.10143 64.78143 0.00000 0.69956 d
2.1371 57.03286 64.78286 0.00000 0.45008 d
3.2057 55.96429 64.78429 0.00000 0.21518 d
4.2743 54.89571 64.78571 0.00000 0.012350 d
5.3429 53.82714 64.78714 0.00000 -0.14966 d
6.4114 52.75857 64.78857 0.00000 -0.26903 d
7.4800 51.69000 64.79000 0.00000 -0.34903 d
8.5486 50.62143 64.79143 0.00000 -0.39631 d
9.6172 49.55286 64.79286 0.00000 -0.41988 d
10.686 48.48429 64.79429 0.00000 -0.43026 d
11.754 47.41571 64.79571 0.00000 -0.43892 d
12.823 46.34714 64.79714 0.00000 -0.44287 d
13.891 45.27857 64.79857 0.00000 -0.43627 d
14.960 44.21000 64.80000 0.00000 -0.42639 d
d - Displacements include imported displacements.

Structure: 21-a | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0 44.21000 70.72000 0.00000 -0.089026 d
0.34768 44.20559 70.37235 0.00000 -0.098808 d
0.69535 44.20118 70.02471 0.00000 -0.10934 d
1.0430 44.19676 69.67706 0.00000 -0.12067 d
1.3907 44.19235 69.32941 0.00000 -0.13289 d
1.7384 44.18794 68.98176 0.00000 -0.14606 d
2.0861 44.18353 68.63412 0.00000 -0.16029 d
2.4337 44.17912 68.28647 0.00000 -0.17566 d
2.7814 44.17471 67.93882 0.00000 -0.19228 d
3.1291 44.17029 67.59118 0.00000 -0.21028 d
3.4768 44.16588 67.24353 0.00000 -0.22980 d
3.8244 44.16147 66.89588 0.00000 -0.25098 d
4.1721 44.15706 66.54824 0.00000 -0.27400 d
4.5198 44.15265 66.20059 0.00000 -0.29906 d
4.8675 44.14824 65.85294 0.00000 -0.32637 d
5.2151 44.14382 65.50529 0.00000 -0.35618 d
5.5628 44.13941 65.15765 0.00000 -0.38877 d
5.9105 44.13500 64.81000 0.00000 -0.42446 d
6.2582 44.13059 64.46235 0.00000 -0.46360 d
6.6058 44.12618 64.11471 0.00000 -0.50661 d
6.9535 44.12176 63.76706 0.00000 -0.55395 d
7.3012 44.11735 63.41941 0.00000 -0.60617 d
7.6489 44.11294 63.07176 0.00000 -0.66386 d
7.9965 44.10853 62.72412 0.00000 -0.72775 d
8.3442 44.10412 62.37647 0.00000 -0.78275 d
8.6919 44.09971 62.02882 0.00000 -0.84739 d
9.0396 44.09529 61.68118 0.00000 -0.90783 d
9.3872 44.09088 61.33353 0.00000 -0.95225 d
9.7349 44.08647 60.98588 0.00000 -0.97675 d
10.083 44.08206 60.63824 0.00000 -0.98549 d
10.430 44.07765 60.29059 0.00000 -0.99113 d
10.778 44.07324 59.94294 0.00000 -1.0156 d
11.126 44.06882 59.59529 0.00000 -1.0925 d
11.473 44.06441 59.24765 0.00000 -1.2733 d
11.821 44.06000 58.90000 0.00000 -1.6500 d
d - Displacements include imported displacements.

Structure: f-50 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	44.10000	51.60000	0.00000	-2.9196	d
0.99267	44.10400	50.60733	0.00000	-1.1618	d
1.9853	44.10800	49.61467	0.00000	-0.99272	d
2.9780	44.11200	48.62200	0.00000	-0.94611	d
3.9707	44.11600	47.62933	0.00000	-0.77826	d
4.9634	44.12000	46.63667	0.00000	-0.60940	d
5.9560	44.12400	45.64400	0.00000	-0.47184	d
6.9487	44.12800	44.65133	0.00000	-0.36685	d
7.9414	44.13200	43.65867	0.00000	-0.28562	d
8.9341	44.13600	42.66600	0.00000	-0.22200	d
9.9267	44.14000	41.67333	0.00000	-0.17162	d
10.919	44.14400	40.68067	0.00000	-0.13137	d
11.912	44.14800	39.68800	0.00000	-0.098950	d
12.905	44.15200	38.69533	0.00000	-0.072682	d
13.897	44.15600	37.70267	0.00000	-0.051295	d
14.890	44.16000	36.71000	0.00000	-0.033819	d

d - Displacements include imported displacements.

Structure: 14-15 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	55.00000	64.76000	0.00000	0.030375	d
1.0700	55.00000	63.69000	0.00000	-0.010182	d
2.1400	55.00000	62.62000	0.00000	-0.15996	d

d - Displacements include imported displacements.

Structure: 15-16 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	55.00000	62.62000	0.00000	-0.15996	d
1.6907	56.23000	61.46000	0.00000	-0.13423	d

d - Displacements include imported displacements.

Structure: 16-17 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	56.23000	61.46000	0.00000	-0.13423	d
1.9000	56.22000	59.56000	0.00000	-1.0609	d

d - Displacements include imported displacements.

Structure: 17-g | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	56.22000	59.56000	0.00000	-1.0609	d
1.6125	55.10000	58.40000	0.00000	-3.4243	d

d - Displacements include imported displacements.

Structure: h-49 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	54.98000	51.60000	0.00000	-3.1815	d
1.0678	55.74000	50.85000	0.00000	-1.5797	d
2.1355	56.50000	50.10000	0.00000	-0.80460	d

d - Displacements include imported displacements.

Structure: 49-36 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	56.50000	50.10000	0.00000	-0.80460	d
1.1950	56.50000	48.90500	0.00000	-0.28793	d
2.3900	56.50000	47.71000	0.00000	0.054700	d

d - Displacements include imported displacements.

Structure: 36-48 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	56.50000	47.71000	0.00000	0.054700	d
1.1506	55.73000	46.85500	0.00000	0.0047141	d
2.3012	54.96000	46.00000	0.00000	-0.067237	d

d - Displacements include imported displacements.

Structure: 48-47 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	54.96000	46.00000	0.00000	-0.067237	d
1.1700	54.96000	44.83000	0.00000	-0.032439	d

d - Displacements include imported displacements.

Structure: 47-51 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	54.96000	44.83000	0.00000	-0.032439	d
1.0750	53.88500	44.83000	0.00000	-0.16538	d
2.1500	52.81000	44.83000	0.00000	-0.26333	d
3.2250	51.73500	44.83000	0.00000	-0.32848	d
4.3000	50.66000	44.83000	0.00000	-0.36633	d
5.3750	49.58500	44.83000	0.00000	-0.38465	d
6.4500	48.51000	44.83000	0.00000	-0.39276	d
7.5250	47.43500	44.83000	0.00000	-0.40098	d
8.6000	46.36000	44.83000	0.00000	-0.40133	d
9.6750	45.28500	44.83000	0.00000	-0.39450	d
10.750	44.21000	44.83000	0.00000	-0.38470	d

d - Displacements include imported displacements.

Structure: 50-46 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

Dist.	x	y	z	z	
[m]	[m]	[m]	[m]	[mm]	
0.0	44.16000	36.71000	0.00000	-0.033819	d
1.0800	45.24000	36.71000	0.00000	-0.036845	d
2.1600	46.32000	36.71000	0.00000	-0.039487	d
3.2400	47.40000	36.71000	0.00000	-0.041745	d
4.3200	48.48000	36.71000	0.00000	-0.043621	d
5.4000	49.56000	36.71000	0.00000	-0.045115	d
6.4800	50.64000	36.71000	0.00000	-0.046213	d
7.5600	51.72000	36.71000	0.00000	-0.046896	d
8.6400	52.80000	36.71000	0.00000	-0.047131	d
9.7200	53.88000	36.71000	0.00000	-0.046879	d
10.800	54.96000	36.71000	0.00000	-0.046102	d

d - Displacements include imported displacements.

Structure: 46-47 | Sub-structure:

Dist.	Coordinates			Displacements	
	x	y	z	z	
[m]	[m]	[m]	[m]	[mm]	
Vertical Offset 1					
0.0	54.96000	36.71000	0.00000	-0.046102	d
1.0150	54.96000	37.72500	0.00000	-0.066903	d
2.0300	54.96000	38.74000	0.00000	-0.066545	d
3.0450	54.96000	39.75500	0.00000	-0.074059	d
4.0600	54.96000	40.77000	0.00000	-0.084738	d
5.0750	54.96000	41.78500	0.00000	-0.083806	d
6.0900	54.96000	42.80000	0.00000	-0.067948	d
7.1050	54.96000	43.81500	0.00000	-0.044842	d
8.1200	54.96000	44.83000	0.00000	-0.032439	d

d - Displacements include imported displacements.

Structure: 24-25 | Sub-structure:

Dist.	Coordinates			Displacements	
	x	y	z	z	
[m]	[m]	[m]	[m]	[mm]	
Vertical Offset 1					
0.0	78.82000	63.10000	0.00000	0.049197	d
1.0289	79.84889	63.09667	0.00000	0.010013	d
2.0578	80.87778	63.09333	0.00000	0.015492	d
3.0867	81.90667	63.09000	0.00000	0.019894	d
4.1156	82.93556	63.08667	0.00000	0.023399	d
5.1445	83.96444	63.08333	0.00000	0.026156	d
6.1734	84.99333	63.08000	0.00000	0.028292	d
7.2023	86.02222	63.07667	0.00000	0.029909	d
8.2312	87.05111	63.07333	0.00000	0.031095	d
9.2600	88.08000	63.07000	0.00000	0.031921	d

d - Displacements include imported displacements.

Structure: 25-26 | Sub-structure:

Dist.	Coordinates			Displacements	
	x	y	z	z	
[m]	[m]	[m]	[m]	[mm]	
Vertical Offset 1					
0.0	88.08000	63.07000	0.00000	0.031921	d
1.0641	88.06400	62.00600	0.00000	0.031669	d
2.1282	88.04800	60.94200	0.00000	0.031428	d
3.1924	88.03200	59.87800	0.00000	0.031209	d
4.2565	88.01600	58.81400	0.00000	0.031019	d
5.3206	88.00000	57.75000	0.00000	0.030868	d

d - Displacements include imported displacements.

Structure: 26-27 | Sub-structure:

Dist.	Coordinates			Displacements	
	x	y	z	z	
[m]	[m]	[m]	[m]	[mm]	
Vertical Offset 1					
0.0	88.00000	57.75000	0.00000	0.030868	d

1.0246	86.97545	57.76364	0.00000	0.029599	d
2.0493	85.95091	57.77727	0.00000	0.027853	d
3.0739	84.92636	57.79091	0.00000	0.025525	d
4.0985	83.90182	57.80455	0.00000	0.022485	d
5.1232	82.87727	57.81818	0.00000	0.018573	d
6.1478	81.85273	57.83182	0.00000	0.013586	d
7.1725	80.82818	57.84545	0.00000	0.0072723	d
8.1971	79.80364	57.85909	0.00000	0.039888	d
9.2217	78.77909	57.87273	0.00000	0.070401	d
10.246	77.75455	57.88636	0.00000	0.11499	d
11.271	76.73000	57.90000	0.00000	0.21034	d

d - Displacements include imported displacements.

Structure: 27-28 | Sub-structure:

Dist.	Coordinates			Displacements	
	x	y	z	z	
[m]	[m]	[m]	[m]	[mm]	
Vertical Offset 1					
0.0	76.73000	57.90000	0.00000	0.21034	d
1.0567	76.72333	58.95667	0.00000	0.21215	d
2.1134	76.71667	60.01333	0.00000	0.20139	d
3.1701	76.71000	61.07000	0.00000	0.17973	d

d - Displacements include imported displacements.

Structure: 28-29 | Sub-structure:

Dist.	Coordinates			Displacements	
	x	y	z	z	
[m]	[m]	[m]	[m]	[mm]	
Vertical Offset 1					
0.0	76.71000	61.07000	0.00000	0.17973	d
1.4640	77.76500	62.08500	0.00000	0.090806	d
2.9280	78.82000	63.10000	0.00000	0.049197	d

d - Displacements include imported displacements.

Structure: 27-32 | Sub-structure:

Dist.	Coordinates			Displacements	
	x	y	z	z	
[m]	[m]	[m]	[m]	[mm]	
Vertical Offset 1					
0.0	76.73000	57.90000	0.00000	0.21034	d
1.0300	76.73400	56.87000	0.00000	0.20683	d
2.0600	76.73800	55.84000	0.00000	0.20447	d
3.0900	76.74200	54.81000	0.00000	0.20333	d
4.1200	76.74600	53.78000	0.00000	0.20339	d
5.1500	76.75000	52.75000	0.00000	0.20351	d

d - Displacements include imported displacements.

Structure: 33-31 | Sub-structure:

Dist.	Coordinates			Displacements	
	x	y	z	z	
[m]	[m]	[m]	[m]	[mm]	
Vertical Offset 1					
0.0	87.93000	52.75000	0.00000	0.030810	d
1.0400	86.89000	52.75000	0.00000	0.029484	d
2.0800	85.85000	52.75000	0.00000	0.027657	d
3.1200	84.81000	52.75000	0.00000	0.025215	d
4.1600	83.77000	52.75000	0.00000	0.022019	d
5.2000	82.73000	52.75000	0.00000	0.017894	d
6.2400	81.69000	52.75000	0.00000	0.012622	d
7.2800	80.65000	52.75000	0.00000	0.0059241	d
8.3200	79.61000	52.75000	0.00000	0.045539	d
9.3600	78.57000	52.75000	0.00000	0.075554	d
10.400	77.53000	52.75000	0.00000	0.12784	d
11.440	76.49000	52.75000	0.00000	0.23770	d
12.480	75.45000	52.75000	0.00000	0.42432	d

13.520 74.41000 52.75000 0.00000 0.69057 d
 14.560 73.37000 52.75000 0.00000 1.0229 d
 15.600 72.33000 52.75000 0.00000 1.3912 d
 16.640 71.29000 52.75000 0.00000 1.7480 d
 17.680 70.25000 52.75000 0.00000 2.0278 d
 d - Displacements include imported displacements.

Structure: 31-34 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0 70.25000 52.75000 0.00000 2.0278 d
 1.1236 70.22667 51.62667 0.00000 1.9842 d
 2.2472 70.20333 50.50333 0.00000 1.8507 d
 3.3707 70.18000 49.38000 0.00000 1.6281 d
 d - Displacements include imported displacements.

Structure: 34-35 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0 70.18000 49.38000 0.00000 1.6281 d
 1.3300 71.51000 49.37000 0.00000 1.2633 d
 d - Displacements include imported displacements.

Structure: 35-41 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0 71.51000 49.37000 0.00000 1.2633 d
 1.2000 71.50000 48.17000 0.00000 0.99611 d
 2.4001 71.49000 46.97000 0.00000 0.71716 d
 3.6001 71.48000 45.77000 0.00000 0.46407 d
 d - Displacements include imported displacements.

Structure: 41-40 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0 71.48000 45.77000 0.00000 0.46407 d
 1.0175 70.46250 45.77000 0.00000 0.60049 d
 2.0350 69.44500 45.77000 0.00000 0.72701 d
 3.0525 68.42750 45.77000 0.00000 0.82707 d
 4.0700 67.41000 45.77000 0.00000 0.89062 d
 d - Displacements include imported displacements.

Structure: 40-39 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0 67.41000 45.77000 0.00000 0.89062 d
 1.3000 67.40333 44.47000 0.00000 0.51514 d
 2.6000 67.39667 43.17000 0.00000 0.24742 d
 3.9001 67.39000 41.87000 0.00000 0.096248 d
 d - Displacements include imported displacements.

Structure: 39-38 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	67.39000	41.87000	0.00000	0.096248	d
1.0305	68.42050	41.86150	0.00000	0.086876	d
2.0611	69.45100	41.85300	0.00000	0.078905	d
3.0916	70.48150	41.84450	0.00000	0.069079	d
4.1221	71.51200	41.83600	0.00000	0.059387	d
5.1527	72.54250	41.82750	0.00000	0.049968	d
6.1832	73.57300	41.81900	0.00000	0.037025	d
7.2137	74.60350	41.81050	0.00000	0.011203	d
8.2443	75.63400	41.80200	0.00000	0.0052432	d
9.2748	76.66450	41.79350	0.00000	0.010815	d
10.305	77.69500	41.78500	0.00000	0.015541	d
11.336	78.72550	41.77650	0.00000	0.019509	d
12.366	79.75600	41.76800	0.00000	0.022805	d
13.397	80.78650	41.75950	0.00000	0.025507	d
14.427	81.81700	41.75100	0.00000	0.027690	d
15.458	82.84750	41.74250	0.00000	0.029419	d
16.489	83.87800	41.73400	0.00000	0.030756	d
17.519	84.90850	41.72550	0.00000	0.031753	d
18.550	85.93900	41.71700	0.00000	0.032459	d
19.580	86.96950	41.70850	0.00000	0.032916	d
20.611	88.00000	41.70000	0.00000	0.033160	d

d - Displacements include imported displacements.

Structure: 38-25 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	88.00000	41.70000	0.00000	0.033160	d
1.0176	88.00381	42.71762	0.00000	0.032988	d
2.0353	88.00762	43.73524	0.00000	0.032788	d
3.0529	88.01143	44.75286	0.00000	0.032566	d
4.0705	88.01524	45.77048	0.00000	0.032330	d
5.0881	88.01905	46.78810	0.00000	0.032086	d
6.1058	88.02286	47.80571	0.00000	0.031842	d
7.1234	88.02667	48.82333	0.00000	0.031608	d
8.1410	88.03048	49.84095	0.00000	0.031390	d
9.1586	88.03429	50.85857	0.00000	0.031197	d
10.176	88.03810	51.87619	0.00000	0.031035	d
11.194	88.04190	52.89381	0.00000	0.030911	d
12.212	88.04571	53.91143	0.00000	0.030829	d
13.229	88.04952	54.92905	0.00000	0.030792	d
14.247	88.05333	55.94667	0.00000	0.030802	d
15.264	88.05714	56.96429	0.00000	0.030857	d
16.282	88.06095	57.98190	0.00000	0.030956	d
17.300	88.06476	58.99952	0.00000	0.031094	d
18.317	88.06857	60.01714	0.00000	0.031267	d
19.335	88.07238	61.03476	0.00000	0.031468	d
20.353	88.07619	62.05238	0.00000	0.031688	d
21.370	88.08000	63.07000	0.00000	0.031921	d

d - Displacements include imported displacements.

Structure: 20-22 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	55.96000	70.70000	0.00000	-0.052277	d
1.0170	56.97700	70.69900	0.00000	-0.037303	d
2.0340	57.99400	70.69800	0.00000	-0.022156	d
3.0510	59.01100	70.69700	0.00000	-0.0079787	d
4.0680	60.02800	70.69600	0.00000	0.0029298	d
5.0850	61.04500	70.69500	0.00000	0.0094463	d
6.1020	62.06200	70.69400	0.00000	0.016743	d

7.1190 63.07900 70.69300 0.00000 0.024660 d
 8.1360 64.09600 70.69200 0.00000 0.033019 d
 9.1530 65.11300 70.69100 0.00000 0.041635 d
 10.170 66.13000 70.69000 0.00000 0.050301 d
 d - Displacements include imported displacements.

Structure: 22-b | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	66.13000	70.69000	0.00000	0.050301 d
0.69360	66.14000	69.99647	0.00000	0.081679 d
1.3872	66.15000	69.30294	0.00000	0.13703 d
2.0808	66.16000	68.60941	0.00000	0.22356 d
2.7744	66.17000	67.91588	0.00000	0.34532 d
3.4680	66.18000	67.22235	0.00000	0.50313 d
4.1616	66.19000	66.52882	0.00000	0.69463 d
4.8552	66.20000	65.83529	0.00000	0.91424 d
5.5488	66.21000	65.14176	0.00000	1.1532 d
6.2424	66.22000	64.44824	0.00000	1.3993 d
6.9360	66.23000	63.75471	0.00000	1.6372 d
7.6296	66.24000	63.06118	0.00000	1.8482 d
8.3232	66.25000	62.36765	0.00000	2.0097 d
9.0168	66.26000	61.67412	0.00000	2.0954 d
9.7104	66.27000	60.98059	0.00000	2.0744 d
10.404	66.28000	60.28706	0.00000	1.9097 d
11.098	66.29000	59.59353	0.00000	1.5574 d
11.791	66.30000	58.90000	0.00000	0.97266 d

d - Displacements include imported displacements.

Structure: e-45 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	64.74000	51.60000	0.00000	0.92379 d
0.98415	64.72267	50.61600	0.00000	1.6177 d
1.9683	64.70533	49.63200	0.00000	1.8490 d
2.9525	64.68800	48.64800	0.00000	1.8116 d
3.9366	64.67067	47.66400	0.00000	1.6138 d
4.9208	64.65333	46.68000	0.00000	1.3305 d
5.9049	64.63600	45.69600	0.00000	1.0177 d
6.8891	64.61867	44.71200	0.00000	0.71727 d
7.8732	64.60133	43.72800	0.00000	0.45873 d
8.8574	64.58400	42.74400	0.00000	0.25954 d
9.8415	64.56667	41.76000	0.00000	0.12552 d
10.826	64.54933	40.77600	0.00000	0.051030 d
11.810	64.53200	39.79200	0.00000	0.018986 d
12.794	64.51467	38.80800	0.00000	951.13E-6 d
13.778	64.49733	37.82400	0.00000	-0.031325 d
14.762	64.48000	36.84000	0.00000	-0.018315 d

d - Displacements include imported displacements.

Structure: 18-31 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	59.17000	64.78000	0.00000	0.93711 d
1.1384	60.30833	64.77333	0.00000	1.0767 d
2.2767	61.44667	64.76667	0.00000	1.1137 d
3.4151	62.58500	64.76000	0.00000	1.1552 d
4.5534	63.72333	64.75333	0.00000	1.1994 d
5.6918	64.86167	64.74667	0.00000	1.2445 d
6.8301	66.00000	64.74000	0.00000	1.2892 d

d - Displacements include imported displacements.

Structure: 23-24 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	66.00000	63.14000	0.00000	1.8146	d
1.0683	67.06833	63.13667	0.00000	1.8332	d
2.1367	68.13667	63.13333	0.00000	1.7628	d
3.2050	69.20500	63.13000	0.00000	1.6074	d
4.2734	70.27333	63.12667	0.00000	1.3827	d
5.3417	71.34167	63.12333	0.00000	1.1154	d
6.4100	72.41000	63.12000	0.00000	0.83785	d
7.4784	73.47833	63.11667	0.00000	0.58121	d
8.5467	74.54667	63.11333	0.00000	0.36992	d
9.6150	75.61500	63.11000	0.00000	0.21780	d
10.683	76.68333	63.10667	0.00000	0.12558	d
11.752	77.75167	63.10333	0.00000	0.079275	d
12.820	78.82000	63.10000	0.00000	0.049197	d

d - Displacements include imported displacements.

Structure: b-27 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	66.10000	58.46000	0.00000	0.25172	d
1.0645	67.16300	58.40400	0.00000	1.4528	d
2.1289	68.22600	58.34800	0.00000	2.0306	d
3.1934	69.28900	58.29200	0.00000	2.1694	d
4.2579	70.35200	58.23600	0.00000	2.0297	d
5.3224	71.41500	58.18000	0.00000	1.7288	d
6.3868	72.47800	58.12400	0.00000	1.3561	d
7.4513	73.54100	58.06800	0.00000	0.97919	d
8.5158	74.60400	58.01200	0.00000	0.64601	d
9.5803	75.66700	57.95600	0.00000	0.38598	d
10.645	76.73000	57.90000	0.00000	0.21034	d

d - Displacements include imported displacements.

Structure: 42-37 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	64.54000	46.73000	0.00000	1.3510	d
1.0183	65.55826	46.71783	0.00000	1.3013	d
2.0367	66.57652	46.70565	0.00000	1.2478	d
3.0550	67.59478	46.69348	0.00000	1.1905	d
4.0733	68.61304	46.68130	0.00000	1.1024	d
5.0917	69.63130	46.66913	0.00000	0.96453	d
6.1100	70.64957	46.65696	0.00000	0.79455	d
7.1283	71.66783	46.64478	0.00000	0.61294	d
8.1467	72.68609	46.63261	0.00000	0.44015	d
9.1650	73.70435	46.62043	0.00000	0.29336	d
10.183	74.72261	46.60826	0.00000	0.18358	d
11.202	75.74087	46.59609	0.00000	0.11341	d
12.220	76.75913	46.58391	0.00000	0.075320	d
13.238	77.77739	46.57174	0.00000	0.050403	d
14.257	78.79565	46.55957	0.00000	0.0056554	d
15.275	79.81391	46.54739	0.00000	0.011869	d
16.293	80.83217	46.53522	0.00000	0.016916	d
17.312	81.85043	46.52304	0.00000	0.020983	d
18.330	82.86870	46.51087	0.00000	0.024231	d
19.348	83.88696	46.49870	0.00000	0.026790	d
20.367	84.90522	46.48652	0.00000	0.028773	d
21.385	85.92348	46.47435	0.00000	0.030274	d
22.403	86.94174	46.46217	0.00000	0.031372	d
23.422	87.96000	46.45000	0.00000	0.032133	d

d - Displacements include imported displacements.

Structure: 47-43 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	54.96000	44.83000	0.00000	-0.032439 d
1.0600	56.02000	44.83000	0.00000	0.13058 d
2.1200	57.08000	44.83000	0.00000	0.31722 d
3.1800	58.14000	44.83000	0.00000	0.51269 d
4.2400	59.20000	44.83000	0.00000	0.69581 d
5.3000	60.26000	44.83000	0.00000	0.84161 d
6.3600	61.32000	44.83000	0.00000	0.92671 d
7.4200	62.38000	44.83000	0.00000	0.87950 d
8.4800	63.44000	44.83000	0.00000	0.81713 d
9.5400	64.50000	44.83000	0.00000	0.75809 d

d - Displacements include imported displacements.

Structure: 44-39 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	64.44000	41.91000	0.00000	0.14451 d
1.4751	65.91500	41.89000	0.00000	0.11611 d
2.9503	67.39000	41.87000	0.00000	0.096248 d

d - Displacements include imported displacements.

Structure: 46-45 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	54.96000	36.71000	0.00000	-0.046102 d
1.0579	56.01778	36.72444	0.00000	-0.045064 d
2.1158	57.07556	36.73889	0.00000	-0.043460 d
3.1736	58.13333	36.75333	0.00000	-0.041283 d
4.2315	59.19111	36.76778	0.00000	-0.038546 d
5.2894	60.24889	36.78222	0.00000	-0.035281 d
6.3473	61.30667	36.79667	0.00000	-0.031546 d
7.4051	62.36444	36.81111	0.00000	-0.027413 d
8.4630	63.42222	36.82556	0.00000	-0.022971 d
9.5209	64.48000	36.84000	0.00000	-0.018315 d

d - Displacements include imported displacements.

Structure: a-12 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	44.06000	58.90000	0.00000	-1.6500 d
1.1151	42.95250	58.77000	0.00000	-2.0639 d
2.2302	41.84500	58.64000	0.00000	-2.3800 d
3.3453	40.73750	58.51000	0.00000	-2.6082 d
4.4604	39.63000	58.38000	0.00000	-2.0943 d

d - Displacements include imported displacements.

Structure: 12-11 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

Dist.	x	y	z	z
[m]	[m]	[m]	[m]	[mm]
0.0	39.63000	58.38000	0.00000	-2.0943 d
1.1167	39.63000	57.26333	0.00000	-3.1982 d
2.2333	39.63000	56.14667	0.00000	-3.5248 d
3.3500	39.63000	55.03000	0.00000	-3.6326 d
4.4667	39.63000	53.91333	0.00000	-3.5575 d
5.5833	39.63000	52.79667	0.00000	-3.2625 d
6.7000	39.63000	51.68000	0.00000	-2.1646 d

d - Displacements include imported displacements.

Structure: 11-f | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]
Vertical Offset 1				
0.0	39.63000	51.68000	0.00000	-2.1646 d
0.55884	40.18875	51.67000	0.00000	-2.9490 d
1.1177	40.74750	51.66000	0.00000	-3.2223 d
1.6765	41.30625	51.65000	0.00000	-3.3611 d
2.2354	41.86500	51.64000	0.00000	-3.4254 d
2.7942	42.42375	51.63000	0.00000	-3.4298 d
3.3530	42.98250	51.62000	0.00000	-3.3748 d
3.9119	43.54125	51.61000	0.00000	-3.2417 d
4.4707	44.10000	51.60000	0.00000	-2.9196 d

d - Displacements include imported displacements.

Structure: ag | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]
Vertical Offset 1				
0.0	44.06000	58.90000	0.00000	-1.6500 d
1.0047	45.06364	58.85455	0.00000	-1.4531 d
2.0093	46.06727	58.80909	0.00000	-1.3465 d
3.0140	47.07091	58.76364	0.00000	-1.3033 d
4.0187	48.07455	58.71818	0.00000	-1.3052 d
5.0233	49.07818	58.67273	0.00000	-1.3460 d
6.0280	50.08182	58.62727	0.00000	-1.4249 d
7.0327	51.08545	58.58182	0.00000	-1.5462 d
8.0373	52.08909	58.53636	0.00000	-1.7216 d
9.0420	53.09273	58.49091	0.00000	-1.9787 d
10.047	54.09636	58.44545	0.00000	-2.3934 d
11.051	55.10000	58.40000	0.00000	-3.4243 d

d - Displacements include imported displacements.

Structure: gb | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]
Vertical Offset 1				
0.0	55.10000	58.40000	0.00000	-3.4243 d
0.57001	55.67000	58.40300	0.00000	-3.8899 d
1.1400	56.24000	58.40600	0.00000	-4.0747 d
1.7100	56.81000	58.40900	0.00000	-4.1433 d
2.2800	57.38000	58.41200	0.00000	-4.1376 d
2.8500	57.95000	58.41500	0.00000	-4.0721 d
3.4200	58.52000	58.41800	0.00000	-3.9460 d
3.9901	59.09000	58.42100	0.00000	-3.7261 d
4.5601	59.66000	58.42400	0.00000	-3.0883 d
5.1301	60.23000	58.42700	0.00000	-1.9282 d
5.7001	60.80000	58.43000	0.00000	-1.6414 d
6.2701	61.37000	58.43300	0.00000	-1.4412 d
6.8401	61.94000	58.43600	0.00000	-1.2717 d
7.4101	62.51000	58.43900	0.00000	-1.1167 d
7.9801	63.08000	58.44200	0.00000	-0.96747 d
8.5501	63.65000	58.44500	0.00000	-0.81612 d
9.1201	64.22000	58.44800	0.00000	-0.65306 d
9.6901	64.79000	58.45100	0.00000	-0.46416 d
10.260	65.36000	58.45400	0.00000	-0.22504 d

10.830 65.93000 58.45700 0.00000 0.10949 d
 11.400 66.50000 58.46000 0.00000 0.78112 d
 d - Displacements include imported displacements.

Structure: bc | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	66.50000	58.46000	0.00000	0.78112	d
0.27800	66.50000	58.18200	0.00000	0.66166	d
0.55600	66.50000	57.90400	0.00000	0.56733	d
0.83400	66.50000	57.62600	0.00000	0.48598	d
1.11200	66.50000	57.34800	0.00000	0.41853	d
1.39000	66.50000	57.07000	0.00000	0.36373	d
1.66800	66.50000	56.79200	0.00000	0.32002	d
1.94600	66.50000	56.51400	0.00000	0.28604	d
2.22400	66.50000	56.23600	0.00000	0.26071	d
2.50200	66.50000	55.95800	0.00000	0.24324	d
2.78000	66.50000	55.68000	0.00000	0.23305	d
3.05800	66.50000	55.40200	0.00000	0.22984	d
3.33600	66.50000	55.12400	0.00000	0.23345	d
3.61400	66.50000	54.84600	0.00000	0.24396	d
3.89200	66.50000	54.56800	0.00000	0.26164	d
4.17000	66.50000	54.29000	0.00000	0.28697	d
4.44800	66.50000	54.01200	0.00000	0.32063	d
4.72600	66.50000	53.73400	0.00000	0.36358	d
5.00400	66.50000	53.45600	0.00000	0.41702	d
5.28200	66.50000	53.17800	0.00000	0.48263	d
5.56000	66.50000	52.90000	0.00000	0.62395	d

d - Displacements include imported displacements.

Structure: cd | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	66.50000	52.90000	0.00000	0.62395	d
1.7493	65.00000	52.00000	0.00000	0.52842	d

d - Displacements include imported displacements.

Structure: eh | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	64.74000	51.60000	0.00000	0.92379	d
1.0844	63.65556	51.60000	0.00000	0.52965	d
2.1689	62.57111	51.60000	0.00000	0.11362	d
3.2533	61.48667	51.60000	0.00000	-0.38615	d
4.3378	60.40222	51.60000	0.00000	-1.1290	d
5.4222	59.31778	51.60000	0.00000	-3.5869	d
6.5067	58.23333	51.60000	0.00000	-4.0703	d
7.5911	57.14889	51.60000	0.00000	-4.1447	d
8.6756	56.06444	51.60000	0.00000	-3.9535	d
9.7600	54.98000	51.60000	0.00000	-3.1815	d

d - Displacements include imported displacements.

Structure: hf | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	54.98000	51.60000	0.00000	-3.1815	d
1.0880	53.89200	51.60000	0.00000	-2.4017	d

2.1760 52.80400 51.60000 0.00000 -2.1069 d
 3.2640 51.71600 51.60000 0.00000 -1.9501 d
 4.3520 50.62800 51.60000 0.00000 -1.8647 d
 5.4400 49.54000 51.60000 0.00000 -1.8281 d
 6.5280 48.45200 51.60000 0.00000 -1.8333 d
 7.6160 47.36400 51.60000 0.00000 -1.8818 d
 8.7040 46.27600 51.60000 0.00000 -1.9845 d
 9.7920 45.18800 51.60000 0.00000 -2.1824 d
 10.880 44.10000 51.60000 0.00000 -2.9196 d
 d - Displacements include imported displacements.

Structure: de | Sub-structure:

Dist.	Coordinates			Displacements	
	x	y	z	z	
[m]	[m]	[m]	[m]	[mm]	
Vertical Offset 1					
0.0	65.00000	52.00000	0.00000	0.52842	d
0.11927	64.93500	51.90000	0.00000	0.64069	d
0.23854	64.87000	51.80000	0.00000	0.74329	d
0.35781	64.80500	51.70000	0.00000	0.83733	d
0.47707	64.74000	51.60000	0.00000	0.92379	d
d - Displacements include imported displacements.					

Specific Building Damage Results - All Segments

Structure: 21-20 | Sub-structure:

Vertical Offset	Segment	Start	Length	Curvature	Deflection	Average	Max	Max
Gradient Max Gradient	Min	Damage			Ratio	Horizontal	Tensile	
from Line for	of Vertical	Radius of	Category			Strain	Strain	
of Vertical	Vertical	Curvature						
Horizontal Displacement	Curve							
Movement	Calculations							
Displacement	Curve							
Calculations								
Curve								
[m]	[m]	[m]	[m]	[m]	[%]	[%]	[%]	
0.0	1	3.2046	5.3409	Hogging	150.34E-6	310.19E-6	362.31E-6	-
53.637E-6	19.245E-6	142860.	0					

(Negligible)
 Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 19-20 | Sub-structure:

Vertical Offset	Segment	Start	Length	Curvature	Deflection	Average	Max	Max
Gradient Max Gradient	Min	Damage			Ratio	Horizontal	Tensile	
from Line for	of Vertical	Radius of	Category			Strain	Strain	
of Vertical	Vertical	Curvature						
Horizontal Displacement	Curve							
Movement	Calculations							
Displacement	Curve							
Calculations								
Curve								
[m]	[m]	[m]	[m]	[m]	[%]	[%]	[%]	
0.0	1	0.0	1.0080	Hogging	0.0	0.025022	0.025022	-
263.19E-6	202.18E-6	16610.	0					

(Negligible)
 Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 19-18 | Sub-structure:

Vertical Offset	Segment	Start	Length	Curvature	Deflection	Average	Max	Max
Gradient Max Gradient	Min	Damage						

from Line for of Vertical Horizontal Movement Displacement Calculations	Radius of Vertical Displacement Curve	Category	Start	Length	Curvature	Deflection	Ratio	Average Horizontal Strain	Max Tensile Strain	Max
[m]	[m]	[m]	[m]	[m]	[m]	[m]	[%]	[%]	[%]	Curve
0.0 338.47E-6	-256.79E-6	1 71923.	0.0	2.0092	Hogging	0	345.96E-6	0.033326	0.033367	-

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 18-13 | Sub-structure:

Vertical Offset Gradient Max from Line for of Vertical Horizontal Movement Displacement Calculations Curve	Segment Max Gradient Min	Start Damage	Length	Curvature	Deflection	Ratio	Average Horizontal Strain	Max Tensile Strain	Max
[m]	[m]	[m]	[m]	[m]	[m]	[%]	[%]	[%]	
0.0 319.46E-6	233.52E-6	1 61574.	0.0	1.3884	Sagging	0	197.09E-6	-0.028645	0.0057300

(Negligible)

176.51E-6	233.52E-6	2 27642.	1.3884	13.571	Hogging	0	0.0037188	0.0050002	0.0077914
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(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 21-a | Sub-structure:

Vertical Offset Gradient Max from Line for of Vertical Horizontal Movement Displacement Calculations Curve	Segment Max Gradient Min	Start Damage	Length	Curvature	Deflection	Ratio	Average Horizontal Strain	Max Tensile Strain	Max
[m]	[m]	[m]	[m]	[m]	[m]	[%]	[%]	[%]	
0.0 0.0	183.75E-6	1 22136.	0.69535	7.2381	Sagging	0	0.0018336	0.0	0.0016986

(Negligible)

292.93E-6	183.75E-6	2 245130.	7.9335	0.14770	Hogging	0	622.83E-6	0.016789	0.016809	-
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(Negligible)

374.82E-6	185.86E-6	3 78646.	8.0812	0.36549	Sagging	0	557.43E-6	0.031598	0.031622	-
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(Negligible)

374.82E-6	185.86E-6	4 6791.1	8.4466	1.6478	Hogging	0	0.0027516	0.037496	0.037764	-
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(Negligible)

374.82E-6	0.0010830	5 551.77	10.094	1.7255	Sagging	0	0.016743	0.037496	0.042998	-
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(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Vertical Horizontal Displacement Curvature Strain Strain
 Movement Displacement Curve Calculations
 Curve [m] [m] [m] [%] [%] [%]
 [m] 0.0 1 0.0 1.8990 None 0.0 -0.0058665 0.0011733
 58.668E-6 487.75E-6 - 0

(Negligible)
 Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 17-g | Sub-structure:

Vertical Offset Segment Start Length Curvature Deflection Average Max Max
 Gradient Max Gradient Min Damage Ratio Horizontal Tensile of
 from Line for of Vertical Radius of Category Strain Strain
 of Vertical Vertical Horizontal Displacement Curvature
 Movement Displacement Curve Calculations Curve
 [m] [m] [m] [m] [%] [%] [%]
 [m] 0.0 1 0.0 1.6115 None 0.0 0.038688 0.038688 -
 386.73E-6 0.0014652 - 0

(Negligible)
 Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: h-49 | Sub-structure:

Vertical Offset Segment Start Length Curvature Deflection Average Max Max
 Gradient Max Gradient Min Damage Ratio Horizontal Tensile of
 from Line for of Vertical Radius of Category Strain Strain
 of Vertical Vertical Horizontal Displacement Curvature
 Movement Displacement Curve Calculations Curve
 [m] [m] [m] [m] [%] [%] [%]
 [m] 0.0 1 0.0 2.1345 Sagging 0.019159 0.032282 0.040064 -
 382.88E-6 -0.0014995 1379.8 0

(Negligible)
 Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 49-36 | Sub-structure:

Vertical Offset Segment Start Length Curvature Deflection Average Max Max
 Gradient Max Gradient Min Damage Ratio Horizontal Tensile of
 from Line for of Vertical Radius of Category Strain Strain
 of Vertical Vertical Horizontal Displacement Curvature
 Movement Displacement Curve Calculations Curve
 [m] [m] [m] [m] [%] [%] [%]
 [m] 0.0 1 0.0 1.1950 None 0.0 -0.0069380 0.0013876 -
 82.393E-6 -432.39E-6 8198.4 0

(Negligible)
 Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 36-48 | Sub-structure:

Vertical Offset **Segment** **Start Length Curvature Deflection** **Average** **Max** **Max**
Gradient Max Gradient **Min** **Damage** **Ratio** **Horizontal** **Tensile** **of**
from Line for **of Vertical** **Radius of Category** **Strain** **Strain**
of Vertical **Horizontal Displacement Curvature**
Vertical **Movement**
Horizontal Displacement **Curve**
Calculations
Curve
[m] [m] [m] [m] [%] [%] [%]
0.0 All settlements are less than the Settlement Trough Limit Sensitivity.
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 48-47 | Sub-structure:

Vertical Offset **Segment** **Start Length Curvature Deflection** **Average** **Max** **Max**
Gradient Max Gradient **Min** **Damage** **Ratio** **Horizontal** **Tensile** **of**
from Line for **of Vertical** **Radius of Category** **Strain** **Strain**
of Vertical **Horizontal Displacement Curvature**
Vertical **Movement**
Horizontal Displacement **Curve**
Calculations
Curve
[m] [m] [m] [m] [%] [%] [%]
0.0 All settlements are less than the Settlement Trough Limit Sensitivity.
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 47-51 | Sub-structure:

Vertical Offset **Segment** **Start Length Curvature Deflection** **Average** **Max** **Max**
Gradient Max Gradient **Min** **Damage** **Ratio** **Horizontal** **Tensile**
from Line for **of Vertical** **Radius of** **Category** **Strain** **Strain**
of **of Vertical** **Radius of** **Category** **Strain** **Strain**
Vertical **Horizontal Displacement Curvature**
Movement
Horizontal Displacement **Curve**
Calculations
Curve
[m] [m] [m] [m] [%] [%] [%]
0.0 1 1.0750 9.6740 Hogging 0.0013212 0.0064056 0.0071360 -
99.439E-6 123.66E-6 33550. 0

(Negligible)
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 50-46 | Sub-structure:

Vertical Offset **Segment** **Start Length Curvature Deflection** **Average** **Max** **Max**
Gradient Max Gradient **Min** **Damage** **Ratio** **Horizontal** **Tensile** **of**
from Line for **of Vertical** **Radius of Category** **Strain** **Strain**
of Vertical **Horizontal Displacement Curvature**
Vertical **Movement**
Horizontal Displacement **Curve**
Calculations
Curve
[m] [m] [m] [m] [%] [%] [%]
0.0 All settlements are less than the Settlement Trough Limit Sensitivity.
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 46-47 | Sub-structure:

Vertical Offset **Segment** **Start Length Curvature Deflection** **Average** **Max** **Max**
Gradient Max Gradient **Min** **Damage** **Ratio** **Horizontal** **Tensile** **of**
from Line for **Radius of Category** **Vertical** **Strain** **Strain**
of Vertical **Displacement Curvature**
Vertical **Movement**
Horizontal **Displacement Curve**
Movement **Calculations**
Displacement **Curve**
Calculations
Curve
[m] [m] [m] [m] [%] [%] [%]
[m] 0.0 All settlements are less than the Settlement Trough Limit Sensitivity.
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 24-25 | Sub-structure:

Vertical Offset **Segment** **Start Length Curvature Deflection** **Average** **Max** **Max**
Gradient Max Gradient **Min** **Damage** **Ratio** **Horizontal** **Tensile** **of**
from Line for **Radius of Category** **Vertical** **Strain** **Strain**
of Vertical **Displacement Curvature**
Vertical **Movement**
Horizontal **Displacement Curve**
Movement **Calculations**
Displacement **Curve**
Calculations
Curve
[m] [m] [m] [m] [%] [%] [%]
[m] 0.0 All settlements are less than the Settlement Trough Limit Sensitivity.
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 25-26 | Sub-structure:

Vertical Offset **Segment** **Start Length Curvature Deflection** **Average** **Max** **Max**
Gradient Max Gradient **Min** **Damage** **Ratio** **Horizontal** **Tensile** **of**
from Line for **Radius of Category** **Vertical** **Strain** **Strain**
of Vertical **Displacement Curvature**
Vertical **Movement**
Horizontal **Displacement Curve**
Movement **Calculations**
Displacement **Curve**
Calculations
Curve
[m] [m] [m] [m] [%] [%] [%]
[m] 0.0 All settlements are less than the Settlement Trough Limit Sensitivity.
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 26-27 | Sub-structure:

Vertical Offset **Segment** **Start Length Curvature Deflection** **Average** **Max** **Max**
Gradient Max Gradient **Min** **Damage** **Ratio** **Horizontal** **Tensile** **of**
from Line for **Radius of Category** **Vertical** **Strain** **Strain**
of Vertical **Displacement Curvature**
Vertical **Movement**
Horizontal **Displacement Curve**
Movement **Calculations**
Displacement **Curve**
Calculations
Curve
[m] [m] [m] [m] [%] [%] [%]
[m] 0.0 1 10.246 1.0236 Sagging 0.0 0.037497 0.037497 -
374.83E-6 -93.029E-6 17519. 0

(Negligible)
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 27-28 | Sub-structure:

Vertical Offset **Segment** **Start Length Curvature Deflection** **Average** **Max** **Max**
Gradient Max Gradient **Min** **Damage**

from Line for of Vertical Horizontal Movement Displacement Calculations Curve	Radius of Vertical Displacement Curve	Category	Start	Length	Curvature	Deflection	Average	Max	Max
			Damage	Damage		Ratio	Horizontal	Tensile	of
							Strain	Strain	
[m]	[m]		[m]	[m]		[%]	[%]	[%]	
0.0 120.80E-6	20.502E-6	1 86041.	0.0	3.1691	Sagging	378.75E-6	-0.010138	0.0020389	

(Negligible)
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 28-29 | Sub-structure:

Vertical Offset Gradient Max from Line for of Vertical Horizontal Movement Displacement Calculations Curve	Segment Max Gradient Radius of Vertical Displacement Curve	Segment Min Category	Start Damage	Length Damage	Curvature	Deflection	Average	Max	Max
						Ratio	Horizontal	Tensile	of
							Strain	Strain	
[m]	[m]		[m]	[m]		[%]	[%]	[%]	Curve
0.0 274.80E-6	60.722E-6	1 45310.	0.0	0.0	None	0.0	0.0	0.0	-

(Negligible)
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 27-32 | Sub-structure:

Vertical Offset Gradient Max from Line for of Vertical Horizontal Movement Displacement Calculations Curve	Segment Max Gradient Radius of Vertical Displacement Curve	Segment Min Category	Start Damage	Length Damage	Curvature	Deflection	Average	Max	Max
						Ratio	Horizontal	Tensile	of
							Strain	Strain	
[m]	[m]		[m]	[m]		[%]	[%]	[%]	
0.0 50.201E-6	3.4063E-6	1 885950.	0.0	4.7320	Hogging	60.697E-6	-647.17E-6	134.07E-6	
50.201E-6	0.0	2 4.5211E+6	4.7320	0.41707	None	0.0	-0.0050198	0.0010040	

(Negligible)
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 33-31 | Sub-structure:

Vertical Offset Gradient Max from Line for of Vertical Horizontal Movement Displacement Calculations Curve	Segment Max Gradient Radius of Vertical Displacement Curve	Segment Min Category	Start Damage	Length Damage	Curvature	Deflection	Average	Max	Max
						Ratio	Horizontal	Tensile	of
							Strain	Strain	
[m]	[m]		[m]	[m]		[%]	[%]	[%]	

0.0	1	10.400	4.8502	Hogging	0.0039496	0.037329	0.038453	-
374.23E-6	-353.98E-6	14342.	0					

(Negligible)

0.0	2	15.250	2.4288	Sagging	0.0018651	0.036775	0.037306	-
371.44E-6	-353.98E-6	11579.	0					

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 31-34 | Sub-structure:

Vertical Offset Gradient Max from Line for of Vertical Vertical Horizontal Displacement Calculations	Segment Max Gradient Radius of Displacement Curve	Start Min Category	Length Damage	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of Curve
[m]	[m]	[m]	[m]	[m]	[%]	[%]	[%]	
0.0	1	0.0	3.3697	Sagging	0.0026606	-0.054546	0.011014	
801.68E-6	198.11E-6	13965.	0					

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 34-35 | Sub-structure:

Vertical Offset Gradient Max from Line for of Vertical Vertical Horizontal Displacement Calculations Curve	Segment Max Gradient Radius of Displacement Curve	Start Min Category	Length Damage	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of
[m]	[m]	[m]	[m]	[m]	[%]	[%]	[%]	
0.0	1	0.0	1.3290	Sagging	0.0	0.0041447	0.0041447	-
41.446E-6	274.33E-6	-	0					

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 35-41 | Sub-structure:

Vertical Offset Gradient Max from Line for of Vertical Vertical Horizontal Displacement Calculations Curve	Segment Max Gradient Radius of Displacement Curve	Start Min Category	Length Damage	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max
[m]	[m]	[m]	[m]	[m]	[%]	[%]	[%]	
0.0	1	0.0	1.3499	Sagging	96.807E-6	-0.0082223	0.0016454	
96.613E-6	232.45E-6	67973.	0					

(Negligible)

0.0	2	1.3499	2.2492	Hogging	534.44E-6	0.0083135	0.0083845	-
127.11E-6	232.45E-6	40780.	0					

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 41-40 | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Vertical Horizontal Displacement Movement Displacement Calculations Curve	Segment Min Radius of Category	Start Length Damage	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of
[m]		[m]	[m]	[%]	[%]	[%]	
0.0 209.27E-6	1 26494.	0.0	4.0690 0	Sagging	0.0012168	-0.013192	0.0027268

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 40-39 | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Vertical Horizontal Displacement Movement Displacement Calculations Curve	Segment Min Radius of Category	Start Length Damage	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of
[m]		[m]	[m]	[%]	[%]	[%]	Curve
0.0 352.58E-6	1 14785.	0.0	2.6000 0	Hogging	0.0020507	0.035271	0.035586 -

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 39-38 | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Vertical Horizontal Displacement Movement Displacement Calculations Curve	Segment Min Radius of Category	Start Length Damage	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of
[m]		[m]	[m]	[%]	[%]	[%]	
0.0							All settlements are less than the Settlement Trough Limit Sensitivity. Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 38-25 | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Vertical Horizontal Displacement Movement Displacement Calculations Curve	Segment Min Radius of Category	Start Length Damage	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of
[m]		[m]	[m]	[%]	[%]	[%]	
0.0							All settlements are less than the Settlement Trough Limit Sensitivity. Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 20-22 | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Movement Displacement Calculations Curve	Segment Min	Start Damage	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max	Max	of
[m]		[m]	[m]	[m]	[%]	[%]	[%]			
0.0										

All settlements are less than the Settlement Trough Limit Sensitivity. Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 22-b | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Movement Displacement Calculations Curve	Segment Min	Start Damage	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max	Max	of
[m]		[m]	[m]	[m]	[%]	[%]	[%]			
0.0		1	1.3872	4.4488	Hogging	0.0035166	0.037423	0.040939	-	
374.55E-6	-354.72E-6	13663.		0						
(Negligible)										
		2	5.8360	5.9542	Sagging	0.016825	0.028271	0.053831	-	
373.21E-6	843.31E-6	1969.7	1	(Very						
Slight)										

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: e-45 | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Movement Displacement Calculations Curve	Segment Min	Start Damage	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max	Max	of
[m]		[m]	[m]	[m]	[%]	[%]	[%]			
0.0		1	0.0	5.6883	Sagging	0.015220	0.035044	0.058146	-	
350.32E-6	-704.86E-6	1896.0	1	(Very						
Slight)										
		2	5.6883	4.1532	Hogging	0.0029392	0.035044	0.037832	-	
350.32E-6	317.76E-6	15583.		0						
(Negligible)										

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 18-31 | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Movement Displacement Calculations Curve	Segment Min	Start Damage	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max	Max	of
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**Movement
Displacement
Calculations
Curve**

[m]	[m]	[m]	[m]	[%]	[%]	[%]	
0.0	1	0.0	3.2935	Sagging	0.0019845	-0.0083758	0.0018988
242.42E-6	-122.66E-6	10008.	0				
(Negligible)							
0.0	2	3.2935	2.2368	Hogging	26.305E-6	1.2862E-6	25.928E-6
		480940.	0				
(Negligible)							
0.0	3	5.5303	1.2988	Sagging	5.1712E-6	1.2862E-6	5.5432E-6
		1.4035E+6	0				
(Negligible)							

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 23-24 | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical of Vertical Radius of Category

Segment Min

Start Length Curvature Deflection Average Max Max

Damage Ratio Horizontal Tensile

Horizontal Displacement Curvature Movement Displacement Curve

Calculations Curve

[m]	[m]	[m]	[m]	[%]	[%]	[%]				
0.0	1	0.0	5.7193	Sagging	0.0043013	-0.034671	0.0070530			
705.69E-6	259.78E-6	12655.	0							
(Negligible)										
304.99E-6	259.78E-6	20313.	2	5.7193	4.9641	Hogging	0.0028027	0.021094	0.024128	-
(Negligible)										

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: b-27 | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical of Vertical Radius of Category

Segment Min

Start Length Curvature Deflection Average Max Max

Damage Ratio Horizontal Tensile

Horizontal Displacement Curvature Movement Displacement Curve

Calculations Curve

[m]	[m]	[m]	[m]	[%]	[%]	[%]				
0.0	1	0.0	6.5883	Sagging	0.021940	-0.0097005	0.023441			
0.0025098	-0.0011311	1680.9	0							
(Negligible)										
373.97E-6	353.96E-6	12995.	2	6.5883	4.0554	Hogging	0.0031569	0.037411	0.040350	-
(Negligible)										

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 42-37 | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical of Vertical Radius of Category

Segment Min

Start Length Curvature Deflection Average Max Max

Damage Ratio Horizontal Tensile

**Movement
Displacement
Calculations
Curve**

[m]		[m]	[m]		[%]	[%]	[%]
[m]	0.0	All settlements are less than the Settlement Trough Limit Sensitivity.					

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: a-12 | Sub-structure:

Vertical Offset Gradient Max from Line for of Vertical Vertical	Segment Max Gradient Radius of Displacement Movement Displacement Calculations	Segment Min Category	Start Length Damage	Length Curvature	Curvature Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of Curve
[m]	[m]		[m]	[m]	[%]	[%]	[%]	
0.0		1	0.0	4.4594	Hogging	0.013976	532.96E-6	0.014531
5.3296E-6	-460.79E-6	1372.7		0				-

(Negligible)
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 12-11 | Sub-structure:

Vertical Offset Gradient Max from Line for of Vertical Vertical	Segment Max Gradient Radius of Displacement Movement Displacement Calculations	Segment Min Category	Start Length Damage	Length Curvature	Curvature Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of Curve
[m]	[m]		[m]	[m]	[%]	[%]	[%]	
0.0		1	0.0	6.6990	Hogging	0.022397	-0.023959	0.012659
0.0014394	989.98E-6	1313.9		0				

(Negligible)
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 11-f | Sub-structure:

Vertical Offset Gradient Max from Line for of Vertical Vertical	Segment Max Gradient Radius of Displacement Movement Displacement Calculations	Segment Min Category	Start Length Damage	Length Curvature	Curvature Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of Curve
[m]	[m]		[m]	[m]	[%]	[%]	[%]	
0.0		1	0.0	4.4697	Hogging	0.020430	-0.036533	0.013677
0.0029314	0.0014078	512.81		0				

(Negligible)
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: ag | Sub-structure:

Vertical Offset Gradient Max from Line for of Vertical Vertical	Segment Max Gradient Radius of Displacement Movement Displacement Calculations	Segment Min Category	Start Length Damage	Length Curvature	Curvature Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of Curve
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0.0 1 0.0 1.7483 Hogging 0.0 -0.22454 0.044908
 0.0022504 54.732E-6 - 0

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: eh | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Radius of Vertical Horizontal Displacement Movement Displacement Calculations Curve	Segment Min Category	Start Damage	Length [m]	Curvature [m]	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of
--	----------------------------	-----------------	---------------	------------------	---------------------	------------------------------	-----------------------	-----------

[m]			[m]	[m]	[%]	[%]	[%]	
[m]			[m]	[m]	[%]	[%]	[%]	
0.0	1	0.0	4.7622	Sagging	0.015730	-0.011178	0.012160	
0.0014748	2062.8		0					

(Negligible)

	2	4.7622	4.9968	Hogging	0.031926	-0.013567	0.022875	
0.0014748	1541.3		0					

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: hf | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Radius of Vertical Horizontal Displacement Movement Displacement Calculations Curve	Segment Min Category	Start Damage	Length [m]	Curvature [m]	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of
--	----------------------------	-----------------	---------------	------------------	---------------------	------------------------------	-----------------------	-----------

[m]			[m]	[m]	[%]	[%]	[%]	
[m]			[m]	[m]	[%]	[%]	[%]	
0.0	1	0.0	10.879	Sagging	0.011228	300.52E-6	0.012556	-
8.3053E-6	-716.74E-6	1819.7	0					

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: de | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Radius of Vertical Horizontal Displacement Movement Displacement Calculations Curve	Segment Min Category	Start Damage	Length [m]	Curvature [m]	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of
--	----------------------------	-----------------	---------------	------------------	---------------------	------------------------------	-----------------------	-----------

[m]			[m]	[m]	[%]	[%]	[%]	
[m]			[m]	[m]	[%]	[%]	[%]	
0.0	1	0.0	0.47607	Sagging	0.0035817	0.017545	0.018414	-
175.42E-6	-941.18E-6	1428.9	0					

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Specific Building Damage Results - Critical Values for All Segments within Each Sub-Structure

Structure: 21-20 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0 142860.	150.34E-6 - 0 (Negligible)	310.19E-6	19.245E-6	0.11174	362.31E-6	-53.637E-6	19.245E-6

Structure: 19-20 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0 16610.	0.0 - 0 (Negligible)	0.025022	202.18E-6	0.43479	0.025022	-263.19E-6	202.18E-6

Structure: 19-18 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0 71923.	345.96E-6 - 0 (Negligible)	0.033326	-256.79E-6	0.93685	0.033367	-338.47E-6	-256.79E-6

Structure: 18-13 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0 27642.	0.0037188 61574. 0 (Negligible)	-0.028645	233.52E-6	0.93711	0.0077914	319.46E-6	233.52E-6

Structure: 21-a | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		

Offset from Radius of Curvature Vertical (Hogging) Movement Calculations	Ratio of Radius of Curvature Vertical (Sagging)	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0 6791.1	0.016743 551.77	0.037496 (Negligible)	0.0010830	1.6489	0.042998	-374.82E-6	0.0010830

Structure: f-50 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0 32673.	0.037151 504.33	0.037499 1 (Very Slight)	-0.0017701	2.9196	0.058029	-374.85E-6	-0.0017701

Structure: 14-15 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0 -	0.0 -	0.0 (Negligible)	0.0	140.00E-6	0.15982	0.0	141.20E-6 140.00E-6

Structure: 15-16 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0 -	0.0 -	0.0 (Negligible)	0.033641	-15.215E-6	0.15996	0.033641	-336.30E-6 -15.215E-6

Structure: 16-17 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement	Max Gradient of Vertical Displacement
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Vertical (Hogging) (Sagging) Displacement Curve
 Movement Curve
 Calculations

[m]	[m]	[%]	[%]	[mm]	[%]		
0.0		0.0	-0.0058665	487.75E-6	1.0604	0.0011733	58.668E-6 487.75E-6
-	-	0	(Negligible)				

Structure: 17-g | Sub-structure:

Vertical Deflection Average Max Slope Max Max Max Gradient Max Gradient
 Min Min Damage Category
 Offset from Ratio Horizontal Settlement Tensile of of Vertical
 Radius of Radius of Strain Strain Horizontal Displacement
 Line for Curvature Curvature
 Vertical Displacement Curve
 (Hogging) (Sagging)
 Movement Curve
 Calculations

[m]	[m]	[%]	[%]	[mm]	[%]		
0.0		0.0	0.038688	0.0014652	3.4229	0.038688	-386.73E-6 0.0014652
-	-	0	(Negligible)				

Structure: h-49 | Sub-structure:

Vertical Deflection Average Max Slope Max Max Max Gradient Max Gradient
 Min Min Damage Category
 Offset from Ratio Horizontal Settlement Tensile of of Vertical
 Radius of Radius of Strain Strain Horizontal Displacement
 Line for Curvature Curvature
 Vertical Displacement Curve
 (Hogging) (Sagging)
 Movement Curve
 Calculations

[m]	[m]	[%]	[%]	[mm]	[%]		
0.0		0.019159	0.032282	-0.0014995	3.1815	0.040064	-382.88E-6 -0.0014995
-	-	1379.8	0	(Negligible)			

Structure: 49-36 | Sub-structure:

Vertical Deflection Average Max Slope Max Max Max Gradient Max Gradient
 Min Min Damage Category
 Offset from Ratio Horizontal Settlement Tensile of of Vertical
 Radius of Radius of Strain Strain Horizontal Displacement
 Line for Curvature Curvature
 Vertical Displacement Curve
 (Hogging) (Sagging)
 Movement Curve
 Calculations

[m]	[m]	[%]	[%]	[mm]	[%]		
0.0		0.0	-0.0069380	-432.39E-6	0.80460	0.0013876	-82.393E-6 -432.39E-6
-	-	0	(Negligible)				

Structure: 36-48 | Sub-structure:

Vertical Deflection Average Max Max Max Max Gradient Max Gradient Min
 Min Damage Category
 Offset from Ratio Horizontal Slope Settlement Tensile of of Vertical Radius
 of Radius of Strain Strain Horizontal Displacement
 Line for Curvature Curvature
 Vertical Displacement Curve
 (Hogging) (Sagging)
 Movement Curve
 Calculations

[m] [%] [%] [mm] [%] [m]

Structure: 48-47 | Sub-structure:

Vertical Min Offset of Radius of Line for Curvature (Hogging) Movement Calculations	Deflection Ratio	Average Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve	Min Radius
[m]	[%]	[%]		[mm]	[%]			[m]

Structure: 47-51 | Sub-structure:

Vertical Min Offset of Radius of Line for Curvature (Hogging) Movement Calculations	Deflection Ratio	Average Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve	Min Radius
[m]	[%]	[%]		[mm]	[%]			[m]
0.0	0.0013212	0.0064056	123.66E-6	0.40133	0.0071360	-99.439E-6	123.66E-6	33550.
	- 0 (Negligible)							

Structure: 50-46 | Sub-structure:

Vertical Min Offset of Radius of Line for Curvature (Hogging) Movement Calculations	Deflection Ratio	Average Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve	Min Radius
[m]	[%]	[%]		[mm]	[%]			[m]

Structure: 46-47 | Sub-structure:

Vertical Min Offset of Radius of Line for Curvature (Hogging) Movement Calculations	Deflection Ratio	Average Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve	Min Radius
[m]	[%]	[%]		[mm]	[%]			[m]

Structure: 24-25 | Sub-structure:

Vertical Min Offset of Radius of Line for Curvature (Hogging) Movement Calculations	Deflection Ratio	Average Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve	Min Radius
[m]	[%]	[%]		[mm]	[%]			[m]

Line for Curvature Curvature Vertical (Hogging) (Sagging) Movement Calculations

Strain	Strain	Horizontal Displacement	Displacement	Curve
[m]	[%]	[%]	[mm]	[%]
[m]				[m]

Structure: 25-26 | Sub-structure:

Vertical Deflection Average Max Max Max Max Gradient Max Gradient Min
 Min Damage Category
 Offset from Ratio Horizontal Slope Settlement Tensile of of Vertical Radius
 of Radius of
 Line for Strain Strain Horizontal Displacement
 Curvature Curvature
 Vertical Displacement Curve
 (Hogging) (Sagging)
 Movement
 Calculations

Strain	Strain	Horizontal Displacement	Displacement	Curve
[m]	[%]	[%]	[mm]	[%]
[m]				[m]

Structure: 26-27 | Sub-structure:

Vertical Deflection Average Max Slope Max Max Max Gradient Max Gradient
 Min Min Damage Category
 Offset from Ratio Horizontal Settlement Tensile of of Vertical
 Radius of Radius of
 Line for Strain Strain Horizontal Displacement
 Curvature Curvature
 Vertical Displacement Curve
 (Hogging) (Sagging)
 Movement
 Calculations

Strain	Strain	Horizontal Displacement	Displacement	Curve
[m]	[%]	[%]	[mm]	[%]
[m]	[m]			
0.0	0.0	0.037497	-93.029E-6	0.21025
-17519.0	0.0 (Negligible)			0.037497
				-374.83E-6
				-93.029E-6

Structure: 27-28 | Sub-structure:

Vertical Deflection Average Max Slope Max Max Max Gradient Max Gradient
 Min Min Damage Category
 Offset from Ratio Horizontal Settlement Tensile of of Vertical
 Radius of Radius of
 Line for Strain Strain Horizontal Displacement
 Curvature Curvature
 Vertical Displacement Curve
 (Hogging) (Sagging)
 Movement
 Calculations

Strain	Strain	Horizontal Displacement	Displacement	Curve
[m]	[%]	[%]	[mm]	[%]
[m]	[m]			
0.0	378.75E-6	-0.010138	20.502E-6	0.21215
-86041.0	0.0 (Negligible)			0.0020389
				120.80E-6
				20.502E-6

Structure: 28-29 | Sub-structure:

Vertical Deflection Average Max Slope Max Max Max Gradient Max Gradient
 Min Min Damage Category
 Offset from Ratio Horizontal Settlement Tensile of of Vertical
 Radius of Radius of
 Line for Strain Strain Horizontal Displacement
 Curvature Curvature
 Vertical Displacement Curve
 (Hogging) (Sagging)
 Movement
 Calculations

Strain	Strain	Horizontal Displacement	Displacement	Curve
[m]	[%]	[%]	[mm]	[%]
[m]	[m]			

0.0 0.0 0.0 60.722E-6 0.17973 0.0 -274.80E-6 60.722E-6
 - - 0 (Negligible)

Structure: 27-32 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0 885950.	60.697E-6 - 0 (Negligible)	-0.0050198	3.4063E-6	0.21034	0.0010040	50.201E-6	3.4063E-6

Structure: 33-31 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0 14342.	0.0039496 11579. 0 (Negligible)	0.037329	-353.98E-6	2.0275	0.038453	-374.23E-6	-353.98E-6

Structure: 31-34 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0 - 13965. 0 (Negligible)	0.0026606	-0.054546	198.11E-6	2.0278	0.011014	801.68E-6	198.11E-6

Structure: 34-35 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0 - 0 (Negligible)	0.0	0.0041447	274.33E-6	1.6281	0.0041447	-41.446E-6	274.33E-6

Structure: 35-41 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0 40780.	534.44E-6 67973.0	0.0083135 (Negligible)	232.45E-6	1.2633	0.0083845	-127.11E-6	232.45E-6

Structure: 41-40 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0 - 26494.0	0.0012168 (Negligible)	-0.013192	-134.08E-6	0.89056	0.0027268	209.27E-6	-134.08E-6

Structure: 40-39 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0 14785.	0.0020507 - 0	0.035271 (Negligible)	288.73E-6	0.89062	0.035586	-352.58E-6	288.73E-6

Structure: 39-38 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve	Min Radius
[m]	[m]	[%]	[%]	[mm]	[%]			[m]

Structure: 38-25 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve	Min Radius
[m]	[m]	[%]	[%]	[mm]	[%]			[m]

Vertical Displacement Curve
(Hogging) (Sagging) Curve
Movement Curve
Calculations
[m] [%] [%] [mm] [%] [m]
[m]

Structure: 20-22 | Sub-structure:

Vertical Deflection Average Max Max Max Max Gradient Max Gradient Min
Min Damage Category
Offset from Ratio Horizontal Slope Settlement Tensile of of Vertical Radius
of Radius of
Line for Strain Strain Horizontal Displacement
Curvature Curvature
Vertical Displacement Curve
(Hogging) (Sagging) Curve
Movement Curve
Calculations
[m] [%] [%] [mm] [%] [m]
[m]

Structure: 22-b | Sub-structure:

Vertical Deflection Average Max Slope Max Max Max Gradient Max Gradient
Min Min Damage Category
Offset from Ratio Horizontal Settlement Tensile of of Vertical
Radius of Radius of
Line for Strain Strain Horizontal Displacement
Curvature Curvature
Vertical Displacement Curve
(Hogging) (Sagging) Curve
Movement Curve
Calculations
[m] [%] [%] [mm] [%]
[m] [m]
0.0 0.016825 0.037423 843.31E-6 2.0952 0.053831 -374.55E-6 843.31E-6
13663. 1969.7 1 (Very Slight)

Structure: e-45 | Sub-structure:

Vertical Deflection Average Max Slope Max Max Max Gradient Max Gradient
Min Min Damage Category
Offset from Ratio Horizontal Settlement Tensile of of Vertical
Radius of Radius of
Line for Strain Strain Horizontal Displacement
Curvature Curvature
Vertical Displacement Curve
(Hogging) (Sagging) Curve
Movement Curve
Calculations
[m] [%] [%] [mm] [%]
[m] [m]
0.0 0.015220 0.035044 -704.86E-6 1.8474 0.058146 -350.32E-6 -704.86E-6
15583. 1896.0 1 (Very Slight)

Structure: 18-31 | Sub-structure:

Vertical Deflection Average Max Slope Max Max Max Gradient Max Gradient
Min Min Damage Category
Offset from Ratio Horizontal Settlement Tensile of of Vertical
Radius of Radius of
Line for Strain Strain Horizontal Displacement
Curvature Curvature
Vertical Displacement Curve
(Hogging) (Sagging) Curve
Movement Curve
Calculations
[m] [%] [%] [mm] [%]
[m] [m]
0.0 0.0019845 -0.0083758 -122.66E-6 1.2891 0.0018988 242.42E-6 -122.66E-6
480940. 10008. 0 (Negligible)

Structure: 23-24 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0 20313.	0.0043013 12655.0	-0.034671 (Negligible)	259.78E-6	1.8327	0.024128	705.69E-6	259.78E-6

Structure: b-27 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0 12995.	0.021940 1680.9	0.037411 (Negligible)	-0.0011311	2.1691	0.040350	0.0025098	-0.0011311

Structure: 42-37 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0 28014.	0.0022975 25576.0	0.013255 (Negligible)	178.34E-6	1.3510	0.015055	330.78E-6	178.34E-6

Structure: 47-43 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0 56370.	0.0044652 13238.0	-0.019551 (Negligible)	-184.43E-6	0.92504	0.0041066	397.13E-6	-184.43E-6

Structure: 44-39 | Sub-structure:

Vertical Min	Deflection Min	Average Damage Category	Max Slope	Max	Max	Max Gradient	Max Gradient
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Offset from Radius of Curvature Vertical (Hogging) Movement Calculations	Ratio of Radius of Curvature Vertical (Sagging) Movement Calculations	Horizontal Strain	Average Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve	Min Radius
[m]	[m]	[%]	[%]	[mm]	[mm]	[%]	[mm]	[mm]	[m]
0.0	0.0	0.0023810	19.251E-6	0.14451	0.0023811	-23.810E-6	19.251E-6	-	-
-	-	0 (Negligible)							

Structure: 46-45 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio Curvature Vertical (Sagging) Movement Calculations	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve	Min Radius
[m]	[m]	[%]	[mm]	[mm]	[%]	[mm]	[mm]	[m]
0.0	0.0	0.013976	532.96E-6	-460.79E-6	2.6057	0.014531	-5.3296E-6	-460.79E-6
1372.7		0 (Negligible)						

Structure: a-12 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio Curvature Vertical (Sagging) Movement Calculations	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve	Min Radius
[m]	[m]	[%]	[mm]	[mm]	[%]	[mm]	[mm]	[m]
0.0	0.0	0.022397	-0.023959	989.98E-6	3.6303	0.012659	0.0014394	989.98E-6
1313.9		0 (Negligible)						

Structure: 12-11 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio Curvature Vertical (Sagging) Movement Calculations	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve	Min Radius
[m]	[m]	[%]	[mm]	[mm]	[%]	[mm]	[mm]	[m]
0.0	0.0	0.022397	-0.023959	989.98E-6	3.6303	0.012659	0.0014394	989.98E-6
1313.9		0 (Negligible)						

Structure: 11-f | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio Curvature Vertical (Sagging) Movement Calculations	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve	Min Radius
[m]	[m]	[%]	[mm]	[mm]	[%]	[mm]	[mm]	[m]
0.0	0.0	0.022397	-0.023959	989.98E-6	3.6303	0.012659	0.0014394	989.98E-6
1313.9		0 (Negligible)						

Calculations

[m]	[%]	[%]	[%]	[mm]	[%]			
[m]	[m]							
0.0	0.020430	-0.036533	0.0014078	3.4295	0.013677	0.0029314	0.0014078	
512.81	- 0 (Negligible)							

Structure: ag | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
---	----------------------	---	-----------	----------------	--------------------	---	---

[m]	[%]	[%]		[mm]	[%]		
[m]	[m]						
0.0	0.011152	466.62E-6	0.0010262	3.4233	0.012771	-9.0631E-6	0.0010262
- 1380.2	0 (Negligible)						

Structure: gb | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
---	----------------------	---	-----------	----------------	--------------------	---	---

[m]	[%]	[%]		[mm]	[%]		
[m]	[m]						
0.0	0.022487	-0.13765	-0.0020397	4.1432	0.040173	0.0087603	-0.0020397
798.71	992.71	0 (Negligible)					

Structure: bc | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
---	----------------------	---	-----------	----------------	--------------------	---	---

[m]	[%]	[%]		[mm]	[%]		
[m]	[m]						
0.0	0.0084424	-0.075759	-512.84E-6	0.78112	0.015675	0.0088425	-512.84E-6
825.43	- 0 (Negligible)						

Structure: cd | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
---	----------------------	---	-----------	----------------	--------------------	---	---

[m]	[%]	[%]		[mm]	[%]		
[m]	[m]						
0.0	0.0	-0.22454	54.732E-6	0.62395	0.044908	0.0022504	54.732E-6
-	- 0 (Negligible)						

Structure: eh | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[%]	[%]		[mm]	[%]		
0.0 1541.3	0.031926 2062.8	-0.013567 0 (Negligible)	0.0022699	4.1446	0.022875	0.0014748	0.0022699

Structure: hf | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[%]	[%]		[mm]	[%]		
0.0 - 1819.7	0.011228 0	300.52E-6 0 (Negligible)	-716.74E-6	3.1815	0.012556	-8.3053E-6	-716.74E-6

Structure: de | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[%]	[%]		[mm]	[%]		
0.0 - 1428.9	0.0035817 0	0.017545 0 (Negligible)	-941.18E-6	0.92306	0.018414	-175.42E-6	-941.18E-6

Specific Building Damage Results - Critical Segments within Each Structure

Structure Name	Parameter Max	Min	Critical Sub-Structure	Damage Category	Critical Start Segment	End	Curvature	Max Slope
21-20	Max Slope	[m]			[m]	[m]		
0.11174	362.31E-6	142860.	-	0 (Negligible)	1	3.2046	8.5455	Hogging 19.245E-6
0.11174	362.31E-6	142860.	-	0 (Negligible)	1	3.2046	8.5455	Hogging 19.245E-6
0.11174	362.31E-6	142860.	-	0 (Negligible)	1	3.2046	8.5455	Hogging 19.245E-6
	Max Tensile Strain	[m]			[m]	[m]		

0.11174	362.31E-6	Min Radius of Curvature (Hogging)	142860.	- 0 (Negligible)	1	3.2046	8.5455	Hogging	19.245E-6
-	-	Min Radius of Curvature (Sagging)	-	-	-	-	-	-	-
19-20		Max Slope			1	0.0	1.0080	Hogging	202.18E-6
0.43479	0.025022	Max Settlement	16610.	- 0 (Negligible)	1	0.0	1.0080	Hogging	202.18E-6
0.43479	0.025022	Max Tensile	16610.	- 0 (Negligible)	1	0.0	1.0080	Hogging	202.18E-6
0.43479	0.025022	Strain	16610.	- 0 (Negligible)	1	0.0	1.0080	Hogging	202.18E-6
0.43479	0.025022	Min Radius of Curvature (Hogging)	16610.	- 0 (Negligible)	1	0.0	1.0080	Hogging	202.18E-6
-	-	Min Radius of Curvature (Sagging)	-	-	-	-	-	-	-
19-18		Max Slope			1	0.0	2.0092	Hogging	256.79E-6
0.93685	0.033367	Max Settlement	71923.	- 0 (Negligible)	1	0.0	2.0092	Hogging	256.79E-6
0.93685	0.033367	Max Tensile	71923.	- 0 (Negligible)	1	0.0	2.0092	Hogging	256.79E-6
0.93685	0.033367	Strain	71923.	- 0 (Negligible)	1	0.0	2.0092	Hogging	256.79E-6
0.93685	0.033367	Min Radius of Curvature (Hogging)	71923.	- 0 (Negligible)	1	0.0	2.0092	Hogging	256.79E-6
-	-	Min Radius of Curvature (Sagging)	-	-	-	-	-	-	-
18-13		Max Slope			1	0.0	1.3884	Sagging	233.52E-6
0.93711	0.0057300	Max Settlement	- 61574. 0	(Negligible)	1	0.0	1.3884	Sagging	233.52E-6
0.93711	0.0057300	Max Tensile	- 61574. 0	(Negligible)	2	1.3884	14.959	Hogging	233.52E-6
0.62489	0.0077914	Strain	27642.	- 0 (Negligible)	2	1.3884	14.959	Hogging	233.52E-6
0.62489	0.0077914	Min Radius of Curvature (Hogging)	27642.	- 0 (Negligible)	2	1.3884	14.959	Hogging	233.52E-6
0.93711	0.0057300	Min Radius of Curvature (Sagging)	- 61574. 0	(Negligible)	1	0.0	1.3884	Sagging	233.52E-6
21-a		Max Slope			5	10.094	11.820	Sagging	0.0010830
1.6489	0.042998	Max Settlement	- 551.77 0	(Negligible)	5	10.094	11.820	Sagging	0.0010830
1.6489	0.042998	Max Tensile	- 551.77 0	(Negligible)	5	10.094	11.820	Sagging	0.0010830
1.6489	0.042998	Strain	- 551.77 0	(Negligible)	4	8.4466	10.094	Hogging	185.86E-6
0.98568	0.037764	Min Radius of Curvature (Hogging)	6791.1	- 0 (Negligible)	5	10.094	11.820	Sagging	0.0010830
1.6489	0.042998	Min Radius of Curvature (Sagging)	- 551.77 0	(Negligible)	1	0.0	2.9125	Sagging	0.0017701
f-50		Max Slope			1	0.0	2.9125	Sagging	0.0017701
2.9196	0.058029	Max Settlement	- 504.33 1	(Very Slight)	1	0.0	2.9125	Sagging	0.0017701
2.9196	0.058029	Max Tensile	- 504.33 1	(Very Slight)	1	0.0	2.9125	Sagging	0.0017701
2.9196	0.058029	Strain	- 504.33 1	(Very Slight)	2	2.9125	4.4614	Hogging	170.09E-6
0.94919	0.028409	Min Radius of Curvature (Hogging)	32673.	- 0 (Negligible)	2	2.9125	4.4614	Hogging	170.09E-6

3.1815	0.040064	Min Radius of Curvature (Sagging)	-	1379.8 0 (Negligible)	1	0.0	2.1345	Sagging	0.0014995	
49-36	0.80460	0.0013876	Max Slope	-	8198.4 0 (Negligible)	1	0.0	1.1950	Sagging	432.39E-6
			Max Settlement	-	8198.4 0 (Negligible)	1	0.0	1.1950	Sagging	432.39E-6
			Max Tensile	-	8198.4 0 (Negligible)	1	0.0	1.1950	Sagging	432.39E-6
			Strain	-	8198.4 0 (Negligible)	1	0.0	1.1950	Sagging	432.39E-6
-	-	-	Min Radius of Curvature (Hogging)	-	-	-	-	-	-	-
-	-	-	Min Radius of Curvature (Sagging)	-	-	-	-	-	-	-
36-48			All settlements are less than the Settlement Trough Limit Sensitivity.							
			All settlements are less than the Settlement Trough Limit Sensitivity.							
			All settlements are less than the Settlement Trough Limit Sensitivity.							
			All settlements are less than the Settlement Trough Limit Sensitivity.							
48-47			All settlements are less than the Settlement Trough Limit Sensitivity.							
			All settlements are less than the Settlement Trough Limit Sensitivity.							
			All settlements are less than the Settlement Trough Limit Sensitivity.							
			All settlements are less than the Settlement Trough Limit Sensitivity.							
47-51			Max Slope	-	0 (Negligible)	1	1.0750	10.749	Hogging	123.66E-6
0.40133	0.0071360	33550.	Max Settlement	-	0 (Negligible)	1	1.0750	10.749	Hogging	123.66E-6
			Max Tensile	-	0 (Negligible)	1	1.0750	10.749	Hogging	123.66E-6
			Strain	-	0 (Negligible)	1	1.0750	10.749	Hogging	123.66E-6
			Min Radius of Curvature (Hogging)	-	0 (Negligible)	1	1.0750	10.749	Hogging	123.66E-6
			Min Radius of Curvature (Sagging)	-	0 (Negligible)	1	1.0750	10.749	Hogging	123.66E-6
-	-	-	Min Radius of Curvature (Hogging)	-	0 (Negligible)	1	1.0750	10.749	Hogging	123.66E-6
-	-	-	Min Radius of Curvature (Sagging)	-	0 (Negligible)	1	1.0750	10.749	Hogging	123.66E-6
50-46			All settlements are less than the Settlement Trough Limit Sensitivity.							
			All settlements are less than the Settlement Trough Limit Sensitivity.							
			All settlements are less than the Settlement Trough Limit Sensitivity.							
			All settlements are less than the Settlement Trough Limit Sensitivity.							
46-47			All settlements are less than the Settlement Trough Limit Sensitivity.							
			All settlements are less than the Settlement Trough Limit Sensitivity.							
			All settlements are less than the Settlement Trough Limit Sensitivity.							
			All settlements are less than the Settlement Trough Limit Sensitivity.							
24-25			All settlements are less than the Settlement Trough Limit Sensitivity.							
			All settlements are less than the Settlement Trough Limit Sensitivity.							
			All settlements are less than the Settlement Trough Limit Sensitivity.							
			All settlements are less than the Settlement Trough Limit Sensitivity.							
25-26			All settlements are less than the Settlement Trough Limit Sensitivity.							
			All settlements are less than the Settlement Trough Limit Sensitivity.							
			All settlements are less than the Settlement Trough Limit Sensitivity.							
			All settlements are less than the Settlement Trough Limit Sensitivity.							
26-27			Max Slope	-	0 (Negligible)	1	10.246	11.270	Sagging	93.029E-6
0.21025	0.037497	17519.0	Max Settlement	-	0 (Negligible)	1	10.246	11.270	Sagging	93.029E-6
			Max Tensile	-	0 (Negligible)	1	10.246	11.270	Sagging	93.029E-6
			Strain	-	0 (Negligible)	1	10.246	11.270	Sagging	93.029E-6
			Min Radius of Curvature (Hogging)	-	0 (Negligible)	1	10.246	11.270	Sagging	93.029E-6
			Min Radius of Curvature (Sagging)	-	0 (Negligible)	1	10.246	11.270	Sagging	93.029E-6
-	-	-	Min Radius of Curvature (Hogging)	-	0 (Negligible)	1	10.246	11.270	Sagging	93.029E-6
-	-	-	Min Radius of Curvature (Sagging)	-	0 (Negligible)	1	10.246	11.270	Sagging	93.029E-6
0.21025	0.037497	17519.0	Max Slope	-	0 (Negligible)	1	10.246	11.270	Sagging	93.029E-6

34-35		Max Slope			1	0.0	1.3290	Sagging	274.33E-6
1.6281	0.0041447	-	- 0 (Negligible)						
		Max Settlement			1	0.0	1.3290	Sagging	274.33E-6
1.6281	0.0041447	-	- 0 (Negligible)						
		Max Tensile			1	0.0	1.3290	Sagging	274.33E-6
1.6281	0.0041447	-	- 0 (Negligible)						
		Strain			-	-	- -		-
		Min Radius of							
		-	- -						
		Curvature (Hogging)							
		Min Radius of			-	-	- -		-
		-	- -						
		Curvature (Sagging)							
35-41		Max Slope			1	0.0	1.3499	Sagging	232.45E-6
1.2633	0.0016454	-	67973.0 (Negligible)						
		Max Settlement			1	0.0	1.3499	Sagging	232.45E-6
1.2633	0.0016454	-	67973.0 (Negligible)						
		Max Tensile			2	1.3499	3.5991	Hogging	232.45E-6
0.96127	0.0083845	40780.	- 0 (Negligible)						
		Strain							
		Min Radius of			2	1.3499	3.5991	Hogging	232.45E-6
0.96127	0.0083845	40780.	- 0 (Negligible)						
		Curvature (Hogging)							
		Min Radius of			1	0.0	1.3499	Sagging	232.45E-6
1.2633	0.0016454	-	67973.0 (Negligible)						
		Curvature (Sagging)							
41-40		Max Slope			1	0.0	4.0690	Sagging	134.08E-6
0.89056	0.0027268	-	26494.0 (Negligible)						
		Max Settlement			1	0.0	4.0690	Sagging	134.08E-6
0.89056	0.0027268	-	26494.0 (Negligible)						
		Max Tensile			1	0.0	4.0690	Sagging	134.08E-6
0.89056	0.0027268	-	26494.0 (Negligible)						
		Strain							
		Min Radius of			-	-	- -		-
		-	- -						
		Curvature (Hogging)							
		Min Radius of			1	0.0	4.0690	Sagging	134.08E-6
0.89056	0.0027268	-	26494.0 (Negligible)						
		Curvature (Sagging)							
40-39		Max Slope			1	0.0	2.6000	Hogging	288.73E-6
0.89062	0.035586	14785.	- 0 (Negligible)						
		Max Settlement			1	0.0	2.6000	Hogging	288.73E-6
0.89062	0.035586	14785.	- 0 (Negligible)						
		Max Tensile			1	0.0	2.6000	Hogging	288.73E-6
0.89062	0.035586	14785.	- 0 (Negligible)						
		Strain							
		Min Radius of			1	0.0	2.6000	Hogging	288.73E-6
0.89062	0.035586	14785.	- 0 (Negligible)						
		Curvature (Hogging)							
		Min Radius of			-	-	- -		-
		-	- -						
		Curvature (Sagging)							
39-38		All settlements are less than the Settlement Trough Limit Sensitivity.							
		All settlements are less than the Settlement Trough Limit Sensitivity.							
		All settlements are less than the Settlement Trough Limit Sensitivity.							
		All settlements are less than the Settlement Trough Limit Sensitivity.							
38-25		All settlements are less than the Settlement Trough Limit Sensitivity.							
		All settlements are less than the Settlement Trough Limit Sensitivity.							
		All settlements are less than the Settlement Trough Limit Sensitivity.							
		All settlements are less than the Settlement Trough Limit Sensitivity.							
20-22		All settlements are less than the Settlement Trough Limit Sensitivity.							
		All settlements are less than the Settlement Trough Limit Sensitivity.							
		All settlements are less than the Settlement Trough Limit Sensitivity.							
		All settlements are less than the Settlement Trough Limit Sensitivity.							
		All settlements are less than the Settlement Trough Limit Sensitivity.							
22-b		Max Slope			2	5.8360	11.790	Sagging	843.31E-6
2.0952	0.053831	-	1969.7 1 (Very Slight)						

		Max Settlement			2	5.8360	11.790	Sagging	843.31E-6
2.0952	0.053831	-	1969.7	1 (Very Slight)					
		Max Tensile			2	5.8360	11.790	Sagging	843.31E-6
2.0952	0.053831	-	1969.7	1 (Very Slight)					
		Strain							
		Min Radius of			1	1.3872	5.8360	Hogging	354.72E-6
1.2551	0.040939	13663.	-	0 (Negligible)					
		Curvature (Hogging)							
		Min Radius of			2	5.8360	11.790	Sagging	843.31E-6
2.0952	0.053831	-	1969.7	1 (Very Slight)					
		Curvature (Sagging)							
e-45		Max Slope			1	0.0	5.6883	Sagging	704.86E-6
1.8474	0.058146	-	1896.0	1 (Very Slight)					
		Max Settlement			1	0.0	5.6883	Sagging	704.86E-6
1.8474	0.058146	-	1896.0	1 (Very Slight)					
		Max Tensile			1	0.0	5.6883	Sagging	704.86E-6
1.8474	0.058146	-	1896.0	1 (Very Slight)					
		Strain							
		Min Radius of			2	5.6883	9.8415	Hogging	317.76E-6
1.0865	0.037832	15583.	-	0 (Negligible)					
		Curvature (Hogging)							
		Min Radius of			1	0.0	5.6883	Sagging	704.86E-6
1.8474	0.058146	-	1896.0	1 (Very Slight)					
		Curvature (Sagging)							
18-31		Max Slope			1	0.0	3.2935	Sagging	122.66E-6
1.1508	0.0018988	-	10008.0	0 (Negligible)					
		Max Settlement			3	5.5303	6.8291	Sagging	39.670E-6
1.2891	5.5432E-6	-	1.4035E+6	0 (Negligible)					
		Max Tensile			1	0.0	3.2935	Sagging	122.66E-6
1.1508	0.0018988	-	10008.0	0 (Negligible)					
		Strain							
		Min Radius of			2	3.2935	5.5303	Hogging	39.670E-6
1.2381	25.928E-6	480940.	-	0 (Negligible)					
		Curvature (Hogging)							
		Min Radius of			1	0.0	3.2935	Sagging	122.66E-6
1.1508	0.0018988	-	10008.0	0 (Negligible)					
		Curvature (Sagging)							
23-24		Max Slope			1	0.0	5.7193	Sagging	259.78E-6
1.8327	0.0070530	-	12655.0	0 (Negligible)					
		Max Settlement			1	0.0	5.7193	Sagging	259.78E-6
1.8327	0.0070530	-	12655.0	0 (Negligible)					
		Max Tensile			2	5.7193	10.683	Hogging	259.78E-6
1.0173	0.024128	20313.	-	0 (Negligible)					
		Strain							
		Min Radius of			2	5.7193	10.683	Hogging	259.78E-6
1.0173	0.024128	20313.	-	0 (Negligible)					
		Curvature (Hogging)							
		Min Radius of			1	0.0	5.7193	Sagging	259.78E-6
1.8327	0.0070530	-	12655.0	0 (Negligible)					
		Curvature (Sagging)							
b-27		Max Slope			1	0.0	6.5883	Sagging	0.0011311
2.1691	0.023441	-	1680.9	0 (Negligible)					
		Max Settlement			1	0.0	6.5883	Sagging	0.0011311
2.1691	0.023441	-	1680.9	0 (Negligible)					
		Max Tensile			2	6.5883	10.644	Hogging	353.96E-6
1.2848	0.040350	12995.	-	0 (Negligible)					
		Strain							
		Min Radius of			2	6.5883	10.644	Hogging	353.96E-6
1.2848	0.040350	12995.	-	0 (Negligible)					
		Curvature (Hogging)							
		Min Radius of			1	0.0	6.5883	Sagging	0.0011311
2.1691	0.023441	-	1680.9	0 (Negligible)					
		Curvature (Sagging)							
42-37		Max Slope			1	0.0	6.7130	Sagging	178.34E-6
1.3510	0.0019471	-	25576.0	0 (Negligible)					
		Max Settlement			1	0.0	6.7130	Sagging	178.34E-6
1.3510	0.0019471	-	25576.0	0 (Negligible)					

0.68701	0.015055	Max Tensile Strain	28014.	- 0 (Negligible)	2	6.7130	11.202	Hogging	178.34E-6
0.68701	0.015055	Min Radius of Curvature (Hogging)	28014.	- 0 (Negligible)	2	6.7130	11.202	Hogging	178.34E-6
1.3510	0.0019471	Min Radius of Curvature (Sagging)	-	25576. 0 (Negligible)	1	0.0	6.7130	Sagging	178.34E-6
47-43		Max Slope			1	1.0600	2.4942	Hogging	184.43E-6
0.38622	0.0016189	Max Settlement	56370.	- 0 (Negligible)	2	2.4942	8.6274	Sagging	184.43E-6
0.92504	0.0041066	Max Tensile Strain	-	13238. 0 (Negligible)	2	2.4942	8.6274	Sagging	184.43E-6
0.92504	0.0041066	Min Radius of Curvature (Hogging)	-	13238. 0 (Negligible)	2	2.4942	8.6274	Sagging	184.43E-6
0.38622	0.0016189	Min Radius of Curvature (Sagging)	56370.	- 0 (Negligible)	1	1.0600	2.4942	Hogging	184.43E-6
0.92504	0.0041066	Max Settlement	-	13238. 0 (Negligible)	2	2.4942	8.6274	Sagging	184.43E-6
44-39		Max Slope			1	0.0	1.4751	Sagging	19.251E-6
0.14451	0.0023811	Max Settlement	-	254820. 0 (Negligible)	1	0.0	1.4751	Sagging	19.251E-6
0.14451	0.0023811	Max Tensile Strain	-	254820. 0 (Negligible)	1	0.0	1.4751	Sagging	19.251E-6
0.14451	0.0023811	Min Radius of Curvature (Hogging)	-	254820. 0 (Negligible)	1	0.0	1.4751	Sagging	19.251E-6
-	-	Min Radius of Curvature (Sagging)	-	-	-	-	-	-	-
-	-	Min Radius of Curvature (Sagging)	-	-	-	-	-	-	-
46-45		All settlements are less than the Settlement Trough Limit Sensitivity.							
		All settlements are less than the Settlement Trough Limit Sensitivity.							
		All settlements are less than the Settlement Trough Limit Sensitivity.							
		All settlements are less than the Settlement Trough Limit Sensitivity.							
a-12		Max Slope			1	0.0	4.4594	Hogging	460.79E-6
2.6057	0.014531	Max Settlement	1372.7	- 0 (Negligible)	1	0.0	4.4594	Hogging	460.79E-6
2.6057	0.014531	Max Tensile Strain	1372.7	- 0 (Negligible)	1	0.0	4.4594	Hogging	460.79E-6
2.6057	0.014531	Min Radius of Curvature (Hogging)	1372.7	- 0 (Negligible)	1	0.0	4.4594	Hogging	460.79E-6
-	-	Min Radius of Curvature (Sagging)	-	-	-	-	-	-	-
12-11		Max Slope			1	0.0	6.6990	Hogging	989.98E-6
3.6303	0.012659	Max Settlement	1313.9	- 0 (Negligible)	1	0.0	6.6990	Hogging	989.98E-6
3.6303	0.012659	Max Tensile Strain	1313.9	- 0 (Negligible)	1	0.0	6.6990	Hogging	989.98E-6
3.6303	0.012659	Min Radius of Curvature (Hogging)	1313.9	- 0 (Negligible)	1	0.0	6.6990	Hogging	989.98E-6
-	-	Min Radius of Curvature (Sagging)	-	-	-	-	-	-	-

11-f		Max Slope			1	0.0	4.4697	Hogging	0.0014078
3.4295	0.013677	512.81	- 0 (Negligible)		1	0.0	4.4697	Hogging	0.0014078
3.4295	0.013677	Max Settlement			1	0.0	4.4697	Hogging	0.0014078
		512.81	- 0 (Negligible)		1	0.0	4.4697	Hogging	0.0014078
3.4295	0.013677	Max Tensile			1	0.0	4.4697	Hogging	0.0014078
		512.81	- 0 (Negligible)		1	0.0	4.4697	Hogging	0.0014078
3.4295	0.013677	Strain			1	0.0	4.4697	Hogging	0.0014078
		Min Radius of			1	0.0	4.4697	Hogging	0.0014078
		512.81	- 0 (Negligible)		-	-	-	-	-
-	-	Curvature (Hogging)			-	-	-	-	-
-	-	Min Radius of			-	-	-	-	-
-	-	Curvature (Sagging)			-	-	-	-	-
ag		Max Slope			1	0.0	11.050	Sagging	0.0010262
3.4233	0.012771	- 1380.2 0	(Negligible)		1	0.0	11.050	Sagging	0.0010262
3.4233	0.012771	Max Settlement			1	0.0	11.050	Sagging	0.0010262
		- 1380.2 0	(Negligible)		1	0.0	11.050	Sagging	0.0010262
3.4233	0.012771	Max Tensile			1	0.0	11.050	Sagging	0.0010262
		- 1380.2 0	(Negligible)		-	-	-	-	-
-	-	Strain			-	-	-	-	-
-	-	Min Radius of			-	-	-	-	-
-	-	Curvature (Hogging)			-	-	-	-	-
-	-	Min Radius of			1	0.0	11.050	Sagging	0.0010262
3.4233	0.012771	- 1380.2 0	(Negligible)		1	0.0	11.050	Sagging	0.0010262
		Curvature (Sagging)			1	0.0	4.7366	Hogging	0.0020397
gb		Max Slope			1	0.0	4.7366	Hogging	0.0020397
4.1432	0.040173	910.71	- 0 (Negligible)		1	0.0	4.7366	Hogging	0.0020397
4.1432	0.040173	Max Settlement			1	0.0	4.7366	Hogging	0.0020397
		910.71	- 0 (Negligible)		1	0.0	4.7366	Hogging	0.0020397
4.1432	0.040173	Max Tensile			1	0.0	4.7366	Hogging	0.0020397
		910.71	- 0 (Negligible)		3	7.8094	11.399	Hogging	0.0011886
1.0122	0.028282	Strain			3	7.8094	11.399	Hogging	0.0011886
		Min Radius of			2	4.7366	7.8094	Sagging	0.0020397
		798.71	- 0 (Negligible)		2	4.7366	7.8094	Sagging	0.0020397
2.7289	0.011240	Curvature (Hogging)			2	4.7366	7.8094	Sagging	0.0020397
		Min Radius of			2	4.7366	7.8094	Sagging	0.0020397
		- 992.71 0	(Negligible)		1	0.0	5.5590	Hogging	512.84E-6
bc		Curvature (Sagging)			1	0.0	5.5590	Hogging	512.84E-6
0.78112	0.015675	Max Slope			1	0.0	5.5590	Hogging	512.84E-6
0.78112	0.015675	825.43	- 0 (Negligible)		1	0.0	5.5590	Hogging	512.84E-6
		Max Settlement			1	0.0	5.5590	Hogging	512.84E-6
		825.43	- 0 (Negligible)		1	0.0	5.5590	Hogging	512.84E-6
0.78112	0.015675	Max Tensile			1	0.0	5.5590	Hogging	512.84E-6
		825.43	- 0 (Negligible)		1	0.0	5.5590	Hogging	512.84E-6
0.78112	0.015675	Strain			1	0.0	5.5590	Hogging	512.84E-6
		Min Radius of			1	0.0	5.5590	Hogging	512.84E-6
		825.43	- 0 (Negligible)		-	-	-	-	-
-	-	Curvature (Hogging)			-	-	-	-	-
-	-	Min Radius of			-	-	-	-	-
-	-	Curvature (Sagging)			-	-	-	-	-
cd		Max Slope			1	0.0	1.7483	Hogging	54.732E-6
0.62395	0.044908	- - 0	(Negligible)		1	0.0	1.7483	Hogging	54.732E-6
0.62395	0.044908	Max Settlement			1	0.0	1.7483	Hogging	54.732E-6
		- - 0	(Negligible)		1	0.0	1.7483	Hogging	54.732E-6
0.62395	0.044908	Max Tensile			1	0.0	1.7483	Hogging	54.732E-6
		- - 0	(Negligible)		-	-	-	-	-
-	-	Strain			-	-	-	-	-
-	-	Min Radius of			-	-	-	-	-
-	-	Curvature (Hogging)			-	-	-	-	-
-	-	Min Radius of			-	-	-	-	-
-	-	Curvature (Sagging)			-	-	-	-	-
eh		Max Slope			1	0.0	4.7622	Sagging	0.0022699
2.0911	0.012160	- 2062.8 0	(Negligible)		1	0.0	4.7622	Sagging	0.0022699

Line for Vertical Movement Calculations	Strain	Strain
[m] [m] [m]	[%]	[%]

No structures have segments combined.

Structure: 18-13 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]	[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 21-a | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]	[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: f-50 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]	[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 14-15 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]	[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 15-16 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]	[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 16-17 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]	[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 17-g | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: h-49 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 49-36 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 36-48 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 48-47 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 47-51 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 50-46 | Sub-structure:

Calculations

[m] [m] [m] [%] [%] [%]
No structures have segments combined.

Structure: 27-32 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
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[m] [m] [m] [%] [%] [%]
No structures have segments combined.

Structure: 33-31 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
--	------------------	--------------	-----------	------------------	---------------------------	--------------------	-----------------

[m] [m] [m] [%] [%] [%]
No structures have segments combined.

Structure: 31-34 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
--	------------------	--------------	-----------	------------------	---------------------------	--------------------	-----------------

[m] [m] [m] [%] [%] [%]
No structures have segments combined.

Structure: 34-35 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
--	------------------	--------------	-----------	------------------	---------------------------	--------------------	-----------------

[m] [m] [m] [%] [%] [%]
No structures have segments combined.

Structure: 35-41 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
--	------------------	--------------	-----------	------------------	---------------------------	--------------------	-----------------

[m] [m] [m] [%] [%] [%]
No structures have segments combined.

Structure: 41-40 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
--	------------------	--------------	-----------	------------------	---------------------------	--------------------	-----------------

[m] [m] [m] [%] [%] [%]
No structures have segments combined.

Structure: 40-39 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: 39-38 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: 38-25 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: 20-22 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: 22-b | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: e-45 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: 18-31 | Sub-structure:

Vertical Offset from Line for	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
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Vertical Movement Calculations
 [m] [m] [m] [%] [%] [%]
 No structures have segments combined.

Structure: 23-24 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: b-27 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 42-37 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 47-43 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 44-39 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 46-45 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: a-12 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: 12-11 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: 11-f | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: ag | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: gb | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: bc | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: cd | Sub-structure:

Vertical	Combined	Start	Length	Curvature	Deflection	Average	Max	Damage Category
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Offset from Segment Ratio Horizontal Tensile
 Line for Vertical Strain Strain
 Movement
 Calculations
 [m] [m] [m] [%] [%] [%]
 No structures have segments combined.

Structure: eh | Sub-structure:

Vertical Combined Start Length Curvature Deflection Average Max Damage Category
 Offset from Segment Ratio Horizontal Tensile
 Line for Vertical Strain Strain
 Movement
 Calculations
 [m] [m] [m] [%] [%] [%]
 No structures have segments combined.

Structure: hf | Sub-structure:

Vertical Combined Start Length Curvature Deflection Average Max Damage Category
 Offset from Segment Ratio Horizontal Tensile
 Line for Vertical Strain Strain
 Movement
 Calculations
 [m] [m] [m] [%] [%] [%]
 No structures have segments combined.

Structure: de | Sub-structure:

Vertical Combined Start Length Curvature Deflection Average Max Damage Category
 Offset from Segment Ratio Horizontal Tensile
 Line for Vertical Strain Strain
 Movement
 Calculations
 [m] [m] [m] [%] [%] [%]
 No structures have segments combined.

DEMOLITION + EXCAVATION + LOADING (LONG TERM)

Analysis Options

Analysis: Boussinesq
 Global Poisson's ratio: 0.20
 Maximum allowable ratio between values of E: 1.5
 Horizontal rigid boundary level: -45.40 [m OD]
 Displacements at area centroids calculated.

Soil Profiles Soil Profile 1

Layer	Level at top	Number of intermediate displacement levels	Youngs Modulus		Poissons ratio	Non-linear curve
	[mOD]		Top [kN/m ²]	Btm [kN/m ²]		
1	0.0	8	10000.	10000.	0.20000	None
2	-4.2000	4	24000.	24000.	0.20000	None
3	-6.2500	4	24000.	24000.	0.20000	None
4	-8.3500	1	24000.	24000.	0.20000	None
5	-9.0000	61	16000.	75328.	0.20000	None
6	-39.600	11	300000.	300000.	0.20000	None

Soil Zones

Zone	Name	X coordinates		Y coordinates		Profile
		min [m]	max [m]	min [m]	max [m]	
1	demo	0.0	110.00	0.0	110.00	Soil Profile 1

Load Data

Load ref.	Name	Shape Polygon	Orientation of Plane	Centre of load (Global)			Angle of Tangential local x from	Width x or Radius	Length
				Number	Normal (local x)	Z (local y)			
Coordinates	Rectangle			X	Y	Z			
tolerance rectangles									
[m]				[m]	[m]	[m]	[Degrees]	[m]	[m]
				[kN/m ²]	[kN/m ²]	[kN/m ²]			
1	basement A	Polygonal	Horizontal	N/A	N/A	-0.60000	N/A	N/A	
N/A	(66,58.3)	(66,53.2)	10.000	2	-10.000		N/A	N/A	
	(59.8,51.7)	(55,51.6)							
	(55,58.4)								
2	vault A	Polygonal	Horizontal	N/A	N/A	-3.1300	N/A	N/A	
N/A	(55,58.4)	(59.8,58.4)	10.000	1	-20.000		N/A	N/A	
	(59.8,51.6)	(55,51.6)							
3	vault B	Polygonal	Horizontal	N/A	N/A	-3.1300	N/A	N/A	
N/A	(44.3,58.4)	(44.3,51.6)	10.000	1	-20.000		N/A	N/A	
	(39.6,51.7)	(39.6,58.4)							
4	basement B	Polygonal	Horizontal	N/A	N/A	-3.1300	N/A	N/A	
N/A	(55,58.4)	(55,51.6)	10.000	1	-10.000		N/A	N/A	
	(39.6,51.7)	(39.6,58.4)							
5	new basement	Polygonal	Horizontal	N/A	N/A	-4.2000	N/A	N/A	
N/A	(66,58.3)	(66,53.2)	10.000	2	10.000		N/A	N/A	
	(59.8,51.7)	(39.6,51.7)							
	(39.6,58.4)								

Displacement Data

intrvl	Ref.	Type	Name	Direction of Extrusion	No. of intrvl	Line/Line for extrusion			No. of	
						Show	First point	Second point		
across	Extrusion	along	Calculate	Detailed	X	Y	Z (level)	X	Y	Z (level)
extrusion/line	Depth	extrusion	results		[m]	[m]	[m]	[m]	[m]	[m]
[m]										
1	Grid	Grid 1	Global X	30.000	35.000	0.0	N/A	80.000	0.0	
99	70.000		99	Yes	Yes					
2	Line	21-20	N/A	55.960	70.700	0.0	44.210	70.720	0.0	
11	N/A	N/A	Yes	Yes						
3	Line	19-20	N/A	59.140	66.790	0.0	55.960	70.700	0.0	
5	N/A	N/A	Yes	Yes						
4	Line	19-18	N/A	59.140	66.790	0.0	59.170	64.780	0.0	
2	N/A	N/A	Yes	Yes						
5	Line	18-13	N/A	59.170	64.780	0.0	44.210	64.800	0.0	
14	N/A	N/A	Yes	Yes						
6	Line	21-a	N/A	44.210	70.720	0.0	44.060	58.900	0.0	
34	N/A	N/A	Yes	Yes						
7	Line	f-50	N/A	44.100	51.600	0.0	44.160	36.710	0.0	
15	N/A	N/A	Yes	Yes						
8	Line	14-15	N/A	55.000	64.760	0.0	55.000	62.620	0.0	
2	N/A	N/A	Yes	Yes						
9	Line	15-16	N/A	55.000	62.620	0.0	56.230	61.460	0.0	
1	N/A	N/A	Yes	Yes						
10	Line	16-17	N/A	56.230	61.460	0.0	56.220	59.560	0.0	
1	N/A	N/A	Yes	Yes						
11	Line	17-g	N/A	56.220	59.560	0.0	55.100	58.400	0.0	
1	N/A	N/A	Yes	Yes						

50	Line	eh	N/A	64.740	51.600	0.0	54.980	51.600	0.0
9	N/A	N/A	Yes	Yes					
51	Line	hf	N/A	54.980	51.600	0.0	44.100	51.600	0.0
10	N/A	N/A	Yes	Yes					
52	Line	de	N/A	65.000	52.000	0.0	64.740	51.600	0.0
4	N/A	N/A	Yes	Yes					

Problem Type

Problem Type : Tunnelling and Embedded Wall Excavations

Displacement Data

Type of intervals across extrusion/line	Name of Extrusion	Direction of intervals along	No. of extrusion	Calculate Surface of extrusion	Point/Line/Line for extrusion type for	No.							
				tunnels									
				First point	Second point								
				X	Y	Z (level)	X	Y	Z (level)				
				[m]	[m]	[m]	[m]	[m]	[m]				
[m]	Grid	Grid 1		Global X	30.00000	35.00000	0.00000	-	80.00000	0.00000			
99	70.00000		99	Yes	Surface								
Line	21-20	-			55.96000	70.70000	0.00000	44.21000	70.72000	0.00000			
11	-	-		Yes	Surface								
Line	19-20	-			59.14000	66.79000	0.00000	55.96000	70.70000	0.00000			
5	-	-		Yes	Surface								
Line	19-18	-			59.14000	66.79000	0.00000	59.17000	64.78000	0.00000			
2	-	-		Yes	Surface								
Line	18-13	-			59.17000	64.78000	0.00000	44.21000	64.80000	0.00000			
14	-	-		Yes	Surface								
Line	21-a	-			44.21000	70.72000	0.00000	44.06000	58.90000	0.00000			
34	-	-		Yes	Surface								
Line	f-50	-			44.10000	51.60000	0.00000	44.16000	36.71000	0.00000			
15	-	-		Yes	Surface								
Line	14-15	-			55.00000	64.76000	0.00000	55.00000	62.62000	0.00000			
2	-	-		Yes	Surface								
Line	15-16	-			55.00000	62.62000	0.00000	56.23000	61.46000	0.00000			
1	-	-		Yes	Surface								
Line	16-17	-			56.23000	61.46000	0.00000	56.22000	59.56000	0.00000			
1	-	-		Yes	Surface								
Line	17-g	-			56.22000	59.56000	0.00000	55.10000	58.40000	0.00000			
1	-	-		Yes	Surface								
Line	h-49	-			54.98000	51.60000	0.00000	56.50000	50.10000	0.00000			
2	-	-		Yes	Surface								
Line	49-36	-			56.50000	50.10000	0.00000	56.50000	47.71000	0.00000			
2	-	-		Yes	Surface								
Line	36-48	-			56.50000	47.71000	0.00000	54.96000	46.00000	0.00000			
2	-	-		Yes	Surface								
Line	48-47	-			54.96000	46.00000	0.00000	54.96000	44.83000	0.00000			
1	-	-		Yes	Surface								
Line	47-51	-			54.96000	44.83000	0.00000	44.21000	44.83000	0.00000			
10	-	-		Yes	Surface								
Line	50-46	-			44.16000	36.71000	0.00000	54.96000	36.71000	0.00000			
10	-	-		Yes	Surface								
Line	46-47	-			54.96000	36.71000	0.00000	54.96000	44.83000	0.00000			
8	-	-		Yes	Surface								
Line	24-25	-			78.82000	63.10000	0.00000	88.08000	63.07000	0.00000			
9	-	-		Yes	Surface								
Line	25-26	-			88.08000	63.07000	0.00000	88.00000	57.75000	0.00000			
5	-	-		Yes	Surface								
Line	26-27	-			88.00000	57.75000	0.00000	76.73000	57.90000	0.00000			
11	-	-		Yes	Surface								
Line	27-28	-			76.73000	57.90000	0.00000	76.71000	61.07000	0.00000			
3	-	-		Yes	Surface								

Line 28-29	-	-	76.71000	61.07000	0.00000	78.82000	63.10000	0.00000
2	-	Yes	Surface					
Line 27-32	-	-	76.73000	57.90000	0.00000	76.75000	52.75000	0.00000
5	-	Yes	Surface					
Line 33-31	-	-	87.93000	52.75000	0.00000	70.25000	52.75000	0.00000
17	-	Yes	Surface					
Line 31-34	-	-	70.25000	52.75000	0.00000	70.18000	49.38000	0.00000
3	-	Yes	Surface					
Line 34-35	-	-	70.18000	49.38000	0.00000	71.51000	49.37000	0.00000
1	-	Yes	Surface					
Line 35-41	-	-	71.51000	49.37000	0.00000	71.48000	45.77000	0.00000
3	-	Yes	Surface					
Line 41-40	-	-	71.48000	45.77000	0.00000	67.41000	45.77000	0.00000
4	-	Yes	Surface					
Line 40-39	-	-	67.41000	45.77000	0.00000	67.39000	41.87000	0.00000
3	-	Yes	Surface					
Line 39-38	-	-	67.39000	41.87000	0.00000	88.00000	41.70000	0.00000
20	-	Yes	Surface					
Line 38-25	-	-	88.00000	41.70000	0.00000	88.08000	63.07000	0.00000
21	-	Yes	Surface					
Line 20-22	-	-	55.96000	70.70000	0.00000	66.13000	70.69000	0.00000
10	-	Yes	Surface					
Line 22-b	-	-	66.13000	70.69000	0.00000	66.30000	58.90000	0.00000
17	-	Yes	Surface					
Line e-45	-	-	64.74000	51.60000	0.00000	64.48000	36.84000	0.00000
15	-	Yes	Surface					
Line 18-31	-	-	59.17000	64.78000	0.00000	66.00000	64.74000	0.00000
6	-	Yes	Surface					
Line 23-24	-	-	66.00000	63.14000	0.00000	78.82000	63.10000	0.00000
12	-	Yes	Surface					
Line b-27	-	-	66.10000	58.46000	0.00000	76.73000	57.90000	0.00000
10	-	Yes	Surface					
Line 42-37	-	-	64.54000	46.73000	0.00000	87.96000	46.45000	0.00000
23	-	Yes	Surface					
Line 47-43	-	-	54.96000	44.83000	0.00000	64.50000	44.83000	0.00000
9	-	Yes	Surface					
Line 44-39	-	-	64.44000	41.91000	0.00000	67.39000	41.87000	0.00000
2	-	Yes	Surface					
Line 46-45	-	-	54.96000	36.71000	0.00000	64.48000	36.84000	0.00000
9	-	Yes	Surface					
Line a-12	-	-	44.06000	58.90000	0.00000	39.63000	58.38000	0.00000
4	-	Yes	Surface					
Line 12-11	-	-	39.63000	58.38000	0.00000	39.63000	51.68000	0.00000
6	-	Yes	Surface					
Line 11-f	-	-	39.63000	51.68000	0.00000	44.10000	51.60000	0.00000
8	-	Yes	Surface					
Line ag	-	-	44.06000	58.90000	0.00000	55.10000	58.40000	0.00000
11	-	Yes	Surface					
Line gb	-	-	55.10000	58.40000	0.00000	66.50000	58.46000	0.00000
20	-	Yes	Surface					
Line bc	-	-	66.50000	58.46000	0.00000	66.50000	52.90000	0.00000
20	-	Yes	Surface					
Line cd	-	-	66.50000	52.90000	0.00000	65.00000	52.00000	0.00000
1	-	Yes	Surface					
Line eh	-	-	64.74000	51.60000	0.00000	54.98000	51.60000	0.00000
9	-	Yes	Surface					
Line hf	-	-	54.98000	51.60000	0.00000	44.10000	51.60000	0.00000
10	-	Yes	Surface					
Line de	-	-	65.00000	52.00000	0.00000	64.74000	51.60000	0.00000
4	-	Yes	Surface					

Vertical Ground Movement Curves

Curve Name: No vertical ground movement

Coordinates: [Distance from wall / wall depth or max. excavation depth (x), Depth / wall depth or max. excavation depth (y), Settlement / wall depth or max. excavation depth (z) (%)]

[0.000,0.000,0.000] [1.000,0.000,0.000] [0.000,1.000,0.000] [1.000,1.000,0.000]

Curve Fitting Method: Polynomial

Method:

x Order: 1

y Order: 0

Polynomial: z = 0.0x + 0.0

Coeff. of Determination: -2147483648.E+2147483647

Curve Name: Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11 (b))

Coordinates: [Distance from wall / wall depth or max. excavation depth (x), Depth / wall depth or max. excavation depth (y), Settlement / wall depth or max. excavation depth (z) (%)]

[0.000,0.000,0.039] [0.100,0.000,0.049] [0.200,0.000,0.056] [0.300,0.000,0.062] [0.400,0.000,0.067] [0.500,0.000,0.070] [0.600,0.000,0.072] [0.700,0.000,0.073] [0.800,0.000,0.073] [0.900,0.000,0.072] [1.000,0.000,0.070] [1.100,0.000,0.068] [1.200,0.000,0.065] [1.300,0.000,0.061] [1.400,0.000,0.058] [1.500,0.000,0.054] [1.600,0.000,0.050] [1.700,0.000,0.046] [1.800,0.000,0.042] [1.900,0.000,0.038] [2.000,0.000,0.034] [2.100,0.000,0.030] [2.200,0.000,0.027] [2.300,0.000,0.023] [2.400,0.000,0.020] [2.500,0.000,0.017] [2.600,0.000,0.014] [2.700,0.000,0.012] [2.800,0.000,0.010] [2.900,0.000,0.008] [3.000,0.000,0.007] [3.100,0.000,0.005] [3.200,0.000,0.004] [3.300,0.000,0.004] [3.400,0.000,0.003] [3.500,0.000,0.002] [3.600,0.000,0.002] [3.700,0.000,0.002] [3.800,0.000,0.001] [3.900,0.000,0.001] [4.000,0.000,0.000]

Curve Fitting Method: Polynomial

Method:

x Order: 4

y Order: 0

Polynomial: $z = -2.6455E-3x^4 + 2.8495E-2x^3 - 1.0051E-1x^2 + 1.0569E-1x + 3.8990E-2$

Coeff. of Determination: 9.9991E-1

Determination:

Horizontal Ground Movement Curves

Curve Name: No horizontal ground movement

Coordinates: [Distance from wall / wall depth or max. excavation depth (x), Depth / wall depth or max. excavation depth (y), Horizontal movement / wall depth or max. excavation depth (z) (%)]

[0.000,0.000,0.000] [1.000,0.000,0.000] [0.000,1.000,0.000] [1.000,1.000,0.000]

Curve Fitting Method: Polynomial

Method:

x Order: 0

y Order: 0

Polynomial: $z = 0.0$

Coeff. of Determination: -2147483648.E+2147483647

Determination:

Curve Name: Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11 (a))

Coordinates: [Distance from wall / wall depth or max. excavation depth (x), Depth / wall depth or max. excavation depth (y), Horizontal movement / wall depth or max. excavation depth (z) (%)]

[0.000,0.000,0.150] [4.000,0.000,0.000]

Curve Fitting Method: Polynomial

Method:

x Order: 1

y Order: 0

Polynomial: $z = -3.75E-2x + 1.50E-1$

Coeff. of Determination: 1.00

Determination:

Polygonal Excavations

Excavation Name: Excavation 1

Surface level [m]: 0.0

Contribution: Positive

Enabled: Yes

Surface movement curves which are selected are applied between surface and [m]: -10.000

Corner	x	y	Base Level	Stiffened	Previous Side			Next Side		
					d	p1	p2*	d	p1	p2*
	[m]	[m]	[m]		[m]	[%]	[%]	[m]	[%]	[%]
1	66.020	58.310	-1.0700	No	-	-	-	-	-	-
2	66.000	53.200	-1.0700	No	-	-	-	-	-	-
3	59.820	51.680	-1.0700	No	-	-	-	-	-	-
4	39.630	51.680	-1.0700	No	-	-	-	-	-	-

5 39.630 58.380 -1.0700 No - - - - - -

Side	Corner 1		Corner 2		Ground Movement Curve	
	x [m]	y [m]	x [m]	y [m]	Vertical	Horizontal
1 of high stiff clay 2.11(a)	66.020	58.310	66.000	53.200	Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(b))	Excavation in front stiffness wall in (CIRIA 580 Fig.
2 of high stiff clay 2.11(a)	66.000	53.200	59.820	51.680	Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(b))	Excavation in front stiffness wall in (CIRIA 580 Fig.
3 of high stiff clay 2.11(a)	59.820	51.680	39.630	51.680	Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(b))	Excavation in front stiffness wall in (CIRIA 580 Fig.
4 of high stiff clay 2.11(a)	39.630	51.680	39.630	58.380	Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(b))	Excavation in front stiffness wall in (CIRIA 580 Fig.
5 of high stiff clay 2.11(a)	39.630	58.380	66.020	58.310	Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(b))	Excavation in front stiffness wall in (CIRIA 580 Fig.

Excavation Name: Excavation 2
 Surface level [m]: 0.0
 Contribution: Positive
 Enabled: Yes
 Surface movement curves which are selected are applied between surface and [m]: -5.0000

Corner	x	y	Base Level	Stiffened	Previous d	Side p1 p2*	Next Side d p1 p2*
	[m]	[m]	[m]		[m]	[%] [%]	[m] [%] [%]
1	59.820	58.310	-3.6000	No	-	- -	- - -
2	66.020	58.310	-3.6000	No	-	- -	- - -
3	66.000	53.200	-3.6000	No	-	- -	- - -
4	59.820	51.680	-3.6000	No	-	- -	- - -

Side	Corner 1		Corner 2		Ground Movement Curve	
	x [m]	y [m]	x [m]	y [m]	Vertical	Horizontal
1 of high stiff clay 2.11(a)	59.820	58.310	66.020	58.310	Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(b))	Excavation in front stiffness wall in (CIRIA 580 Fig.
2 of high stiff clay 2.11(a)	66.020	58.310	66.000	53.200	Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(b))	Excavation in front stiffness wall in (CIRIA 580 Fig.
3 of high stiff clay 2.11(a)	66.000	53.200	59.820	51.680	Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(b))	Excavation in front stiffness wall in (CIRIA 580 Fig.
4 movement 2.11(a)	59.820	51.680	59.820	58.310	No vertical ground movement	No horizontal ground

Excavation Name: Excavation 3
 Surface level [m]: 0.0
 Contribution: Negative
 Enabled: Yes
 Surface movement curves which are selected are applied between surface and [m]: -5.0000

Corner	x	y	Base Level	Stiffened	Previous Side	Next Side				
	[m]	[m]	[m]		d	p1	p2*	d	p1	p2*
					[m]	[%]	[%]	[m]	[%]	[%]
1	59.820	58.310	-1.0700	No	-	-	-	-	-	-
2	66.020	58.310	-1.0700	No	-	-	-	-	-	-
3	66.000	53.200	-1.0700	No	-	-	-	-	-	-
4	59.820	51.680	-1.0700	No	-	-	-	-	-	-

Side	Corner 1		Corner 2		Ground Movement Curve	
	x	y	x	y	Vertical	Horizontal
	[m]	[m]	[m]	[m]		
1	59.820	58.310	66.020	58.310	Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(b))	Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(b))
2.11(a)						
2	66.020	58.310	66.000	53.200	Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(b))	Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(b))
2.11(a)						
3	66.000	53.200	59.820	51.680	Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(b))	Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(b))
2.11(a)						
4	59.820	51.680	59.820	58.310	No vertical ground movement	No horizontal ground movement

Damage Category Strains

Name	0 (Negligible) to 1 (Very Slight)	1 (Very Slight) to 2 (Slight)	2 (Slight) to 3 (Moderate)	3 (Moderate) to 4 (Severe)
Burland Strain Limits	0.0	500.00E-6	750.00E-6	0.0015000

Specific Structures - Geometry

Structure Name	Sub-Structure Name	Displacement Poisson's E/G	Start Distance	End Distance	Vertical Offsets from Line for Vertical Movement Calculations	Vertical Displacement Limit Sensitivity
		Line	[m]	[m]	[m]	[mm]
21-20		21-20	0.00000	11.74902	0.0	0.10000
Burland Strain Limits		0.20000 2.6000				
19-20		19-20	0.00000	5.03889	0.0	0.10000
Burland Strain Limits		0.20000 2.6000				
19-18		19-18	0.00000	2.00922	0.0	0.10000
Burland Strain Limits		0.20000 2.6000				
18-13		18-13	0.00000	14.95901	0.0	0.10000
Burland Strain Limits		0.20000 2.6000				
21-a		21-a	0.00000	11.81995	0.0	0.10000
Burland Strain Limits		0.20000 2.6000				
f-50		f-50	0.00000	14.88912	0.0	0.10000
Burland Strain Limits		0.20000 2.6000				
14-15		14-15	0.00000	2.13900	0.0	0.10000
Burland Strain Limits		0.20000 2.6000				

15-16	15-16	0.00000	1.68971	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
16-17	16-17	0.00000	1.89903	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
17-g	17-g	0.00000	1.61145	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
h-49	h-49	0.00000	2.13451	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
49-36	49-36	0.00000	2.38900	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
36-48	36-48	0.00000	2.30024	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
48-47	48-47	0.00000	1.16900	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
47-51	47-51	0.00000	10.74900	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
50-46	50-46	0.00000	10.79900	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
46-47	46-47	0.00000	8.11900	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
24-25	24-25	0.00000	9.25905	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
25-26	25-26	0.00000	5.31960	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
26-27	26-27	0.00000	11.27000	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
27-28	27-28	0.00000	3.16906	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
28-29	28-29	0.00000	2.92697	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
27-32	27-32	0.00000	5.14904	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
33-31	33-31	0.00000	17.67900	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
31-34	31-34	0.00000	3.36973	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
34-35	34-35	0.00000	1.32904	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
35-41	35-41	0.00000	3.59912	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
41-40	41-40	0.00000	4.06900	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
40-39	40-39	0.00000	3.89905	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
39-38	39-38	0.00000	20.60970	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
38-25	38-25	0.00000	21.36915	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
20-22	20-22	0.00000	10.16900	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
22-b	22-b	0.00000	11.79023	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
e-45	e-45	0.00000	14.76129	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
18-31	18-31	0.00000	6.82912	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
23-24	23-24	0.00000	12.81906	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
b-27	b-27	0.00000	10.64374	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
42-37	42-37	0.00000	23.42067	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
47-43	47-43	0.00000	9.53900	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
44-39	44-39	0.00000	2.94927	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
46-45	46-45	0.00000	9.51989	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
a-12	a-12	0.00000	4.45941	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
12-11	12-11	0.00000	6.69900	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
11-f	11-f	0.00000	4.46972	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
ag	ag	0.00000	11.05032	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				

gb	gb	0.00000	11.39916	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
bc	bc	0.00000	5.55900	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
cd	cd	0.00000	1.74829	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
eh	eh	0.00000	9.75900	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
hf	hf	0.00000	10.87900	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
de	de	0.00000	0.47607	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				

Specific Structures - Bending Parameters

Structure Name	Sub-Structure	Height	Default	Hogging			
Sagging	Name	Properties		2nd Moment	Distance	Distance	2nd Moment
Distance	Distance			of Area	of Bending	of N.A.	of Area
of Bending	of N.A.			(per unit	Strain	from Edge	(per unit
Strain	from Edge			width)	from N.A.	of Beam in	width)
from N.A.	of Beam in					Tension	
Tension		[m]		[m ³]	[m]	[m]	[m ³]
21-20		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
19-20		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
19-18		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
18-13		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
21-a		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
f-50		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
14-15		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
15-16		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
16-17		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
17-g		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
h-49		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
49-36		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
36-48		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
48-47		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
47-51		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
50-46		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
46-47		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
24-25		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
25-26		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
26-27		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
27-28		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
28-29		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						

27-32		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
33-31		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
31-34		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
34-35		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
35-41		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
41-40		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
40-39		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
39-38		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
38-25		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
20-22		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						
22-b		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						
e-45		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						
18-31		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						
23-24		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						
b-27		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						
42-37		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						
47-43		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						
44-39		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						
46-45		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						
a-12		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						
12-11		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						
11-f		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						
ag		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
gb		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						
bc		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						
cd		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						
eh		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						
hf		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
de		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						

Building Segment Combinations

Structure Name	Sub-Structure Name	Vertical Offset from Line for Vertical Movement Calculations	Segment Start	Length	Curvature	Combined Segment
		[m]	[m]	[m]		
No structures have segments combined.						

Utility Strain Calculation Options

Neglect beneficial contribution of axial strains : No

Specific Building Damage Results - Horizontal Displacements

Structure: 21-20 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	55.96000	70.70000	0.00000	0.12817	-0.41142	-0.12887	0.41120 d	
1.0682	54.89182	70.70182	0.00000	0.11194	-0.28146	-0.11242	0.28127 d	
2.1364	53.82364	70.70364	0.00000	0.073605	-0.15213	-0.073864	0.15201 d	
3.2046	52.75545	70.70545	0.00000	0.016518	-0.028982	-0.016567	0.028954 d	
4.2727	51.68727	70.70727	0.00000	0.0	0.0	0.0	0.0 d	
5.3409	50.61909	70.70909	0.00000	0.0	0.0	0.0	0.0 d	
6.4091	49.55091	70.71091	0.00000	0.0	0.0	0.0	0.0 d	
7.4773	48.48273	70.71273	0.00000	0.0	0.0	0.0	0.0 d	
8.5455	47.41455	70.71455	0.00000	0.0	0.0	0.0	0.0 d	
9.6137	46.34636	70.71636	0.00000	0.0	0.0	0.0	0.0 d	
10.682	45.27818	70.71818	0.00000	0.0	0.0	0.0	0.0 d	
11.750	44.21000	70.72000	0.00000	0.0	0.0	0.0	0.0 d	

d - Displacements include imported displacements.

Structure: 19-20 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	59.14000	66.79000	0.00000	0.16764	-2.0905	-1.7276	1.1890 d	
1.0080	58.50400	67.57200	0.00000	0.24222	-1.7048	-1.4754	0.88772 d	
2.0160	57.86800	68.35400	0.00000	0.26175	-1.3468	-1.2100	0.64673 d	
3.0239	57.23200	69.13600	0.00000	0.24244	-1.0142	-0.93977	0.45181 d	
4.0319	56.59600	69.91800	0.00000	0.19537	-0.70344	-0.66901	0.29228 d	
5.0399	55.96000	70.70000	0.00000	0.12817	-0.41142	-0.40005	0.16015 d	

d - Displacements include imported displacements.

Structure: 19-18 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	59.14000	66.79000	0.00000	0.16764	-2.0905	2.0928	0.13642 d	
1.0051	59.15500	65.78500	0.00000	0.21619	-2.4301	2.4331	0.17990 d	
2.0102	59.17000	64.78000	0.00000	0.27717	-2.7589	2.7627	0.23596 d	

d - Displacements include imported displacements.

Structure: 18-13 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	59.17000	64.78000	0.00000	0.27717	-2.7589	-0.28085	2.7585 d	
1.0686	58.10143	64.78143	0.00000	0.61900	-2.3309	-0.62211	2.3301 d	
2.1371	57.03286	64.78286	0.00000	0.80818	-1.8769	-0.81069	1.8758 d	
3.2057	55.96429	64.78429	0.00000	0.86676	-1.4554	-0.86870	1.4542 d	
4.2743	54.89571	64.78571	0.00000	0.83344	-1.0960	-0.83491	1.0949 d	
5.3429	53.82714	64.78714	0.00000	0.74509	-0.80530	-0.74617	0.80430 d	
6.4114	52.75857	64.78857	0.00000	0.62906	-0.57714	-0.62983	0.57629 d	
7.4800	51.69000	64.79000	0.00000	0.50296	-0.40088	-0.50349	0.40021 d	
8.5486	50.62143	64.79143	0.00000	0.37701	-0.26565	-0.37737	0.26514 d	
9.6172	49.55286	64.79286	0.00000	0.25664	-0.16205	-0.25686	0.16171 d	

10.686	48.48429	64.79429	0.00000	0.14436	-0.082578	-0.14447	0.082384	d
11.754	47.41571	64.79571	0.00000	0.041021	-0.021448	-0.041050	0.021393	d
12.823	46.34714	64.79714	0.00000	0.0	0.0	0.0	0.0	d
13.891	45.27857	64.79857	0.00000	0.0	0.0	0.0	0.0	d
14.960	44.21000	64.80000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 21-a | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	44.21000	70.72000	0.00000	0.0	0.0	0.0	0.0	d
0.34768	44.20559	70.37235	0.00000	0.0	0.0	0.0	0.0	d
0.69535	44.20118	70.02471	0.00000	0.0	0.0	0.0	0.0	d
1.0430	44.19676	69.67706	0.00000	0.0	0.0	0.0	0.0	d
1.3907	44.19235	69.32941	0.00000	0.0	0.0	0.0	0.0	d
1.7384	44.18794	68.98176	0.00000	0.0	0.0	0.0	0.0	d
2.0861	44.18353	68.63412	0.00000	0.0	0.0	0.0	0.0	d
2.4337	44.17912	68.28647	0.00000	0.0	0.0	0.0	0.0	d
2.7814	44.17471	67.93882	0.00000	0.0	0.0	0.0	0.0	d
3.1291	44.17029	67.59118	0.00000	0.0	0.0	0.0	0.0	d
3.4768	44.16588	67.24353	0.00000	0.0	0.0	0.0	0.0	d
3.8244	44.16147	66.89588	0.00000	0.0	0.0	0.0	0.0	d
4.1721	44.15706	66.54824	0.00000	0.0	0.0	0.0	0.0	d
4.5198	44.15265	66.20059	0.00000	0.0	0.0	0.0	0.0	d
4.8675	44.14824	65.85294	0.00000	0.0	0.0	0.0	0.0	d
5.2151	44.14382	65.50529	0.00000	0.0	0.0	0.0	0.0	d
5.5628	44.13941	65.15765	0.00000	0.0	0.0	0.0	0.0	d
5.9105	44.13500	64.81000	0.00000	0.0	0.0	0.0	0.0	d
6.2582	44.13059	64.46235	0.00000	0.0	0.0	0.0	0.0	d
6.6058	44.12618	64.11471	0.00000	0.0	0.0	0.0	0.0	d
6.9535	44.12176	63.76706	0.00000	0.0	0.0	0.0	0.0	d
7.3012	44.11735	63.41941	0.00000	0.0	0.0	0.0	0.0	d
7.6489	44.11294	63.07176	0.00000	0.0	0.0	0.0	0.0	d
7.9965	44.10853	62.72412	0.00000	0.0	0.0	0.0	0.0	d
8.3442	44.10412	62.37647	0.00000	-270.23E-6	-0.10188	0.10187	0.0010226	d
8.6919	44.09971	62.02882	0.00000	-616.05E-6	-0.23225	0.23224	0.0023311	d
9.0396	44.09529	61.68118	0.00000	-961.86E-6	-0.36262	0.36260	0.0036396	d
9.3872	44.09088	61.33353	0.00000	-0.0013077	-0.49299	0.49297	0.0049482	d
9.7349	44.08647	60.98588	0.00000	-0.0016535	-0.62336	0.62333	0.0062567	d
10.083	44.08206	60.63824	0.00000	-0.0019993	-0.75373	0.75370	0.0075652	d
10.430	44.07765	60.29059	0.00000	-0.0023451	-0.88410	0.88406	0.0088738	d
10.778	44.07324	59.94294	0.00000	-0.0026909	-1.0145	1.0144	0.010182	d
11.126	44.06882	59.59529	0.00000	-0.0030367	-1.1448	1.1448	0.011491	d
11.473	44.06441	59.24765	0.00000	-0.0033825	-1.2752	1.2752	0.012799	d
11.821	44.06000	58.90000	0.00000	-0.0037284	-1.4056	1.4055	0.014108	d

d - Displacements include imported displacements.

Structure: f-50 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	44.10000	51.60000	0.00000	0.0	1.5750	-1.5750	0.0063465	d
0.99267	44.10400	50.60733	0.00000	0.0	1.2028	-1.2027	0.0048465	d
1.9853	44.10800	49.61467	0.00000	0.0	0.83050	-0.83049	0.0033465	d
2.9780	44.11200	48.62200	0.00000	0.0	0.45825	-0.45825	0.0018465	d
3.9707	44.11600	47.62933	0.00000	0.0	0.086000	-0.085999	346.54E-6	d
4.9634	44.12000	46.63667	0.00000	0.0	0.0	0.0	0.0	d
5.9560	44.12400	45.64400	0.00000	0.0	0.0	0.0	0.0	d
6.9487	44.12800	44.65133	0.00000	0.0	0.0	0.0	0.0	d
7.9414	44.13200	43.65867	0.00000	0.0	0.0	0.0	0.0	d
8.9341	44.13600	42.66600	0.00000	0.0	0.0	0.0	0.0	d
9.9267	44.14000	41.67333	0.00000	0.0	0.0	0.0	0.0	d
10.919	44.14400	40.68067	0.00000	0.0	0.0	0.0	0.0	d
11.912	44.14800	39.68800	0.00000	0.0	0.0	0.0	0.0	d
12.905	44.15200	38.69533	0.00000	0.0	0.0	0.0	0.0	d
13.897	44.15600	37.70267	0.00000	0.0	0.0	0.0	0.0	d

14.890 44.16000 36.71000 0.00000 0.0 0.0 0.0 0.0 d
 d - Displacements include imported displacements.

Structure: 14-15 | Sub-structure:

Dist.	Coordinates			Displacements		Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
	x	y	z	x	y		
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
	0.0	55.00000	64.76000	0.00000	0.84279	-1.1278	1.1278
	1.0700	55.00000	63.69000	0.00000	0.96061	-1.0722	1.0722
	2.1400	55.00000	62.62000	0.00000	1.0302	-0.92116	0.92116

d - Displacements include imported displacements.

Structure: 15-16 | Sub-structure:

Dist.	Coordinates			Displacements		Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
	x	y	z	x	y		
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
	0.0	55.00000	62.62000	0.00000	1.0302	-0.92116	1.3815
	1.6907	56.23000	61.46000	0.00000	1.2426	-1.5248	1.9502

d - Displacements include imported displacements.

Structure: 16-17 | Sub-structure:

Dist.	Coordinates			Displacements		Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
	x	y	z	x	y		
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
	0.0	56.23000	61.46000	0.00000	1.2426	-1.5248	1.5183
	1.9000	56.22000	59.56000	0.00000	0.75970	-1.4108	1.4068

d - Displacements include imported displacements.

Structure: 17-g | Sub-structure:

Dist.	Coordinates			Displacements		Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
	x	y	z	x	y		
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
	0.0	56.22000	59.56000	0.00000	0.75970	-1.4108	0.48727
	1.6125	55.10000	58.40000	0.00000	0.039851	-1.5829	1.1111

d - Displacements include imported displacements.

Structure: h-49 | Sub-structure:

Dist.	Coordinates			Displacements		Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
	x	y	z	x	y		
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
	0.0	54.98000	51.60000	0.00000	0.032693	1.5755	-1.0834
	1.0678	55.74000	50.85000	0.00000	0.41190	1.3775	-0.67442
	2.1355	56.50000	50.10000	0.00000	0.84003	1.4123	-0.39408

d - Displacements include imported displacements.

Structure: 49-36 | Sub-structure:

Dist.	Coordinates			Displacements		Horizontal displacement along the	Horizontal displacement perpendicular
	x	y	z	x	y		

[m]	[m]	[m]	[m]	[mm]	[mm]	Line	to Line
0.0	56.50000	50.10000	0.00000	0.84003	1.4123	-1.4123	0.84003 d
1.1950	56.50000	48.90500	0.00000	1.1136	1.4952	-1.4952	1.1136 d
2.3900	56.50000	47.71000	0.00000	1.0708	1.3967	-1.3967	1.0708 d

d - Displacements include imported displacements.

Structure: 36-48 | Sub-structure:

Dist.	Coordinates			Displacements			
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	56.50000	47.71000	0.00000	1.0708	1.3967	-1.7545	-0.13899 d
1.1506	55.73000	46.85500	0.00000	0.93757	1.1061	-1.4493	-0.043491 d
2.3012	54.96000	46.00000	0.00000	0.80409	0.93976	-1.2364	-0.031390 d

d - Displacements include imported displacements.

Structure: 48-47 | Sub-structure:

Dist.	Coordinates			Displacements			
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	54.96000	46.00000	0.00000	0.80409	0.93976	-0.93976	0.80409 d
1.1700	54.96000	44.83000	0.00000	0.68541	0.96606	-0.96606	0.68541 d

d - Displacements include imported displacements.

Structure: 47-51 | Sub-structure:

Dist.	Coordinates			Displacements			
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	54.96000	44.83000	0.00000	0.68541	0.96606	-0.68541	-0.96606 d
1.0750	53.88500	44.83000	0.00000	0.61968	0.71522	-0.61968	-0.71522 d
2.1500	52.81000	44.83000	0.00000	0.52678	0.51476	-0.52678	-0.51476 d
3.2250	51.73500	44.83000	0.00000	0.42213	0.35765	-0.42213	-0.35765 d
4.3000	50.66000	44.83000	0.00000	0.31522	0.23573	-0.31522	-0.23573 d
5.3750	49.58500	44.83000	0.00000	0.21143	0.14150	-0.21143	-0.14150 d
6.4500	48.51000	44.83000	0.00000	0.11350	0.068740	-0.11350	-0.068740 d
7.5250	47.43500	44.83000	0.00000	0.022589	0.012493	-0.022589	-0.012493 d
8.6000	46.36000	44.83000	0.00000	0.0	0.0	0.0	0.0 d
9.6750	45.28500	44.83000	0.00000	0.0	0.0	0.0	0.0 d
10.750	44.21000	44.83000	0.00000	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: 50-46 | Sub-structure:

Dist.	Coordinates			Displacements			
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	44.16000	36.71000	0.00000	0.0	0.0	0.0	0.0 d
1.0800	45.24000	36.71000	0.00000	0.0	0.0	0.0	0.0 d
2.1600	46.32000	36.71000	0.00000	0.0	0.0	0.0	0.0 d
3.2400	47.40000	36.71000	0.00000	0.0	0.0	0.0	0.0 d
4.3200	48.48000	36.71000	0.00000	0.0	0.0	0.0	0.0 d
5.4000	49.56000	36.71000	0.00000	0.0	0.0	0.0	0.0 d
6.4800	50.64000	36.71000	0.00000	0.0	0.0	0.0	0.0 d
7.5600	51.72000	36.71000	0.00000	0.0	0.0	0.0	0.0 d
8.6400	52.80000	36.71000	0.00000	0.0	0.0	0.0	0.0 d
9.7200	53.88000	36.71000	0.00000	0.0	0.0	0.0	0.0 d
10.800	54.96000	36.71000	0.00000	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: 46-47 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	54.96000	36.71000	0.00000	0.0	0.0	0.0	0.0	0.0 d
1.0150	54.96000	37.72500	0.00000	0.0	0.0	0.0	0.0	0.0 d
2.0300	54.96000	38.74000	0.00000	0.050906	0.13554	0.13554	-0.050906	d
3.0450	54.96000	39.75500	0.00000	0.14079	0.34546	0.34546	-0.14079	d
4.0600	54.96000	40.77000	0.00000	0.23826	0.53485	0.53485	-0.23826	d
5.0750	54.96000	41.78500	0.00000	0.34320	0.69876	0.69876	-0.34320	d
6.0900	54.96000	42.80000	0.00000	0.45473	0.83086	0.83086	-0.45473	d
7.1050	54.96000	43.81500	0.00000	0.57047	0.92320	0.92320	-0.57047	d
8.1200	54.96000	44.83000	0.00000	0.68541	0.96606	0.96606	-0.68541	d

d - Displacements include imported displacements.

Structure: 24-25 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	78.82000	63.10000	0.00000	-0.25748	-0.096352	-0.25716	-0.097186	d
1.0289	79.84889	63.09667	0.00000	0.0	0.0	0.0	0.0	d
2.0578	80.87778	63.09333	0.00000	0.0	0.0	0.0	0.0	d
3.0867	81.90667	63.09000	0.00000	0.0	0.0	0.0	0.0	d
4.1156	82.93556	63.08667	0.00000	0.0	0.0	0.0	0.0	d
5.1445	83.96444	63.08333	0.00000	0.0	0.0	0.0	0.0	d
6.1734	84.99333	63.08000	0.00000	0.0	0.0	0.0	0.0	d
7.2023	86.02222	63.07667	0.00000	0.0	0.0	0.0	0.0	d
8.2312	87.05111	63.07333	0.00000	0.0	0.0	0.0	0.0	d
9.2600	88.08000	63.07000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 25-26 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	88.08000	63.07000	0.00000	0.0	0.0	0.0	0.0	d
1.0641	88.06400	62.00600	0.00000	0.0	0.0	0.0	0.0	d
2.1282	88.04800	60.94200	0.00000	0.0	0.0	0.0	0.0	d
3.1924	88.03200	59.87800	0.00000	0.0	0.0	0.0	0.0	d
4.2565	88.01600	58.81400	0.00000	0.0	0.0	0.0	0.0	d
5.3206	88.00000	57.75000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 26-27 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	88.00000	57.75000	0.00000	0.0	0.0	0.0	0.0	0.0 d
1.0246	86.97545	57.76364	0.00000	0.0	0.0	0.0	0.0	0.0 d
2.0493	85.95091	57.77727	0.00000	0.0	0.0	0.0	0.0	0.0 d
3.0739	84.92636	57.79091	0.00000	0.0	0.0	0.0	0.0	0.0 d
4.0985	83.90182	57.80455	0.00000	0.0	0.0	0.0	0.0	0.0 d
5.1232	82.87727	57.81818	0.00000	0.0	0.0	0.0	0.0	0.0 d
6.1478	81.85273	57.83182	0.00000	0.0	0.0	0.0	0.0	0.0 d
7.1725	80.82818	57.84545	0.00000	0.0	0.0	0.0	0.0	0.0 d
8.1971	79.80364	57.85909	0.00000	-0.23051	902.20E-6	0.23050	0.0021657	d

9.2217	78.77909	57.87273	0.00000	-0.61473	0.0024060	0.61471	0.0057754	d
10.246	77.75455	57.88636	0.00000	-0.99895	0.0039098	0.99891	0.0093851	d
11.271	76.73000	57.90000	0.00000	-1.3832	0.0054136	1.3831	0.012995	d

d - Displacements include imported displacements.

Structure: 27-28 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	76.73000	57.90000	0.00000	-1.3832	0.0054136	0.014140	1.3831	d
1.0567	76.72333	58.95667	0.00000	-1.3764	-0.083160	-0.074474	1.3769	d
2.1134	76.71667	60.01333	0.00000	-1.3216	-0.21044	-0.20210	1.3229	d
3.1701	76.71000	61.07000	0.00000	-1.2198	-0.31493	-0.30723	1.2218	d

d - Displacements include imported displacements.

Structure: 28-29 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	76.71000	61.07000	0.00000	-1.2198	-0.31493	-1.0974	0.61875	d
1.4640	77.76500	62.08500	0.00000	-0.73660	-0.23675	-0.69497	0.34008	d
2.9280	78.82000	63.10000	0.00000	-0.25748	-0.096352	-0.25235	0.10908	d

d - Displacements include imported displacements.

Structure: 27-32 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	76.73000	57.90000	0.00000	-1.3832	0.0054136	-0.010785	-1.3831	d
1.0300	76.73400	56.87000	0.00000	-1.3802	0.0054018	-0.010762	-1.3801	d
2.0600	76.73800	55.84000	0.00000	-1.3771	0.0053900	-0.010738	-1.3771	d
3.0900	76.74200	54.81000	0.00000	-1.3741	0.0053782	-0.010715	-1.3741	d
4.1200	76.74600	53.78000	0.00000	-1.3711	0.0053664	-0.010691	-1.3711	d
5.1500	76.75000	52.75000	0.00000	-1.3640	0.0057099	-0.062395	-1.3638	d

d - Displacements include imported displacements.

Structure: 33-31 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	87.93000	52.75000	0.00000	0.0	0.0	0.0	0.0	d
1.0400	86.89000	52.75000	0.00000	0.0	0.0	0.0	0.0	d
2.0800	85.85000	52.75000	0.00000	0.0	0.0	0.0	0.0	d
3.1200	84.81000	52.75000	0.00000	0.0	0.0	0.0	0.0	d
4.1600	83.77000	52.75000	0.00000	0.0	0.0	0.0	0.0	d
5.2000	82.73000	52.75000	0.00000	0.0	0.0	0.0	0.0	d
6.2400	81.69000	52.75000	0.00000	0.0	0.0	0.0	0.0	d
7.2800	80.65000	52.75000	0.00000	0.0	0.0	0.0	0.0	d
8.3200	79.61000	52.75000	0.00000	-0.29330	0.0096977	0.29330	-0.0096977	d
9.3600	78.57000	52.75000	0.00000	-0.68279	0.024444	0.68279	-0.024444	d
10.4000	77.53000	52.75000	0.00000	-1.0721	0.041844	1.0721	-0.041844	d
11.4400	76.49000	52.75000	0.00000	-1.4613	0.062686	1.4613	-0.062686	d
12.4800	75.45000	52.75000	0.00000	-1.8501	0.088102	1.8501	-0.088102	d
13.5200	74.41000	52.75000	0.00000	-2.2385	0.11978	2.2385	-0.11978	d
14.5600	73.37000	52.75000	0.00000	-2.6262	0.16035	2.6262	-0.16035	d
15.6000	72.33000	52.75000	0.00000	-3.0127	0.21417	3.0127	-0.21417	d
16.6400	71.29000	52.75000	0.00000	-3.3968	0.28895	3.3968	-0.28895	d

17.680 70.25000 52.75000 0.00000 -3.7762 0.39984 3.7762 -0.39984 d
d - Displacements include imported displacements.

Structure: 31-34 | Sub-structure:

Dist.	Coordinates			Displacements			
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	70.25000	52.75000	0.00000	-3.7762	0.39984	-0.32133	-3.7837 d
1.1236	70.22667	51.62667	0.00000	-3.4758	1.2938	-1.2214	-3.5019 d
2.2472	70.20333	50.50333	0.00000	-2.9688	1.9046	-1.8426	-3.0077 d
3.3707	70.18000	49.38000	0.00000	-2.4187	2.2104	-2.1597	-2.4641 d

d - Displacements include imported displacements.

Structure: 34-35 | Sub-structure:

Dist.	Coordinates			Displacements			
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	70.18000	49.38000	0.00000	-2.4187	2.2104	-2.4352	2.1921 d
1.3300	71.51000	49.37000	0.00000	-2.3678	1.6458	-2.3801	1.6280 d

d - Displacements include imported displacements.

Structure: 35-41 | Sub-structure:

Dist.	Coordinates			Displacements			
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	71.51000	49.37000	0.00000	-2.3678	1.6458	-1.6261	-2.3814 d
1.2000	71.50000	48.17000	0.00000	-1.9223	1.7581	-1.7420	-1.9369 d
2.4001	71.49000	46.97000	0.00000	-1.5114	1.7152	-1.7025	-1.5257 d
3.6001	71.48000	45.77000	0.00000	-1.1503	1.5596	-1.5499	-1.1632 d

d - Displacements include imported displacements.

Structure: 41-40 | Sub-structure:

Dist.	Coordinates			Displacements			
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	71.48000	45.77000	0.00000	-1.1503	1.5596	1.1503	-1.5596 d
1.0175	70.46250	45.77000	0.00000	-1.1069	1.8430	1.1069	-1.8430 d
2.0350	69.44500	45.77000	0.00000	-0.97961	2.1128	0.97961	-2.1128 d
3.0525	68.42750	45.77000	0.00000	-0.76672	2.3467	0.76672	-2.3467 d
4.0700	67.41000	45.77000	0.00000	-0.61336	2.4938	0.61336	-2.4938 d

d - Displacements include imported displacements.

Structure: 40-39 | Sub-structure:

Dist.	Coordinates			Displacements			
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	67.41000	45.77000	0.00000	-0.61336	2.4938	-2.4906	-0.62614 d
1.3000	67.40333	44.47000	0.00000	-0.50044	2.0347	-2.0321	-0.51086 d
2.6000	67.39667	43.17000	0.00000	-0.38752	1.5756	-1.5735	-0.39559 d
3.9001	67.39000	41.87000	0.00000	-0.27459	1.1164	-1.1150	-0.28032 d

d - Displacements include imported displacements.

Structure: 39-38 | Sub-structure:

Dist.	Coordinates			Displacements			
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	67.39000	41.87000	0.00000	-0.27459	1.1164	-0.28379	1.1141 d
1.0305	68.42050	41.86150	0.00000	-0.25181	1.0238	-0.26025	1.0217 d
2.0611	69.45100	41.85300	0.00000	-0.27713	0.91122	-0.28464	0.90891 d
3.0916	70.48150	41.84450	0.00000	-0.30178	0.76467	-0.30808	0.76215 d
4.1221	71.51200	41.83600	0.00000	-0.28963	0.59713	-0.29455	0.59472 d
5.1527	72.54250	41.82750	0.00000	-0.23933	0.41602	-0.24275	0.41403 d
6.1832	73.57300	41.81900	0.00000	-0.15159	0.22781	-0.15346	0.22655 d
7.2137	74.60350	41.81050	0.00000	-0.028529	0.037767	-0.028839	0.037530 d
8.2443	75.63400	41.80200	0.00000	0.0	0.0	0.0	0.0 d
9.2748	76.66450	41.79350	0.00000	0.0	0.0	0.0	0.0 d
10.305	77.69500	41.78500	0.00000	0.0	0.0	0.0	0.0 d
11.336	78.72550	41.77650	0.00000	0.0	0.0	0.0	0.0 d
12.366	79.75600	41.76800	0.00000	0.0	0.0	0.0	0.0 d
13.397	80.78650	41.75950	0.00000	0.0	0.0	0.0	0.0 d
14.427	81.81700	41.75100	0.00000	0.0	0.0	0.0	0.0 d
15.458	82.84750	41.74250	0.00000	0.0	0.0	0.0	0.0 d
16.489	83.87800	41.73400	0.00000	0.0	0.0	0.0	0.0 d
17.519	84.90850	41.72550	0.00000	0.0	0.0	0.0	0.0 d
18.550	85.93900	41.71700	0.00000	0.0	0.0	0.0	0.0 d
19.580	86.96950	41.70850	0.00000	0.0	0.0	0.0	0.0 d
20.611	88.00000	41.70000	0.00000	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: 38-25 | Sub-structure:

Dist.	Coordinates			Displacements			
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	88.00000	41.70000	0.00000	0.0	0.0	0.0	0.0 d
1.0176	88.00381	42.71762	0.00000	0.0	0.0	0.0	0.0 d
2.0353	88.00762	43.73524	0.00000	0.0	0.0	0.0	0.0 d
3.0529	88.01143	44.75286	0.00000	0.0	0.0	0.0	0.0 d
4.0705	88.01524	45.77048	0.00000	0.0	0.0	0.0	0.0 d
5.0881	88.01905	46.78810	0.00000	0.0	0.0	0.0	0.0 d
6.1058	88.02286	47.80571	0.00000	0.0	0.0	0.0	0.0 d
7.1234	88.02667	48.82333	0.00000	0.0	0.0	0.0	0.0 d
8.1410	88.03048	49.84095	0.00000	0.0	0.0	0.0	0.0 d
9.1586	88.03429	50.85857	0.00000	0.0	0.0	0.0	0.0 d
10.176	88.03810	51.87619	0.00000	0.0	0.0	0.0	0.0 d
11.194	88.04190	52.89381	0.00000	0.0	0.0	0.0	0.0 d
12.212	88.04571	53.91143	0.00000	0.0	0.0	0.0	0.0 d
13.229	88.04952	54.92905	0.00000	0.0	0.0	0.0	0.0 d
14.247	88.05333	55.94667	0.00000	0.0	0.0	0.0	0.0 d
15.264	88.05714	56.96429	0.00000	0.0	0.0	0.0	0.0 d
16.282	88.06095	57.98190	0.00000	0.0	0.0	0.0	0.0 d
17.300	88.06476	58.99952	0.00000	0.0	0.0	0.0	0.0 d
18.317	88.06857	60.01714	0.00000	0.0	0.0	0.0	0.0 d
19.335	88.07238	61.03476	0.00000	0.0	0.0	0.0	0.0 d
20.353	88.07619	62.05238	0.00000	0.0	0.0	0.0	0.0 d
21.370	88.08000	63.07000	0.00000	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: 20-22 | Sub-structure:

Dist.	Coordinates			Displacements			
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	55.96000	70.70000	0.00000	0.12817	-0.41142	0.12858	-0.41129 d
1.0170	56.97700	70.69900	0.00000	0.12132	-0.52867	0.12184	-0.52855 d
2.0340	57.99400	70.69800	0.00000	0.093137	-0.63186	0.093758	-0.63177 d

3.0510	59.01100	70.69700	0.00000	0.046536	-0.71253	0.047236	-0.71248	d
4.0680	60.02800	70.69600	0.00000	0.0	-0.75525	742.63E-6	-0.75525	d
5.0850	61.04500	70.69500	0.00000	0.0	-0.75563	742.99E-6	-0.75562	d
6.1020	62.06200	70.69400	0.00000	0.0	-0.75600	743.36E-6	-0.75600	d
7.1190	63.07900	70.69300	0.00000	0.0	-0.75638	743.73E-6	-0.75637	d
8.1360	64.09600	70.69200	0.00000	0.0	-0.75675	744.10E-6	-0.75675	d
9.1530	65.11300	70.69100	0.00000	0.0	-0.75713	744.47E-6	-0.75712	d
10.170	66.13000	70.69000	0.00000	-0.0067287	-0.75729	-0.0059841	-0.75729	d

d - Displacements include imported displacements.

Structure: 22-b | Sub-structure:

Dist.	Coordinates			Displacements				d
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	66.13000	70.69000	0.00000	-0.0067287	-0.75729	0.75711	-0.017646	d
0.69360	66.14000	69.99647	0.00000	-0.010446	-1.0173	1.0170	-0.025111	d
1.3872	66.15000	69.30294	0.00000	-0.015105	-1.2773	1.2769	-0.033518	d
2.0808	66.16000	68.60941	0.00000	-0.020895	-1.5372	1.5368	-0.043056	d
2.7744	66.17000	67.91588	0.00000	-0.028063	-1.7971	1.7965	-0.053970	d
3.4680	66.18000	67.22235	0.00000	-0.036928	-2.0570	2.0563	-0.066581	d
4.1616	66.19000	66.52882	0.00000	-0.047921	-2.3168	2.3159	-0.081318	d
4.8552	66.20000	65.83529	0.00000	-0.061627	-2.5765	2.5753	-0.098767	d
5.5488	66.21000	65.14176	0.00000	-0.078873	-2.8360	2.8346	-0.11975	d
6.2424	66.22000	64.44824	0.00000	-0.10085	-3.0953	3.0935	-0.14547	d
6.9360	66.23000	63.75471	0.00000	-0.12937	-3.3542	3.3520	-0.17772	d
7.6296	66.24000	63.06118	0.00000	-0.16728	-3.6125	3.6097	-0.21934	d
8.3232	66.25000	62.36765	0.00000	-0.21935	-3.8697	3.8662	-0.27512	d
9.0168	66.26000	61.67412	0.00000	-0.29427	-4.1248	4.1201	-0.35370	d
9.7104	66.27000	60.98059	0.00000	-0.40956	-4.3750	4.3687	-0.47259	d
10.404	66.28000	60.28706	0.00000	-0.60658	-4.6125	4.6033	-0.67302	d
11.098	66.29000	59.59353	0.00000	-1.0104	-4.8030	4.7880	-1.0795	d
11.791	66.30000	58.90000	0.00000	-2.2102	-4.6572	4.6249	-2.2771	d

d - Displacements include imported displacements.

Structure: e-45 | Sub-structure:

Dist.	Coordinates			Displacements				d
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	64.74000	51.60000	0.00000	-1.1775	4.7875	-4.7661	-1.2617	d
0.98415	64.72267	50.61600	0.00000	-1.0923	4.4411	-4.4212	-1.1704	d
1.9683	64.70533	49.63200	0.00000	-1.0071	4.0946	-4.0763	-1.0791	d
2.9525	64.68800	48.64800	0.00000	-0.92189	3.7482	-3.7314	-0.98776	d
3.9366	64.67067	47.66400	0.00000	-0.83668	3.4018	-3.3865	-0.89646	d
4.9208	64.65333	46.68000	0.00000	-0.75147	3.0553	-3.0416	-0.80516	d
5.9049	64.63600	45.69600	0.00000	-0.66626	2.7089	-2.6967	-0.71387	d
6.8891	64.61867	44.71200	0.00000	-0.58105	2.3624	-2.3518	-0.62257	d
7.8732	64.60133	43.72800	0.00000	-0.49584	2.0160	-2.0069	-0.53127	d
8.8574	64.58400	42.74400	0.00000	-0.41063	1.6695	-1.6620	-0.43997	d
9.8415	64.56667	41.76000	0.00000	-0.32542	1.3231	-1.3172	-0.34867	d
10.826	64.54933	40.77600	0.00000	-0.24021	0.97665	-0.97227	-0.25738	d
11.810	64.53200	39.79200	0.00000	-0.15500	0.63021	-0.62738	-0.16608	d
12.794	64.51467	38.80800	0.00000	-0.069793	0.28377	-0.28249	-0.074780	d
13.778	64.49733	37.82400	0.00000	0.0	0.0	0.0	0.0	d
14.762	64.48000	36.84000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 18-31 | Sub-structure:

Dist.	Coordinates			Displacements				d
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	59.17000	64.78000	0.00000	0.27717	-2.7589	0.29332	-2.7572	d
1.1384	60.30833	64.77333	0.00000	0.0	-2.9762	0.017430	-2.9762	d

2.2767	61.44667	64.76667	0.00000	0.0	-2.9788	0.017445	-2.9787	d
3.4151	62.58500	64.76000	0.00000	0.0	-2.9813	0.017459	-2.9812	d
4.5534	63.72333	64.75333	0.00000	0.0	-2.9838	0.017474	-2.9837	d
5.6918	64.86167	64.74667	0.00000	0.0	-2.9862	0.017489	-2.9862	d
6.8301	66.00000	64.74000	0.00000	0.0	-2.9888	0.017503	-2.9887	d

d - Displacements include imported displacements.

Structure: 23-24 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	66.00000	63.14000	0.00000	0.0	-3.5888	0.011197	-3.5887	d
1.0683	67.06833	63.13667	0.00000	-0.75301	-3.4670	-0.74219	-3.4693	d
2.1367	68.13667	63.13333	0.00000	-1.3762	-3.1361	-1.3664	-3.1403	d
3.2050	69.20500	63.13000	0.00000	-1.7826	-2.6978	-1.7742	-2.7033	d
4.2734	70.27333	63.12667	0.00000	-1.9793	-2.2415	-1.9723	-2.2476	d
5.3417	71.34167	63.12333	0.00000	-2.0092	-1.8173	-2.0036	-1.8236	d
6.4100	72.41000	63.12000	0.00000	-1.9181	-1.4438	-1.9136	-1.4498	d
7.4784	73.47833	63.11667	0.00000	-1.7422	-1.1228	-1.7386	-1.1282	d
8.5467	74.54667	63.11333	0.00000	-1.5073	-0.84913	-1.5047	-0.85383	d
9.6150	75.61500	63.11000	0.00000	-1.2313	-0.61596	-1.2294	-0.61980	d
10.683	76.68333	63.10667	0.00000	-0.92594	-0.41652	-0.92464	-0.41940	d
11.752	77.75167	63.10333	0.00000	-0.59947	-0.24493	-0.59870	-0.24680	d
12.820	78.82000	63.10000	0.00000	-0.25748	-0.096352	-0.25717	-0.097155	d

d - Displacements include imported displacements.

Structure: b-27 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	66.10000	58.46000	0.00000	-2.5112	-4.7085	-2.2600	-4.8340	d
1.0645	67.16300	58.40400	0.00000	-4.9532	-0.40735	-4.9249	-0.66737	d
2.1289	68.22600	58.34800	0.00000	-4.5719	-0.078755	-4.5615	-0.31917	d
3.1934	69.28900	58.29200	0.00000	-4.1741	0.016337	-4.1692	-0.20328	d
4.2579	70.35200	58.23600	0.00000	-3.7754	0.014776	-3.7709	-0.18386	d
5.3224	71.41500	58.18000	0.00000	-3.3767	0.013216	-3.3727	-0.16444	d
6.3868	72.47800	58.12400	0.00000	-2.9780	0.011655	-2.9745	-0.14503	d
7.4513	73.54100	58.06800	0.00000	-2.5793	0.010095	-2.5762	-0.12561	d
8.5158	74.60400	58.01200	0.00000	-2.1806	0.0085345	-2.1780	-0.10619	d
9.5803	75.66700	57.95600	0.00000	-1.7819	0.0069740	-1.7798	-0.086776	d
10.645	76.73000	57.90000	0.00000	-1.3832	0.0054136	-1.3815	-0.067360	d

d - Displacements include imported displacements.

Structure: 42-37 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	64.54000	46.73000	0.00000	-0.75824	3.0829	-0.79504	3.0736	d
1.0183	65.55826	46.71783	0.00000	-0.73540	2.9900	-0.77109	2.9810	d
2.0367	66.57652	46.70565	0.00000	-0.71256	2.8971	-0.74714	2.8884	d
3.0550	67.59478	46.69348	0.00000	-0.68972	2.8043	-0.72320	2.7958	d
4.0733	68.61304	46.68130	0.00000	-1.0293	2.5678	-1.0599	2.5553	d
5.0917	69.63130	46.66913	0.00000	-1.2624	2.2704	-1.2895	2.2552	d
6.1100	70.64957	46.65696	0.00000	-1.3844	1.9482	-1.4076	1.9315	d
7.1283	71.66783	46.64478	0.00000	-1.4064	1.6266	-1.4258	1.6097	d
8.1467	72.68609	46.63261	0.00000	-1.3451	1.3213	-1.3608	1.3051	d
9.1650	73.70435	46.62043	0.00000	-1.2172	1.0395	-1.2296	1.0249	d
10.183	74.72261	46.60826	0.00000	-1.0372	0.78381	-1.0465	0.77136	d
11.202	75.74087	46.59609	0.00000	-0.81681	0.55377	-0.82338	0.54396	d
12.220	76.75913	46.58391	0.00000	-0.56522	0.34757	-0.56933	0.34079	d
13.238	77.77739	46.57174	0.00000	-0.28939	0.16287	-0.29132	0.15940	d
14.257	78.79565	46.55957	0.00000	0.0	0.0	0.0	0.0	d

15.275	79.81391	46.54739	0.00000	0.0	0.0	0.0	0.0	0.0	d
16.293	80.83217	46.53522	0.00000	0.0	0.0	0.0	0.0	0.0	d
17.312	81.85043	46.52304	0.00000	0.0	0.0	0.0	0.0	0.0	d
18.330	82.86870	46.51087	0.00000	0.0	0.0	0.0	0.0	0.0	d
19.348	83.88696	46.49870	0.00000	0.0	0.0	0.0	0.0	0.0	d
20.367	84.90522	46.48652	0.00000	0.0	0.0	0.0	0.0	0.0	d
21.385	85.92348	46.47435	0.00000	0.0	0.0	0.0	0.0	0.0	d
22.403	86.94174	46.46217	0.00000	0.0	0.0	0.0	0.0	0.0	d
23.422	87.96000	46.45000	0.00000	0.0	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 47-43 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	54.96000	44.83000	0.00000	0.68541	0.96606	0.68541	0.96606	d
1.0600	56.02000	44.83000	0.00000	0.70166	1.2648	0.70166	1.2648	d
2.1200	57.08000	44.83000	0.00000	0.64246	1.6062	0.64246	1.6062	d
3.1800	58.14000	44.83000	0.00000	0.48181	1.9645	0.48181	1.9645	d
4.2400	59.20000	44.83000	0.00000	0.20776	2.2954	0.20776	2.2954	d
5.3000	60.26000	44.83000	0.00000	-0.16345	2.5446	-0.16345	2.5446	d
6.3600	61.32000	44.83000	0.00000	-0.58424	2.6680	-0.58424	2.6680	d
7.4200	62.38000	44.83000	0.00000	-0.63920	2.5989	-0.63920	2.5989	d
8.4800	63.44000	44.83000	0.00000	-0.61653	2.5067	-0.61653	2.5067	d
9.5400	64.50000	44.83000	0.00000	-0.59385	2.4145	-0.59385	2.4145	d

d - Displacements include imported displacements.

Structure: 44-39 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	64.44000	41.91000	0.00000	-0.34118	1.3872	-0.35995	1.3824	d
1.4751	65.91500	41.89000	0.00000	-0.30789	1.2518	-0.32483	1.2475	d
2.9503	67.39000	41.87000	0.00000	-0.27459	1.1164	-0.28971	1.1126	d

d - Displacements include imported displacements.

Structure: 46-45 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	54.96000	36.71000	0.00000	0.0	0.0	0.0	0.0	d
1.0579	56.01778	36.72444	0.00000	0.0	0.0	0.0	0.0	d
2.1158	57.07556	36.73889	0.00000	0.0	0.0	0.0	0.0	d
3.1736	58.13333	36.75333	0.00000	0.0	0.0	0.0	0.0	d
4.2315	59.19111	36.76778	0.00000	0.0	0.0	0.0	0.0	d
5.2894	60.24889	36.78222	0.00000	0.0	0.0	0.0	0.0	d
6.3473	61.30667	36.79667	0.00000	0.0	0.0	0.0	0.0	d
7.4051	62.36444	36.81111	0.00000	0.0	0.0	0.0	0.0	d
8.4630	63.42222	36.82556	0.00000	0.0	0.0	0.0	0.0	d
9.5209	64.48000	36.84000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: a-12 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	44.06000	58.90000	0.00000	-0.0037284	-1.4056	0.16757	1.3956	d

1.1151	42.95250	58.77000	0.00000	-0.0038606	-1.4554	0.17351	1.4451	d
2.2302	41.84500	58.64000	0.00000	-0.0039928	-1.5053	0.17945	1.4946	d
3.3453	40.73750	58.51000	0.00000	-0.0041250	-1.5551	0.18540	1.5441	d
4.4604	39.63000	58.38000	0.00000	-0.0042573	-1.6050	0.19134	1.5936	d

d - Displacements include imported displacements.

Structure: 12-11 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	39.63000	58.38000	0.00000	-0.0042573	-1.6050	1.6050	-0.0042573	d
1.1167	39.63000	57.26333	0.00000	1.6050	0.0	0.0	1.6050	d
2.2333	39.63000	56.14667	0.00000	1.6050	0.0	0.0	1.6050	d
3.3500	39.63000	55.03000	0.00000	1.6050	0.0	0.0	1.6050	d
4.4667	39.63000	53.91333	0.00000	1.6050	0.0	0.0	1.6050	d
5.5833	39.63000	52.79667	0.00000	1.6050	0.0	0.0	1.6050	d
6.7000	39.63000	51.68000	0.00000	1.6050	0.0	0.0	1.6050	d

d - Displacements include imported displacements.

Structure: 11-f | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	39.63000	51.68000	0.00000	1.6050	0.0	1.6047	0.028720	d
0.55884	40.18875	51.67000	0.00000	0.0	1.6013	-0.028653	1.6010	d
1.1177	40.74750	51.66000	0.00000	0.0	1.5975	-0.028586	1.5972	d
1.6765	41.30625	51.65000	0.00000	0.0	1.5938	-0.028519	1.5935	d
2.2354	41.86500	51.64000	0.00000	0.0	1.5900	-0.028452	1.5897	d
2.7942	42.42375	51.63000	0.00000	0.0	1.5863	-0.028385	1.5860	d
3.3530	42.98250	51.62000	0.00000	0.0	1.5825	-0.028318	1.5822	d
3.9119	43.54125	51.61000	0.00000	0.0	1.5788	-0.028251	1.5785	d
4.4707	44.10000	51.60000	0.00000	0.0	1.5750	-0.028183	1.5747	d

d - Displacements include imported displacements.

Structure: ag | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	44.06000	58.90000	0.00000	-0.0037284	-1.4056	0.059869	-1.4043	d
1.0047	45.06364	58.85455	0.00000	-0.0037709	-1.4216	0.060553	-1.4204	d
2.0093	46.06727	58.80909	0.00000	0.0017098	-1.4379	0.066763	-1.4363	d
3.0140	47.07091	58.76364	0.00000	0.010084	-1.4542	0.075868	-1.4523	d
4.0187	48.07455	58.71818	0.00000	0.018044	-1.4705	0.084558	-1.4682	d
5.0233	49.07818	58.67273	0.00000	0.025472	-1.4868	0.092715	-1.4841	d
6.0280	50.08182	58.62727	0.00000	0.032204	-1.5031	0.10017	-1.5001	d
7.0327	51.08545	58.58182	0.00000	0.037999	-1.5192	0.10670	-1.5160	d
8.0373	52.08909	58.53636	0.00000	0.042493	-1.5353	0.11191	-1.5318	d
9.0420	53.09273	58.49091	0.00000	0.045102	-1.5513	0.11524	-1.5477	d
10.047	54.09636	58.44545	0.00000	0.044834	-1.5672	0.11569	-1.5636	d
11.051	55.10000	58.40000	0.00000	0.039851	-1.5829	0.11143	-1.5795	d

d - Displacements include imported displacements.

Structure: gb | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	55.10000	58.40000	0.00000	0.039851	-1.5829	0.031519	-1.5831	d

0.57001	55.67000	58.40300	0.00000	0.049926	-1.5816	0.041601	-1.5819	d
1.1400	56.24000	58.40600	0.00000	0.060559	-1.5805	0.052241	-1.5808	d
1.7100	56.81000	58.40900	0.00000	0.075208	-1.5796	0.066893	-1.5800	d
2.2800	57.38000	58.41200	0.00000	0.096670	-1.5796	0.088355	-1.5800	d
2.8500	57.95000	58.41500	0.00000	0.131113	-1.5812	0.12280	-1.5819	d
3.4200	58.52000	58.41800	0.00000	0.19539	-1.5885	0.18703	-1.5895	d
3.9901	59.09000	58.42100	0.00000	0.35626	-1.6251	0.34770	-1.6269	d
4.5601	59.66000	58.42400	0.00000	1.2139	-2.4365	1.2011	-2.4428	d
5.1301	60.23000	58.42700	0.00000	-0.0041562	-5.3619	-0.032376	-5.3618	d
5.7001	60.80000	58.43000	0.00000	-0.0041517	-5.3602	-0.032363	-5.3601	d
6.2701	61.37000	58.43300	0.00000	-0.0041472	-5.3585	-0.032349	-5.3584	d
6.8401	61.94000	58.43600	0.00000	-0.0041427	-5.3568	-0.032336	-5.3567	d
7.4101	62.51000	58.43900	0.00000	-0.0041382	-5.3551	-0.032323	-5.3550	d
7.9801	63.08000	58.44200	0.00000	-0.0041337	-5.3534	-0.032309	-5.3533	d
8.5501	63.65000	58.44500	0.00000	-0.0041292	-5.3517	-0.032296	-5.3516	d
9.1201	64.22000	58.44800	0.00000	-0.0041248	-5.3500	-0.032282	-5.3499	d
9.6901	64.79000	58.45100	0.00000	-0.0041203	-5.3483	-0.032269	-5.3482	d
10.260	65.36000	58.45400	0.00000	-0.0041158	-5.3467	-0.032256	-5.3466	d
10.830	65.93000	58.45700	0.00000	-0.0041113	-5.3450	-0.032242	-5.3449	d
11.400	66.50000	58.46000	0.00000	-4.9742	-1.5544	-4.9823	-1.5282	d

d - Displacements include imported displacements.

Structure: bc | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	66.50000	58.46000	0.00000	-4.9742	-1.5544	1.5544	-4.9742	d
0.27800	66.50000	58.18200	0.00000	-5.2198	0.020430	-0.020430	-5.2198	d
0.55600	66.50000	57.90400	0.00000	-5.2194	0.020428	-0.020428	-5.2194	d
0.83400	66.50000	57.62600	0.00000	-5.2190	0.020426	-0.020426	-5.2190	d
1.1120	66.50000	57.34800	0.00000	-5.2185	0.020425	-0.020425	-5.2185	d
1.3900	66.50000	57.07000	0.00000	-5.2181	0.020423	-0.020423	-5.2181	d
1.6680	66.50000	56.79200	0.00000	-5.2177	0.020422	-0.020422	-5.2177	d
1.9460	66.50000	56.51400	0.00000	-5.2173	0.020420	-0.020420	-5.2173	d
2.2240	66.50000	56.23600	0.00000	-5.2169	0.020418	-0.020418	-5.2169	d
2.5020	66.50000	55.95800	0.00000	-5.2165	0.020417	-0.020417	-5.2165	d
2.7800	66.50000	55.68000	0.00000	-5.2161	0.020415	-0.020415	-5.2161	d
3.0580	66.50000	55.40200	0.00000	-5.2157	0.020414	-0.020414	-5.2157	d
3.3360	66.50000	55.12400	0.00000	-5.2153	0.020412	-0.020412	-5.2153	d
3.6140	66.50000	54.84600	0.00000	-5.2149	0.020410	-0.020410	-5.2149	d
3.8920	66.50000	54.56800	0.00000	-5.2145	0.020409	-0.020409	-5.2145	d
4.1700	66.50000	54.29000	0.00000	-5.2141	0.020407	-0.020407	-5.2141	d
4.4480	66.50000	54.01200	0.00000	-5.2137	0.020406	-0.020406	-5.2137	d
4.7260	66.50000	53.73400	0.00000	-5.2132	0.020404	-0.020404	-5.2132	d
5.0040	66.50000	53.45600	0.00000	-5.2128	0.020402	-0.020402	-5.2128	d
5.2820	66.50000	53.17800	0.00000	-5.2073	0.22912	-0.22912	-5.2073	d
5.5600	66.50000	52.90000	0.00000	-4.4430	2.6658	-2.6658	-4.4430	d

d - Displacements include imported displacements.

Structure: cd | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	66.50000	52.90000	0.00000	-4.4430	2.6658	2.4383	-4.5718	d
1.7493	65.00000	52.00000	0.00000	-1.2067	4.9064	-1.4895	-4.8280	d

d - Displacements include imported displacements.

Structure: eh | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	64.74000	51.60000	0.00000	-1.1775	4.7875	1.1775	-4.7875	d

1.0844	63.65556	51.60000	0.00000	-1.2007	4.8818	1.2007	-4.8818	d
2.1689	62.57111	51.60000	0.00000	-1.2239	4.9762	1.2239	-4.9762	d
3.2533	61.48667	51.60000	0.00000	-1.2471	5.0705	1.2471	-5.0705	d
4.3378	60.40222	51.60000	0.00000	-1.2703	5.1648	1.2703	-5.1648	d
5.4222	59.31778	51.60000	0.00000	0.32672	1.6270	-0.32672	-1.6270	d
6.5067	58.23333	51.60000	0.00000	0.10538	1.5803	-0.10538	-1.5803	d
7.5911	57.14889	51.60000	0.00000	0.062681	1.5769	-0.062681	-1.5769	d
8.6756	56.06444	51.60000	0.00000	0.044598	1.5760	-0.044598	-1.5760	d
9.7600	54.98000	51.60000	0.00000	0.032693	1.5755	-0.032693	-1.5755	d

d - Displacements include imported displacements.

Structure: hf | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	54.98000	51.60000	0.00000	0.032693	1.5755	-0.032693	-1.5755	d
1.0880	53.89200	51.60000	0.00000	0.023657	1.5753	-0.023657	-1.5753	d
2.1760	52.80400	51.60000	0.00000	0.017422	1.5752	-0.017422	-1.5752	d
3.2640	51.71600	51.60000	0.00000	0.012861	1.5751	-0.012861	-1.5751	d
4.3520	50.62800	51.60000	0.00000	0.0093794	1.5751	-0.0093794	-1.5751	d
5.4400	49.54000	51.60000	0.00000	0.0066347	1.5751	-0.0066347	-1.5751	d
6.5280	48.45200	51.60000	0.00000	0.0044153	1.5750	-0.0044153	-1.5750	d
7.6160	47.36400	51.60000	0.00000	0.0025836	1.5750	-0.0025836	-1.5750	d
8.7040	46.27600	51.60000	0.00000	0.0010461	1.5750	-0.0010461	-1.5750	d
9.7920	45.18800	51.60000	0.00000	0.0	1.5750	0.0	-1.5750	d
10.880	44.10000	51.60000	0.00000	0.0	1.5750	0.0	-1.5750	d

d - Displacements include imported displacements.

Structure: de | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	65.00000	52.00000	0.00000	-1.2067	4.9064	-3.4560	-3.6857	d
0.11927	64.93500	51.90000	0.00000	-1.1994	4.8767	-3.4351	-3.6634	d
0.23854	64.87000	51.80000	0.00000	-1.1921	4.8469	-3.4142	-3.6411	d
0.35781	64.80500	51.70000	0.00000	-1.1848	4.8172	-3.3933	-3.6187	d
0.47707	64.74000	51.60000	0.00000	-1.1775	4.7875	-3.3723	-3.5964	d

d - Displacements include imported displacements.

Specific Building Damage Results - Vertical Displacements

Structure: 21-20 | Sub-structure:

Dist.	Coordinates			Displacements	
	x	y	z	z	
[m]	[m]	[m]	[m]	[mm]	
Vertical Offset 1					
0.0	55.96000	70.70000	0.00000	-0.14196	d
1.0682	54.89182	70.70182	0.00000	-0.15795	d
2.1364	53.82364	70.70364	0.00000	-0.17474	d
3.2046	52.75545	70.70545	0.00000	-0.19601	d
4.2727	51.68727	70.70727	0.00000	-0.20442	d
5.3409	50.61909	70.70909	0.00000	-0.20366	d
6.4091	49.55091	70.71091	0.00000	-0.20249	d
7.4773	48.48273	70.71273	0.00000	-0.20096	d
8.5455	47.41455	70.71455	0.00000	-0.19905	d
9.6137	46.34636	70.71636	0.00000	-0.19668	d
10.682	45.27818	70.71818	0.00000	-0.19371	d
11.750	44.21000	70.72000	0.00000	-0.19001	d

d - Displacements include imported displacements.

Structure: 19-20 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	59.14000	66.79000	0.00000	0.37896 d
1.0080	58.50400	67.57200	0.00000	0.16405 d
2.0160	57.86800	68.35400	0.00000	0.012116 d
3.0239	57.23200	69.13600	0.00000	-0.080958 d
4.0319	56.59600	69.91800	0.00000	-0.12620 d
5.0399	55.96000	70.70000	0.00000	-0.14196 d

d - Displacements include imported displacements.

Structure: 19-18 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	59.14000	66.79000	0.00000	0.37896 d
1.0051	59.15500	65.78500	0.00000	0.64204 d
2.0102	59.17000	64.78000	0.00000	0.92729 d

d - Displacements include imported displacements.

Structure: 18-13 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	59.17000	64.78000	0.00000	0.92729 d
1.0686	58.10143	64.78143	0.00000	0.68941 d
2.1371	57.03286	64.78286	0.00000	0.44041 d
3.2057	55.96429	64.78429	0.00000	0.20698 d
4.2743	54.89571	64.78571	0.00000	0.0063543 d
5.3429	53.82714	64.78714	0.00000	-0.15322 d
6.4114	52.75857	64.78857	0.00000	-0.27063 d
7.4800	51.69000	64.79000	0.00000	-0.34979 d
8.5486	50.62143	64.79143	0.00000	-0.39798 d
9.6172	49.55286	64.79286	0.00000	-0.42458 d
10.686	48.48429	64.79429	0.00000	-0.44031 d
11.754	47.41571	64.79571	0.00000	-0.45665 d
12.823	46.34714	64.79714	0.00000	-0.47034 d
13.891	45.27857	64.79857	0.00000	-0.47508 d
14.960	44.21000	64.80000	0.00000	-0.47750 d

d - Displacements include imported displacements.

Structure: 21-a | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	44.21000	70.72000	0.00000	-0.19001 d
0.34768	44.20559	70.37235	0.00000	-0.19962 d
0.69535	44.20118	70.02471	0.00000	-0.20981 d
1.0430	44.19676	69.67706	0.00000	-0.22062 d
1.3907	44.19235	69.32941	0.00000	-0.23210 d
1.7384	44.18794	68.98176	0.00000	-0.24430 d
2.0861	44.18353	68.63412	0.00000	-0.25728 d
2.4337	44.17912	68.28647	0.00000	-0.27112 d
2.7814	44.17471	67.93882	0.00000	-0.28587 d
3.1291	44.17029	67.59118	0.00000	-0.30162 d
3.4768	44.16588	67.24353	0.00000	-0.31845 d
3.8244	44.16147	66.89588	0.00000	-0.33648 d
4.1721	44.15706	66.54824	0.00000	-0.35580 d
4.5198	44.15265	66.20059	0.00000	-0.37653 d
4.8675	44.14824	65.85294	0.00000	-0.39883 d
5.2151	44.14382	65.50529	0.00000	-0.42283 d
5.5628	44.13941	65.15765	0.00000	-0.44872 d

5.9105	44.13500	64.81000	0.00000	-0.47669	d
6.2582	44.13059	64.46235	0.00000	-0.50697	d
6.6058	44.12618	64.11471	0.00000	-0.53980	d
6.9535	44.12176	63.76706	0.00000	-0.57548	d
7.3012	44.11735	63.41941	0.00000	-0.61433	d
7.6489	44.11294	63.07176	0.00000	-0.65674	d
7.9965	44.10853	62.72412	0.00000	-0.70316	d
8.3442	44.10412	62.37647	0.00000	-0.73821	d
8.6919	44.09971	62.02882	0.00000	-0.78009	d
9.0396	44.09529	61.68118	0.00000	-0.81459	d
9.3872	44.09088	61.33353	0.00000	-0.82944	d
9.7349	44.08647	60.98588	0.00000	-0.82027	d
10.083	44.08206	60.63824	0.00000	-0.79066	d
10.430	44.07765	60.29059	0.00000	-0.75254	d
10.778	44.07324	59.94294	0.00000	-0.72686	d
11.126	44.06882	59.59529	0.00000	-0.74553	d
11.473	44.06441	59.24765	0.00000	-0.85717	d
11.821	44.06000	58.90000	0.00000	-1.1478	d

d - Displacements include imported displacements.

Structure: f-50 | Sub-structure:

Dist.	Coordinates			Displacements	
	x	y	z	z	
[m]	[m]	[m]	[m]	[mm]	
Vertical Offset 1					
0.0	44.10000	51.60000	0.00000	-2.2459	d
0.99267	44.10400	50.60733	0.00000	-0.79119	d
1.9853	44.10800	49.61467	0.00000	-0.77702	d
2.9780	44.11200	48.62200	0.00000	-0.83496	d
3.9707	44.11600	47.62933	0.00000	-0.73916	d
4.9634	44.12000	46.63667	0.00000	-0.61968	d
5.9560	44.12400	45.64400	0.00000	-0.51570	d
6.9487	44.12800	44.65133	0.00000	-0.43333	d
7.9414	44.13200	43.65867	0.00000	-0.36710	d
8.9341	44.13600	42.66600	0.00000	-0.31314	d
9.9267	44.14000	41.67333	0.00000	-0.26868	d
10.919	44.14400	40.68067	0.00000	-0.23168	d
11.912	44.14800	39.68800	0.00000	-0.20062	d
12.905	44.15200	38.69533	0.00000	-0.17435	d
13.897	44.15600	37.70267	0.00000	-0.15199	d
14.890	44.16000	36.71000	0.00000	-0.13284	d

d - Displacements include imported displacements.

Structure: 14-15 | Sub-structure:

Dist.	Coordinates			Displacements	
	x	y	z	z	
[m]	[m]	[m]	[m]	[mm]	
Vertical Offset 1					
0.0	55.00000	64.76000	0.00000	0.025038	d
1.0700	55.00000	63.69000	0.00000	0.029897	d
2.1400	55.00000	62.62000	0.00000	-0.054327	d

d - Displacements include imported displacements.

Structure: 15-16 | Sub-structure:

Dist.	Coordinates			Displacements	
	x	y	z	z	
[m]	[m]	[m]	[m]	[mm]	
Vertical Offset 1					
0.0	55.00000	62.62000	0.00000	-0.054327	d
1.6907	56.23000	61.46000	0.00000	0.059745	d

d - Displacements include imported displacements.

Structure: 16-17 | Sub-structure:

Dist.	Coordinates			Displacements	
	x	y	z	z	
[m]	[m]	[m]	[m]	[mm]	

Vertical Offset 1

0.0 56.23000 61.46000 0.00000 0.059745 d
1.9000 56.22000 59.56000 0.00000 -0.60235 d
d - Displacements include imported displacements.

Structure: 17-g | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0 56.22000 59.56000 0.00000 -0.60235 d
1.6125 55.10000 58.40000 0.00000 -2.5155 d
d - Displacements include imported displacements.

Structure: h-49 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0 54.98000 51.60000 0.00000 -2.2688 d
1.0678 55.74000 50.85000 0.00000 -1.0313 d
2.1355 56.50000 50.10000 0.00000 -0.43612 d
d - Displacements include imported displacements.

Structure: 49-36 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0 56.50000 50.10000 0.00000 -0.43612 d
1.1950 56.50000 48.90500 0.00000 -0.078569 d
2.3900 56.50000 47.71000 0.00000 0.15741 d
d - Displacements include imported displacements.

Structure: 36-48 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0 56.50000 47.71000 0.00000 0.15741 d
1.1506 55.73000 46.85500 0.00000 0.059268 d
2.3012 54.96000 46.00000 0.00000 -0.050586 d
d - Displacements include imported displacements.

Structure: 48-47 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0 54.96000 46.00000 0.00000 -0.050586 d
1.1700 54.96000 44.83000 0.00000 -0.058106 d
d - Displacements include imported displacements.

Structure: 47-51 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

Dist.	x	y	z	z	
[m]	[m]	[m]	[m]	[mm]	
0.0	54.96000	44.83000	0.00000	-0.058106	d
1.0750	53.88500	44.83000	0.00000	-0.18799	d
2.1500	52.81000	44.83000	0.00000	-0.28353	d
3.2250	51.73500	44.83000	0.00000	-0.34747	d
4.3000	50.66000	44.83000	0.00000	-0.38578	d
5.3750	49.58500	44.83000	0.00000	-0.40655	d
6.4500	48.51000	44.83000	0.00000	-0.41924	d
7.5250	47.43500	44.83000	0.00000	-0.43413	d
8.6000	46.36000	44.83000	0.00000	-0.44296	d
9.6750	45.28500	44.83000	0.00000	-0.44602	d
10.750	44.21000	44.83000	0.00000	-0.44691	d

d - Displacements include imported displacements.

Structure: 50-46 | Sub-structure:

Dist.	Coordinates			Displacements	
	x	y	z	z	
[m]	[m]	[m]	[m]	[mm]	
Vertical Offset 1					
0.0	44.16000	36.71000	0.00000	-0.13284	d
1.0800	45.24000	36.71000	0.00000	-0.13570	d
2.1600	46.32000	36.71000	0.00000	-0.13805	d
3.2400	47.40000	36.71000	0.00000	-0.13994	d
4.3200	48.48000	36.71000	0.00000	-0.14140	d
5.4000	49.56000	36.71000	0.00000	-0.14244	d
6.4800	50.64000	36.71000	0.00000	-0.14306	d
7.5600	51.72000	36.71000	0.00000	-0.14325	d
8.6400	52.80000	36.71000	0.00000	-0.14296	d
9.7200	53.88000	36.71000	0.00000	-0.14213	d
10.800	54.96000	36.71000	0.00000	-0.14072	d

d - Displacements include imported displacements.

Structure: 46-47 | Sub-structure:

Dist.	Coordinates			Displacements	
	x	y	z	z	
[m]	[m]	[m]	[m]	[mm]	
Vertical Offset 1					
0.0	54.96000	36.71000	0.00000	-0.14072	d
1.0150	54.96000	37.72500	0.00000	-0.16172	d
2.0300	54.96000	38.74000	0.00000	-0.16040	d
3.0450	54.96000	39.75500	0.00000	-0.16540	d
4.0600	54.96000	40.77000	0.00000	-0.17144	d
5.0750	54.96000	41.78500	0.00000	-0.16295	d
6.0900	54.96000	42.80000	0.00000	-0.13553	d
7.1050	54.96000	43.81500	0.00000	-0.095325	d
8.1200	54.96000	44.83000	0.00000	-0.058106	d

d - Displacements include imported displacements.

Structure: 24-25 | Sub-structure:

Dist.	Coordinates			Displacements	
	x	y	z	z	
[m]	[m]	[m]	[m]	[mm]	
Vertical Offset 1					
0.0	78.82000	63.10000	0.00000	-0.015677	d
1.0289	79.84889	63.09667	0.00000	-0.054120	d
2.0578	80.87778	63.09333	0.00000	-0.047551	d
3.0867	81.90667	63.09000	0.00000	-0.041800	d
4.1156	82.93556	63.08667	0.00000	-0.036759	d
5.1445	83.96444	63.08333	0.00000	-0.032334	d
6.1734	84.99333	63.08000	0.00000	-0.028445	d
7.2023	86.02222	63.07667	0.00000	-0.025021	d
8.2312	87.05111	63.07333	0.00000	-0.022003	d
9.2600	88.08000	63.07000	0.00000	-0.019341	d

d - Displacements include imported displacements.

Structure: 25-26 | Sub-structure:

Dist.	Coordinates			Displacements	
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	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	88.08000	63.07000	0.00000	-0.019341	d
1.0641	88.06400	62.00600	0.00000	-0.020018	d
2.1282	88.04800	60.94200	0.00000	-0.020628	d
3.1924	88.03200	59.87800	0.00000	-0.021162	d
4.2565	88.01600	58.81400	0.00000	-0.021610	d
5.3206	88.00000	57.75000	0.00000	-0.021966	d

d - Displacements include imported displacements.

Structure: 26-27 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	88.00000	57.75000	0.00000	-0.021966	d
1.0246	86.97545	57.76364	0.00000	-0.025070	d
2.0493	85.95091	57.77727	0.00000	-0.028614	d
3.0739	84.92636	57.79091	0.00000	-0.032669	d
4.0985	83.90182	57.80455	0.00000	-0.037320	d
5.1232	82.87727	57.81818	0.00000	-0.042665	d
6.1478	81.85273	57.83182	0.00000	-0.048825	d
7.1725	80.82818	57.84545	0.00000	-0.055943	d
8.1971	79.80364	57.85909	0.00000	-0.023614	d
9.2217	78.77909	57.87273	0.00000	0.0073320	d
10.246	77.75455	57.88636	0.00000	0.053351	d
11.271	76.73000	57.90000	0.00000	0.15153	d

d - Displacements include imported displacements.

Structure: 27-28 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	76.73000	57.90000	0.00000	0.15153	d
1.0567	76.72333	58.95667	0.00000	0.15232	d
2.1134	76.71667	60.01333	0.00000	0.14034	d
3.1701	76.71000	61.07000	0.00000	0.11736	d

d - Displacements include imported displacements.

Structure: 28-29 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	76.71000	61.07000	0.00000	0.11736	d
1.4640	77.76500	62.08500	0.00000	0.026295	d
2.9280	78.82000	63.10000	0.00000	-0.015677	d

d - Displacements include imported displacements.

Structure: 27-32 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	76.73000	57.90000	0.00000	0.15153	d
1.0300	76.73400	56.87000	0.00000	0.14870	d
2.0600	76.73800	55.84000	0.00000	0.14665	d
3.0900	76.74200	54.81000	0.00000	0.14539	d
4.1200	76.74600	53.78000	0.00000	0.14493	d
5.1500	76.75000	52.75000	0.00000	0.14417	d

d - Displacements include imported displacements.

Structure: 33-31 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	87.93000	52.75000	0.00000	-0.022242	d
1.0400	86.89000	52.75000	0.00000	-0.025442	d
2.0800	85.85000	52.75000	0.00000	-0.029106	d
3.1200	84.81000	52.75000	0.00000	-0.033310	d
4.1600	83.77000	52.75000	0.00000	-0.038145	d
5.2000	82.73000	52.75000	0.00000	-0.043720	d
6.2400	81.69000	52.75000	0.00000	-0.050165	d
7.2800	80.65000	52.75000	0.00000	-0.057639	d
8.3200	79.61000	52.75000	0.00000	-0.018241	d
9.3600	78.57000	52.75000	0.00000	0.012340	d
10.400	77.53000	52.75000	0.00000	0.066278	d
11.440	76.49000	52.75000	0.00000	0.17933	d
12.480	75.45000	52.75000	0.00000	0.37128	d
13.520	74.41000	52.75000	0.00000	0.64591	d
14.560	73.37000	52.75000	0.00000	0.99100	d
15.600	72.33000	52.75000	0.00000	1.3783	d
16.640	71.29000	52.75000	0.00000	1.7633	d
17.680	70.25000	52.75000	0.00000	2.0850	d

d - Displacements include imported displacements.

Structure: 31-34 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	70.25000	52.75000	0.00000	2.0850	d
1.1236	70.22667	51.62667	0.00000	2.0209	d
2.2472	70.20333	50.50333	0.00000	1.8649	d
3.3707	70.18000	49.38000	0.00000	1.6210	d

d - Displacements include imported displacements.

Structure: 34-35 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	70.18000	49.38000	0.00000	1.6210	d
1.3300	71.51000	49.37000	0.00000	1.2333	d

d - Displacements include imported displacements.

Structure: 35-41 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	71.51000	49.37000	0.00000	1.2333	d
1.2000	71.50000	48.17000	0.00000	0.95390	d
2.4001	71.49000	46.97000	0.00000	0.66473	d
3.6001	71.48000	45.77000	0.00000	0.40363	d

d - Displacements include imported displacements.

Structure: 41-40 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	71.48000	45.77000	0.00000	0.40363	d
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1.0175 70.46250 45.77000 0.00000 0.54404 d
 2.0350 69.44500 45.77000 0.00000 0.67548 d
 3.0525 68.42750 45.77000 0.00000 0.78127 d
 4.0700 67.41000 45.77000 0.00000 0.85107 d
 d - Displacements include imported displacements.

Structure: 40-39 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0 67.41000 45.77000 0.00000 0.85107 d
 1.3000 67.40333 44.47000 0.00000 0.45809 d
 2.6000 67.39667 43.17000 0.00000 0.17917 d
 3.9001 67.39000 41.87000 0.00000 0.021154 d
 d - Displacements include imported displacements.

Structure: 39-38 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0 67.39000 41.87000 0.00000 0.021154 d
 1.0305 68.42050 41.86150 0.00000 0.011980 d
 2.0611 69.45100 41.85300 0.00000 0.0042705 d
 3.0916 70.48150 41.84450 0.00000 -0.0051776 d
 4.1221 71.51200 41.83600 0.00000 -0.014338 d
 5.1527 72.54250 41.82750 0.00000 -0.023045 d
 6.1832 73.57300 41.81900 0.00000 -0.035089 d
 7.2137 74.60350 41.81050 0.00000 -0.059827 d
 8.2443 75.63400 41.80200 0.00000 -0.064530 d
 9.2748 76.66450 41.79350 0.00000 -0.057549 d
 10.305 77.69500 41.78500 0.00000 -0.051281 d
 11.336 78.72550 41.77650 0.00000 -0.045664 d
 12.366 79.75600 41.76800 0.00000 -0.040634 d
 13.397 80.78650 41.75950 0.00000 -0.036135 d
 14.427 81.81700 41.75100 0.00000 -0.032112 d
 15.458 82.84750 41.74250 0.00000 -0.028518 d
 16.489 83.87800 41.73400 0.00000 -0.025307 d
 17.519 84.90850 41.72550 0.00000 -0.022438 d
 18.550 85.93900 41.71700 0.00000 -0.019875 d
 19.580 86.96950 41.70850 0.00000 -0.017586 d
 20.611 88.00000 41.70000 0.00000 -0.015541 d
 d - Displacements include imported displacements.

Structure: 38-25 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0 88.00000 41.70000 0.00000 -0.015541 d
 1.0176 88.00381 42.71762 0.00000 -0.016346 d
 2.0353 88.00762 43.73524 0.00000 -0.017132 d
 3.0529 88.01143 44.75286 0.00000 -0.017890 d
 4.0705 88.01524 45.77048 0.00000 -0.018613 d
 5.0881 88.01905 46.78810 0.00000 -0.019290 d
 6.1058 88.02286 47.80571 0.00000 -0.019914 d
 7.1234 88.02667 48.82333 0.00000 -0.020475 d
 8.1410 88.03048 49.84095 0.00000 -0.020967 d
 9.1586 88.03429 50.85857 0.00000 -0.021381 d
 10.176 88.03810 51.87619 0.00000 -0.021711 d
 11.194 88.04190 52.89381 0.00000 -0.021952 d
 12.212 88.04571 53.91143 0.00000 -0.022100 d
 13.229 88.04952 54.92905 0.00000 -0.022152 d
 14.247 88.05333 55.94667 0.00000 -0.022108 d
 15.264 88.05714 56.96429 0.00000 -0.021968 d
 16.282 88.06095 57.98190 0.00000 -0.021735 d
 17.300 88.06476 58.99952 0.00000 -0.021412 d

18.317 88.06857 60.01714 0.00000 -0.021004 d
 19.335 88.07238 61.03476 0.00000 -0.020518 d
 20.353 88.07619 62.05238 0.00000 -0.019961 d
 21.370 88.08000 63.07000 0.00000 -0.019341 d
 d - Displacements include imported displacements.

Structure: 20-22 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	55.96000	70.70000	0.00000	-0.14196	d
1.0170	56.97700	70.69900	0.00000	-0.12616	d
2.0340	57.99400	70.69800	0.00000	-0.11009	d
3.0510	59.01100	70.69700	0.00000	-0.094885	d
4.0680	60.02800	70.69600	0.00000	-0.082856	d
5.0850	61.04500	70.69500	0.00000	-0.075156	d
6.1020	62.06200	70.69400	0.00000	-0.066649	d
7.1190	63.07900	70.69300	0.00000	-0.057526	d
8.1360	64.09600	70.69200	0.00000	-0.047992	d
9.1530	65.11300	70.69100	0.00000	-0.038249	d
10.170	66.13000	70.69000	0.00000	-0.028502	d

d - Displacements include imported displacements.

Structure: 22-b | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	66.13000	70.69000	0.00000	-0.028502	d
0.69360	66.14000	69.99647	0.00000	0.0044438	d
1.3872	66.15000	69.30294	0.00000	0.062079	d
2.0808	66.16000	68.60941	0.00000	0.15178	d
2.7744	66.17000	67.91588	0.00000	0.27779	d
3.4680	66.18000	67.22235	0.00000	0.44118	d
4.1616	66.19000	66.52882	0.00000	0.63992	d
4.8552	66.20000	65.83529	0.00000	0.86881	d
5.5488	66.21000	65.14176	0.00000	1.1195	d
6.2424	66.22000	64.44824	0.00000	1.3807	d
6.9360	66.23000	63.75471	0.00000	1.6377	d
7.6296	66.24000	63.06118	0.00000	1.8727	d
8.3232	66.25000	62.36765	0.00000	2.0647	d
9.0168	66.26000	61.67412	0.00000	2.1892	d
9.7104	66.27000	60.98059	0.00000	2.2174	d
10.404	66.28000	60.28706	0.00000	2.1158	d
11.098	66.29000	59.59353	0.00000	1.8457	d
11.791	66.30000	58.90000	0.00000	1.3708	d

d - Displacements include imported displacements.

Structure: e-45 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	64.74000	51.60000	0.00000	1.4706	d
0.98415	64.72267	50.61600	0.00000	1.9445	d
1.9683	64.70533	49.63200	0.00000	2.0428	d
2.9525	64.68800	48.64800	0.00000	1.9176	d
3.9366	64.67067	47.66400	0.00000	1.6597	d
4.9208	64.65333	46.68000	0.00000	1.3346	d
5.9049	64.63600	45.69600	0.00000	0.99258	d
6.8891	64.61867	44.71200	0.00000	0.67169	d
7.8732	64.60133	43.72800	0.00000	0.39882	d
8.8574	64.58400	42.74400	0.00000	0.18972	d
9.8415	64.56667	41.76000	0.00000	0.049024	d
10.826	64.54933	40.77600	0.00000	-0.029787	d
11.810	64.53200	39.79200	0.00000	-0.064404	d
12.794	64.51467	38.80800	0.00000	-0.083713	d

13.778 64.49733 37.82400 0.00000 -0.11629 d
 14.762 64.48000 36.84000 0.00000 -0.10285 d
 d - Displacements include imported displacements.

Structure: 18-31 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	59.17000	64.78000	0.00000	0.92729 d
1.1384	60.30833	64.77333	0.00000	1.0678 d
2.2767	61.44667	64.76667	0.00000	1.1051 d
3.4151	62.58500	64.76000	0.00000	1.1457 d
4.5534	63.72333	64.75333	0.00000	1.1870 d
5.6918	64.86167	64.74667	0.00000	1.2273 d
6.8301	66.00000	64.74000	0.00000	1.2652 d

d - Displacements include imported displacements.

Structure: 23-24 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	66.00000	63.14000	0.00000	1.8397 d
1.0683	67.06833	63.13667	0.00000	1.8420 d
2.1367	68.13667	63.13333	0.00000	1.7554 d
3.2050	69.20500	63.13000	0.00000	1.5853 d
4.2734	70.27333	63.12667	0.00000	1.3482 d
5.3417	71.34167	63.12333	0.00000	1.0710 d
6.4100	72.41000	63.12000	0.00000	0.78590 d
7.4784	73.47833	63.11667	0.00000	0.52378 d
8.5467	74.54667	63.11333	0.00000	0.30874 d
9.6150	75.61500	63.11000	0.00000	0.15427 d
10.683	76.68333	63.10667	0.00000	0.060806 d
11.752	77.75167	63.10333	0.00000	0.014123 d
12.820	78.82000	63.10000	0.00000	-0.015677 d

d - Displacements include imported displacements.

Structure: b-27 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	66.10000	58.46000	0.00000	0.79781 d
1.0645	67.16300	58.40400	0.00000	1.7761 d
2.1289	68.22600	58.34800	0.00000	2.2228 d
3.1934	69.28900	58.29200	0.00000	2.2759 d
4.2579	70.35200	58.23600	0.00000	2.0787 d
5.3224	71.41500	58.18000	0.00000	1.7389 d
6.3868	72.47800	58.12400	0.00000	1.3398 d
7.4513	73.54100	58.06800	0.00000	0.94505 d
8.5158	74.60400	58.01200	0.00000	0.59994 d
9.5803	75.66700	57.95600	0.00000	0.33209 d
10.645	76.73000	57.90000	0.00000	0.15153 d

d - Displacements include imported displacements.

Structure: 42-37 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	64.54000	46.73000	0.00000	1.3578 d
1.0183	65.55826	46.71783	0.00000	1.2987 d
2.0367	66.57652	46.70565	0.00000	1.2348 d
3.0550	67.59478	46.69348	0.00000	1.1670 d

4.0733	68.61304	46.68130	0.00000	1.0688	d
5.0917	69.63130	46.66913	0.00000	0.92208	d
6.1100	70.64957	46.65696	0.00000	0.74470	d
7.1283	71.66783	46.64478	0.00000	0.55721	d
8.1467	72.68609	46.63261	0.00000	0.37999	d
9.1650	73.70435	46.62043	0.00000	0.23005	d
10.183	74.72261	46.60826	0.00000	0.11823	d
11.202	75.74087	46.59609	0.00000	0.046942	d
12.220	76.75913	46.58391	0.00000	0.0084783	d
13.238	77.77739	46.57174	0.00000	-0.016223	d
14.257	78.79565	46.55957	0.00000	-0.060293	d
15.275	79.81391	46.54739	0.00000	-0.053044	d
16.293	80.83217	46.53522	0.00000	-0.046692	d
17.312	81.85043	46.52304	0.00000	-0.041118	d
18.330	82.86870	46.51087	0.00000	-0.036222	d
19.348	83.88696	46.49870	0.00000	-0.031915	d
20.367	84.90522	46.48652	0.00000	-0.028121	d
21.385	85.92348	46.47435	0.00000	-0.024775	d
22.403	86.94174	46.46217	0.00000	-0.021820	d
23.422	87.96000	46.45000	0.00000	-0.019209	d

d - Displacements include imported displacements.

Structure: 47-43 | Sub-structure:

Dist.	Coordinates			Displacements	
	x	y	z	z	
[m]	[m]	[m]	[m]	[mm]	

Vertical Offset 1

0.0	54.96000	44.83000	0.00000	-0.058106	d
1.0600	56.02000	44.83000	0.00000	0.10181	d
2.1200	57.08000	44.83000	0.00000	0.28568	d
3.1800	58.14000	44.83000	0.00000	0.47897	d
4.2400	59.20000	44.83000	0.00000	0.66051	d
5.3000	60.26000	44.83000	0.00000	0.80516	d
6.3600	61.32000	44.83000	0.00000	0.88922	d
7.4200	62.38000	44.83000	0.00000	0.84072	d
8.4800	63.44000	44.83000	0.00000	0.77650	d
9.5400	64.50000	44.83000	0.00000	0.71493	d

d - Displacements include imported displacements.

Structure: 44-39 | Sub-structure:

Dist.	Coordinates			Displacements	
	x	y	z	z	
[m]	[m]	[m]	[m]	[mm]	

Vertical Offset 1

0.0	64.44000	41.91000	0.00000	0.068810	d
1.4751	65.91500	41.89000	0.00000	0.040771	d
2.9503	67.39000	41.87000	0.00000	0.021154	d

d - Displacements include imported displacements.

Structure: 46-45 | Sub-structure:

Dist.	Coordinates			Displacements	
	x	y	z	z	
[m]	[m]	[m]	[m]	[mm]	

Vertical Offset 1

0.0	54.96000	36.71000	0.00000	-0.14072	d
1.0579	56.01778	36.72444	0.00000	-0.13899	d
2.1158	57.07556	36.73889	0.00000	-0.13659	d
3.1736	58.13333	36.75333	0.00000	-0.13350	d
4.2315	59.19111	36.76778	0.00000	-0.12974	d
5.2894	60.24889	36.78222	0.00000	-0.12534	d
6.3473	61.30667	36.79667	0.00000	-0.12035	d
7.4051	62.36444	36.81111	0.00000	-0.11487	d
8.4630	63.42222	36.82556	0.00000	-0.10900	d
9.5209	64.48000	36.84000	0.00000	-0.10285	d

d - Displacements include imported displacements.

Structure: a-12 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	44.06000	58.90000	0.00000	-1.1478	d
1.1151	42.95250	58.77000	0.00000	-1.6649	d
2.2302	41.84500	58.64000	0.00000	-2.0600	d
3.3453	40.73750	58.51000	0.00000	-2.3448	d
4.4604	39.63000	58.38000	0.00000	-1.9273	d

d - Displacements include imported displacements.

Structure: 12-11 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	39.63000	58.38000	0.00000	-1.9273	d
1.1167	39.63000	57.26333	0.00000	-2.9012	d
2.2333	39.63000	56.14667	0.00000	-3.1867	d
3.3500	39.63000	55.03000	0.00000	-3.2811	d
4.4667	39.63000	53.91333	0.00000	-3.2184	d
5.5833	39.63000	52.79667	0.00000	-2.9646	d
6.7000	39.63000	51.68000	0.00000	-2.0124	d

d - Displacements include imported displacements.

Structure: 11-f | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	39.63000	51.68000	0.00000	-2.0124	d
0.55884	40.18875	51.67000	0.00000	-2.7015	d
1.1177	40.74750	51.66000	0.00000	-2.9242	d
1.6765	41.30625	51.65000	0.00000	-3.0166	d
2.2354	41.86500	51.64000	0.00000	-3.0329	d
2.7942	42.42375	51.63000	0.00000	-2.9843	d
3.3530	42.98250	51.62000	0.00000	-2.8680	d
3.9119	43.54125	51.61000	0.00000	-2.6612	d
4.4707	44.10000	51.60000	0.00000	-2.2459	d

d - Displacements include imported displacements.

Structure: ag | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	44.06000	58.90000	0.00000	-1.1478	d
1.0047	45.06364	58.85455	0.00000	-0.80544	d
2.0093	46.06727	58.80909	0.00000	-0.58125	d
3.0140	47.07091	58.76364	0.00000	-0.44943	d
4.0187	48.07455	58.71818	0.00000	-0.38422	d
5.0233	49.07818	58.67273	0.00000	-0.37502	d
6.0280	50.08182	58.62727	0.00000	-0.41855	d
7.0327	51.08545	58.58182	0.00000	-0.51802	d
8.0373	52.08909	58.53636	0.00000	-0.68555	d
9.0420	53.09273	58.49091	0.00000	-0.95112	d
10.047	54.09636	58.44545	0.00000	-1.3975	d
11.051	55.10000	58.40000	0.00000	-2.5155	d

d - Displacements include imported displacements.

Structure: gb | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	55.10000	58.40000	0.00000	-2.5155	d
0.57001	55.67000	58.40300	0.00000	-3.0537	d
1.1400	56.24000	58.40600	0.00000	-3.2835	d
1.7100	56.81000	58.40900	0.00000	-3.3792	d
2.2800	57.38000	58.41200	0.00000	-3.3857	d
2.8500	57.95000	58.41500	0.00000	-3.3183	d
3.4200	58.52000	58.41800	0.00000	-3.1751	d
3.9901	59.09000	58.42100	0.00000	-2.9208	d
4.5601	59.66000	58.42400	0.00000	-2.2261	d
5.1301	60.23000	58.42700	0.00000	-0.99647	d
5.7001	60.80000	58.43000	0.00000	-0.66314	d
6.2701	61.37000	58.43300	0.00000	-0.43669	d
6.8401	61.94000	58.43600	0.00000	-0.25719	d
7.4101	62.51000	58.43900	0.00000	-0.10655	d
7.9801	63.08000	58.44200	0.00000	0.024478	d
8.5501	63.65000	58.44500	0.00000	0.14306	d
9.1201	64.22000	58.44800	0.00000	0.25682	d
9.6901	64.79000	58.45100	0.00000	0.37609	d
10.260	65.36000	58.45400	0.00000	0.51788	d
10.830	65.93000	58.45700	0.00000	0.71002	d
11.400	66.50000	58.46000	0.00000	1.2226	d

d - Displacements include imported displacements.

Structure: bc | Sub-structure:

Dist.	Coordinates			Displacements	
	x	y	z	z	
[m]	[m]	[m]	[m]	[mm]	

Vertical Offset 1

0.0	66.50000	58.46000	0.00000	1.2226	d
0.27800	66.50000	58.18200	0.00000	1.1535	d
0.55600	66.50000	57.90400	0.00000	1.1067	d
0.83400	66.50000	57.62600	0.00000	1.0676	d
1.1120	66.50000	57.34800	0.00000	1.0363	d
1.3900	66.50000	57.07000	0.00000	1.0120	d
1.6680	66.50000	56.79200	0.00000	0.99344	d
1.9460	66.50000	56.51400	0.00000	0.97960	d
2.2240	66.50000	56.23600	0.00000	0.96970	d
2.5020	66.50000	55.95800	0.00000	0.96315	d
2.7800	66.50000	55.68000	0.00000	0.95956	d
3.0580	66.50000	55.40200	0.00000	0.95868	d
3.3360	66.50000	55.12400	0.00000	0.96041	d
3.6140	66.50000	54.84600	0.00000	0.96481	d
3.8920	66.50000	54.56800	0.00000	0.97206	d
4.1700	66.50000	54.29000	0.00000	0.98252	d
4.4480	66.50000	54.01200	0.00000	0.99670	d
4.7260	66.50000	53.73400	0.00000	1.0153	d
5.0040	66.50000	53.45600	0.00000	1.0391	d
5.2820	66.50000	53.17800	0.00000	1.0696	d
5.5600	66.50000	52.90000	0.00000	1.1700	d

d - Displacements include imported displacements.

Structure: cd | Sub-structure:

Dist.	Coordinates			Displacements	
	x	y	z	z	
[m]	[m]	[m]	[m]	[mm]	

Vertical Offset 1

0.0	66.50000	52.90000	0.00000	1.1700	d
1.7493	65.00000	52.00000	0.00000	1.1853	d

d - Displacements include imported displacements.

Structure: eh | Sub-structure:

Dist.	Coordinates			Displacements	
	x	y	z	z	
[m]	[m]	[m]	[m]	[mm]	

Vertical Offset 1

0.0	64.74000	51.60000	0.00000	1.4706	d
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1.0844 63.65556 51.60000 0.00000 1.1574 d
 2.1689 62.57111 51.60000 0.00000 0.78243 d
 3.2533 61.48667 51.60000 0.00000 0.29232 d
 4.3378 60.40222 51.60000 0.00000 -0.45799 d
 5.4222 59.31778 51.60000 0.00000 -2.8603 d
 6.5067 58.23333 51.60000 0.00000 -3.3486 d
 7.5911 57.14889 51.60000 0.00000 -3.4071 d
 8.6756 56.06444 51.60000 0.00000 -3.1612 d
 9.7600 54.98000 51.60000 0.00000 -2.2688 d
 d - Displacements include imported displacements.

Structure: hf | Sub-structure:

Dist.	Coordinates			Displacements	
	x	y	z	z	
[m]	[m]	[m]	[m]	[mm]	
Vertical Offset 1					
0.0	54.98000	51.60000	0.00000	-2.2688	d
1.0880	53.89200	51.60000	0.00000	-1.3671	d
2.1760	52.80400	51.60000	0.00000	-1.0070	d
3.2640	51.71600	51.60000	0.00000	-0.81494	d
4.3520	50.62800	51.60000	0.00000	-0.71630	d
5.4400	49.54000	51.60000	0.00000	-0.68583	d
6.5280	48.45200	51.60000	0.00000	-0.71662	d
7.6160	47.36400	51.60000	0.00000	-0.81305	d
8.7040	46.27600	51.60000	0.00000	-0.99263	d
9.7920	45.18800	51.60000	0.00000	-1.3116	d
10.880	44.10000	51.60000	0.00000	-2.2459	d
d - Displacements include imported displacements.					

Structure: de | Sub-structure:

Dist.	Coordinates			Displacements	
	x	y	z	z	
[m]	[m]	[m]	[m]	[mm]	
Vertical Offset 1					
0.0	65.00000	52.00000	0.00000	1.1853	d
0.11927	64.93500	51.90000	0.00000	1.2668	d
0.23854	64.87000	51.80000	0.00000	1.3411	d
0.35781	64.80500	51.70000	0.00000	1.4088	d
0.47707	64.74000	51.60000	0.00000	1.4706	d
d - Displacements include imported displacements.					

Specific Building Damage Results - All Segments

Structure: 21-20 | Sub-structure:

Vertical Offset Max Gradient from Line for of Vertical Vertical Horizontal Displacement Movement Displacement Calculations Curve	Segment Max Gradient of Vertical Radius of Displacement Curve	Start Min Category	Length Damage	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain
0.0	1	0.0	0.079709	Hogging	0.0	0.0015408	0.0015408
-15.408E-6	14.974E-6	8.2558E+6	0				
(Negligible)							
-36.089E-6	15.712E-6	669710.	2 0.079709	1.7244 Sagging	17.937E-6	0.0024234	0.0024271
(Negligible)							
-53.637E-6	19.917E-6	144650.	3 1.8041	9.9449 Hogging	298.62E-6	863.31E-6	0.0010327

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 19-20 | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Vertical Horizontal Displacement Movement Displacement Calculations	Segment Min Radius of Category	Start Damage	Length [m]	Curvature [m]	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max	of Curve
[m] 0.0 268.54E-6	1 15883.	0.0	5.0389	Hogging 0	0.0031392	0.026341	0.027268	-	

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 19-18 | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Vertical Horizontal Displacement Movement Displacement Calculations	Segment Min Radius of Category	Start Damage	Length [m]	Curvature [m]	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max	of Curve
[m] 0.0 338.47E-6	1 45575.	0.0	2.0092	Hogging 0	545.96E-6	0.033326	0.033391	-	

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 18-13 | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Vertical Horizontal Displacement Movement Displacement Calculations Curve	Segment Min Radius of Category	Start Damage	Length [m]	Curvature [m]	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max	of Curve
[m] 0.0 319.46E-6	1 64298.	0.0	1.3360	Sagging 0	165.70E-6	-0.029076	0.0058160		

(Negligible)

176.51E-6	2 27933.	1.3360	13.623	Hogging 0	0.0035680	0.0049130	0.0076000		
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(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 21-a | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Vertical Horizontal Displacement Movement Displacement Calculations	Segment Min Radius of Category	Start Damage	Length [m]	Curvature [m]	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max	of Curve
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Vertical Horizontal Displacement Curvature Strain Strain
 Movement Displacement Curve Calculations Curve
 [m] [m] [m] [m] [%] [%] [%]

0.0		1	0.0	7.6543	Sagging	0.0011687	0.0	0.0010733	
0.0	133.51E-6	34165.		0					
(Negligible)									
374.82E-6	133.51E-6	5502.8	2	7.6543	2.5298	Hogging	0.0035630	0.031297	0.031829 -
(Negligible)									
374.82E-6	835.64E-6	602.41	3	10.184	1.6359	Sagging	0.014998	0.037496	0.042004 -
(Negligible)									

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: f-50 | Sub-structure:

Vertical Offset Segment Start Length Curvature Deflection Average Max Max
 Gradient Max Gradient Min Damage
 from Line for Ratio Horizontal Tensile
 of Vertical Radius of Category Strain Strain
 of Vertical Horizontal Displacement Curvature
 Movement Displacement Curve Calculations Curve
 [m] [m] [m] [m] [%] [%] [%]

374.85E-6	-0.0014649	553.18	1	0.0	2.8258	Sagging	0.033707	0.037499	0.055191 -
Slight)									
374.85E-6	-120.35E-6	15267.	2	2.8258	2.0037	Hogging	0.0011636	0.025139	0.025277 -
(Negligible)									
86.626E-6	-120.35E-6	52949.	3	4.8296	10.060	Sagging	0.0011657	115.21E-6	0.0013183 -
(Negligible)									

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 14-15 | Sub-structure:

Vertical Offset Segment Start Length Curvature Deflection Average Max Max
 Gradient Max Gradient Min Damage
 from Line for Ratio Horizontal Tensile of
 of Vertical Radius of Category Strain Strain
 of Vertical Horizontal Displacement Curvature
 Movement Displacement Curve Calculations Curve
 [m] [m] [m] [m] [%] [%] [%]

0.0	All settlements are less than the Settlement Trough Limit Sensitivity.								
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Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 15-16 | Sub-structure:

Vertical Offset Segment Start Length Curvature Deflection Average Max Max
 Gradient Max Gradient Min Damage
 from Line for Ratio Horizontal Tensile of
 of Vertical Radius of Category

Vertical Horizontal Displacement Curvature Strain Strain
 Movement Displacement Curve Calculations
 Curve

[m] [m] [m] [%] [%] [%]
 [m] 0.0 All settlements are less than the Settlement Trough Limit Sensitivity.
 Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 16-17 | Sub-structure:

Vertical Offset Segment Start Length Curvature Deflection Average Max Max
 Gradient Max Gradient Min Damage Ratio Horizontal Tensile of
 from Line for of Vertical Radius of Category Strain Strain
 of Vertical Displacement Curvature
 Movement Displacement Curve
 Calculations Curve
 [m] [m] [m] [%] [%] [%]

[m] 0.0 1 1.8990 0.0 None 0.0 0.0 0.0
 58.668E-6 348.48E-6 - 0

(Negligible)
 Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 17-g | Sub-structure:

Vertical Offset Segment Start Length Curvature Deflection Average Max Max
 Gradient Max Gradient Min Damage Ratio Horizontal Tensile of
 from Line for of Vertical Radius of Category Strain Strain
 of Vertical Displacement Curvature
 Movement Displacement Curve
 Calculations Curve
 [m] [m] [m] [%] [%] [%]

[m] 0.0 1 0.0 1.6115 Hogging 0.0 0.038688 0.038688 -
 386.73E-6 0.0011861 - 0

(Negligible)
 Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: h-49 | Sub-structure:

Vertical Offset Segment Start Length Curvature Deflection Average Max Max
 Gradient Max Gradient Min Damage Ratio Horizontal Tensile of
 from Line for of Vertical Radius of Category Strain Strain
 of Vertical Displacement Curvature
 Movement Displacement Curve
 Calculations Curve
 [m] [m] [m] [%] [%] [%]

[m] 0.0 1 0.0 2.1345 Sagging 0.014888 0.032282 0.037280 -
 382.88E-6 -0.0011585 1775.6 0

(Negligible)
 Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 49-36 | Sub-structure:

Vertical Offset Segment Start Length Curvature Deflection Average Max Max
 Gradient Max Gradient Min Damage

Vertical Offset	Segment	Start Length	Curvature	Deflection	Average	Max	Max	
Gradient Max Gradient	Min	Damage		Ratio	Horizontal	Tensile	of	
from Line for	of Vertical	Radius of	Category		Strain	Strain		
Vertical	Vertical	Displacement	Curvature					
Horizontal	Movement	Displacement	Curve					
Calculations	Curve							
Curve								
[m]	[m]	[m]	[m]	[%]	[%]	[%]		
0.0	1	0.0	2.3890	Sagging	0.0025195	647.80E-6	0.0027870	-
82.393E-6	-299.23E-6	11737.	0					

(Negligible)
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 36-48 | Sub-structure:

Vertical Offset	Segment	Start Length	Curvature	Deflection	Average	Max	Max	
Gradient Max Gradient	Min	Damage		Ratio	Horizontal	Tensile	of	
from Line for	of Vertical	Radius of	Category		Strain	Strain		
Vertical	Vertical	Displacement	Curvature					
Horizontal	Movement	Displacement	Curve					
Calculations	Curve							
Curve								
[m]	[m]	[m]	[m]	[%]	[%]	[%]	Curve	
0.0	1	0.0	0.0	None	0.0	0.0	0.0	-
265.13E-6	85.272E-6	112960.	0					

(Negligible)
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 48-47 | Sub-structure:

Vertical Offset	Segment	Start Length	Curvature	Deflection	Average	Max	Max	
Gradient Max Gradient	Min	Damage		Ratio	Horizontal	Tensile	of	
from Line for	of Vertical	Radius of	Category		Strain	Strain		
Vertical	Vertical	Displacement	Curvature					
Horizontal	Movement	Displacement	Curve					
Calculations	Curve							
Curve								
[m]	[m]	[m]	[m]	[%]	[%]	[%]		
0.0								

All settlements are less than the Settlement Trough Limit Sensitivity.
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 47-51 | Sub-structure:

Vertical Offset	Segment	Start Length	Curvature	Deflection	Average	Max	Max	
Gradient Max Gradient	Min	Damage		Ratio	Horizontal	Tensile	of	
from Line for	of Vertical	Radius of	Category		Strain	Strain		
Vertical	Vertical	Displacement	Curvature					
Horizontal	Movement	Displacement	Curve					
Calculations	Curve							
Curve								
[m]	[m]	[m]	[m]	[%]	[%]	[%]		
0.0	1	1.0750	9.6740	Hogging	0.0011522	0.0064056	0.0070425	-
99.439E-6	120.82E-6	34333.	0					

(Negligible)
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 50-46 | Sub-structure:

Vertical Offset Gradient Max from Line for of Vertical Vertical Horizontal Movement Displacement Calculations Curve	Segment Max Gradient Radius of Displacement Curve	Segment Min Category	Start Damage	Length [m]	Curvature [m]	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of
[m]	[m]		[m]	[m]	[m]	[%]	[%]	[%]	
0.0	2.6458E-6	1.9241E+6	1	0.0	10.799	Hogging	52.293E-6	0.0	50.104E-6

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 46-47 | Sub-structure:

Vertical Offset Gradient Max from Line for of Vertical Vertical Horizontal Movement Displacement Calculations Curve	Segment Max Gradient Radius of Displacement Curve	Segment Min Category	Start Damage	Length [m]	Curvature [m]	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of
[m]	[m]		[m]	[m]	[m]	[%]	[%]	[%]	Curve
206.78E-6	-39.607E-6	34976.	1	0.0	6.0900	Hogging	561.13E-6	0.013643	0.013842 -

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 24-25 | Sub-structure:

Vertical Offset Gradient Max from Line for of Vertical Vertical Horizontal Movement Displacement Calculations Curve	Segment Max Gradient Radius of Displacement Curve	Segment Min Category	Start Damage	Length [m]	Curvature [m]	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of
[m]	[m]		[m]	[m]	[m]	[%]	[%]	[%]	

0.0 All settlements are less than the Settlement Trough Limit Sensitivity.
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 25-26 | Sub-structure:

Vertical Offset Gradient Max from Line for of Vertical Vertical Horizontal Movement Displacement Calculations Curve	Segment Max Gradient Radius of Displacement Curve	Segment Min Category	Start Damage	Length [m]	Curvature [m]	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of
[m]	[m]		[m]	[m]	[m]	[%]	[%]	[%]	

0.0 All settlements are less than the Settlement Trough Limit Sensitivity.
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 26-27 | Sub-structure:

Vertical Offset Gradient Max from Line for of Vertical Vertical Horizontal Movement Displacement Calculations	Segment Max Gradient Radius of Displacement Curve	Min Category	Start Damage	Length [m]	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of Curve
[m]			[m]	[m]		[%]	[%]	[%]	
0.0		1	11.270	0.0	None	0.0	0.0	0.0	-
374.83E-6	-95.781E-6	17096.		0					

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 27-28 | Sub-structure:

Vertical Offset Gradient Max from Line for of Vertical Vertical Horizontal Movement Displacement Calculations Curve	Segment Max Gradient Radius of Displacement Curve	Min Category	Start Damage	Length [m]	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of Curve
[m]			[m]	[m]		[%]	[%]	[%]	
0.0		1	0.0	3.1691	Sagging	384.31E-6	-0.010138	0.0020393	
120.80E-6	21.753E-6	84445.		0					

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 28-29 | Sub-structure:

Vertical Offset Gradient Max from Line for of Vertical Vertical Horizontal Movement Displacement Calculations Curve	Segment Max Gradient Radius of Displacement Curve	Min Category	Start Damage	Length [m]	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of Curve
[m]			[m]	[m]		[%]	[%]	[%]	
0.0		1	0.0	0.0	None	0.0	0.0	0.0	-
274.80E-6	62.184E-6	43669.		0					

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 27-32 | Sub-structure:

Vertical Offset Gradient Max from Line for of Vertical Vertical Horizontal Movement Displacement Calculations Curve	Segment Max Gradient Radius of Displacement Curve	Min Category	Start Damage	Length [m]	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of Curve
[m]			[m]	[m]		[%]	[%]	[%]	
0.0		1	0.0	4.0643	Hogging	38.127E-6	2.2799E-6	38.803E-6	
0.0	2.7426E-6	1.3388E+6		0					

(Negligible)
 50.201E-6 2 4.0643 1.0847 Sagging 1.4396E-6 -0.0047619 952.40E-6
 0.0 1.8133E+6 0

(Negligible)
 Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 33-31 | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Vertical Horizontal Displacement Movement Displacement Calculations Curve	Segment Min Radius of Category	Start Damage	Length [m]	Curvature [m]	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of
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[m]								
0.0	1	11.440	4.0101	Hogging	0.0031424	0.037298	0.038039	-
374.04E-6	13774.		0					

(Negligible)
 371.44E-6 2 15.450 2.2289 Sagging 0.0015173 0.036741 0.037138 -
 13761. 0

(Negligible)
 Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 31-34 | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Vertical Horizontal Displacement Movement Displacement Calculations Curve	Segment Min Radius of Category	Start Damage	Length [m]	Curvature [m]	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of
--	---	-----------------	---------------	------------------	---------------------	---------------------------------	--------------------------	-----------

[m]								
0.0	1	0.0	3.3697	Sagging	0.0026866	-0.054546	0.011016	
801.68E-6	13576.		0					

(Negligible)
 Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 34-35 | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Vertical Horizontal Displacement Movement Displacement Calculations Curve	Segment Min Radius of Category	Start Damage	Length [m]	Curvature [m]	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of
--	---	-----------------	---------------	------------------	---------------------	---------------------------------	--------------------------	-----------

[m]								
0.0	1	0.0	1.3290	None	0.0	0.0041447	0.0041447	-
41.446E-6	291.47E-6 -		0					

(Negligible)
 Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 35-41 | Sub-structure:

Vertical Offset Segment Start Length Curvature Deflection Average Max Max
 Gradient Max Gradient Min Damage Ratio Horizontal Tensile
 from Line for of Vertical Radius of Category Strain Strain
 of Vertical Vertical Displacement Curvature
 Movement
 Displacement Curve
 Calculations
 Curve

[m] [m] [m] [m] [%] [%] [%]
 [m] 0.0 1 0.0 1.2171 Sagging 11.104E-6 -0.0094792 0.0018958
 96.613E-6 240.96E-6 75100. 0

(Negligible)
 2 1.2171 2.3821 Hogging 583.12E-6 0.0080333 0.0081153 -
 127.11E-6 240.96E-6 38355. 0

(Negligible)
 Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 41-40 | Sub-structure:

Vertical Offset Segment Start Length Curvature Deflection Average Max Max
 Gradient Max Gradient Min Damage Ratio Horizontal Tensile of
 from Line for of Vertical Radius of Category Strain Strain
 of Vertical Vertical Displacement Curvature
 Movement
 Displacement Curve
 Calculations
 Curve

[m] [m] [m] [m] [%] [%] [%]
 [m] 0.0 1 0.0 4.0690 Sagging 0.0011794 -0.013192 0.0027215
 209.27E-6 -138.00E-6 26809. 0

(Negligible)
 Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 40-39 | Sub-structure:

Vertical Offset Segment Start Length Curvature Deflection Average Max Max
 Gradient Max Gradient Min Damage Ratio Horizontal Tensile of
 from Line for of Vertical Radius of Category Strain Strain
 of Vertical Vertical Displacement Curvature
 Movement
 Displacement Curve
 Calculations
 Curve

[m] [m] [m] [m] [%] [%] [%]
 [m] 0.0 1 0.0 2.6000 Hogging 0.0021706 0.035271 0.035604 -
 352.58E-6 302.18E-6 14185. 0

(Negligible)
 Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 39-38 | Sub-structure:

Vertical Offset Segment Start Length Curvature Deflection Average Max Max
 Gradient Max Gradient Min Damage Ratio Horizontal Tensile of
 from Line for of Vertical Radius of Category Strain Strain
 of Vertical Vertical Displacement Curvature
 Movement
 Displacement Curve
 Calculations
 Curve

[m] [m] [m] [%] [%] [%]
 [m] 0.0 All settlements are less than the Settlement Trough Limit Sensitivity.
 Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 38-25 | Sub-structure:

Vertical Offset Gradient Max from Line for of Vertical Vertical Horizontal Movement Displacement Calculations Curve	Segment Max Gradient Radius of Displacement Curve	Min	Start Damage	Length [m]	Curvature [m]	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of
[m]				[m]	[m]	[%]	[%]	[%]	

[m] 0.0 All settlements are less than the Settlement Trough Limit Sensitivity.
 Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 20-22 | Sub-structure:

Vertical Offset Gradient Max from Line for of Vertical Vertical Horizontal Movement Displacement Calculations Curve	Segment Max Gradient Radius of Displacement Curve	Min	Start Damage	Length [m]	Curvature [m]	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max
[m]				[m]	[m]	[%]	[%]	[%]	

[m] 0.0
 6.6267E-6 -15.530E-6 1.8393E+6 1 0.0 1.0031 None 0.0 -662.67E-6 132.50E-6

(Negligible)

45.746E-6 -15.803E-6 893990. 2 1.0031 1.0309 Hogging 0.0 -0.0027327 546.56E-6

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 22-b | Sub-structure:

Vertical Offset Gradient Max from Line for of Vertical Vertical Horizontal Movement Displacement Calculations Curve	Segment Max Gradient Radius of Displacement Curve	Min	Start Damage	Length [m]	Curvature [m]	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of
[m]				[m]	[m]	[%]	[%]	[%]	

[m] 0.0
 374.49E-6 -376.36E-6 13163. 1 2.0808 3.9254 Hogging 0.0029559 0.037412 0.040093 -

(Negligible)

373.21E-6 684.83E-6 2246.0 1 2 6.0062 5.7840 Sagging 0.015104 0.028005 0.050943 -

(Slight)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: e-45 | Sub-structure:

Vertical Offset Segment Start Length Curvature Deflection Average Max Max
 Gradient Max Gradient Min Damage Ratio Horizontal Tensile of
 from Line for of Vertical Radius of Category Strain Strain
 of Vertical Vertical Displacement Curvature
 Movement
 Displacement Curve
 Calculations
 Curve

[m]	[m]	[m]	[m]	[m]	[m]	[%]	[%]	[%]	
0.0		1	0.0	5.4340	Sagging	0.012611	0.035044	0.054130	-
350.32E-6	-481.40E-6	2342.7	1	(Very					
					Slight)				
		2	5.4340	9.3273	Hogging	0.0054836	0.030681	0.038779	-
350.32E-6	347.45E-6	14805.		0					

(Negligible)
 Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 18-31 | Sub-structure:

Vertical Offset Segment Start Length Curvature Deflection Average Max Max
 Gradient Max Gradient Min Damage Ratio Horizontal Tensile
 from Line for of Vertical Radius of Category Strain Strain
 of of Vertical Vertical Displacement Curvature
 Movement
 Displacement Curve
 Calculations
 Curve

[m]	[m]	[m]	[m]	[m]	[m]	[%]	[%]	[%]	
0.0		1	0.0	3.3735	Sagging	0.0019754	-0.0081773	0.0018572	
242.42E-6	-123.42E-6	9987.4		0					
		2	3.3735	0.60519	Hogging	4.2065E-6	1.2862E-6	4.7565E-6	
0.0	-36.311E-6	1.4285E+6		0					
					(Negligible)				
		3	3.9787	2.8504	Sagging	55.216E-6	1.2862E-6	66.841E-6	
0.0	-36.311E-6	505620.		0					

(Negligible)
 Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 23-24 | Sub-structure:

Vertical Offset Segment Start Length Curvature Deflection Average Max Max
 Gradient Max Gradient Min Damage Ratio Horizontal Tensile
 from Line for of Vertical Radius of Category Strain Strain
 of of Vertical Vertical Displacement Curvature
 Movement
 Displacement Curve
 Calculations
 Curve

[m]	[m]	[m]	[m]	[m]	[m]	[%]	[%]	[%]	
0.0		1	0.0	5.6385	Sagging	0.0041980	-0.035289	0.0071720	
705.69E-6	266.85E-6	12627.		0					
		2	5.6385	3.9766	Hogging	0.0020229	0.018840	0.020694	-
285.14E-6	266.85E-6	19914.		0					

(Negligible)
 Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: b-27 | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Vertical Horizontal Displacement Movement Displacement Calculations Curve	Segment Min Radius of Category	Start Damage	Length [m]	Curvature [m]	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max	Max	of
--	---	-----------------	---------------	------------------	---------------------	---------------------------------	--------------------------	-----	-----	----

[m]		[m]	[m]		[%]	[%]	[%]			
[m]										
0.0	1	0.0	6.3924	Sagging	0.019481	-0.011144	0.018365			
0.0025098	1987.3		0							

(Negligible)

373.97E-6	2	6.3924	4.2513	Hogging	0.0034041	0.037411	0.040699	-		
	12621.		0							

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 42-37 | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Vertical Horizontal Displacement Movement Displacement Calculations Curve	Segment Min Radius of Category	Start Damage	Length [m]	Curvature [m]	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max	Max	of
--	---	-----------------	---------------	------------------	---------------------	---------------------------------	--------------------------	-----	-----	----

[m]		[m]	[m]		[%]	[%]	[%]			
[m]										
0.0	1	0.0	6.6375	Sagging	0.0022041	-0.0093704	0.0019584			
330.78E-6	26343.		0							

(Negligible)

219.05E-6	2	6.6375	3.5459	Hogging	0.0011912	0.010449	0.011443	-		
	27297.		0							

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 47-43 | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Vertical Horizontal Displacement Movement Displacement Calculations Curve	Segment Min Radius of Category	Start Damage	Length [m]	Curvature [m]	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max	Max	of
--	---	-----------------	---------------	------------------	---------------------	---------------------------------	--------------------------	-----	-----	----

[m]		[m]	[m]		[%]	[%]	[%]			
[m]										
0.0	1	1.0600	1.4620	Hogging	176.06E-6	-0.0082164	0.0016463			
151.58E-6	55255.		0							

(Negligible)

397.13E-6	2	2.5220	6.1825	Sagging	0.0045100	-0.019301	0.0040596			
	13209.		0							

(Negligible)

21.391E-6	3	8.7045	0.83449	None	0.0	0.0021391	0.0021391	-		
	155500.		0							

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 44-39 | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Vertical Horizontal Displacement Movement Displacement Calculations Curve	Segment Min Radius of Category	Start Length Damage	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of
[m]		[m]	[m]	[%]	[%]	[%]	

[m] 0.0 All settlements are less than the Settlement Trough Limit Sensitivity.
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 46-45 | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Vertical Horizontal Displacement Movement Displacement Calculations Curve	Segment Min Radius of Category	Start Length Damage	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of
[m]		[m]	[m]	[%]	[%]	[%]	

[m] 0.0
0.0 -5.8162E-6 1.6519E+6 1 0.0 9.5199 Hogging 61.432E-6 0.0 91.159E-6

(Negligible)
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: a-12 | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Vertical Horizontal Displacement Movement Displacement Calculations Curve	Segment Min Radius of Category	Start Length Damage	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of
[m]		[m]	[m]	[%]	[%]	[%]	Curve

[m] 0.0
5.3296E-6 463.69E-6 1461.8 1 0.0 4.4594 Hogging 0.013701 532.96E-6 0.014256 -

(Negligible)
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 12-11 | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Vertical Horizontal Displacement Movement Displacement Calculations Curve	Segment Min Radius of Category	Start Length Damage	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of
[m]		[m]	[m]	[%]	[%]	[%]	Curve

[m] 0.0
0.0014394 873.37E-6 1510.4 1 0.0 6.6990 Hogging 0.019536 -0.023959 0.011052

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 11-f | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Vertical Horizontal Movement Displacement Calculations	Segment Min Radius of Category	Start Damage	Length [m]	Curvature [m]	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max	of Curve
[m] 0.0 0.0029314	1 564.03	0.0	4.4697	Hogging 0	0.020497	-0.036533	0.013715		

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: ag | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Vertical Horizontal Movement Displacement Calculations	Segment Min Radius of Category	Start Damage	Length [m]	Curvature [m]	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max	of Curve
[m] 0.0 9.0631E-6	1 1270.0	0.0	11.050	Sagging 0	0.013570	466.62E-6	0.015438		-

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: gb | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Vertical Horizontal Movement Displacement Calculations Curve	Segment Min Radius of Category	Start Damage	Length [m]	Curvature [m]	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max	of Curve
[m] 0.0 0.0021686	1 865.25	0.0	4.7368	Hogging 0	0.025447	0.016618	0.043266		
(Negligible)	2	4.7368	4.0219	Sagging	0.017275	-0.021158	0.0088861		
(Negligible)	3	8.7587	2.6404	Hogging	0.010948	-0.18714	0.037912		

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: bc | Sub-structure:

0.0 1 0.0 10.879 Sagging 0.014429 300.52E-6 0.016049 -
 8.3053E-6 858.72E-6 1611.5 0

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: de | Sub-structure:

Vertical Offset from Line of Vertical Movement Displacement Calculations	Segment Min Radius of Curvature	Start Length	Length	Damage	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max
[m]		[m]	[m]			[%]	[%]	[%]	
0.0	1	0.0	0.47607	Sagging	0.0027477	0.017545	0.018212	-	
175.42E-6	-683.50E-6	1916.1	0						

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Specific Building Damage Results - Critical Values for All Segments within Each Sub-Structure

Structure: 21-20 | Sub-structure:

Vertical Offset from Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[%]	[%]		[mm]	[%]		
0.0	298.62E-6	0.0024234	19.917E-6	0.20439	0.0024271	-53.637E-6	19.917E-6
144650.	669710.0	(Negligible)					

Structure: 19-20 | Sub-structure:

Vertical Offset from Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[%]	[%]		[mm]	[%]		
0.0	0.0031392	0.026341	213.15E-6	0.37896	0.027268	-268.54E-6	213.15E-6
15883.	-0	(Negligible)					

Structure: 19-18 | Sub-structure:

Vertical Offset from Line for Curvature	Deflection Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement	Max Gradient of Vertical Displacement
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Vertical (Hogging) (Sagging) Displacement Curve
 Movement Curve
 Calculations

[m]	[m]	[%]	[%]	[mm]	[%]		
0.0	45575.	545.96E-6	0.033326	-283.70E-6	0.92700	0.033391	-338.47E-6 -283.70E-6
		- 0 (Negligible)					

Structure: 18-13 | Sub-structure:

Vertical Deflection Average Max Slope Max Max Max Gradient Max Gradient
 Min Min Damage Category
 Offset from Ratio Horizontal Settlement Tensile of of Vertical
 Radius of Radius of Strain Strain Horizontal Displacement
 Line for Curvature Curvature
 Vertical Displacement Curve
 (Hogging) (Sagging)
 Movement
 Calculations

[m]	[m]	[%]	[%]	[mm]	[%]		
0.0	27933.	0.0035680	-0.029076	233.06E-6	0.92729	0.0076000	319.46E-6 233.06E-6
		64298. 0 (Negligible)					

Structure: 21-a | Sub-structure:

Vertical Deflection Average Max Slope Max Max Max Gradient Max Gradient
 Min Min Damage Category
 Offset from Ratio Horizontal Settlement Tensile of of Vertical
 Radius of Radius of Strain Strain Horizontal Displacement
 Line for Curvature Curvature
 Vertical Displacement Curve
 (Hogging) (Sagging)
 Movement
 Calculations

[m]	[m]	[%]	[%]	[mm]	[%]		
0.0	5502.8	0.014998	0.037496	835.64E-6	1.1470	0.042004	-374.82E-6 835.64E-6
		602.41 0 (Negligible)					

Structure: f-50 | Sub-structure:

Vertical Deflection Average Max Slope Max Max Max Gradient Max Gradient
 Min Min Damage Category
 Offset from Ratio Horizontal Settlement Tensile of of Vertical
 Radius of Radius of Strain Strain Horizontal Displacement
 Line for Curvature Curvature
 Vertical Displacement Curve
 (Hogging) (Sagging)
 Movement
 Calculations

[m]	[m]	[%]	[%]	[mm]	[%]		
0.0	15267.	0.033707	0.037499	-0.0014649	2.2459	0.055191	-374.85E-6 -0.0014649
		553.18 1 (Very Slight)					

Structure: 14-15 | Sub-structure:

Vertical Deflection Average Max Max Max Max Gradient Max Gradient Min
 Min Damage Category
 Offset from Ratio Horizontal Slope Settlement Tensile of of Vertical Radius
 of Radius of Strain Strain Horizontal Displacement
 Line for Curvature Curvature
 Vertical Displacement Curve
 (Hogging) (Sagging)
 Movement
 Calculations

[m] [%] [%] [mm] [%] [m]

Structure: 15-16 | Sub-structure:

Vertical Min Offset of Radius of Line for Curvature (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve	Min Radius
[m]	[%]	[%]		[mm]	[%]			[m]

Structure: 16-17 | Sub-structure:

Vertical Min Offset of Radius of Line for Curvature (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve	
[m]	[%]	[%]		[mm]	[%]			
0.0	0.0	0.0	348.48E-6	0.60200	0.0	58.668E-6	348.48E-6	
- 0 (Negligible)								

Structure: 17-g | Sub-structure:

Vertical Min Offset of Radius of Line for Curvature (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve	
[m]	[%]	[%]		[mm]	[%]			
0.0	0.0	0.038688	0.0011861	2.5144	0.038688	-386.73E-6	0.0011861	
- 0 (Negligible)								

Structure: h-49 | Sub-structure:

Vertical Min Offset of Radius of Line for Curvature (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve	
[m]	[%]	[%]		[mm]	[%]			
0.0	0.014888	0.032282	-0.0011585	2.2688	0.037280	-382.88E-6	-0.0011585	
- 1775.6 0 (Negligible)								

Structure: 49-36 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0	0.0025195	647.80E-6	-299.23E-6	0.43612	0.0027870	-82.393E-6	-299.23E-6
- 11737.0	0 (Negligible)						

Structure: 36-48 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0	0.0	0.0	0.0	85.272E-6	0.15741	0.0	-265.13E-6
- 0	0 (Negligible)						85.272E-6

Structure: 48-47 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve	Min Radius
[m]	[m]	[%]	[%]	[mm]	[%]			[m]
0.0	0.0011522	0.0064056	120.82E-6	0.44691	0.0070425	-99.439E-6	120.82E-6	
34333.	- 0 (Negligible)							

Structure: 47-51 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0	0.0011522	0.0064056	120.82E-6	0.44691	0.0070425	-99.439E-6	120.82E-6
34333.	- 0 (Negligible)						

Structure: 50-46 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0	0.0011522	0.0064056	120.82E-6	0.44691	0.0070425	-99.439E-6	120.82E-6
34333.	- 0 (Negligible)						

Vertical (Hogging) (Sagging) Displacement Curve
 Movement Curve
 Calculations

[m]	[m]	[%]	[%]	[mm]	[%]		
0.0	1.9241E+6	52.293E-6	0.0	2.6458E-6	0.14324	50.104E-6	0.0 2.6458E-6
- 0 (Negligible)							

Structure: 46-47 | Sub-structure:

Vertical Deflection Average Max Slope Max Max Max Gradient Max Gradient
 Min Min Damage Category
 Offset from Ratio Horizontal Settlement Tensile of of Vertical
 Radius of Radius of Strain Strain Horizontal Displacement
 Line for Curvature Curvature
 Vertical Displacement Curve
 (Hogging) (Sagging)
 Movement
 Calculations

[m]	[m]	[%]	[%]	[mm]	[%]		
0.0	34976.	561.13E-6	0.013643	-39.607E-6	0.17144	0.013842	-206.78E-6 -39.607E-6
- 0 (Negligible)							

Structure: 24-25 | Sub-structure:

Vertical Deflection Average Max Max Max Max Gradient Max Gradient Min
 Min Damage Category
 Offset from Ratio Horizontal Slope Settlement Tensile of of Vertical Radius
 of Radius of Strain Strain Horizontal Displacement
 Line for Curvature Curvature
 Vertical Displacement Curve
 (Hogging) (Sagging)
 Movement
 Calculations

[m]	[m]	[%]	[%]	[mm]	[%]		[m]

Structure: 25-26 | Sub-structure:

Vertical Deflection Average Max Max Max Max Gradient Max Gradient Min
 Min Damage Category
 Offset from Ratio Horizontal Slope Settlement Tensile of of Vertical Radius
 of Radius of Strain Strain Horizontal Displacement
 Line for Curvature Curvature
 Vertical Displacement Curve
 (Hogging) (Sagging)
 Movement
 Calculations

[m]	[m]	[%]	[%]	[mm]	[%]		[m]

Structure: 26-27 | Sub-structure:

Vertical Deflection Average Max Slope Max Max Max Gradient Max Gradient
 Min Min Damage Category
 Offset from Ratio Horizontal Settlement Tensile of of Vertical
 Radius of Radius of Strain Strain Horizontal Displacement
 Line for Curvature Curvature
 Vertical Displacement Curve
 (Hogging) (Sagging)
 Movement
 Calculations

[m]	[m]	[%]	[%]	[mm]	[%]		
0.0	-	0.0	0.0	-95.781E-6	0.15143	0.0	-374.83E-6 -95.781E-6
- 0 (Negligible)							

Structure: 27-28 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0	384.31E-6	-0.010138	21.753E-6	0.15232	0.0020393	120.80E-6	21.753E-6
- 84445.0	(Negligible)						

Structure: 28-29 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0	0.0	0.0	62.184E-6	0.11736	0.0	-274.80E-6	62.184E-6
-	- 0	(Negligible)					

Structure: 27-32 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0	38.127E-6	-0.0047619	2.7426E-6	0.15153	952.40E-6	50.201E-6	2.7426E-6
1.3388E+6	1.8133E+6	0 (Negligible)					

Structure: 33-31 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0	0.0031424	0.037298	-372.26E-6	2.0847	0.038039	-374.04E-6	-372.26E-6
13774.	13761.0	(Negligible)					

Structure: 31-34 | Sub-structure:

Vertical Min	Deflection Min	Average Damage Category	Max Slope	Max	Max	Max Gradient	Max Gradient
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Offset from Radius of Curvature Vertical (Hogging) Movement Calculations	Ratio of Radius of Curvature	Horizontal Strain	Average Damage Category	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]		[mm]	[%]		
0.0	0.0026866	-0.054546	217.12E-6	2.0850	0.011016	801.68E-6	217.12E-6	
- 13576.0	0 (Negligible)							

Structure: 34-35 | Sub-structure:

Vertical Min Offset from Radius of Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]		[mm]	[%]	
0.0	0.0	0.0041447	291.47E-6	1.6210	0.0041447	-41.446E-6	291.47E-6
-	- 0 (Negligible)						

Structure: 35-41 | Sub-structure:

Vertical Min Offset from Radius of Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]		[mm]	[%]	
0.0	583.12E-6	-0.0094792	240.96E-6	1.2333	0.0081153	-127.11E-6	240.96E-6
38355.0	75100.0 (Negligible)						

Structure: 41-40 | Sub-structure:

Vertical Min Offset from Radius of Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]		[mm]	[%]	
0.0	0.0011794	-0.013192	-138.00E-6	0.85100	0.0027215	209.27E-6	-138.00E-6
- 26809.0	0 (Negligible)						

Structure: 40-39 | Sub-structure:

Vertical Min Offset from Radius of Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]		[mm]	[%]	
0.0	0.0011794	-0.013192	-138.00E-6	0.85100	0.0027215	209.27E-6	-138.00E-6
- 26809.0	0 (Negligible)						

Vertical (Hogging) (Sagging) Displacement Curve
 Movement Curve
 Calculations

[m]	[m]	[%]	[%]	[mm]	[%]		
0.0	14185.	0.0021706	0.035271	302.18E-6	0.85107	0.035604	-352.58E-6 302.18E-6
		- 0 (Negligible)					

Structure: 39-38 | Sub-structure:

Vertical Deflection Average Max Max Max Max Gradient Max Gradient Min
 Min Damage Category
 Offset from Ratio Horizontal Slope Settlement Tensile of of Vertical Radius
 of Radius of
 Line for Strain Strain Horizontal Displacement
 Curvature Curvature
 Vertical Displacement Curve
 (Hogging) (Sagging)
 Movement
 Calculations Curve

[m]	[%]	[%]		[mm]	[%]		[m]
[m]							

Structure: 38-25 | Sub-structure:

Vertical Deflection Average Max Max Max Max Gradient Max Gradient Min
 Min Damage Category
 Offset from Ratio Horizontal Slope Settlement Tensile of of Vertical Radius
 of Radius of
 Line for Strain Strain Horizontal Displacement
 Curvature Curvature
 Vertical Displacement Curve
 (Hogging) (Sagging)
 Movement
 Calculations Curve

[m]	[%]	[%]		[mm]	[%]		[m]
[m]							

Structure: 20-22 | Sub-structure:

Vertical Deflection Average Max Slope Max Max Max Gradient Max Gradient
 Min Min Damage Category
 Offset from Ratio Horizontal Settlement Tensile of of Vertical
 Radius of Radius of
 Line for Strain Strain Horizontal Displacement
 Curvature Curvature
 Vertical Displacement Curve
 (Hogging) (Sagging)
 Movement
 Calculations Curve

[m]	[m]	[%]	[%]		[mm]	[%]	
0.0	893990.	0.0	-0.0027327	-15.803E-6	0.14196	546.56E-6	45.746E-6 -15.803E-6
		- 0 (Negligible)					

Structure: 22-b | Sub-structure:

Vertical Deflection Average Max Slope Max Max Max Gradient Max Gradient
 Min Min Damage Category
 Offset from Ratio Horizontal Settlement Tensile of of Vertical
 Radius of Radius of
 Line for Strain Strain Horizontal Displacement
 Curvature Curvature
 Vertical Displacement Curve
 (Hogging) (Sagging)
 Movement
 Calculations Curve

[m]	[m]	[%]	[%]		[mm]	[%]	
0.0	13163.	0.015104	0.037412	684.83E-6	2.2164	0.050943	-374.49E-6 684.83E-6
		2246.0 1 (Very Slight)					

Structure: e-45 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
14805.0	2342.7	1 (Very Slight)	0.035044	-481.40E-6	2.0418	0.054130	-350.32E-6 -481.40E-6

Structure: 18-31 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
1.4285E+6	9987.4	0 (Negligible)	-0.0081773	-123.42E-6	1.2652	0.0018572	242.42E-6 -123.42E-6

Structure: 23-24 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
19914.0	12627.0	0 (Negligible)	-0.035289	266.85E-6	1.8419	0.020694	705.69E-6 266.85E-6

Structure: b-27 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
12621.0	1987.3	0 (Negligible)	0.037411	-921.36E-6	2.2745	0.040699	0.0025098 -921.36E-6

Structure: 42-37 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
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Calculations

[m]	[%]	[%]	[mm]	[%]				
[m]	[m]							
0.0	0.013701	532.96E-6	463.69E-6	2.3418	0.014256	-5.3296E-6	463.69E-6	
1461.8	- 0 (Negligible)							

Structure: 12-11 | Sub-structure:

Vertical	Deflection	Average	Max Slope	Max	Max	Max Gradient	Max Gradient
Min	Min	Damage	Category	Settlement	Tensile	of	of Vertical
Offset from	Ratio	Horizontal				Horizontal	Displacement
Radius of	Radius of	Strain			Strain	Displacement	Curve
Line for	Curvature					Curve	
Curvature	Curvature						
Vertical	Vertical						
(Hogging)	(Sagging)						
Movement							
Calculations							

[m]	[%]	[%]	[mm]	[%]			
[m]	[m]						
0.0	0.019536	-0.023959	873.37E-6	3.2792	0.011052	0.0014394	873.37E-6
1510.4	- 0 (Negligible)						

Structure: 11-f | Sub-structure:

Vertical	Deflection	Average	Max Slope	Max	Max	Max Gradient	Max Gradient
Min	Min	Damage	Category	Settlement	Tensile	of	of Vertical
Offset from	Ratio	Horizontal				Horizontal	Displacement
Radius of	Radius of	Strain			Strain	Displacement	Curve
Line for	Curvature					Curve	
Curvature	Curvature						
Vertical	Vertical						
(Hogging)	(Sagging)						
Movement							
Calculations							

[m]	[%]	[%]	[mm]	[%]			
[m]	[m]						
0.0	0.020497	-0.036533	0.0012367	3.0322	0.013715	0.0029314	0.0012367
564.03	- 0 (Negligible)						

Structure: ag | Sub-structure:

Vertical	Deflection	Average	Max Slope	Max	Max	Max Gradient	Max Gradient
Min	Min	Damage	Category	Settlement	Tensile	of	of Vertical
Offset from	Ratio	Horizontal				Horizontal	Displacement
Radius of	Radius of	Strain			Strain	Displacement	Curve
Line for	Curvature					Curve	
Curvature	Curvature						
Vertical	Vertical						
(Hogging)	(Sagging)						
Movement							
Calculations							

[m]	[%]	[%]	[mm]	[%]			
[m]	[m]						
0.0	0.013570	466.62E-6	0.0011129	2.5144	0.015438	-9.0631E-6	0.0011129
- 1270.0	0 (Negligible)						

Structure: gb | Sub-structure:

Vertical	Deflection	Average	Max Slope	Max	Max	Max Gradient	Max Gradient
Min	Min	Damage	Category	Settlement	Tensile	of	of Vertical
Offset from	Ratio	Horizontal				Horizontal	Displacement
Radius of	Radius of	Strain			Strain	Displacement	Curve
Line for	Curvature					Curve	
Curvature	Curvature						
Vertical	Vertical						
(Hogging)	(Sagging)						
Movement							
Calculations							

[m]	[%]	[%]	[mm]	[%]			
[m]	[m]						
0.0	0.025447	-0.18714	-0.0021620	3.3854	0.043266	0.0087603	-0.0021620
821.77	954.03	0 (Negligible)					

Structure: bc | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0 885.25	0.0042569 - 0 (Negligible)	-0.075759	-364.29E-6	1.2226	0.015286	0.0088425	-364.29E-6

Structure: cd | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0 -	0.0 - 0 (Negligible)	0.0	-0.22454 -8.7694E-6	1.1853	0.044908	0.0022504	-8.7694E-6

Structure: eh | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0 1532.7	0.032977 2059.9 0 (Negligible)	-0.013670	0.0022186	3.4069	0.023700	0.0014748	0.0022186

Structure: hf | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0 -	0.014429 1611.5 0 (Negligible)	300.52E-6	858.72E-6	2.2688	0.016049	-8.3053E-6	858.72E-6

Structure: de | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature (Hogging) Movement Calculations	Deflection Min Ratio of Radius of Curvature (Sagging)	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0	0.0027477	0.017545	-683.50E-6	1.4701	0.018212	-175.42E-6	-683.50E-6
- 1916.1	0 (Negligible)						

Specific Building Damage Results - Critical Segments within Each Structure

Structure Name Max	Parameter Max	Critical Min	Critical Damage Category Sub-Structure Segment	Start	End	Curvature	Max Slope
[mm]	[%]	[m]	[m]	[m]	[m]		
21-20	Max Slope	144650.	- 0 (Negligible)	3	1.8041	11.749 Hogging	19.917E-6
0.20439	0.0010327	144650.	- 0 (Negligible)	3	1.8041	11.749 Hogging	19.917E-6
0.20439	0.0010327	144650.	- 0 (Negligible)	2	0.079709	1.8041 Sagging	15.712E-6
0.16952	0.0024271	- 669710.	0 (Negligible)	3	1.8041	11.749 Hogging	19.917E-6
0.20439	0.0010327	144650.	- 0 (Negligible)	2	0.079709	1.8041 Sagging	15.712E-6
0.16952	0.0024271	- 669710.	0 (Negligible)	1	0.0	5.0389 Hogging	213.15E-6
19-20	Max Slope	15883.	- 0 (Negligible)	1	0.0	5.0389 Hogging	213.15E-6
0.37896	0.027268	15883.	- 0 (Negligible)	1	0.0	5.0389 Hogging	213.15E-6
0.37896	0.027268	15883.	- 0 (Negligible)	1	0.0	5.0389 Hogging	213.15E-6
0.37896	0.027268	15883.	- 0 (Negligible)	1	0.0	5.0389 Hogging	213.15E-6
0.37896	0.027268	15883.	- 0 (Negligible)	-	-	- -	-
-	-	-	- -	-	-	- -	-
19-18	Max Slope	45575.	- 0 (Negligible)	1	0.0	2.0092 Hogging	283.70E-6
0.92700	0.033391	45575.	- 0 (Negligible)	1	0.0	2.0092 Hogging	283.70E-6
0.92700	0.033391	45575.	- 0 (Negligible)	1	0.0	2.0092 Hogging	283.70E-6
0.92700	0.033391	45575.	- 0 (Negligible)	1	0.0	2.0092 Hogging	283.70E-6
0.92700	0.033391	45575.	- 0 (Negligible)	-	-	- -	-
-	-	-	- -	-	-	- -	-
18-13	Max Slope	64298.	0 (Negligible)	1	0.0	1.3360 Sagging	233.06E-6
0.92729	0.0058160	- 64298.	0 (Negligible)				

		Max Settlement		1	0.0	1.3360	Sagging	233.06E-6
0.92729	0.0058160	-	64298.0 (Negligible)					
		Max Tensile		2	1.3360	14.959	Hogging	233.06E-6
0.62710	0.0076000	27933.	- 0 (Negligible)					
		Strain						
		Min Radius of		2	1.3360	14.959	Hogging	233.06E-6
0.62710	0.0076000	27933.	- 0 (Negligible)					
		Curvature (Hogging)						
		Min Radius of		1	0.0	1.3360	Sagging	233.06E-6
0.92729	0.0058160	-	64298.0 (Negligible)					
		Curvature (Sagging)						
21-a		Max Slope		3	10.184	11.820	Sagging	835.64E-6
1.1470	0.042004	-	602.41 0 (Negligible)					
		Max Settlement		3	10.184	11.820	Sagging	835.64E-6
1.1470	0.042004	-	602.41 0 (Negligible)					
		Max Tensile		3	10.184	11.820	Sagging	835.64E-6
1.1470	0.042004	-	602.41 0 (Negligible)					
		Strain						
		Min Radius of		2	7.6543	10.184	Hogging	133.51E-6
0.82932	0.031829	5502.8	- 0 (Negligible)					
		Curvature (Hogging)						
		Min Radius of		3	10.184	11.820	Sagging	835.64E-6
1.1470	0.042004	-	602.41 0 (Negligible)					
		Curvature (Sagging)						
f-50		Max Slope		1	0.0	2.8258	Sagging	0.0014649
2.2459	0.055191	-	553.18 1 (Very Slight)					
		Max Settlement		1	0.0	2.8258	Sagging	0.0014649
2.2459	0.055191	-	553.18 1 (Very Slight)					
		Max Tensile		1	0.0	2.8258	Sagging	0.0014649
2.2459	0.055191	-	553.18 1 (Very Slight)					
		Strain						
		Min Radius of		2	2.8258	4.8296	Hogging	120.35E-6
0.83435	0.025277	15267.	- 0 (Negligible)					
		Curvature (Hogging)						
		Min Radius of		1	0.0	2.8258	Sagging	0.0014649
2.2459	0.055191	-	553.18 1 (Very Slight)					
		Curvature (Sagging)						
14-15		All settlements are less than the Settlement Trough Limit Sensitivity.						
		All settlements are less than the Settlement Trough Limit Sensitivity.						
		All settlements are less than the Settlement Trough Limit Sensitivity.						
		All settlements are less than the Settlement Trough Limit Sensitivity.						
15-16		All settlements are less than the Settlement Trough Limit Sensitivity.						
		All settlements are less than the Settlement Trough Limit Sensitivity.						
		All settlements are less than the Settlement Trough Limit Sensitivity.						
		All settlements are less than the Settlement Trough Limit Sensitivity.						
16-17		Max Slope		1	1.8990	1.8990	Sagging	348.48E-6
0.60200	0.0	-	- 0 (Negligible)					
		Max Settlement		1	1.8990	1.8990	Sagging	348.48E-6
0.60200	0.0	-	- 0 (Negligible)					
		Max Tensile		1	1.8990	1.8990	Sagging	348.48E-6
0.60200	0.0	-	- 0 (Negligible)					
		Strain						
		Min Radius of		-	-	-	-	-
-	-	-	-					
		Curvature (Hogging)						
		Min Radius of		-	-	-	-	-
-	-	-	-					
		Curvature (Sagging)						
17-g		Max Slope		1	0.0	1.6115	Hogging	0.0011861
2.5144	0.038688	-	- 0 (Negligible)					
		Max Settlement		1	0.0	1.6115	Hogging	0.0011861
2.5144	0.038688	-	- 0 (Negligible)					
		Max Tensile		1	0.0	1.6115	Hogging	0.0011861
2.5144	0.038688	-	- 0 (Negligible)					
		Strain						
		Min Radius of		-	-	-	-	-
-	-	-	-					

			Curvature (Hogging)							
			Min Radius of							
-	-	-	-	-	-	-	-	-	-	-
			Curvature (Sagging)							
h-49			Max Slope	1	0.0	2.1345	Sagging		0.0011585	
2.2688	0.037280	-	1775.6 0 (Negligible)							
			Max Settlement	1	0.0	2.1345	Sagging		0.0011585	
2.2688	0.037280	-	1775.6 0 (Negligible)							
			Max Tensile	1	0.0	2.1345	Sagging		0.0011585	
2.2688	0.037280	-	1775.6 0 (Negligible)							
			Strain							
			Min Radius of							
-	-	-	-	-	-	-	-	-	-	-
			Curvature (Hogging)							
			Min Radius of	1	0.0	2.1345	Sagging		0.0011585	
2.2688	0.037280	-	1775.6 0 (Negligible)							
			Curvature (Sagging)							
49-36			Max Slope	1	0.0	2.3890	Sagging		299.23E-6	
0.43612	0.0027870	-	11737. 0 (Negligible)							
			Max Settlement	1	0.0	2.3890	Sagging		299.23E-6	
0.43612	0.0027870	-	11737. 0 (Negligible)							
			Max Tensile	1	0.0	2.3890	Sagging		299.23E-6	
0.43612	0.0027870	-	11737. 0 (Negligible)							
			Strain							
			Min Radius of							
-	-	-	-	-	-	-	-	-	-	-
			Curvature (Hogging)							
			Min Radius of	1	0.0	2.3890	Sagging		299.23E-6	
0.43612	0.0027870	-	11737. 0 (Negligible)							
			Curvature (Sagging)							
36-48			Max Slope	1	0.0	0.0	Sagging		85.272E-6	
0.15741	0.0	-	112960. 0 (Negligible)							
			Max Settlement	1	0.0	0.0	Sagging		85.272E-6	
0.15741	0.0	-	112960. 0 (Negligible)							
			Max Tensile	1	0.0	0.0	Sagging		85.272E-6	
0.15741	0.0	-	112960. 0 (Negligible)							
			Strain							
			Min Radius of							
-	-	-	-	-	-	-	-	-	-	-
			Curvature (Hogging)							
			Min Radius of							
-	-	-	-	-	-	-	-	-	-	-
			Curvature (Sagging)							
48-47			All settlements are less than the Settlement Trough Limit Sensitivity.							
			All settlements are less than the Settlement Trough Limit Sensitivity.							
			All settlements are less than the Settlement Trough Limit Sensitivity.							
			All settlements are less than the Settlement Trough Limit Sensitivity.							
			All settlements are less than the Settlement Trough Limit Sensitivity.							
47-51			Max Slope	1	1.0750	10.749	Hogging		120.82E-6	
0.44691	0.0070425	34333.	- 0 (Negligible)							
			Max Settlement	1	1.0750	10.749	Hogging		120.82E-6	
0.44691	0.0070425	34333.	- 0 (Negligible)							
			Max Tensile	1	1.0750	10.749	Hogging		120.82E-6	
0.44691	0.0070425	34333.	- 0 (Negligible)							
			Strain							
			Min Radius of	1	1.0750	10.749	Hogging		120.82E-6	
0.44691	0.0070425	34333.	- 0 (Negligible)							
			Curvature (Hogging)							
			Min Radius of							
-	-	-	-	-	-	-	-	-	-	-
			Curvature (Sagging)							
50-46			Max Slope	1	0.0	10.799	Hogging		2.6458E-6	
0.14324	50.104E-6	1.9241E+6	- 0 (Negligible)							
			Max Settlement	1	0.0	10.799	Hogging		2.6458E-6	
0.14324	50.104E-6	1.9241E+6	- 0 (Negligible)							
			Max Tensile	1	0.0	10.799	Hogging		2.6458E-6	
0.14324	50.104E-6	1.9241E+6	- 0 (Negligible)							

0.14324	50.104E-6	Strain Min Radius of Curvature (Hogging) Min Radius of	1.9241E+6	- 0 (Negligible)	1	0.0	10.799	Hogging	2.6458E-6
-	-	-	-	-	-	-	-	-	-
46-47		Curvature (Sagging) Max Slope			1	0.0	6.0900	Hogging	39.607E-6
0.17144	0.013842		34976.	- 0 (Negligible)	1	0.0	6.0900	Hogging	39.607E-6
0.17144	0.013842	Max Settlement	34976.	- 0 (Negligible)	1	0.0	6.0900	Hogging	39.607E-6
0.17144	0.013842	Max Tensile	34976.	- 0 (Negligible)	1	0.0	6.0900	Hogging	39.607E-6
0.17144	0.013842	Strain Min Radius of Curvature (Hogging) Min Radius of	34976.	- 0 (Negligible)	1	0.0	6.0900	Hogging	39.607E-6
-	-	-	-	-	-	-	-	-	-
24-25		Curvature (Sagging)							
25-26		All settlements are less than the Settlement Trough Limit Sensitivity. All settlements are less than the Settlement Trough Limit Sensitivity. All settlements are less than the Settlement Trough Limit Sensitivity. All settlements are less than the Settlement Trough Limit Sensitivity.							
26-27		All settlements are less than the Settlement Trough Limit Sensitivity. All settlements are less than the Settlement Trough Limit Sensitivity. All settlements are less than the Settlement Trough Limit Sensitivity. All settlements are less than the Settlement Trough Limit Sensitivity.							
0.15143	0.0	Max Slope	- 17096.0	0 (Negligible)	1	11.270	11.270	Sagging	95.781E-6
0.15143	0.0	Max Settlement	- 17096.0	0 (Negligible)	1	11.270	11.270	Sagging	95.781E-6
0.15143	0.0	Max Tensile	- 17096.0	0 (Negligible)	1	11.270	11.270	Sagging	95.781E-6
-	-	Strain Min Radius of	-	-	-	-	-	-	-
-	-	Curvature (Hogging) Min Radius of	-	-	-	-	-	-	-
27-28		Curvature (Sagging) Max Slope			1	0.0	3.1691	Sagging	21.753E-6
0.15232	0.0020393		- 84445.0	0 (Negligible)	1	0.0	3.1691	Sagging	21.753E-6
0.15232	0.0020393	Max Settlement	- 84445.0	0 (Negligible)	1	0.0	3.1691	Sagging	21.753E-6
0.15232	0.0020393	Max Tensile	- 84445.0	0 (Negligible)	1	0.0	3.1691	Sagging	21.753E-6
0.15232	0.0020393	Strain Min Radius of	- 84445.0	0 (Negligible)	1	0.0	3.1691	Sagging	21.753E-6
-	-	-	-	-	-	-	-	-	-
28-29		Curvature (Hogging) Min Radius of			1	0.0	3.1691	Sagging	21.753E-6
0.11736	0.0	Curvature (Sagging) Max Slope	- 43669.0	0 (Negligible)	1	0.0	0.0	Sagging	62.184E-6
0.11736	0.0	Max Settlement	- 43669.0	0 (Negligible)	1	0.0	0.0	Sagging	62.184E-6
0.11736	0.0	Max Tensile	- 43669.0	0 (Negligible)	1	0.0	0.0	Sagging	62.184E-6
-	-	Strain Min Radius of	-	-	-	-	-	-	-
-	-	Curvature (Hogging) Min Radius of	-	-	-	-	-	-	-

41-40		Max Slope		1	0.0	4.0690	Sagging	138.00E-6
0.85100	0.0027215	-	26809. 0 (Negligible)					
		Max Settlement		1	0.0	4.0690	Sagging	138.00E-6
0.85100	0.0027215	-	26809. 0 (Negligible)					
		Max Tensile		1	0.0	4.0690	Sagging	138.00E-6
0.85100	0.0027215	-	26809. 0 (Negligible)					
		Strain						
		Min Radius of		-	-	-	-	-
		Curvature (Hogging)						
0.85100	0.0027215	-	26809. 0 (Negligible)	1	0.0	4.0690	Sagging	138.00E-6
		Curvature (Sagging)						
40-39		Max Slope		1	0.0	2.6000	Hogging	302.18E-6
0.85107	0.035604	14185. - 0 (Negligible)						
		Max Settlement		1	0.0	2.6000	Hogging	302.18E-6
0.85107	0.035604	14185. - 0 (Negligible)						
		Max Tensile		1	0.0	2.6000	Hogging	302.18E-6
0.85107	0.035604	14185. - 0 (Negligible)						
		Strain						
0.85107	0.035604	14185. - 0 (Negligible)		1	0.0	2.6000	Hogging	302.18E-6
		Curvature (Hogging)						
		Min Radius of		-	-	-	-	-
		Curvature (Sagging)						
39-38		All settlements are less than the Settlement Trough Limit Sensitivity.						
		All settlements are less than the Settlement Trough Limit Sensitivity.						
		All settlements are less than the Settlement Trough Limit Sensitivity.						
		All settlements are less than the Settlement Trough Limit Sensitivity.						
38-25		All settlements are less than the Settlement Trough Limit Sensitivity.						
		All settlements are less than the Settlement Trough Limit Sensitivity.						
		All settlements are less than the Settlement Trough Limit Sensitivity.						
		All settlements are less than the Settlement Trough Limit Sensitivity.						
20-22		Max Slope		2	1.0031	2.0340	Hogging	15.803E-6
0.12638	546.56E-6	893990. - 0 (Negligible)						
		Max Settlement		1	0.0	1.0031	Sagging	15.530E-6
0.14196	132.50E-6	- 1.8393E+6 0 (Negligible)						
		Max Tensile		2	1.0031	2.0340	Hogging	15.803E-6
0.12638	546.56E-6	893990. - 0 (Negligible)						
		Strain						
0.12638	546.56E-6	893990. - 0 (Negligible)		2	1.0031	2.0340	Hogging	15.803E-6
		Curvature (Hogging)						
		Min Radius of		-	-	-	-	-
		Curvature (Sagging)						
22-b		Max Slope		2	6.0062	11.790	Sagging	684.83E-6
2.2164	0.050943	- 2246.0 1 (Very Slight)						
		Max Settlement		2	6.0062	11.790	Sagging	684.83E-6
2.2164	0.050943	- 2246.0 1 (Very Slight)						
		Max Tensile		2	6.0062	11.790	Sagging	684.83E-6
2.2164	0.050943	- 2246.0 1 (Very Slight)						
		Strain						
1.2917	0.040093	13163. - 0 (Negligible)		1	2.0808	6.0062	Hogging	376.36E-6
		Curvature (Hogging)						
2.2164	0.050943	- 2246.0 1 (Very Slight)		2	6.0062	11.790	Sagging	684.83E-6
		Curvature (Sagging)						
e-45		Max Slope		1	0.0	5.4340	Sagging	481.40E-6
2.0418	0.054130	- 2342.7 1 (Very Slight)						
		Max Settlement		1	0.0	5.4340	Sagging	481.40E-6
2.0418	0.054130	- 2342.7 1 (Very Slight)						
		Max Tensile		1	0.0	5.4340	Sagging	481.40E-6
2.0418	0.054130	- 2342.7 1 (Very Slight)						
		Strain						

1.1562	0.038779	Min Radius of Curvature (Hogging)	14805.	- 0 (Negligible)	2	5.4340	14.761	Hogging	347.45E-6
2.0418	0.054130	Min Radius of Curvature (Sagging)	-	2342.7 1 (Very Slight)	1	0.0	5.4340	Sagging	481.40E-6
18-31		Max Slope			1	0.0	3.3735	Sagging	123.42E-6
1.1442	0.0018572	Max Settlement	-	9987.4 0 (Negligible)	3	3.9787	6.8291	Sagging	36.311E-6
1.2652	66.841E-6	Max Tensile	-	505620. 0 (Negligible)	1	0.0	3.3735	Sagging	123.42E-6
1.1442	0.0018572	Strain	-	9987.4 0 (Negligible)	2	3.3735	3.9787	Hogging	36.311E-6
1.1662	4.7565E-6	Min Radius of Curvature (Hogging)	1.4285E+6	- 0 (Negligible)	1	0.0	3.3735	Sagging	123.42E-6
1.1442	0.0018572	Min Radius of Curvature (Sagging)	-	9987.4 0 (Negligible)	1	0.0	5.6385	Sagging	266.85E-6
23-24		Max Slope			1	0.0	5.6385	Sagging	266.85E-6
1.8419	0.0071720	Max Settlement	-	12627. 0 (Negligible)	1	0.0	5.6385	Sagging	266.85E-6
1.8419	0.0071720	Max Tensile	-	12627. 0 (Negligible)	2	5.6385	9.6150	Hogging	266.85E-6
0.99180	0.020694	Strain	19914.	- 0 (Negligible)	2	5.6385	9.6150	Hogging	266.85E-6
0.99180	0.020694	Min Radius of Curvature (Hogging)	19914.	- 0 (Negligible)	1	0.0	5.6385	Sagging	266.85E-6
1.8419	0.0071720	Min Radius of Curvature (Sagging)	-	12627. 0 (Negligible)	1	0.0	6.3924	Sagging	921.36E-6
b-27		Max Slope			1	0.0	6.3924	Sagging	921.36E-6
2.2745	0.018365	Max Settlement	-	1987.3 0 (Negligible)	1	0.0	6.3924	Sagging	921.36E-6
2.2745	0.018365	Max Tensile	-	1987.3 0 (Negligible)	2	6.3924	10.644	Hogging	370.72E-6
1.3378	0.040699	Strain	12621.	- 0 (Negligible)	2	6.3924	10.644	Hogging	370.72E-6
1.3378	0.040699	Min Radius of Curvature (Hogging)	12621.	- 0 (Negligible)	1	0.0	6.3924	Sagging	921.36E-6
2.2745	0.018365	Min Radius of Curvature (Sagging)	-	1987.3 0 (Negligible)	1	0.0	6.6375	Sagging	184.12E-6
42-37		Max Slope			1	0.0	6.6375	Sagging	184.12E-6
1.3578	0.0019584	Max Settlement	-	26343. 0 (Negligible)	1	0.0	6.6375	Sagging	184.12E-6
1.3578	0.0019584	Max Tensile	-	26343. 0 (Negligible)	2	6.6375	10.183	Hogging	184.12E-6
0.64758	0.011443	Strain	27297.	- 0 (Negligible)	2	6.6375	10.183	Hogging	184.12E-6
0.64758	0.011443	Min Radius of Curvature (Hogging)	27297.	- 0 (Negligible)	1	0.0	6.6375	Sagging	184.12E-6
1.3578	0.0019584	Min Radius of Curvature (Sagging)	-	26343. 0 (Negligible)	1	1.0600	2.5220	Hogging	182.38E-6
47-43		Max Slope			2	2.5220	8.7045	Sagging	182.38E-6
0.35899	0.0016463	Max Settlement	55255.	- 0 (Negligible)	2	2.5220	8.7045	Sagging	182.38E-6
0.88765	0.0040596	Max Tensile	-	13209. 0 (Negligible)	2	2.5220	8.7045	Sagging	182.38E-6
0.88765	0.0040596	Strain	-	13209. 0 (Negligible)	1	1.0600	2.5220	Hogging	182.38E-6
0.35899	0.0016463	Min Radius of Curvature (Hogging)	55255.	- 0 (Negligible)					

-	-	Strain	-	-	-	-	-	-
-	-	Min Radius of	-	-	-	-	-	-
-	-	Curvature	-	-	-	-	-	-
-	-	(Hogging)	-	-	-	-	-	-
2.5144	0.015438	Min Radius of	1270.0	0	(Negligible)	1	0.0	11.050 Sagging 0.0011129
-	-	Curvature	-	-	-	-	-	-
-	-	(Sagging)	-	-	-	-	-	-
gb	-	Max Slope	-	-	-	1	0.0	4.7368 Hogging 0.0021620
3.3854	0.043266	865.25	-	0	(Negligible)	1	0.0	4.7368 Hogging 0.0021620
3.3854	0.043266	Max Settlement	865.25	-	0 (Negligible)	1	0.0	4.7368 Hogging 0.0021620
3.3854	0.043266	Max Tensile	865.25	-	0 (Negligible)	1	0.0	4.7368 Hogging 0.0021620
3.3854	0.043266	865.25	-	0	(Negligible)	1	0.0	4.7368 Hogging 0.0021620
1.2217	0.037912	Strain	-	-	-	3	8.7587	11.399 Hogging 907.16E-6
1.2217	0.037912	Min Radius of	821.77	-	0 (Negligible)	3	8.7587	11.399 Hogging 907.16E-6
1.2217	0.037912	Curvature	-	-	-	3	8.7587	11.399 Hogging 907.16E-6
1.2217	0.037912	(Hogging)	-	-	-	3	8.7587	11.399 Hogging 907.16E-6
1.8449	0.0088861	Min Radius of	954.03	0	(Negligible)	2	4.7368	8.7587 Sagging 0.0021620
1.8449	0.0088861	Curvature	-	-	-	2	4.7368	8.7587 Sagging 0.0021620
1.8449	0.0088861	(Sagging)	-	-	-	2	4.7368	8.7587 Sagging 0.0021620
bc	-	Max Slope	-	-	-	1	0.0	5.5590 Hogging 364.29E-6
1.2226	0.015286	885.25	-	0	(Negligible)	1	0.0	5.5590 Hogging 364.29E-6
1.2226	0.015286	Max Settlement	885.25	-	0 (Negligible)	1	0.0	5.5590 Hogging 364.29E-6
1.2226	0.015286	Max Tensile	885.25	-	0 (Negligible)	1	0.0	5.5590 Hogging 364.29E-6
1.2226	0.015286	885.25	-	0	(Negligible)	1	0.0	5.5590 Hogging 364.29E-6
1.2226	0.015286	Strain	-	-	-	1	0.0	5.5590 Hogging 364.29E-6
1.2226	0.015286	Min Radius of	885.25	-	0 (Negligible)	1	0.0	5.5590 Hogging 364.29E-6
1.2226	0.015286	Curvature	-	-	-	1	0.0	5.5590 Hogging 364.29E-6
1.2226	0.015286	(Hogging)	-	-	-	1	0.0	5.5590 Hogging 364.29E-6
-	-	Min Radius of	-	-	-	-	-	-
-	-	Curvature	-	-	-	-	-	-
-	-	(Sagging)	-	-	-	-	-	-
cd	-	Max Slope	-	-	-	1	0.0	1.7483 Hogging 8.7694E-6
1.1853	0.044908	-	-	0	(Negligible)	1	0.0	1.7483 Hogging 8.7694E-6
1.1853	0.044908	Max Settlement	-	-	0 (Negligible)	1	0.0	1.7483 Hogging 8.7694E-6
1.1853	0.044908	Max Tensile	-	-	0 (Negligible)	1	0.0	1.7483 Hogging 8.7694E-6
1.1853	0.044908	-	-	-	0 (Negligible)	1	0.0	1.7483 Hogging 8.7694E-6
-	-	Strain	-	-	-	-	-	-
-	-	Min Radius of	-	-	-	-	-	-
-	-	Curvature	-	-	-	-	-	-
-	-	(Hogging)	-	-	-	-	-	-
-	-	Min Radius of	-	-	-	-	-	-
-	-	Curvature	-	-	-	-	-	-
-	-	(Sagging)	-	-	-	-	-	-
eh	-	Max Slope	-	-	-	1	0.0	4.7584 Sagging 0.0022186
1.4706	0.013135	-	2059.9	0	(Negligible)	1	0.0	4.7584 Sagging 0.0022186
1.4706	0.013135	Max Settlement	2059.9	-	0 (Negligible)	2	4.7584	9.7590 Hogging 0.0022186
3.4069	0.023700	1532.7	-	0	(Negligible)	2	4.7584	9.7590 Hogging 0.0022186
3.4069	0.023700	Max Tensile	1532.7	-	0 (Negligible)	2	4.7584	9.7590 Hogging 0.0022186
3.4069	0.023700	1532.7	-	0	(Negligible)	2	4.7584	9.7590 Hogging 0.0022186
3.4069	0.023700	Strain	-	-	-	2	4.7584	9.7590 Hogging 0.0022186
3.4069	0.023700	Min Radius of	1532.7	-	0 (Negligible)	2	4.7584	9.7590 Hogging 0.0022186
3.4069	0.023700	Curvature	-	-	-	2	4.7584	9.7590 Hogging 0.0022186
3.4069	0.023700	(Hogging)	-	-	-	2	4.7584	9.7590 Hogging 0.0022186
1.4706	0.013135	Min Radius of	2059.9	0	(Negligible)	1	0.0	4.7584 Sagging 0.0022186
1.4706	0.013135	Curvature	-	-	-	1	0.0	4.7584 Sagging 0.0022186
1.4706	0.013135	(Sagging)	-	-	-	1	0.0	4.7584 Sagging 0.0022186
hf	-	Max Slope	-	-	-	1	0.0	10.879 Sagging 858.72E-6
2.2688	0.016049	-	1611.5	0	(Negligible)	1	0.0	10.879 Sagging 858.72E-6
2.2688	0.016049	Max Settlement	1611.5	-	0 (Negligible)	1	0.0	10.879 Sagging 858.72E-6
2.2688	0.016049	Max Tensile	1611.5	-	0 (Negligible)	1	0.0	10.879 Sagging 858.72E-6
2.2688	0.016049	-	1611.5	-	0 (Negligible)	1	0.0	10.879 Sagging 858.72E-6
2.2688	0.016049	Strain	-	-	-	1	0.0	10.879 Sagging 858.72E-6

-	-	-	-	Min Radius of Curvature (Hogging)	-	-	-	-	-
2.2688	0.016049	-	1611.5	0 (Negligible)	1	0.0	10.879	Sagging	858.72E-6
1.4701	0.018212	-	1916.1	0 (Negligible)	1	0.0	0.47607	Sagging	683.50E-6
1.4701	0.018212	-	1916.1	0 (Negligible)	1	0.0	0.47607	Sagging	683.50E-6
1.4701	0.018212	-	1916.1	0 (Negligible)	1	0.0	0.47607	Sagging	683.50E-6
-	-	-	-	Min Radius of Curvature (Hogging)	-	-	-	-	-
1.4701	0.018212	-	1916.1	0 (Negligible)	1	0.0	0.47607	Sagging	683.50E-6

Specific Building Damage Results - All Combined Segments

Structure: 21-20 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: 19-20 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: 19-18 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: 18-13 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: 21-a | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: f-50 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: 14-15 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: 15-16 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: 16-17 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: 17-g | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: h-49 | Sub-structure:

Vertical Offset from Line for	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
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Vertical Movement Calculations
 [m] [m] [m] [%] [%] [%]
 No structures have segments combined.

Structure: 49-36 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 36-48 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 48-47 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 47-51 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 50-46 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 46-47 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 24-25 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: 25-26 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: 26-27 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: 27-28 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: 28-29 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: 27-32 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: 33-31 | Sub-structure:

Vertical	Combined	Start	Length	Curvature	Deflection	Average	Max	Damage Category
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Offset from Line for Vertical Movement Calculations	Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 31-34 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 34-35 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 35-41 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 41-40 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 40-39 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 39-38 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

[m] [m] [m] [%] [%] [%]
No structures have segments combined.

Structure: 38-25 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]	[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 20-22 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]	[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 22-b | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]	[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: e-45 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]	[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 18-31 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]	[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 23-24 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]	[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: b-27 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: 42-37 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: 47-43 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: 44-39 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: 46-45 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: a-12 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: 12-11 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

**Movement
Calculations**

[m] [m] [m] [%] [%] [%]
No structures have segments combined.

Structure: 11-f | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
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[m] [m] [m] [%] [%] [%]
No structures have segments combined.

Structure: ag | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
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[m] [m] [m] [%] [%] [%]
No structures have segments combined.

Structure: gb | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
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[m] [m] [m] [%] [%] [%]
No structures have segments combined.

Structure: bc | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
---	---------------------	-------	--------	-----------	---------------------	---------------------------------	--------------------------	-----------------

[m] [m] [m] [%] [%] [%]
No structures have segments combined.

Structure: cd | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
---	---------------------	-------	--------	-----------	---------------------	---------------------------------	--------------------------	-----------------

[m] [m] [m] [%] [%] [%]
No structures have segments combined.

Structure: eh | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
---	---------------------	-------	--------	-----------	---------------------	---------------------------------	--------------------------	-----------------

[m] [m] [m] [%] [%] [%]
No structures have segments combined.

Structure: hf | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: de | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

[m]				[m]	[m]	[m]	[m]	[m]	[m]
1	Grid	Grid 1	Global X	30.000	35.000	0.0	N/A	80.000	0.0
99	70.000		99	Yes	Yes				
2	Line	21-20	N/A	55.960	70.700	0.0	44.210	70.720	0.0
11	N/A	N/A		Yes	Yes				
3	Line	19-20	N/A	59.140	66.790	0.0	55.960	70.700	0.0
5	N/A	N/A		Yes	Yes				
4	Line	19-18	N/A	59.140	66.790	0.0	59.170	64.780	0.0
2	N/A	N/A		Yes	Yes				
5	Line	18-13	N/A	59.170	64.780	0.0	44.210	64.800	0.0
14	N/A	N/A		Yes	Yes				
6	Line	21-a	N/A	44.210	70.720	0.0	44.060	58.900	0.0
34	N/A	N/A		Yes	Yes				
7	Line	f-50	N/A	44.100	51.600	0.0	44.160	36.710	0.0
15	N/A	N/A		Yes	Yes				
8	Line	14-15	N/A	55.000	64.760	0.0	55.000	62.620	0.0
2	N/A	N/A		Yes	Yes				
9	Line	15-16	N/A	55.000	62.620	0.0	56.230	61.460	0.0
1	N/A	N/A		Yes	Yes				
10	Line	16-17	N/A	56.230	61.460	0.0	56.220	59.560	0.0
1	N/A	N/A		Yes	Yes				
11	Line	17-g	N/A	56.220	59.560	0.0	55.100	58.400	0.0
1	N/A	N/A		Yes	Yes				
12	Line	h-49	N/A	54.980	51.600	0.0	56.500	50.100	0.0
2	N/A	N/A		Yes	Yes				
13	Line	49-36	N/A	56.500	50.100	0.0	56.500	47.710	0.0
2	N/A	N/A		Yes	Yes				
14	Line	36-48	N/A	56.500	47.710	0.0	54.960	46.000	0.0
2	N/A	N/A		Yes	Yes				
15	Line	48-47	N/A	54.960	46.000	0.0	54.960	44.830	0.0
1	N/A	N/A		Yes	Yes				
16	Line	47-51	N/A	54.960	44.830	0.0	44.210	44.830	0.0
10	N/A	N/A		Yes	Yes				
17	Line	50-46	N/A	44.160	36.710	0.0	54.960	36.710	0.0
10	N/A	N/A		Yes	Yes				
18	Line	46-47	N/A	54.960	36.710	0.0	54.960	44.830	0.0
8	N/A	N/A		Yes	Yes				
19	Line	24-25	N/A	78.820	63.100	0.0	88.080	63.070	0.0
9	N/A	N/A		Yes	Yes				
20	Line	25-26	N/A	88.080	63.070	0.0	88.000	57.750	0.0
5	N/A	N/A		Yes	Yes				
21	Line	26-27	N/A	88.000	57.750	0.0	76.730	57.900	0.0
11	N/A	N/A		Yes	Yes				
22	Line	27-28	N/A	76.730	57.900	0.0	76.710	61.070	0.0
3	N/A	N/A		Yes	Yes				
23	Line	28-29	N/A	76.710	61.070	0.0	78.820	63.100	0.0
2	N/A	N/A		Yes	Yes				
24	Line	27-32	N/A	76.730	57.900	0.0	76.750	52.750	0.0
5	N/A	N/A		Yes	Yes				
25	Line	33-31	N/A	87.930	52.750	0.0	70.250	52.750	0.0
17	N/A	N/A		Yes	Yes				
26	Line	31-34	N/A	70.250	52.750	0.0	70.180	49.380	0.0
3	N/A	N/A		Yes	Yes				
27	Line	34-35	N/A	70.180	49.380	0.0	71.510	49.370	0.0
1	N/A	N/A		Yes	Yes				
28	Line	35-41	N/A	71.510	49.370	0.0	71.480	45.770	0.0
3	N/A	N/A		Yes	Yes				
29	Line	41-40	N/A	71.480	45.770	0.0	67.410	45.770	0.0
4	N/A	N/A		Yes	Yes				
30	Line	40-39	N/A	67.410	45.770	0.0	67.390	41.870	0.0
3	N/A	N/A		Yes	Yes				
31	Line	39-38	N/A	67.390	41.870	0.0	88.000	41.700	0.0
20	N/A	N/A		Yes	Yes				
32	Line	38-25	N/A	88.000	41.700	0.0	88.080	63.070	0.0
21	N/A	N/A		Yes	Yes				
33	Line	20-22	N/A	55.960	70.700	0.0	66.130	70.690	0.0
10	N/A	N/A		Yes	Yes				
34	Line	22-b	N/A	66.130	70.690	0.0	66.300	58.900	0.0
17	N/A	N/A		Yes	Yes				
35	Line	e-45	N/A	64.740	51.600	0.0	64.480	36.840	0.0
15	N/A	N/A		Yes	Yes				
36	Line	18-31	N/A	59.170	64.780	0.0	66.000	64.740	0.0
6	N/A	N/A		Yes	Yes				
37	Line	23-24	N/A	66.000	63.140	0.0	78.820	63.100	0.0
12	N/A	N/A		Yes	Yes				

38	Line	b-27	N/A	66.100	58.460	0.0	76.730	57.900	0.0
10	N/A	N/A	Yes	Yes					
39	Line	42-37	N/A	64.540	46.730	0.0	87.960	46.450	0.0
23	N/A	N/A	Yes	Yes					
40	Line	47-43	N/A	54.960	44.830	0.0	64.500	44.830	0.0
9	N/A	N/A	Yes	Yes					
41	Line	44-39	N/A	64.440	41.910	0.0	67.390	41.870	0.0
2	N/A	N/A	Yes	Yes					
42	Line	46-45	N/A	54.960	36.710	0.0	64.480	36.840	0.0
9	N/A	N/A	Yes	Yes					
43	Line	a-12	N/A	44.060	58.900	0.0	39.630	58.380	0.0
4	N/A	N/A	Yes	Yes					
44	Line	12-11	N/A	39.630	58.380	0.0	39.630	51.680	0.0
6	N/A	N/A	Yes	Yes					
45	Line	11-f	N/A	39.630	51.680	0.0	44.100	51.600	0.0
8	N/A	N/A	Yes	Yes					
46	Line	ag	N/A	44.060	58.900	0.0	55.100	58.400	0.0
11	N/A	N/A	Yes	Yes					
47	Line	gb	N/A	55.100	58.400	0.0	66.500	58.460	0.0
20	N/A	N/A	Yes	Yes					
48	Line	bc	N/A	66.500	58.460	0.0	66.500	52.900	0.0
20	N/A	N/A	Yes	Yes					
49	Line	cd	N/A	66.500	52.900	0.0	65.000	52.000	0.0
1	N/A	N/A	Yes	Yes					
50	Line	eh	N/A	64.740	51.600	0.0	54.980	51.600	0.0
9	N/A	N/A	Yes	Yes					
51	Line	hf	N/A	54.980	51.600	0.0	44.100	51.600	0.0
10	N/A	N/A	Yes	Yes					
52	Line	de	N/A	65.000	52.000	0.0	64.740	51.600	0.0
4	N/A	N/A	Yes	Yes					

Problem Type

Problem Type : Tunnelling and Embedded Wall Excavations

Displacement Data

Type of intervals across extrusion/line	Name of Extrusion	Direction No. of intervals along	Point/Line/Line for extrusion Calculate Surface of extrusion type for	No.					
		tunnels							
		First point		Second point					
		X	Y	Z (level)					
		[m]	[m]	[m]					
[m]	Grid 1	Global X	30.00000	35.00000	0.00000	-	80.00000	0.00000	
99	70.00000	99 Yes	Surface						
Line 11	21-20	-	55.96000	70.70000	0.00000	44.21000	70.72000	0.00000	
Line 5	19-20	-	59.14000	66.79000	0.00000	55.96000	70.70000	0.00000	
Line 2	19-18	-	59.14000	66.79000	0.00000	59.17000	64.78000	0.00000	
Line 14	18-13	-	59.17000	64.78000	0.00000	44.21000	64.80000	0.00000	
Line 34	21-a	-	44.21000	70.72000	0.00000	44.06000	58.90000	0.00000	
Line 15	f-50	-	44.10000	51.60000	0.00000	44.16000	36.71000	0.00000	
Line 2	14-15	-	55.00000	64.76000	0.00000	55.00000	62.62000	0.00000	
Line 1	15-16	-	55.00000	62.62000	0.00000	56.23000	61.46000	0.00000	
Line 1	16-17	-	56.23000	61.46000	0.00000	56.22000	59.56000	0.00000	

Line 17-g	-	-	56.22000	59.56000	0.00000	55.10000	58.40000	0.00000
1	-	Yes	Surface					
Line h-49	-	-	54.98000	51.60000	0.00000	56.50000	50.10000	0.00000
2	-	Yes	Surface					
Line 49-36	-	-	56.50000	50.10000	0.00000	56.50000	47.71000	0.00000
2	-	Yes	Surface					
Line 36-48	-	-	56.50000	47.71000	0.00000	54.96000	46.00000	0.00000
2	-	Yes	Surface					
Line 48-47	-	-	54.96000	46.00000	0.00000	54.96000	44.83000	0.00000
1	-	Yes	Surface					
Line 47-51	-	-	54.96000	44.83000	0.00000	44.21000	44.83000	0.00000
10	-	Yes	Surface					
Line 50-46	-	-	44.16000	36.71000	0.00000	54.96000	36.71000	0.00000
10	-	Yes	Surface					
Line 46-47	-	-	54.96000	36.71000	0.00000	54.96000	44.83000	0.00000
8	-	Yes	Surface					
Line 24-25	-	-	78.82000	63.10000	0.00000	88.08000	63.07000	0.00000
9	-	Yes	Surface					
Line 25-26	-	-	88.08000	63.07000	0.00000	88.00000	57.75000	0.00000
5	-	Yes	Surface					
Line 26-27	-	-	88.00000	57.75000	0.00000	76.73000	57.90000	0.00000
11	-	Yes	Surface					
Line 27-28	-	-	76.73000	57.90000	0.00000	76.71000	61.07000	0.00000
3	-	Yes	Surface					
Line 28-29	-	-	76.71000	61.07000	0.00000	78.82000	63.10000	0.00000
2	-	Yes	Surface					
Line 27-32	-	-	76.73000	57.90000	0.00000	76.75000	52.75000	0.00000
5	-	Yes	Surface					
Line 33-31	-	-	87.93000	52.75000	0.00000	70.25000	52.75000	0.00000
17	-	Yes	Surface					
Line 31-34	-	-	70.25000	52.75000	0.00000	70.18000	49.38000	0.00000
3	-	Yes	Surface					
Line 34-35	-	-	70.18000	49.38000	0.00000	71.51000	49.37000	0.00000
1	-	Yes	Surface					
Line 35-41	-	-	71.51000	49.37000	0.00000	71.48000	45.77000	0.00000
3	-	Yes	Surface					
Line 41-40	-	-	71.48000	45.77000	0.00000	67.41000	45.77000	0.00000
4	-	Yes	Surface					
Line 40-39	-	-	67.41000	45.77000	0.00000	67.39000	41.87000	0.00000
3	-	Yes	Surface					
Line 39-38	-	-	67.39000	41.87000	0.00000	88.00000	41.70000	0.00000
20	-	Yes	Surface					
Line 38-25	-	-	88.00000	41.70000	0.00000	88.08000	63.07000	0.00000
21	-	Yes	Surface					
Line 20-22	-	-	55.96000	70.70000	0.00000	66.13000	70.69000	0.00000
10	-	Yes	Surface					
Line 22-b	-	-	66.13000	70.69000	0.00000	66.30000	58.90000	0.00000
17	-	Yes	Surface					
Line e-45	-	-	64.74000	51.60000	0.00000	64.48000	36.84000	0.00000
15	-	Yes	Surface					
Line 18-31	-	-	59.17000	64.78000	0.00000	66.00000	64.74000	0.00000
6	-	Yes	Surface					
Line 23-24	-	-	66.00000	63.14000	0.00000	78.82000	63.10000	0.00000
12	-	Yes	Surface					
Line b-27	-	-	66.10000	58.46000	0.00000	76.73000	57.90000	0.00000
10	-	Yes	Surface					
Line 42-37	-	-	64.54000	46.73000	0.00000	87.96000	46.45000	0.00000
23	-	Yes	Surface					
Line 47-43	-	-	54.96000	44.83000	0.00000	64.50000	44.83000	0.00000
9	-	Yes	Surface					
Line 44-39	-	-	64.44000	41.91000	0.00000	67.39000	41.87000	0.00000
2	-	Yes	Surface					
Line 46-45	-	-	54.96000	36.71000	0.00000	64.48000	36.84000	0.00000
9	-	Yes	Surface					
Line a-12	-	-	44.06000	58.90000	0.00000	39.63000	58.38000	0.00000
4	-	Yes	Surface					
Line 12-11	-	-	39.63000	58.38000	0.00000	39.63000	51.68000	0.00000
6	-	Yes	Surface					
Line 11-f	-	-	39.63000	51.68000	0.00000	44.10000	51.60000	0.00000
8	-	Yes	Surface					
Line ag	-	-	44.06000	58.90000	0.00000	55.10000	58.40000	0.00000
11	-	Yes	Surface					
Line gb	-	-	55.10000	58.40000	0.00000	66.50000	58.46000	0.00000
20	-	Yes	Surface					
Line bc	-	-	66.50000	58.46000	0.00000	66.50000	52.90000	0.00000
20	-	Yes	Surface					

Line	cd	-	-	66.50000	52.90000	0.00000	65.00000	52.00000	0.00000
1	-	-	Yes	Surface					
Line	eh	-	-	64.74000	51.60000	0.00000	54.98000	51.60000	0.00000
9	-	-	Yes	Surface					
Line	hf	-	-	54.98000	51.60000	0.00000	44.10000	51.60000	0.00000
10	-	-	Yes	Surface					
Line	de	-	-	65.00000	52.00000	0.00000	64.74000	51.60000	0.00000
4	-	-	Yes	Surface					

Vertical Ground Movement Curves

Curve Name: No vertical ground movement

Coordinates: [Distance from wall / wall depth or max. excavation depth (x), Depth / wall depth or max. excavation depth (y), Settlement / wall depth or max. excavation depth (z) (%)]

[0.000,0.000,0.000] [1.000,0.000,0.000] [0.000,1.000,0.000] [1.000,1.000,0.000]

Curve Fitting Method: Polynomial

x Order: 1

y Order: 0

Polynomial: z = 0.0x + 0.0

Coeff. of Determination: -2147483648.E+2147483647

Curve Name: Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11 (b))

Coordinates: [Distance from wall / wall depth or max. excavation depth (x), Depth / wall depth or max. excavation depth (y), Settlement / wall depth or max. excavation depth (z) (%)]

[0.000,0.000,0.039] [0.100,0.000,0.049] [0.200,0.000,0.056] [0.300,0.000,0.062] [0.400,0.000,0.067] [0.500,0.000,0.070] [0.600,0.000,0.072] [0.700,0.000,0.073] [0.800,0.000,0.073] [0.900,0.000,0.072] [1.000,0.000,0.070] [1.100,0.000,0.068] [1.200,0.000,0.065] [1.300,0.000,0.061] [1.400,0.000,0.058] [1.500,0.000,0.054] [1.600,0.000,0.050] [1.700,0.000,0.046] [1.800,0.000,0.042] [1.900,0.000,0.038] [2.000,0.000,0.034] [2.100,0.000,0.030] [2.200,0.000,0.027] [2.300,0.000,0.023] [2.400,0.000,0.020] [2.500,0.000,0.017] [2.600,0.000,0.014] [2.700,0.000,0.012] [2.800,0.000,0.010] [2.900,0.000,0.008] [3.000,0.000,0.007] [3.100,0.000,0.005] [3.200,0.000,0.004] [3.300,0.000,0.004] [3.400,0.000,0.003] [3.500,0.000,0.002] [3.600,0.000,0.002] [3.700,0.000,0.002] [3.800,0.000,0.001] [3.900,0.000,0.001] [4.000,0.000,0.000]

Curve Fitting Method: Polynomial

x Order: 4

y Order: 0

Polynomial: z = -2.6455E-3x⁴ + 2.8495E-2x³ - 1.0051E-1x² + 1.0569E-1x + 3.8990E-2

Coeff. of Determination: 9.9991E-1

Horizontal Ground Movement Curves

Curve Name: No horizontal ground movement

Coordinates: [Distance from wall / wall depth or max. excavation depth (x), Depth / wall depth or max. excavation depth (y), Horizontal movement / wall depth or max. excavation depth (z) (%)]

[0.000,0.000,0.000] [1.000,0.000,0.000] [0.000,1.000,0.000] [1.000,1.000,0.000]

Curve Fitting Method: Polynomial

x Order: 0

y Order: 0

Polynomial: z = 0.0

Coeff. of Determination: -2147483648.E+2147483647

Curve Name: Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11 (a))

Coordinates: [Distance from wall / wall depth or max. excavation depth (x), Depth / wall depth or max. excavation depth (y), Horizontal movement / wall depth or max. excavation depth (z) (%)]

[0.000,0.000,0.150] [4.000,0.000,0.000]

Curve Fitting Method: Polynomial

x Order: 1
y Order: 0
Polynomial: z = -3.75E-2x + 1.50E-1
Coeff. of 1.00
Determination:

Polygonal Excavations

Excavation Name: Excavation 1
Surface level [m]: 0.0
Contribution: Positive
Enabled: No
Surface movement curves which are selected are applied between surface and [m]: -10.000

Corner	x	y	Base Level	Stiffened	Previous Side			Next Side		
					d	p1	p2*	d	p1	p2*
	[m]	[m]	[m]		[m]	[%]	[%]	[m]	[%]	[%]
1	66.020	58.310	-1.0700	No	-	-	-	-	-	-
2	66.000	53.200	-1.0700	No	-	-	-	-	-	-
3	59.820	51.680	-1.0700	No	-	-	-	-	-	-
4	39.630	51.680	-1.0700	No	-	-	-	-	-	-
5	39.630	58.380	-1.0700	No	-	-	-	-	-	-

Side	Corner 1		Corner 2		Ground Movement Curve					
	x	y	x	y	Vertical			Horizontal		
	[m]	[m]	[m]	[m]						
1	66.020	58.310	66.000	53.200	Excavation in front of high	Excavation in front of high	stiffness wall in stiff clay	stiffness wall in stiff clay	(CIRIA 580 Fig. 2.11(b))	(CIRIA 580 Fig. 2.11(a))
2	66.000	53.200	59.820	51.680	Excavation in front of high	Excavation in front of high	stiffness wall in stiff clay	stiffness wall in stiff clay	(CIRIA 580 Fig. 2.11(b))	(CIRIA 580 Fig. 2.11(a))
3	59.820	51.680	39.630	51.680	Excavation in front of high	Excavation in front of high	stiffness wall in stiff clay	stiffness wall in stiff clay	(CIRIA 580 Fig. 2.11(b))	(CIRIA 580 Fig. 2.11(a))
4	39.630	51.680	39.630	58.380	Excavation in front of high	Excavation in front of high	stiffness wall in stiff clay	stiffness wall in stiff clay	(CIRIA 580 Fig. 2.11(b))	(CIRIA 580 Fig. 2.11(a))
5	39.630	58.380	66.020	58.310	Excavation in front of high	Excavation in front of high	stiffness wall in stiff clay	stiffness wall in stiff clay	(CIRIA 580 Fig. 2.11(b))	(CIRIA 580 Fig. 2.11(a))

Excavation Name: Excavation 2
Surface level [m]: 0.0
Contribution: Positive
Enabled: No
Surface movement curves which are selected are applied between surface and [m]: -5.0000

Corner	x	y	Base Level	Stiffened	Previous Side			Next Side		
					d	p1	p2*	d	p1	p2*
	[m]	[m]	[m]		[m]	[%]	[%]	[m]	[%]	[%]
1	59.820	58.310	-3.6000	No	-	-	-	-	-	-
2	66.020	58.310	-3.6000	No	-	-	-	-	-	-
3	66.000	53.200	-3.6000	No	-	-	-	-	-	-
4	59.820	51.680	-3.6000	No	-	-	-	-	-	-

Side	Corner 1		Corner 2		Ground Movement Curve	
	x [m]	y [m]	x [m]	y [m]	Vertical	Horizontal
1 of high stiff clay 2.11(a))	59.820	58.310	66.020	58.310	Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(b))	Excavation in front stiffness wall in (CIRIA 580 Fig.
2 of high stiff clay 2.11(a))	66.020	58.310	66.000	53.200	Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(b))	Excavation in front stiffness wall in (CIRIA 580 Fig.
3 of high stiff clay 2.11(a))	66.000	53.200	59.820	51.680	Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(b))	Excavation in front stiffness wall in (CIRIA 580 Fig.
4 movement 2.11(a))	59.820	51.680	59.820	58.310	No vertical ground movement	No horizontal ground movement

Excavation Name: **Excavation 3**
Surface level [m]: 0.0
Contribution: Negative
Enabled: No
Surface movement curves which are selected are applied between surface and [m]: -5.0000

Corner	x [m]	y [m]	Base Level [m]	Stiffened	Previous Side			Next Side		
					d [m]	p1 [%]	p2* [%]	d [m]	p1 [%]	p2* [%]
1	59.820	58.310	-1.0700	No	-	-	-	-	-	-
2	66.020	58.310	-1.0700	No	-	-	-	-	-	-
3	66.000	53.200	-1.0700	No	-	-	-	-	-	-
4	59.820	51.680	-1.0700	No	-	-	-	-	-	-

Side	Corner 1		Corner 2		Ground Movement Curve	
	x [m]	y [m]	x [m]	y [m]	Vertical	Horizontal
1 of high stiff clay 2.11(a))	59.820	58.310	66.020	58.310	Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(b))	Excavation in front stiffness wall in (CIRIA 580 Fig.
2 of high stiff clay 2.11(a))	66.020	58.310	66.000	53.200	Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(b))	Excavation in front stiffness wall in (CIRIA 580 Fig.
3 of high stiff clay 2.11(a))	66.000	53.200	59.820	51.680	Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(b))	Excavation in front stiffness wall in (CIRIA 580 Fig.
4 movement 2.11(a))	59.820	51.680	59.820	58.310	No vertical ground movement	No horizontal ground movement

Damage Category Strains

Name	0 (Negligible)	1 (Very Slight)	2 (Slight)	3 (Moderate)
	to	to	to	to
Burland Strain Limits	1 (Very Slight)	2 (Slight)	3 (Moderate)	4 (Severe)
	0.0	500.00E-6	750.00E-6	0.0015000

Specific Structures - Geometry

Structure Name	Sub-Structure	Displacement	Start	End	Vertical	Vertical
Damage Category	Strains	Poisson's	Distance	Distance	Offsets from	Displacement
Ratio	Name	E/G	Along	Along	Line for	Limit
		Line	Line	Line	Vertical	Sensitivity
			Line	Line	Movement	
					Calculations	
			[m]	[m]	[m]	[mm]
	21-20	21-20	0.00000	11.74902	0.0	0.10000
Burland	Strain Limits	0.20000 2.6000				
	19-20	19-20	0.00000	5.03889	0.0	0.10000
Burland	Strain Limits	0.20000 2.6000				
	19-18	19-18	0.00000	2.00922	0.0	0.10000
Burland	Strain Limits	0.20000 2.6000				
	18-13	18-13	0.00000	14.95901	0.0	0.10000
Burland	Strain Limits	0.20000 2.6000				
	21-a	21-a	0.00000	11.81995	0.0	0.10000
Burland	Strain Limits	0.20000 2.6000				
	f-50	f-50	0.00000	14.88912	0.0	0.10000
Burland	Strain Limits	0.20000 2.6000				
	14-15	14-15	0.00000	2.13900	0.0	0.10000
Burland	Strain Limits	0.20000 2.6000				
	15-16	15-16	0.00000	1.68971	0.0	0.10000
Burland	Strain Limits	0.20000 2.6000				
	16-17	16-17	0.00000	1.89903	0.0	0.10000
Burland	Strain Limits	0.20000 2.6000				
	17-g	17-g	0.00000	1.61145	0.0	0.10000
Burland	Strain Limits	0.20000 2.6000				
	h-49	h-49	0.00000	2.13451	0.0	0.10000
Burland	Strain Limits	0.20000 2.6000				
	49-36	49-36	0.00000	2.38900	0.0	0.10000
Burland	Strain Limits	0.20000 2.6000				
	36-48	36-48	0.00000	2.30024	0.0	0.10000
Burland	Strain Limits	0.20000 2.6000				
	48-47	48-47	0.00000	1.16900	0.0	0.10000
Burland	Strain Limits	0.20000 2.6000				
	47-51	47-51	0.00000	10.74900	0.0	0.10000
Burland	Strain Limits	0.20000 2.6000				
	50-46	50-46	0.00000	10.79900	0.0	0.10000
Burland	Strain Limits	0.20000 2.6000				
	46-47	46-47	0.00000	8.11900	0.0	0.10000
Burland	Strain Limits	0.20000 2.6000				
	24-25	24-25	0.00000	9.25905	0.0	0.10000
Burland	Strain Limits	0.20000 2.6000				
	25-26	25-26	0.00000	5.31960	0.0	0.10000
Burland	Strain Limits	0.20000 2.6000				
	26-27	26-27	0.00000	11.27000	0.0	0.10000
Burland	Strain Limits	0.20000 2.6000				
	27-28	27-28	0.00000	3.16906	0.0	0.10000
Burland	Strain Limits	0.20000 2.6000				
	28-29	28-29	0.00000	2.92697	0.0	0.10000
Burland	Strain Limits	0.20000 2.6000				
	27-32	27-32	0.00000	5.14904	0.0	0.10000
Burland	Strain Limits	0.20000 2.6000				
	33-31	33-31	0.00000	17.67900	0.0	0.10000
Burland	Strain Limits	0.20000 2.6000				
	31-34	31-34	0.00000	3.36973	0.0	0.10000
Burland	Strain Limits	0.20000 2.6000				
	34-35	34-35	0.00000	1.32904	0.0	0.10000
Burland	Strain Limits	0.20000 2.6000				
	35-41	35-41	0.00000	3.59912	0.0	0.10000
Burland	Strain Limits	0.20000 2.6000				
	41-40	41-40	0.00000	4.06900	0.0	0.10000
Burland	Strain Limits	0.20000 2.6000				
	40-39	40-39	0.00000	3.89905	0.0	0.10000
Burland	Strain Limits	0.20000 2.6000				
	39-38	39-38	0.00000	20.60970	0.0	0.10000
Burland	Strain Limits	0.20000 2.6000				
	38-25	38-25	0.00000	21.36915	0.0	0.10000
Burland	Strain Limits	0.20000 2.6000				
	20-22	20-22	0.00000	10.16900	0.0	0.10000
Burland	Strain Limits	0.20000 2.6000				
	22-b	22-b	0.00000	11.79023	0.0	0.10000
Burland	Strain Limits	0.20000 2.6000				

e-45	e-45	0.00000	14.76129	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
18-31	18-31	0.00000	6.82912	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
23-24	23-24	0.00000	12.81906	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
b-27	b-27	0.00000	10.64374	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
42-37	42-37	0.00000	23.42067	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
47-43	47-43	0.00000	9.53900	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
44-39	44-39	0.00000	2.94927	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
46-45	46-45	0.00000	9.51989	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
a-12	a-12	0.00000	4.45941	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
12-11	12-11	0.00000	6.69900	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
11-f	11-f	0.00000	4.46972	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
ag	ag	0.00000	11.05032	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
gb	gb	0.00000	11.39916	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
bc	bc	0.00000	5.55900	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
cd	cd	0.00000	1.74829	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
eh	eh	0.00000	9.75900	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
hf	hf	0.00000	10.87900	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
de	de	0.00000	0.47607	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				

Specific Structures - Bending Parameters

Structure Name	Sub-Structure	Height	Default	Hogging			
Sagging	Name	Properties		2nd Moment	Distance	Distance	2nd Moment
Distance	Distance			of Area	of Bending	of N.A.	of Area
of Bending	of N.A.			(per unit	Strain	from Edge	(per unit
Strain	from Edge			width)	from N.A.	of Beam in	width)
from N.A.	of Beam in					Tension	
Tension							
		[m]		[m ³]	[m]	[m]	[m ³]
21-20		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
19-20		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
19-18		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
18-13		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
21-a		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
f-50		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
14-15		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
15-16		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
16-17		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
17-g		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						

h-49		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
49-36		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
36-48		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
48-47		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
47-51		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
50-46		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
46-47		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
24-25		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
25-26		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
26-27		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
27-28		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
28-29		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
27-32		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
33-31		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
31-34		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
34-35		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
35-41		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
41-40		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
40-39		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
39-38		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
38-25		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
20-22		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						
22-b		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						
e-45		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						
18-31		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						
23-24		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						
b-27		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						
42-37		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						
47-43		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						
44-39		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						
46-45		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						
a-12		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						
12-11		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						
11-f		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						
ag		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
gb		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						
bc		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						
cd		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						

eh			3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000							
hf			13.0000	Yes	732.33	13.0000	13.0000	183.08
6.5000	6.5000							
de			3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000							

Building Segment Combinations

Structure Name	Sub-Structure Name	Vertical Offset from Line for Vertical Movement Calculations	Segment Start	Length	Curvature	Combined Segment
		[m]	[m]	[m]		

No structures have segments combined.

Utility Strain Calculation Options

Neglect beneficial contribution of axial strains : No

Specific Building Damage Results - Horizontal Displacements

Structure: 21-20 | Sub-structure:

Dist.	Coordinates			Displacements		Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
	x	y	z	x	y		
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	55.96000	70.70000	0.00000	0.0	0.0	0.0	0.0 d
1.0682	54.89182	70.70182	0.00000	0.0	0.0	0.0	0.0 d
2.1364	53.82364	70.70364	0.00000	0.0	0.0	0.0	0.0 d
3.2046	52.75545	70.70545	0.00000	0.0	0.0	0.0	0.0 d
4.2727	51.68727	70.70727	0.00000	0.0	0.0	0.0	0.0 d
5.3409	50.61909	70.70909	0.00000	0.0	0.0	0.0	0.0 d
6.4091	49.55091	70.71091	0.00000	0.0	0.0	0.0	0.0 d
7.4773	48.48273	70.71273	0.00000	0.0	0.0	0.0	0.0 d
8.5455	47.41455	70.71455	0.00000	0.0	0.0	0.0	0.0 d
9.6137	46.34636	70.71636	0.00000	0.0	0.0	0.0	0.0 d
10.682	45.27818	70.71818	0.00000	0.0	0.0	0.0	0.0 d
11.750	44.21000	70.72000	0.00000	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: 19-20 | Sub-structure:

Dist.	Coordinates			Displacements		Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
	x	y	z	x	y		
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	59.14000	66.79000	0.00000	0.0	0.0	0.0	0.0 d
1.0080	58.50400	67.57200	0.00000	0.0	0.0	0.0	0.0 d
2.0160	57.86800	68.35400	0.00000	0.0	0.0	0.0	0.0 d
3.0239	57.23200	69.13600	0.00000	0.0	0.0	0.0	0.0 d
4.0319	56.59600	69.91800	0.00000	0.0	0.0	0.0	0.0 d
5.0399	55.96000	70.70000	0.00000	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: 19-18 | Sub-structure:

Dist.	Coordinates			Displacements		Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
	x	y	z	x	y		
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]

0.0	59.14000	66.79000	0.00000	0.0	0.0	0.0	0.0 d
1.0051	59.15500	65.78500	0.00000	0.0	0.0	0.0	0.0 d
2.0102	59.17000	64.78000	0.00000	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: 18-13 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	59.17000	64.78000	0.00000	0.0	0.0	0.0	0.0	0.0 d
1.0686	58.10143	64.78143	0.00000	0.0	0.0	0.0	0.0	0.0 d
2.1371	57.03286	64.78286	0.00000	0.0	0.0	0.0	0.0	0.0 d
3.2057	55.96429	64.78429	0.00000	0.0	0.0	0.0	0.0	0.0 d
4.2743	54.89571	64.78571	0.00000	0.0	0.0	0.0	0.0	0.0 d
5.3429	53.82714	64.78714	0.00000	0.0	0.0	0.0	0.0	0.0 d
6.4114	52.75857	64.78857	0.00000	0.0	0.0	0.0	0.0	0.0 d
7.4800	51.69000	64.79000	0.00000	0.0	0.0	0.0	0.0	0.0 d
8.5486	50.62143	64.79143	0.00000	0.0	0.0	0.0	0.0	0.0 d
9.6172	49.55286	64.79286	0.00000	0.0	0.0	0.0	0.0	0.0 d
10.686	48.48429	64.79429	0.00000	0.0	0.0	0.0	0.0	0.0 d
11.754	47.41571	64.79571	0.00000	0.0	0.0	0.0	0.0	0.0 d
12.823	46.34714	64.79714	0.00000	0.0	0.0	0.0	0.0	0.0 d
13.891	45.27857	64.79857	0.00000	0.0	0.0	0.0	0.0	0.0 d
14.960	44.21000	64.80000	0.00000	0.0	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: 21-a | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	44.21000	70.72000	0.00000	0.0	0.0	0.0	0.0	0.0 d
0.34768	44.20559	70.37235	0.00000	0.0	0.0	0.0	0.0	0.0 d
0.69535	44.20118	70.02471	0.00000	0.0	0.0	0.0	0.0	0.0 d
1.0430	44.19676	69.67706	0.00000	0.0	0.0	0.0	0.0	0.0 d
1.3907	44.19235	69.32941	0.00000	0.0	0.0	0.0	0.0	0.0 d
1.7384	44.18794	68.98176	0.00000	0.0	0.0	0.0	0.0	0.0 d
2.0861	44.18353	68.63412	0.00000	0.0	0.0	0.0	0.0	0.0 d
2.4337	44.17912	68.28647	0.00000	0.0	0.0	0.0	0.0	0.0 d
2.7814	44.17471	67.93882	0.00000	0.0	0.0	0.0	0.0	0.0 d
3.1291	44.17029	67.59118	0.00000	0.0	0.0	0.0	0.0	0.0 d
3.4768	44.16588	67.24353	0.00000	0.0	0.0	0.0	0.0	0.0 d
3.8244	44.16147	66.89588	0.00000	0.0	0.0	0.0	0.0	0.0 d
4.1721	44.15706	66.54824	0.00000	0.0	0.0	0.0	0.0	0.0 d
4.5198	44.15265	66.20059	0.00000	0.0	0.0	0.0	0.0	0.0 d
4.8675	44.14824	65.85294	0.00000	0.0	0.0	0.0	0.0	0.0 d
5.2151	44.14382	65.50529	0.00000	0.0	0.0	0.0	0.0	0.0 d
5.5628	44.13941	65.15765	0.00000	0.0	0.0	0.0	0.0	0.0 d
5.9105	44.13500	64.81000	0.00000	0.0	0.0	0.0	0.0	0.0 d
6.2582	44.13059	64.46235	0.00000	0.0	0.0	0.0	0.0	0.0 d
6.6058	44.12618	64.11471	0.00000	0.0	0.0	0.0	0.0	0.0 d
6.9535	44.12176	63.76706	0.00000	0.0	0.0	0.0	0.0	0.0 d
7.3012	44.11735	63.41941	0.00000	0.0	0.0	0.0	0.0	0.0 d
7.6489	44.11294	63.07176	0.00000	0.0	0.0	0.0	0.0	0.0 d
7.9965	44.10853	62.72412	0.00000	0.0	0.0	0.0	0.0	0.0 d
8.3442	44.10412	62.37647	0.00000	0.0	0.0	0.0	0.0	0.0 d
8.6919	44.09971	62.02882	0.00000	0.0	0.0	0.0	0.0	0.0 d
9.0396	44.09529	61.68118	0.00000	0.0	0.0	0.0	0.0	0.0 d
9.3872	44.09088	61.33353	0.00000	0.0	0.0	0.0	0.0	0.0 d
9.7349	44.08647	60.98588	0.00000	0.0	0.0	0.0	0.0	0.0 d
10.083	44.08206	60.63824	0.00000	0.0	0.0	0.0	0.0	0.0 d
10.430	44.07765	60.29059	0.00000	0.0	0.0	0.0	0.0	0.0 d
10.778	44.07324	59.94294	0.00000	0.0	0.0	0.0	0.0	0.0 d
11.126	44.06882	59.59529	0.00000	0.0	0.0	0.0	0.0	0.0 d
11.473	44.06441	59.24765	0.00000	0.0	0.0	0.0	0.0	0.0 d
11.821	44.06000	58.90000	0.00000	0.0	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: f-50 | Sub-structure:

Dist.	Coordinates			Displacements		Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	x	y	z	x	y			
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	44.10000	51.60000	0.00000	0.0	0.0	0.0	0.0	d
0.99267	44.10400	50.60733	0.00000	0.0	0.0	0.0	0.0	d
1.9853	44.10800	49.61467	0.00000	0.0	0.0	0.0	0.0	d
2.9780	44.11200	48.62200	0.00000	0.0	0.0	0.0	0.0	d
3.9707	44.11600	47.62933	0.00000	0.0	0.0	0.0	0.0	d
4.9634	44.12000	46.63667	0.00000	0.0	0.0	0.0	0.0	d
5.9560	44.12400	45.64400	0.00000	0.0	0.0	0.0	0.0	d
6.9487	44.12800	44.65133	0.00000	0.0	0.0	0.0	0.0	d
7.9414	44.13200	43.65867	0.00000	0.0	0.0	0.0	0.0	d
8.9341	44.13600	42.66600	0.00000	0.0	0.0	0.0	0.0	d
9.9267	44.14000	41.67333	0.00000	0.0	0.0	0.0	0.0	d
10.919	44.14400	40.68067	0.00000	0.0	0.0	0.0	0.0	d
11.912	44.14800	39.68800	0.00000	0.0	0.0	0.0	0.0	d
12.905	44.15200	38.69533	0.00000	0.0	0.0	0.0	0.0	d
13.897	44.15600	37.70267	0.00000	0.0	0.0	0.0	0.0	d
14.890	44.16000	36.71000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 14-15 | Sub-structure:

Dist.	Coordinates			Displacements		Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	x	y	z	x	y			
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	55.00000	64.76000	0.00000	0.0	0.0	0.0	0.0	d
1.0700	55.00000	63.69000	0.00000	0.0	0.0	0.0	0.0	d
2.1400	55.00000	62.62000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 15-16 | Sub-structure:

Dist.	Coordinates			Displacements		Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	x	y	z	x	y			
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	55.00000	62.62000	0.00000	0.0	0.0	0.0	0.0	d
1.6907	56.23000	61.46000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 16-17 | Sub-structure:

Dist.	Coordinates			Displacements		Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	x	y	z	x	y			
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	56.23000	61.46000	0.00000	0.0	0.0	0.0	0.0	d
1.9000	56.22000	59.56000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 17-g | Sub-structure:

Dist.	Coordinates			Displacements		Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	x	y	z	x	y			
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	56.22000	59.56000	0.00000	0.0	0.0	0.0	0.0	d

1.6125 55.10000 58.40000 0.00000 0.0 0.0 0.0 0.0 d
 d - Displacements include imported displacements.

Structure: h-49 | Sub-structure:

Dist.	Coordinates			Displacements		Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
	x	y	z	x	y		
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
	0.0	54.98000	51.60000	0.00000	0.0	0.0	0.0 d
	1.0678	55.74000	50.85000	0.00000	0.0	0.0	0.0 d
	2.1355	56.50000	50.10000	0.00000	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: 49-36 | Sub-structure:

Dist.	Coordinates			Displacements		Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
	x	y	z	x	y		
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
	0.0	56.50000	50.10000	0.00000	0.0	0.0	0.0 d
	1.1950	56.50000	48.90500	0.00000	0.0	0.0	0.0 d
	2.3900	56.50000	47.71000	0.00000	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: 36-48 | Sub-structure:

Dist.	Coordinates			Displacements		Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
	x	y	z	x	y		
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
	0.0	56.50000	47.71000	0.00000	0.0	0.0	0.0 d
	1.1506	55.73000	46.85500	0.00000	0.0	0.0	0.0 d
	2.3012	54.96000	46.00000	0.00000	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: 48-47 | Sub-structure:

Dist.	Coordinates			Displacements		Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
	x	y	z	x	y		
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
	0.0	54.96000	46.00000	0.00000	0.0	0.0	0.0 d
	1.1700	54.96000	44.83000	0.00000	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: 47-51 | Sub-structure:

Dist.	Coordinates			Displacements		Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
	x	y	z	x	y		
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
	0.0	54.96000	44.83000	0.00000	0.0	0.0	0.0 d
	1.0750	53.88500	44.83000	0.00000	0.0	0.0	0.0 d
	2.1500	52.81000	44.83000	0.00000	0.0	0.0	0.0 d
	3.2250	51.73500	44.83000	0.00000	0.0	0.0	0.0 d
	4.3000	50.66000	44.83000	0.00000	0.0	0.0	0.0 d
	5.3750	49.58500	44.83000	0.00000	0.0	0.0	0.0 d
	6.4500	48.51000	44.83000	0.00000	0.0	0.0	0.0 d
	7.5250	47.43500	44.83000	0.00000	0.0	0.0	0.0 d
	8.6000	46.36000	44.83000	0.00000	0.0	0.0	0.0 d
	9.6750	45.28500	44.83000	0.00000	0.0	0.0	0.0 d

10.750 44.21000 44.83000 0.00000 0.0 0.0 0.0 0.0 d
 d - Displacements include imported displacements.

Structure: 50-46 | Sub-structure:

Dist.	Coordinates			Displacements		Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
	x	y	z	x	y		
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	44.16000	36.71000	0.00000	0.0	0.0	0.0	0.0 d
1.0800	45.24000	36.71000	0.00000	0.0	0.0	0.0	0.0 d
2.1600	46.32000	36.71000	0.00000	0.0	0.0	0.0	0.0 d
3.2400	47.40000	36.71000	0.00000	0.0	0.0	0.0	0.0 d
4.3200	48.48000	36.71000	0.00000	0.0	0.0	0.0	0.0 d
5.4000	49.56000	36.71000	0.00000	0.0	0.0	0.0	0.0 d
6.4800	50.64000	36.71000	0.00000	0.0	0.0	0.0	0.0 d
7.5600	51.72000	36.71000	0.00000	0.0	0.0	0.0	0.0 d
8.6400	52.80000	36.71000	0.00000	0.0	0.0	0.0	0.0 d
9.7200	53.88000	36.71000	0.00000	0.0	0.0	0.0	0.0 d
10.800	54.96000	36.71000	0.00000	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: 46-47 | Sub-structure:

Dist.	Coordinates			Displacements		Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
	x	y	z	x	y		
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	54.96000	36.71000	0.00000	0.0	0.0	0.0	0.0 d
1.0150	54.96000	37.72500	0.00000	0.0	0.0	0.0	0.0 d
2.0300	54.96000	38.74000	0.00000	0.0	0.0	0.0	0.0 d
3.0450	54.96000	39.75500	0.00000	0.0	0.0	0.0	0.0 d
4.0600	54.96000	40.77000	0.00000	0.0	0.0	0.0	0.0 d
5.0750	54.96000	41.78500	0.00000	0.0	0.0	0.0	0.0 d
6.0900	54.96000	42.80000	0.00000	0.0	0.0	0.0	0.0 d
7.1050	54.96000	43.81500	0.00000	0.0	0.0	0.0	0.0 d
8.1200	54.96000	44.83000	0.00000	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: 24-25 | Sub-structure:

Dist.	Coordinates			Displacements		Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
	x	y	z	x	y		
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	78.82000	63.10000	0.00000	0.0	0.0	0.0	0.0 d
1.0289	79.84889	63.09667	0.00000	0.0	0.0	0.0	0.0 d
2.0578	80.87778	63.09333	0.00000	0.0	0.0	0.0	0.0 d
3.0867	81.90667	63.09000	0.00000	0.0	0.0	0.0	0.0 d
4.1156	82.93556	63.08667	0.00000	0.0	0.0	0.0	0.0 d
5.1445	83.96444	63.08333	0.00000	0.0	0.0	0.0	0.0 d
6.1734	84.99333	63.08000	0.00000	0.0	0.0	0.0	0.0 d
7.2023	86.02222	63.07667	0.00000	0.0	0.0	0.0	0.0 d
8.2312	87.05111	63.07333	0.00000	0.0	0.0	0.0	0.0 d
9.2600	88.08000	63.07000	0.00000	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: 25-26 | Sub-structure:

Dist.	Coordinates			Displacements		Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
	x	y	z	x	y		
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	88.08000	63.07000	0.00000	0.0	0.0	0.0	0.0 d
1.0641	88.06400	62.00600	0.00000	0.0	0.0	0.0	0.0 d

2.1282	88.04800	60.94200	0.00000	0.0	0.0	0.0	0.0	0.0	d
3.1924	88.03200	59.87800	0.00000	0.0	0.0	0.0	0.0	0.0	d
4.2565	88.01600	58.81400	0.00000	0.0	0.0	0.0	0.0	0.0	d
5.3206	88.00000	57.75000	0.00000	0.0	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 26-27 | Sub-structure:

Dist.	Coordinates			Displacements		Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	x	y	z	x	y			
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	88.00000	57.75000	0.00000	0.0	0.0	0.0	0.0	d
1.0246	86.97545	57.76364	0.00000	0.0	0.0	0.0	0.0	d
2.0493	85.95091	57.77727	0.00000	0.0	0.0	0.0	0.0	d
3.0739	84.92636	57.79091	0.00000	0.0	0.0	0.0	0.0	d
4.0985	83.90182	57.80455	0.00000	0.0	0.0	0.0	0.0	d
5.1232	82.87727	57.81818	0.00000	0.0	0.0	0.0	0.0	d
6.1478	81.85273	57.83182	0.00000	0.0	0.0	0.0	0.0	d
7.1725	80.82818	57.84545	0.00000	0.0	0.0	0.0	0.0	d
8.1971	79.80364	57.85909	0.00000	0.0	0.0	0.0	0.0	d
9.2217	78.77909	57.87273	0.00000	0.0	0.0	0.0	0.0	d
10.246	77.75455	57.88636	0.00000	0.0	0.0	0.0	0.0	d
11.271	76.73000	57.90000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 27-28 | Sub-structure:

Dist.	Coordinates			Displacements		Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	x	y	z	x	y			
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	76.73000	57.90000	0.00000	0.0	0.0	0.0	0.0	d
1.0567	76.72333	58.95667	0.00000	0.0	0.0	0.0	0.0	d
2.1134	76.71667	60.01333	0.00000	0.0	0.0	0.0	0.0	d
3.1701	76.71000	61.07000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 28-29 | Sub-structure:

Dist.	Coordinates			Displacements		Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	x	y	z	x	y			
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	76.71000	61.07000	0.00000	0.0	0.0	0.0	0.0	d
1.4640	77.76500	62.08500	0.00000	0.0	0.0	0.0	0.0	d
2.9280	78.82000	63.10000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 27-32 | Sub-structure:

Dist.	Coordinates			Displacements		Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	x	y	z	x	y			
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	76.73000	57.90000	0.00000	0.0	0.0	0.0	0.0	d
1.0300	76.73400	56.87000	0.00000	0.0	0.0	0.0	0.0	d
2.0600	76.73800	55.84000	0.00000	0.0	0.0	0.0	0.0	d
3.0900	76.74200	54.81000	0.00000	0.0	0.0	0.0	0.0	d
4.1200	76.74600	53.78000	0.00000	0.0	0.0	0.0	0.0	d
5.1500	76.75000	52.75000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 33-31 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	87.93000	52.75000	0.00000	0.0	0.0	0.0	0.0	d
1.0400	86.89000	52.75000	0.00000	0.0	0.0	0.0	0.0	d
2.0800	85.85000	52.75000	0.00000	0.0	0.0	0.0	0.0	d
3.1200	84.81000	52.75000	0.00000	0.0	0.0	0.0	0.0	d
4.1600	83.77000	52.75000	0.00000	0.0	0.0	0.0	0.0	d
5.2000	82.73000	52.75000	0.00000	0.0	0.0	0.0	0.0	d
6.2400	81.69000	52.75000	0.00000	0.0	0.0	0.0	0.0	d
7.2800	80.65000	52.75000	0.00000	0.0	0.0	0.0	0.0	d
8.3200	79.61000	52.75000	0.00000	0.0	0.0	0.0	0.0	d
9.3600	78.57000	52.75000	0.00000	0.0	0.0	0.0	0.0	d
10.4000	77.53000	52.75000	0.00000	0.0	0.0	0.0	0.0	d
11.4400	76.49000	52.75000	0.00000	0.0	0.0	0.0	0.0	d
12.4800	75.45000	52.75000	0.00000	0.0	0.0	0.0	0.0	d
13.5200	74.41000	52.75000	0.00000	0.0	0.0	0.0	0.0	d
14.5600	73.37000	52.75000	0.00000	0.0	0.0	0.0	0.0	d
15.6000	72.33000	52.75000	0.00000	0.0	0.0	0.0	0.0	d
16.6400	71.29000	52.75000	0.00000	0.0	0.0	0.0	0.0	d
17.6800	70.25000	52.75000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 31-34 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	70.25000	52.75000	0.00000	0.0	0.0	0.0	0.0	d
1.1236	70.22667	51.62667	0.00000	0.0	0.0	0.0	0.0	d
2.2472	70.20333	50.50333	0.00000	0.0	0.0	0.0	0.0	d
3.3707	70.18000	49.38000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 34-35 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	70.18000	49.38000	0.00000	0.0	0.0	0.0	0.0	d
1.3300	71.51000	49.37000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 35-41 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	71.51000	49.37000	0.00000	0.0	0.0	0.0	0.0	d
1.2000	71.50000	48.17000	0.00000	0.0	0.0	0.0	0.0	d
2.4001	71.49000	46.97000	0.00000	0.0	0.0	0.0	0.0	d
3.6001	71.48000	45.77000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 41-40 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the	Horizontal displacement perpendicular	

	[m]	[m]	[m]	[m]	[mm]	[mm]	Line [mm]	to Line [mm]	
	0.0	71.48000	45.77000	0.00000	0.0	0.0	0.0	0.0	0.0 d
1.0175	70.46250	45.77000	0.00000	0.0	0.0	0.0	0.0	0.0	0.0 d
2.0350	69.44500	45.77000	0.00000	0.0	0.0	0.0	0.0	0.0	0.0 d
3.0525	68.42750	45.77000	0.00000	0.0	0.0	0.0	0.0	0.0	0.0 d
4.0700	67.41000	45.77000	0.00000	0.0	0.0	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: 40-39 | Sub-structure:

Dist.	Coordinates					Displacements		
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
	0.0	67.41000	45.77000	0.00000	0.0	0.0	0.0	0.0 d
1.3000	67.40333	44.47000	0.00000	0.0	0.0	0.0	0.0	0.0 d
2.6000	67.39667	43.17000	0.00000	0.0	0.0	0.0	0.0	0.0 d
3.9001	67.39000	41.87000	0.00000	0.0	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: 39-38 | Sub-structure:

Dist.	Coordinates					Displacements		
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
	0.0	67.39000	41.87000	0.00000	0.0	0.0	0.0	0.0 d
1.0305	68.42050	41.86150	0.00000	0.0	0.0	0.0	0.0	0.0 d
2.0611	69.45100	41.85300	0.00000	0.0	0.0	0.0	0.0	0.0 d
3.0916	70.48150	41.84450	0.00000	0.0	0.0	0.0	0.0	0.0 d
4.1221	71.51200	41.83600	0.00000	0.0	0.0	0.0	0.0	0.0 d
5.1527	72.54250	41.82750	0.00000	0.0	0.0	0.0	0.0	0.0 d
6.1832	73.57300	41.81900	0.00000	0.0	0.0	0.0	0.0	0.0 d
7.2137	74.60350	41.81050	0.00000	0.0	0.0	0.0	0.0	0.0 d
8.2443	75.63400	41.80200	0.00000	0.0	0.0	0.0	0.0	0.0 d
9.2748	76.66450	41.79350	0.00000	0.0	0.0	0.0	0.0	0.0 d
10.305	77.69500	41.78500	0.00000	0.0	0.0	0.0	0.0	0.0 d
11.336	78.72550	41.77650	0.00000	0.0	0.0	0.0	0.0	0.0 d
12.366	79.75600	41.76800	0.00000	0.0	0.0	0.0	0.0	0.0 d
13.397	80.78650	41.75950	0.00000	0.0	0.0	0.0	0.0	0.0 d
14.427	81.81700	41.75100	0.00000	0.0	0.0	0.0	0.0	0.0 d
15.458	82.84750	41.74250	0.00000	0.0	0.0	0.0	0.0	0.0 d
16.489	83.87800	41.73400	0.00000	0.0	0.0	0.0	0.0	0.0 d
17.519	84.90850	41.72550	0.00000	0.0	0.0	0.0	0.0	0.0 d
18.550	85.93900	41.71700	0.00000	0.0	0.0	0.0	0.0	0.0 d
19.580	86.96950	41.70850	0.00000	0.0	0.0	0.0	0.0	0.0 d
20.611	88.00000	41.70000	0.00000	0.0	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: 38-25 | Sub-structure:

Dist.	Coordinates					Displacements		
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
	0.0	88.00000	41.70000	0.00000	0.0	0.0	0.0	0.0 d
1.0176	88.00381	42.71762	0.00000	0.0	0.0	0.0	0.0	0.0 d
2.0353	88.00762	43.73524	0.00000	0.0	0.0	0.0	0.0	0.0 d
3.0529	88.01143	44.75286	0.00000	0.0	0.0	0.0	0.0	0.0 d
4.0705	88.01524	45.77048	0.00000	0.0	0.0	0.0	0.0	0.0 d
5.0881	88.01905	46.78810	0.00000	0.0	0.0	0.0	0.0	0.0 d
6.1058	88.02286	47.80571	0.00000	0.0	0.0	0.0	0.0	0.0 d
7.1234	88.02667	48.82333	0.00000	0.0	0.0	0.0	0.0	0.0 d
8.1410	88.03048	49.84095	0.00000	0.0	0.0	0.0	0.0	0.0 d
9.1586	88.03429	50.85857	0.00000	0.0	0.0	0.0	0.0	0.0 d
10.176	88.03810	51.87619	0.00000	0.0	0.0	0.0	0.0	0.0 d
11.194	88.04190	52.89381	0.00000	0.0	0.0	0.0	0.0	0.0 d

12.212	88.04571	53.91143	0.00000	0.0	0.0	0.0	0.0	d
13.229	88.04952	54.92905	0.00000	0.0	0.0	0.0	0.0	d
14.247	88.05333	55.94667	0.00000	0.0	0.0	0.0	0.0	d
15.264	88.05714	56.96429	0.00000	0.0	0.0	0.0	0.0	d
16.282	88.06095	57.98190	0.00000	0.0	0.0	0.0	0.0	d
17.300	88.06476	58.99952	0.00000	0.0	0.0	0.0	0.0	d
18.317	88.06857	60.01714	0.00000	0.0	0.0	0.0	0.0	d
19.335	88.07238	61.03476	0.00000	0.0	0.0	0.0	0.0	d
20.353	88.07619	62.05238	0.00000	0.0	0.0	0.0	0.0	d
21.370	88.08000	63.07000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 20-22 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	55.96000	70.70000	0.00000	0.0	0.0	0.0	0.0	d
1.0170	56.97700	70.69900	0.00000	0.0	0.0	0.0	0.0	d
2.0340	57.99400	70.69800	0.00000	0.0	0.0	0.0	0.0	d
3.0510	59.01100	70.69700	0.00000	0.0	0.0	0.0	0.0	d
4.0680	60.02800	70.69600	0.00000	0.0	0.0	0.0	0.0	d
5.0850	61.04500	70.69500	0.00000	0.0	0.0	0.0	0.0	d
6.1020	62.06200	70.69400	0.00000	0.0	0.0	0.0	0.0	d
7.1190	63.07900	70.69300	0.00000	0.0	0.0	0.0	0.0	d
8.1360	64.09600	70.69200	0.00000	0.0	0.0	0.0	0.0	d
9.1530	65.11300	70.69100	0.00000	0.0	0.0	0.0	0.0	d
10.170	66.13000	70.69000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 22-b | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	66.13000	70.69000	0.00000	0.0	0.0	0.0	0.0	d
0.69360	66.14000	69.99647	0.00000	0.0	0.0	0.0	0.0	d
1.3872	66.15000	69.30294	0.00000	0.0	0.0	0.0	0.0	d
2.0808	66.16000	68.60941	0.00000	0.0	0.0	0.0	0.0	d
2.7744	66.17000	67.91588	0.00000	0.0	0.0	0.0	0.0	d
3.4680	66.18000	67.22235	0.00000	0.0	0.0	0.0	0.0	d
4.1616	66.19000	66.52882	0.00000	0.0	0.0	0.0	0.0	d
4.8552	66.20000	65.83529	0.00000	0.0	0.0	0.0	0.0	d
5.5488	66.21000	65.14176	0.00000	0.0	0.0	0.0	0.0	d
6.2424	66.22000	64.44824	0.00000	0.0	0.0	0.0	0.0	d
6.9360	66.23000	63.75471	0.00000	0.0	0.0	0.0	0.0	d
7.6296	66.24000	63.06118	0.00000	0.0	0.0	0.0	0.0	d
8.3232	66.25000	62.36765	0.00000	0.0	0.0	0.0	0.0	d
9.0168	66.26000	61.67412	0.00000	0.0	0.0	0.0	0.0	d
9.7104	66.27000	60.98059	0.00000	0.0	0.0	0.0	0.0	d
10.404	66.28000	60.28706	0.00000	0.0	0.0	0.0	0.0	d
11.098	66.29000	59.59353	0.00000	0.0	0.0	0.0	0.0	d
11.791	66.30000	58.90000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: e-45 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	64.74000	51.60000	0.00000	0.0	0.0	0.0	0.0	d
0.98415	64.72267	50.61600	0.00000	0.0	0.0	0.0	0.0	d
1.9683	64.70533	49.63200	0.00000	0.0	0.0	0.0	0.0	d
2.9525	64.68800	48.64800	0.00000	0.0	0.0	0.0	0.0	d
3.9366	64.67067	47.66400	0.00000	0.0	0.0	0.0	0.0	d

4.9208	64.65333	46.68000	0.00000	0.0	0.0	0.0	0.0	d
5.9049	64.63600	45.69600	0.00000	0.0	0.0	0.0	0.0	d
6.8891	64.61867	44.71200	0.00000	0.0	0.0	0.0	0.0	d
7.8732	64.60133	43.72800	0.00000	0.0	0.0	0.0	0.0	d
8.8574	64.58400	42.74400	0.00000	0.0	0.0	0.0	0.0	d
9.8415	64.56667	41.76000	0.00000	0.0	0.0	0.0	0.0	d
10.826	64.54933	40.77600	0.00000	0.0	0.0	0.0	0.0	d
11.810	64.53200	39.79200	0.00000	0.0	0.0	0.0	0.0	d
12.794	64.51467	38.80800	0.00000	0.0	0.0	0.0	0.0	d
13.778	64.49733	37.82400	0.00000	0.0	0.0	0.0	0.0	d
14.762	64.48000	36.84000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 18-31 | Sub-structure:

Dist.	Coordinates			Displacements		Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	x	y	z	x	y			
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	59.17000	64.78000	0.00000	0.0	0.0	0.0	0.0	d
1.1384	60.30833	64.77333	0.00000	0.0	0.0	0.0	0.0	d
2.2767	61.44667	64.76667	0.00000	0.0	0.0	0.0	0.0	d
3.4151	62.58500	64.76000	0.00000	0.0	0.0	0.0	0.0	d
4.5534	63.72333	64.75333	0.00000	0.0	0.0	0.0	0.0	d
5.6918	64.86167	64.74667	0.00000	0.0	0.0	0.0	0.0	d
6.8301	66.00000	64.74000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 23-24 | Sub-structure:

Dist.	Coordinates			Displacements		Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	x	y	z	x	y			
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	66.00000	63.14000	0.00000	0.0	0.0	0.0	0.0	d
1.0683	67.06833	63.13667	0.00000	0.0	0.0	0.0	0.0	d
2.1367	68.13667	63.13333	0.00000	0.0	0.0	0.0	0.0	d
3.2050	69.20500	63.13000	0.00000	0.0	0.0	0.0	0.0	d
4.2734	70.27333	63.12667	0.00000	0.0	0.0	0.0	0.0	d
5.3417	71.34167	63.12333	0.00000	0.0	0.0	0.0	0.0	d
6.4100	72.41000	63.12000	0.00000	0.0	0.0	0.0	0.0	d
7.4784	73.47833	63.11667	0.00000	0.0	0.0	0.0	0.0	d
8.5467	74.54667	63.11333	0.00000	0.0	0.0	0.0	0.0	d
9.6150	75.61500	63.11000	0.00000	0.0	0.0	0.0	0.0	d
10.683	76.68333	63.10667	0.00000	0.0	0.0	0.0	0.0	d
11.752	77.75167	63.10333	0.00000	0.0	0.0	0.0	0.0	d
12.820	78.82000	63.10000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: b-27 | Sub-structure:

Dist.	Coordinates			Displacements		Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	x	y	z	x	y			
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	66.10000	58.46000	0.00000	0.0	0.0	0.0	0.0	d
1.0645	67.16300	58.40400	0.00000	0.0	0.0	0.0	0.0	d
2.1289	68.22600	58.34800	0.00000	0.0	0.0	0.0	0.0	d
3.1934	69.28900	58.29200	0.00000	0.0	0.0	0.0	0.0	d
4.2579	70.35200	58.23600	0.00000	0.0	0.0	0.0	0.0	d
5.3224	71.41500	58.18000	0.00000	0.0	0.0	0.0	0.0	d
6.3868	72.47800	58.12400	0.00000	0.0	0.0	0.0	0.0	d
7.4513	73.54100	58.06800	0.00000	0.0	0.0	0.0	0.0	d
8.5158	74.60400	58.01200	0.00000	0.0	0.0	0.0	0.0	d
9.5803	75.66700	57.95600	0.00000	0.0	0.0	0.0	0.0	d
10.645	76.73000	57.90000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 42-37 | Sub-structure:

Dist.	Coordinates			Displacements			
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	64.54000	46.73000	0.00000	0.0	0.0	0.0	0.0 d
1.0183	65.55826	46.71783	0.00000	0.0	0.0	0.0	0.0 d
2.0367	66.57652	46.70565	0.00000	0.0	0.0	0.0	0.0 d
3.0550	67.59478	46.69348	0.00000	0.0	0.0	0.0	0.0 d
4.0733	68.61304	46.68130	0.00000	0.0	0.0	0.0	0.0 d
5.0917	69.63130	46.66913	0.00000	0.0	0.0	0.0	0.0 d
6.1100	70.64957	46.65696	0.00000	0.0	0.0	0.0	0.0 d
7.1283	71.66783	46.64478	0.00000	0.0	0.0	0.0	0.0 d
8.1467	72.68609	46.63261	0.00000	0.0	0.0	0.0	0.0 d
9.1650	73.70435	46.62043	0.00000	0.0	0.0	0.0	0.0 d
10.183	74.72261	46.60826	0.00000	0.0	0.0	0.0	0.0 d
11.202	75.74087	46.59609	0.00000	0.0	0.0	0.0	0.0 d
12.220	76.75913	46.58391	0.00000	0.0	0.0	0.0	0.0 d
13.238	77.77739	46.57174	0.00000	0.0	0.0	0.0	0.0 d
14.257	78.79565	46.55957	0.00000	0.0	0.0	0.0	0.0 d
15.275	79.81391	46.54739	0.00000	0.0	0.0	0.0	0.0 d
16.293	80.83217	46.53522	0.00000	0.0	0.0	0.0	0.0 d
17.312	81.85043	46.52304	0.00000	0.0	0.0	0.0	0.0 d
18.330	82.86870	46.51087	0.00000	0.0	0.0	0.0	0.0 d
19.348	83.88696	46.49870	0.00000	0.0	0.0	0.0	0.0 d
20.367	84.90522	46.48652	0.00000	0.0	0.0	0.0	0.0 d
21.385	85.92348	46.47435	0.00000	0.0	0.0	0.0	0.0 d
22.403	86.94174	46.46217	0.00000	0.0	0.0	0.0	0.0 d
23.422	87.96000	46.45000	0.00000	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: 47-43 | Sub-structure:

Dist.	Coordinates			Displacements			
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	54.96000	44.83000	0.00000	0.0	0.0	0.0	0.0 d
1.0600	56.02000	44.83000	0.00000	0.0	0.0	0.0	0.0 d
2.1200	57.08000	44.83000	0.00000	0.0	0.0	0.0	0.0 d
3.1800	58.14000	44.83000	0.00000	0.0	0.0	0.0	0.0 d
4.2400	59.20000	44.83000	0.00000	0.0	0.0	0.0	0.0 d
5.3000	60.26000	44.83000	0.00000	0.0	0.0	0.0	0.0 d
6.3600	61.32000	44.83000	0.00000	0.0	0.0	0.0	0.0 d
7.4200	62.38000	44.83000	0.00000	0.0	0.0	0.0	0.0 d
8.4800	63.44000	44.83000	0.00000	0.0	0.0	0.0	0.0 d
9.5400	64.50000	44.83000	0.00000	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: 44-39 | Sub-structure:

Dist.	Coordinates			Displacements			
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	64.44000	41.91000	0.00000	0.0	0.0	0.0	0.0 d
1.4751	65.91500	41.89000	0.00000	0.0	0.0	0.0	0.0 d
2.9503	67.39000	41.87000	0.00000	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: 46-45 | Sub-structure:

Dist.	Coordinates			Displacements			
	x	y	z	x	y	Horizontal displacement along the	Horizontal displacement perpendicular

[m]	[m]	[m]	[m]	[mm]	[mm]	Line [mm]	to Line [mm]
0.0	54.96000	36.71000	0.00000	0.0	0.0	0.0	0.0 d
1.0579	56.01778	36.72444	0.00000	0.0	0.0	0.0	0.0 d
2.1158	57.07556	36.73889	0.00000	0.0	0.0	0.0	0.0 d
3.1736	58.13333	36.75333	0.00000	0.0	0.0	0.0	0.0 d
4.2315	59.19111	36.76778	0.00000	0.0	0.0	0.0	0.0 d
5.2894	60.24889	36.78222	0.00000	0.0	0.0	0.0	0.0 d
6.3473	61.30667	36.79667	0.00000	0.0	0.0	0.0	0.0 d
7.4051	62.36444	36.81111	0.00000	0.0	0.0	0.0	0.0 d
8.4630	63.42222	36.82556	0.00000	0.0	0.0	0.0	0.0 d
9.5209	64.48000	36.84000	0.00000	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: a-12 | Sub-structure:

Dist.	Coordinates			Displacements			
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	44.06000	58.90000	0.00000	0.0	0.0	0.0	0.0 d
1.1151	42.95250	58.77000	0.00000	0.0	0.0	0.0	0.0 d
2.2302	41.84500	58.64000	0.00000	0.0	0.0	0.0	0.0 d
3.3453	40.73750	58.51000	0.00000	0.0	0.0	0.0	0.0 d
4.4604	39.63000	58.38000	0.00000	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: 12-11 | Sub-structure:

Dist.	Coordinates			Displacements			
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	39.63000	58.38000	0.00000	0.0	0.0	0.0	0.0 d
1.1167	39.63000	57.26333	0.00000	0.0	0.0	0.0	0.0 d
2.2333	39.63000	56.14667	0.00000	0.0	0.0	0.0	0.0 d
3.3500	39.63000	55.03000	0.00000	0.0	0.0	0.0	0.0 d
4.4667	39.63000	53.91333	0.00000	0.0	0.0	0.0	0.0 d
5.5833	39.63000	52.79667	0.00000	0.0	0.0	0.0	0.0 d
6.7000	39.63000	51.68000	0.00000	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: 11-f | Sub-structure:

Dist.	Coordinates			Displacements			
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	39.63000	51.68000	0.00000	0.0	0.0	0.0	0.0 d
0.55884	40.18875	51.67000	0.00000	0.0	0.0	0.0	0.0 d
1.1177	40.74750	51.66000	0.00000	0.0	0.0	0.0	0.0 d
1.6765	41.30625	51.65000	0.00000	0.0	0.0	0.0	0.0 d
2.2354	41.86500	51.64000	0.00000	0.0	0.0	0.0	0.0 d
2.7942	42.42375	51.63000	0.00000	0.0	0.0	0.0	0.0 d
3.3530	42.98250	51.62000	0.00000	0.0	0.0	0.0	0.0 d
3.9119	43.54125	51.61000	0.00000	0.0	0.0	0.0	0.0 d
4.4707	44.10000	51.60000	0.00000	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: ag | Sub-structure:

Dist.	Coordinates			Displacements			
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]

0.0	44.06000	58.90000	0.00000	0.0	0.0	0.0	0.0	d
1.0047	45.06364	58.85455	0.00000	0.0	0.0	0.0	0.0	d
2.0093	46.06727	58.80909	0.00000	0.0	0.0	0.0	0.0	d
3.0140	47.07091	58.76364	0.00000	0.0	0.0	0.0	0.0	d
4.0187	48.07455	58.71818	0.00000	0.0	0.0	0.0	0.0	d
5.0233	49.07818	58.67273	0.00000	0.0	0.0	0.0	0.0	d
6.0280	50.08182	58.62727	0.00000	0.0	0.0	0.0	0.0	d
7.0327	51.08545	58.58182	0.00000	0.0	0.0	0.0	0.0	d
8.0373	52.08909	58.53636	0.00000	0.0	0.0	0.0	0.0	d
9.0420	53.09273	58.49091	0.00000	0.0	0.0	0.0	0.0	d
10.047	54.09636	58.44545	0.00000	0.0	0.0	0.0	0.0	d
11.051	55.10000	58.40000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: gb | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	55.10000	58.40000	0.00000	0.0	0.0	0.0	0.0	d
0.57001	55.67000	58.40300	0.00000	0.0	0.0	0.0	0.0	d
1.1400	56.24000	58.40600	0.00000	0.0	0.0	0.0	0.0	d
1.7100	56.81000	58.40900	0.00000	0.0	0.0	0.0	0.0	d
2.2800	57.38000	58.41200	0.00000	0.0	0.0	0.0	0.0	d
2.8500	57.95000	58.41500	0.00000	0.0	0.0	0.0	0.0	d
3.4200	58.52000	58.41800	0.00000	0.0	0.0	0.0	0.0	d
3.9901	59.09000	58.42100	0.00000	0.0	0.0	0.0	0.0	d
4.5601	59.66000	58.42400	0.00000	0.0	0.0	0.0	0.0	d
5.1301	60.23000	58.42700	0.00000	0.0	0.0	0.0	0.0	d
5.7001	60.80000	58.43000	0.00000	0.0	0.0	0.0	0.0	d
6.2701	61.37000	58.43300	0.00000	0.0	0.0	0.0	0.0	d
6.8401	61.94000	58.43600	0.00000	0.0	0.0	0.0	0.0	d
7.4101	62.51000	58.43900	0.00000	0.0	0.0	0.0	0.0	d
7.9801	63.08000	58.44200	0.00000	0.0	0.0	0.0	0.0	d
8.5501	63.65000	58.44500	0.00000	0.0	0.0	0.0	0.0	d
9.1201	64.22000	58.44800	0.00000	0.0	0.0	0.0	0.0	d
9.6901	64.79000	58.45100	0.00000	0.0	0.0	0.0	0.0	d
10.260	65.36000	58.45400	0.00000	0.0	0.0	0.0	0.0	d
10.830	65.93000	58.45700	0.00000	0.0	0.0	0.0	0.0	d
11.400	66.50000	58.46000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: bc | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	66.50000	58.46000	0.00000	0.0	0.0	0.0	0.0	d
0.27800	66.50000	58.18200	0.00000	0.0	0.0	0.0	0.0	d
0.55600	66.50000	57.90400	0.00000	0.0	0.0	0.0	0.0	d
0.83400	66.50000	57.62600	0.00000	0.0	0.0	0.0	0.0	d
1.1120	66.50000	57.34800	0.00000	0.0	0.0	0.0	0.0	d
1.3900	66.50000	57.07000	0.00000	0.0	0.0	0.0	0.0	d
1.6680	66.50000	56.79200	0.00000	0.0	0.0	0.0	0.0	d
1.9460	66.50000	56.51400	0.00000	0.0	0.0	0.0	0.0	d
2.2240	66.50000	56.23600	0.00000	0.0	0.0	0.0	0.0	d
2.5020	66.50000	55.95800	0.00000	0.0	0.0	0.0	0.0	d
2.7800	66.50000	55.68000	0.00000	0.0	0.0	0.0	0.0	d
3.0580	66.50000	55.40200	0.00000	0.0	0.0	0.0	0.0	d
3.3360	66.50000	55.12400	0.00000	0.0	0.0	0.0	0.0	d
3.6140	66.50000	54.84600	0.00000	0.0	0.0	0.0	0.0	d
3.8920	66.50000	54.56800	0.00000	0.0	0.0	0.0	0.0	d
4.1700	66.50000	54.29000	0.00000	0.0	0.0	0.0	0.0	d
4.4480	66.50000	54.01200	0.00000	0.0	0.0	0.0	0.0	d
4.7260	66.50000	53.73400	0.00000	0.0	0.0	0.0	0.0	d
5.0040	66.50000	53.45600	0.00000	0.0	0.0	0.0	0.0	d
5.2820	66.50000	53.17800	0.00000	0.0	0.0	0.0	0.0	d
5.5600	66.50000	52.90000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: cd | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	66.50000	52.90000	0.00000	0.0	0.0	0.0	0.0	d
1.7493	65.00000	52.00000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: eh | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	64.74000	51.60000	0.00000	0.0	0.0	0.0	0.0	d
1.0844	63.65556	51.60000	0.00000	0.0	0.0	0.0	0.0	d
2.1689	62.57111	51.60000	0.00000	0.0	0.0	0.0	0.0	d
3.2533	61.48667	51.60000	0.00000	0.0	0.0	0.0	0.0	d
4.3378	60.40222	51.60000	0.00000	0.0	0.0	0.0	0.0	d
5.4222	59.31778	51.60000	0.00000	0.0	0.0	0.0	0.0	d
6.5067	58.23333	51.60000	0.00000	0.0	0.0	0.0	0.0	d
7.5911	57.14889	51.60000	0.00000	0.0	0.0	0.0	0.0	d
8.6756	56.06444	51.60000	0.00000	0.0	0.0	0.0	0.0	d
9.7600	54.98000	51.60000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: hf | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	54.98000	51.60000	0.00000	0.0	0.0	0.0	0.0	d
1.0880	53.89200	51.60000	0.00000	0.0	0.0	0.0	0.0	d
2.1760	52.80400	51.60000	0.00000	0.0	0.0	0.0	0.0	d
3.2640	51.71600	51.60000	0.00000	0.0	0.0	0.0	0.0	d
4.3520	50.62800	51.60000	0.00000	0.0	0.0	0.0	0.0	d
5.4400	49.54000	51.60000	0.00000	0.0	0.0	0.0	0.0	d
6.5280	48.45200	51.60000	0.00000	0.0	0.0	0.0	0.0	d
7.6160	47.36400	51.60000	0.00000	0.0	0.0	0.0	0.0	d
8.7040	46.27600	51.60000	0.00000	0.0	0.0	0.0	0.0	d
9.7920	45.18800	51.60000	0.00000	0.0	0.0	0.0	0.0	d
10.880	44.10000	51.60000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: de | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	65.00000	52.00000	0.00000	0.0	0.0	0.0	0.0	d
0.11927	64.93500	51.90000	0.00000	0.0	0.0	0.0	0.0	d
0.23854	64.87000	51.80000	0.00000	0.0	0.0	0.0	0.0	d
0.35781	64.80500	51.70000	0.00000	0.0	0.0	0.0	0.0	d
0.47707	64.74000	51.60000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Specific Building Damage Results - Vertical Displacements

Structure: 21-20 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	55.96000	70.70000	0.00000	-0.11099 d
1.0682	54.89182	70.70182	0.00000	-0.11252 d
2.1364	53.82364	70.70364	0.00000	-0.11308 d
3.2046	52.75545	70.70545	0.00000	-0.11278 d
4.2727	51.68727	70.70727	0.00000	-0.11176 d
5.3409	50.61909	70.70909	0.00000	-0.11012 d
6.4091	49.55091	70.71091	0.00000	-0.10795 d
7.4773	48.48273	70.71273	0.00000	-0.10527 d
8.5455	47.41455	70.71455	0.00000	-0.10209 d
9.6137	46.34636	70.71636	0.00000	-0.098366 d
10.682	45.27818	70.71818	0.00000	-0.094032 d
11.750	44.21000	70.72000	0.00000	-0.089026 d

d - Displacements include imported displacements.

Structure: 19-20 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	59.14000	66.79000	0.00000	-0.28357 d
1.0080	58.50400	67.57200	0.00000	-0.23877 d
2.0160	57.86800	68.35400	0.00000	-0.19971 d
3.0239	57.23200	69.13600	0.00000	-0.16579 d
4.0319	56.59600	69.91800	0.00000	-0.13641 d
5.0399	55.96000	70.70000	0.00000	-0.11099 d

d - Displacements include imported displacements.

Structure: 19-18 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	59.14000	66.79000	0.00000	-0.28357 d
1.0051	59.15500	65.78500	0.00000	-0.36493 d
2.0102	59.17000	64.78000	0.00000	-0.47011 d

d - Displacements include imported displacements.

Structure: 18-13 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	59.17000	64.78000	0.00000	-0.47011 d
1.0686	58.10143	64.78143	0.00000	-0.48945 d
2.1371	57.03286	64.78286	0.00000	-0.50106 d
3.2057	55.96429	64.78429	0.00000	-0.50519 d
4.2743	54.89571	64.78571	0.00000	-0.50296 d
5.3429	53.82714	64.78714	0.00000	-0.49618 d
6.4114	52.75857	64.78857	0.00000	-0.48689 d
7.4800	51.69000	64.79000	0.00000	-0.47690 d
8.5486	50.62143	64.79143	0.00000	-0.46757 d
9.6172	49.55286	64.79286	0.00000	-0.45965 d
10.686	48.48429	64.79429	0.00000	-0.45329 d
11.754	47.41571	64.79571	0.00000	-0.44803 d
12.823	46.34714	64.79714	0.00000	-0.44287 d
13.891	45.27857	64.79857	0.00000	-0.43627 d
14.960	44.21000	64.80000	0.00000	-0.42639 d

d - Displacements include imported displacements.

Structure: 21-a | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]
Vertical Offset 1				
0.0	44.21000	70.72000	0.00000	-0.089026 d
0.34768	44.20559	70.37235	0.00000	-0.098808 d
0.69535	44.20118	70.02471	0.00000	-0.10934 d
1.0430	44.19676	69.67706	0.00000	-0.12067 d
1.3907	44.19235	69.32941	0.00000	-0.13289 d
1.7384	44.18794	68.98176	0.00000	-0.14606 d
2.0861	44.18353	68.63412	0.00000	-0.16029 d
2.4337	44.17912	68.28647	0.00000	-0.17566 d
2.7814	44.17471	67.93882	0.00000	-0.19228 d
3.1291	44.17029	67.59118	0.00000	-0.21028 d
3.4768	44.16588	67.24353	0.00000	-0.22980 d
3.8244	44.16147	66.89588	0.00000	-0.25098 d
4.1721	44.15706	66.54824	0.00000	-0.27400 d
4.5198	44.15265	66.20059	0.00000	-0.29906 d
4.8675	44.14824	65.85294	0.00000	-0.32637 d
5.2151	44.14382	65.50529	0.00000	-0.35618 d
5.5628	44.13941	65.15765	0.00000	-0.38877 d
5.9105	44.13500	64.81000	0.00000	-0.42446 d
6.2582	44.13059	64.46235	0.00000	-0.46360 d
6.6058	44.12618	64.11471	0.00000	-0.50661 d
6.9535	44.12176	63.76706	0.00000	-0.55395 d
7.3012	44.11735	63.41941	0.00000	-0.60617 d
7.6489	44.11294	63.07176	0.00000	-0.66386 d
7.9965	44.10853	62.72412	0.00000	-0.72775 d
8.3442	44.10412	62.37647	0.00000	-0.79865 d
8.6919	44.09971	62.02882	0.00000	-0.87751 d
9.0396	44.09529	61.68118	0.00000	-0.96547 d
9.3872	44.09088	61.33353	0.00000	-1.0639 d
9.7349	44.08647	60.98588	0.00000	-1.1745 d
10.083	44.08206	60.63824	0.00000	-1.2995 d
10.430	44.07765	60.29059	0.00000	-1.4421 d
10.778	44.07324	59.94294	0.00000	-1.6070 d
11.126	44.06882	59.59529	0.00000	-1.8032 d
11.473	44.06441	59.24765	0.00000	-2.0499 d
11.821	44.06000	58.90000	0.00000	-2.3993 d

d - Displacements include imported displacements.

Structure: f-50 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]
Vertical Offset 1				
0.0	44.10000	51.60000	0.00000	-3.4154 d
0.99267	44.10400	50.60733	0.00000	-1.9105 d
1.9853	44.10800	49.61467	0.00000	-1.3858 d
2.9780	44.11200	48.62200	0.00000	-1.0403 d
3.9707	44.11600	47.62933	0.00000	-0.79242 d
4.9634	44.12000	46.63667	0.00000	-0.60940 d
5.9560	44.12400	45.64400	0.00000	-0.47184 d
6.9487	44.12800	44.65133	0.00000	-0.36685 d
7.9414	44.13200	43.65867	0.00000	-0.28562 d
8.9341	44.13600	42.66600	0.00000	-0.22200 d
9.9267	44.14000	41.67333	0.00000	-0.17162 d
10.919	44.14400	40.68067	0.00000	-0.13137 d
11.912	44.14800	39.68800	0.00000	-0.098950 d
12.905	44.15200	38.69533	0.00000	-0.072682 d
13.897	44.15600	37.70267	0.00000	-0.051295 d
14.890	44.16000	36.71000	0.00000	-0.033819 d

d - Displacements include imported displacements.

Structure: 14-15 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0 55.00000 64.76000 0.00000 -0.50657 d
1.0700 55.00000 63.69000 0.00000 -0.65968 d
2.1400 55.00000 62.62000 0.00000 -0.86503 d
d - Displacements include imported displacements.

Structure: 15-16 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0 55.00000 62.62000 0.00000 -0.86503 d
1.6907 56.23000 61.46000 0.00000 -1.2185 d
d - Displacements include imported displacements.

Structure: 16-17 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0 56.23000 61.46000 0.00000 -1.2185 d
1.9000 56.22000 59.56000 0.00000 -2.2939 d
d - Displacements include imported displacements.

Structure: 17-g | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0 56.22000 59.56000 0.00000 -2.2939 d
1.6125 55.10000 58.40000 0.00000 -3.9293 d
d - Displacements include imported displacements.

Structure: h-49 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0 54.98000 51.60000 0.00000 -3.6970 d
1.0678 55.74000 50.85000 0.00000 -2.6219 d
2.1355 56.50000 50.10000 0.00000 -2.0008 d
d - Displacements include imported displacements.

Structure: 49-36 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0 56.50000 50.10000 0.00000 -2.0008 d
1.1950 56.50000 48.90500 0.00000 -1.3388 d
2.3900 56.50000 47.71000 0.00000 -0.94554 d
d - Displacements include imported displacements.

Structure: 36-48 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0 56.50000 47.71000 0.00000 -0.94554 d

1.1506 55.73000 46.85500 0.00000 -0.74976 d
2.3012 54.96000 46.00000 0.00000 -0.59943 d
d - Displacements include imported displacements.

Structure: 48-47 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0 54.96000 46.00000 0.00000 -0.59943 d
1.1700 54.96000 44.83000 0.00000 -0.44907 d
d - Displacements include imported displacements.

Structure: 47-51 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0 54.96000 44.83000 0.00000 -0.44907 d
1.0750 53.88500 44.83000 0.00000 -0.44563 d
2.1500 52.81000 44.83000 0.00000 -0.43936 d
3.2250 51.73500 44.83000 0.00000 -0.43187 d
4.3000 50.66000 44.83000 0.00000 -0.42438 d
5.3750 49.58500 44.83000 0.00000 -0.41764 d
6.4500 48.51000 44.83000 0.00000 -0.41186 d
7.5250 47.43500 44.83000 0.00000 -0.40670 d
8.6000 46.36000 44.83000 0.00000 -0.40133 d
9.6750 45.28500 44.83000 0.00000 -0.39450 d
10.750 44.21000 44.83000 0.00000 -0.38470 d
d - Displacements include imported displacements.

Structure: 50-46 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0 44.16000 36.71000 0.00000 -0.033819 d
1.0800 45.24000 36.71000 0.00000 -0.036845 d
2.1600 46.32000 36.71000 0.00000 -0.039487 d
3.2400 47.40000 36.71000 0.00000 -0.041745 d
4.3200 48.48000 36.71000 0.00000 -0.043621 d
5.4000 49.56000 36.71000 0.00000 -0.045115 d
6.4800 50.64000 36.71000 0.00000 -0.046213 d
7.5600 51.72000 36.71000 0.00000 -0.046896 d
8.6400 52.80000 36.71000 0.00000 -0.047131 d
9.7200 53.88000 36.71000 0.00000 -0.046879 d
10.800 54.96000 36.71000 0.00000 -0.046102 d
d - Displacements include imported displacements.

Structure: 46-47 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0 54.96000 36.71000 0.00000 -0.046102 d
1.0150 54.96000 37.72500 0.00000 -0.066903 d
2.0300 54.96000 38.74000 0.00000 -0.092484 d
3.0450 54.96000 39.75500 0.00000 -0.12404 d
4.0600 54.96000 40.77000 0.00000 -0.16315 d
5.0750 54.96000 41.78500 0.00000 -0.21187 d
6.0900 54.96000 42.80000 0.00000 -0.27299 d
7.1050 54.96000 43.81500 0.00000 -0.35030 d
8.1200 54.96000 44.83000 0.00000 -0.44907 d
d - Displacements include imported displacements.

Structure: 24-25 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	78.82000	63.10000	0.00000	0.0032396 d
1.0289	79.84889	63.09667	0.00000	0.010013 d
2.0578	80.87778	63.09333	0.00000	0.015492 d
3.0867	81.90667	63.09000	0.00000	0.019894 d
4.1156	82.93556	63.08667	0.00000	0.023399 d
5.1445	83.96444	63.08333	0.00000	0.026156 d
6.1734	84.99333	63.08000	0.00000	0.028292 d
7.2023	86.02222	63.07667	0.00000	0.029909 d
8.2312	87.05111	63.07333	0.00000	0.031095 d
9.2600	88.08000	63.07000	0.00000	0.031921 d

d - Displacements include imported displacements.

Structure: 25-26 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	88.08000	63.07000	0.00000	0.031921 d
1.0641	88.06400	62.00600	0.00000	0.031669 d
2.1282	88.04800	60.94200	0.00000	0.031428 d
3.1924	88.03200	59.87800	0.00000	0.031209 d
4.2565	88.01600	58.81400	0.00000	0.031019 d
5.3206	88.00000	57.75000	0.00000	0.030868 d

d - Displacements include imported displacements.

Structure: 26-27 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	88.00000	57.75000	0.00000	0.030868 d
1.0246	86.97545	57.76364	0.00000	0.029599 d
2.0493	85.95091	57.77727	0.00000	0.027853 d
3.0739	84.92636	57.79091	0.00000	0.025525 d
4.0985	83.90182	57.80455	0.00000	0.022485 d
5.1232	82.87727	57.81818	0.00000	0.018573 d
6.1478	81.85273	57.83182	0.00000	0.013586 d
7.1725	80.82818	57.84545	0.00000	0.0072723 d
8.1971	79.80364	57.85909	0.00000	-689.73E-6 d
9.2217	78.77909	57.87273	0.00000	-0.010711 d
10.246	77.75455	57.88636	0.00000	-0.023320 d
11.271	76.73000	57.90000	0.00000	-0.039210 d

d - Displacements include imported displacements.

Structure: 27-28 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	76.73000	57.90000	0.00000	-0.039210 d
1.0567	76.72333	58.95667	0.00000	-0.035787 d
2.1134	76.71667	60.01333	0.00000	-0.031491 d
3.1701	76.71000	61.07000	0.00000	-0.026543 d

d - Displacements include imported displacements.

Structure: 28-29 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z

[m] [m] [m] [m] [mm]

Vertical Offset 1

0.0 76.71000 61.07000 0.00000 -0.026543 d
1.4640 77.76500 62.08500 0.00000 -0.0094733 d
2.9280 78.82000 63.10000 0.00000 0.0032396 d
d - Displacements include imported displacements.

Structure: 27-32 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0 76.73000 57.90000 0.00000 -0.039210 d
1.0300 76.73400 56.87000 0.00000 -0.041569 d
2.0600 76.73800 55.84000 0.00000 -0.042787 d
3.0900 76.74200 54.81000 0.00000 -0.042793 d
4.1200 76.74600 53.78000 0.00000 -0.041592 d
5.1500 76.75000 52.75000 0.00000 -0.039255 d
d - Displacements include imported displacements.

Structure: 33-31 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0 87.93000 52.75000 0.00000 0.030810 d
1.0400 86.89000 52.75000 0.00000 0.029484 d
2.0800 85.85000 52.75000 0.00000 0.027657 d
3.1200 84.81000 52.75000 0.00000 0.025215 d
4.1600 83.77000 52.75000 0.00000 0.022019 d
5.2000 82.73000 52.75000 0.00000 0.017894 d
6.2400 81.69000 52.75000 0.00000 0.012622 d
7.2800 80.65000 52.75000 0.00000 0.0059241 d
8.3200 79.61000 52.75000 0.00000 -0.0025518 d
9.3600 78.57000 52.75000 0.00000 -0.013260 d
10.400 77.53000 52.75000 0.00000 -0.026793 d
11.440 76.49000 52.75000 0.00000 -0.043928 d
12.480 75.45000 52.75000 0.00000 -0.065700 d
13.520 74.41000 52.75000 0.00000 -0.093514 d
14.560 73.37000 52.75000 0.00000 -0.12932 d
15.600 72.33000 52.75000 0.00000 -0.17589 d
16.640 71.29000 52.75000 0.00000 -0.23742 d
17.680 70.25000 52.75000 0.00000 -0.32072 d
d - Displacements include imported displacements.

Structure: 31-34 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0 70.25000 52.75000 0.00000 -0.32072 d
1.1236 70.22667 51.62667 0.00000 -0.28984 d
2.2472 70.20333 50.50333 0.00000 -0.25416 d
3.3707 70.18000 49.38000 0.00000 -0.21757 d
d - Displacements include imported displacements.

Structure: 34-35 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0 70.18000 49.38000 0.00000 -0.21757 d
1.3300 71.51000 49.37000 0.00000 -0.15519 d
d - Displacements include imported displacements.

Structure: 35-41 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	71.51000	49.37000	0.00000	-0.15519	d
1.2000	71.50000	48.17000	0.00000	-0.12963	d
2.4001	71.49000	46.97000	0.00000	-0.10548	d
3.6001	71.48000	45.77000	0.00000	-0.083411	d

d - Displacements include imported displacements.

Structure: 41-40 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	71.48000	45.77000	0.00000	-0.083411	d
1.0175	70.46250	45.77000	0.00000	-0.10683	d
2.0350	69.44500	45.77000	0.00000	-0.13369	d
3.0525	68.42750	45.77000	0.00000	-0.16410	d
4.0700	67.41000	45.77000	0.00000	-0.19797	d

d - Displacements include imported displacements.

Structure: 40-39 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	67.41000	45.77000	0.00000	-0.19797	d
1.3000	67.40333	44.47000	0.00000	-0.14872	d
2.6000	67.39667	43.17000	0.00000	-0.10927	d
3.9001	67.39000	41.87000	0.00000	-0.077694	d

d - Displacements include imported displacements.

Structure: 39-38 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	67.39000	41.87000	0.00000	-0.077694	d
1.0305	68.42050	41.86150	0.00000	-0.063438	d
2.0611	69.45100	41.85300	0.00000	-0.050204	d
3.0916	70.48150	41.84450	0.00000	-0.038093	d
4.1221	71.51200	41.83600	0.00000	-0.027155	d
5.1527	72.54250	41.82750	0.00000	-0.017395	d
6.1832	73.57300	41.81900	0.00000	-0.0087829	d
7.2137	74.60350	41.81050	0.00000	-0.0012613	d
8.2443	75.63400	41.80200	0.00000	0.0052432	d
9.2748	76.66450	41.79350	0.00000	0.010815	d
10.305	77.69500	41.78500	0.00000	0.015541	d
11.336	78.72550	41.77650	0.00000	0.019509	d
12.366	79.75600	41.76800	0.00000	0.022805	d
13.397	80.78650	41.75950	0.00000	0.025507	d
14.427	81.81700	41.75100	0.00000	0.027690	d
15.458	82.84750	41.74250	0.00000	0.029419	d
16.489	83.87800	41.73400	0.00000	0.030756	d
17.519	84.90850	41.72550	0.00000	0.031753	d
18.550	85.93900	41.71700	0.00000	0.032459	d
19.580	86.96950	41.70850	0.00000	0.032916	d
20.611	88.00000	41.70000	0.00000	0.033160	d

d - Displacements include imported displacements.

Structure: 38-25 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	88.00000	41.70000	0.00000	0.033160	d
1.0176	88.00381	42.71762	0.00000	0.032988	d
2.0353	88.00762	43.73524	0.00000	0.032788	d
3.0529	88.01143	44.75286	0.00000	0.032566	d
4.0705	88.01524	45.77048	0.00000	0.032330	d
5.0881	88.01905	46.78810	0.00000	0.032086	d
6.1058	88.02286	47.80571	0.00000	0.031842	d
7.1234	88.02667	48.82333	0.00000	0.031608	d
8.1410	88.03048	49.84095	0.00000	0.031390	d
9.1586	88.03429	50.85857	0.00000	0.031197	d
10.176	88.03810	51.87619	0.00000	0.031035	d
11.194	88.04190	52.89381	0.00000	0.030911	d
12.212	88.04571	53.91143	0.00000	0.030829	d
13.229	88.04952	54.92905	0.00000	0.030792	d
14.247	88.05333	55.94667	0.00000	0.030802	d
15.264	88.05714	56.96429	0.00000	0.030857	d
16.282	88.06095	57.98190	0.00000	0.030956	d
17.300	88.06476	58.99952	0.00000	0.031094	d
18.317	88.06857	60.01714	0.00000	0.031267	d
19.335	88.07238	61.03476	0.00000	0.031468	d
20.353	88.07619	62.05238	0.00000	0.031688	d
21.370	88.08000	63.07000	0.00000	0.031921	d

d - Displacements include imported displacements.

Structure: 20-22 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	55.96000	70.70000	0.00000	-0.11099	d
1.0170	56.97700	70.69900	0.00000	-0.10850	d
2.0340	57.99400	70.69800	0.00000	-0.10498	d
3.0510	59.01100	70.69700	0.00000	-0.10043	d
4.0680	60.02800	70.69600	0.00000	-0.094868	d
5.0850	61.04500	70.69500	0.00000	-0.088401	d
6.1020	62.06200	70.69400	0.00000	-0.081155	d
7.1190	63.07900	70.69300	0.00000	-0.073287	d
8.1360	64.09600	70.69200	0.00000	-0.064978	d
9.1530	65.11300	70.69100	0.00000	-0.056412	d
10.170	66.13000	70.69000	0.00000	-0.047771	d

d - Displacements include imported displacements.

Structure: 22-b | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	66.13000	70.69000	0.00000	-0.047771	d
0.69360	66.14000	69.99647	0.00000	-0.060484	d
1.3872	66.15000	69.30294	0.00000	-0.074937	d
2.0808	66.16000	68.60941	0.00000	-0.091377	d
2.7744	66.17000	67.91588	0.00000	-0.11009	d
3.4680	66.18000	67.22235	0.00000	-0.13140	d
4.1616	66.19000	66.52882	0.00000	-0.15571	d
4.8552	66.20000	65.83529	0.00000	-0.18347	d
5.5488	66.21000	65.14176	0.00000	-0.21522	d
6.2424	66.22000	64.44824	0.00000	-0.25165	d
6.9360	66.23000	63.75471	0.00000	-0.29362	d
7.6296	66.24000	63.06118	0.00000	-0.34229	d
8.3232	66.25000	62.36765	0.00000	-0.39932	d
9.0168	66.26000	61.67412	0.00000	-0.46730	d
9.7104	66.27000	60.98059	0.00000	-0.55055	d
10.404	66.28000	60.28706	0.00000	-0.65675	d
11.098	66.29000	59.59353	0.00000	-0.80012	d
11.791	66.30000	58.90000	0.00000	-1.0082	d

d - Displacements include imported displacements.

Structure: e-45 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	64.74000	51.60000	0.00000	-1.4076	d
0.98415	64.72267	50.61600	0.00000	-0.98124	d
1.9683	64.70533	49.63200	0.00000	-0.74450	d
2.9525	64.68800	48.64800	0.00000	-0.58549	d
3.9366	64.67067	47.66400	0.00000	-0.46712	d
4.9208	64.65333	46.68000	0.00000	-0.37440	d
5.9049	64.63600	45.69600	0.00000	-0.29999	d
6.8891	64.61867	44.71200	0.00000	-0.23956	d
7.8732	64.60133	43.72800	0.00000	-0.19017	d
8.8574	64.58400	42.74400	0.00000	-0.14963	d
9.8415	64.56667	41.76000	0.00000	-0.11625	d
10.826	64.54933	40.77600	0.00000	-0.088689	d
11.810	64.53200	39.79200	0.00000	-0.065891	d
12.794	64.51467	38.80800	0.00000	-0.046999	d
13.778	64.49733	37.82400	0.00000	-0.031325	d
14.762	64.48000	36.84000	0.00000	-0.018315	d

d - Displacements include imported displacements.

Structure: 18-31 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	59.17000	64.78000	0.00000	-0.47011	d
1.1384	60.30833	64.77333	0.00000	-0.44235	d
2.2767	61.44667	64.76667	0.00000	-0.40812	d
3.4151	62.58500	64.76000	0.00000	-0.36932	d
4.5534	63.72333	64.75333	0.00000	-0.32786	d
5.6918	64.86167	64.74667	0.00000	-0.28543	d
6.8301	66.00000	64.74000	0.00000	-0.24354	d

d - Displacements include imported displacements.

Structure: 23-24 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	66.00000	63.14000	0.00000	-0.34977	d
1.0683	67.06833	63.13667	0.00000	-0.29175	d
2.1367	68.13667	63.13333	0.00000	-0.23884	d
3.2050	69.20500	63.13000	0.00000	-0.19206	d
4.2734	70.27333	63.12667	0.00000	-0.15169	d
5.3417	71.34167	63.12333	0.00000	-0.11746	d
6.4100	72.41000	63.12000	0.00000	-0.088807	d
7.4784	73.47833	63.11667	0.00000	-0.065022	d
8.5467	74.54667	63.11333	0.00000	-0.045407	d
9.6150	75.61500	63.11000	0.00000	-0.029309	d
10.683	76.68333	63.10667	0.00000	-0.016153	d
11.752	77.75167	63.10333	0.00000	-0.0054435	d
12.820	78.82000	63.10000	0.00000	0.0032396	d

d - Displacements include imported displacements.

Structure: b-27 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	66.10000	58.46000	0.00000	-1.3236	d
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1.0645	67.16300	58.40400	0.00000	-0.82800	d
2.1289	68.22600	58.34800	0.00000	-0.56862	d
3.1934	69.28900	58.29200	0.00000	-0.40920	d
4.2579	70.35200	58.23600	0.00000	-0.30095	d
5.3224	71.41500	58.18000	0.00000	-0.22298	d
6.3868	72.47800	58.12400	0.00000	-0.16485	d
7.4513	73.54100	58.06800	0.00000	-0.12061	d
8.5158	74.60400	58.01200	0.00000	-0.086508	d
9.5803	75.66700	57.95600	0.00000	-0.059979	d
10.645	76.73000	57.90000	0.00000	-0.039210	d

d - Displacements include imported displacements.

Structure: 42-37 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	64.54000	46.73000	0.00000	-0.38479	d
1.0183	65.55826	46.71783	0.00000	-0.33013	d
2.0367	66.57652	46.70565	0.00000	-0.27911	d
3.0550	67.59478	46.69348	0.00000	-0.23247	d
4.0733	68.61304	46.68130	0.00000	-0.19068	d
5.0917	69.63130	46.66913	0.00000	-0.15391	d
6.1100	70.64957	46.65696	0.00000	-0.12206	d
7.1283	71.66783	46.64478	0.00000	-0.094795	d
8.1467	72.68609	46.63261	0.00000	-0.071683	d
9.1650	73.70435	46.62043	0.00000	-0.052235	d
10.183	74.72261	46.60826	0.00000	-0.035968	d
11.202	75.74087	46.59609	0.00000	-0.022427	d
12.220	76.75913	46.58391	0.00000	-0.011207	d
13.238	77.77739	46.57174	0.00000	-0.0019488	d
14.257	78.79565	46.55957	0.00000	0.0056554	d
15.275	79.81391	46.54739	0.00000	0.011869	d
16.293	80.83217	46.53522	0.00000	0.016916	d
17.312	81.85043	46.52304	0.00000	0.020983	d
18.330	82.86870	46.51087	0.00000	0.024231	d
19.348	83.88696	46.49870	0.00000	0.026790	d
20.367	84.90522	46.48652	0.00000	0.028773	d
21.385	85.92348	46.47435	0.00000	0.030274	d
22.403	86.94174	46.46217	0.00000	0.031372	d
23.422	87.96000	46.45000	0.00000	0.032133	d

d - Displacements include imported displacements.

Structure: 47-43 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	54.96000	44.83000	0.00000	-0.44907	d
1.0600	56.02000	44.83000	0.00000	-0.44803	d
2.1200	57.08000	44.83000	0.00000	-0.44122	d
3.1800	58.14000	44.83000	0.00000	-0.42786	d
4.2400	59.20000	44.83000	0.00000	-0.40796	d
5.3000	60.26000	44.83000	0.00000	-0.38231	d
6.3600	61.32000	44.83000	0.00000	-0.35222	d
7.4200	62.38000	44.83000	0.00000	-0.31921	d
8.4800	63.44000	44.83000	0.00000	-0.28476	d
9.5400	64.50000	44.83000	0.00000	-0.25009	d

d - Displacements include imported displacements.

Structure: 44-39 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	64.44000	41.91000	0.00000	-0.12293	d
1.4751	65.91500	41.89000	0.00000	-0.099746	d
2.9503	67.39000	41.87000	0.00000	-0.077694	d

d - Displacements include imported displacements.

Structure: 46-45 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	54.96000	36.71000	0.00000	-0.046102	d
1.0579	56.01778	36.72444	0.00000	-0.045064	d
2.1158	57.07556	36.73889	0.00000	-0.043460	d
3.1736	58.13333	36.75333	0.00000	-0.041283	d
4.2315	59.19111	36.76778	0.00000	-0.038546	d
5.2894	60.24889	36.78222	0.00000	-0.035281	d
6.3473	61.30667	36.79667	0.00000	-0.031546	d
7.4051	62.36444	36.81111	0.00000	-0.027413	d
8.4630	63.42222	36.82556	0.00000	-0.022971	d
9.5209	64.48000	36.84000	0.00000	-0.018315	d

d - Displacements include imported displacements.

Structure: a-12 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	44.06000	58.90000	0.00000	-2.3993	d
1.1151	42.95250	58.77000	0.00000	-2.7685	d
2.2302	41.84500	58.64000	0.00000	-3.0164	d
3.3453	40.73750	58.51000	0.00000	-3.1498	d
4.4604	39.63000	58.38000	0.00000	-2.5115	d

d - Displacements include imported displacements.

Structure: 12-11 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	39.63000	58.38000	0.00000	-2.5115	d
1.1167	39.63000	57.26333	0.00000	-3.6154	d
2.2333	39.63000	56.14667	0.00000	-3.9420	d
3.3500	39.63000	55.03000	0.00000	-4.0498	d
4.4667	39.63000	53.91333	0.00000	-3.9747	d
5.5833	39.63000	52.79667	0.00000	-3.6797	d
6.7000	39.63000	51.68000	0.00000	-2.5818	d

d - Displacements include imported displacements.

Structure: 11-f | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	39.63000	51.68000	0.00000	-2.5818	d
0.55884	40.18875	51.67000	0.00000	-3.3767	d
1.1177	40.74750	51.66000	0.00000	-3.6603	d
1.6765	41.30625	51.65000	0.00000	-3.8091	d
2.2354	41.86500	51.64000	0.00000	-3.8834	d
2.7942	42.42375	51.63000	0.00000	-3.8976	d
3.3530	42.98250	51.62000	0.00000	-3.8520	d
3.9119	43.54125	51.61000	0.00000	-3.7284	d
4.4707	44.10000	51.60000	0.00000	-3.4154	d

d - Displacements include imported displacements.

Structure: ag | Sub-structure:

Dist.	Coordinates			Displacements
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	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	44.06000	58.90000	0.00000	-2.3993 d
1.0047	45.06364	58.85455	0.00000	-2.1904 d
2.0093	46.06727	58.80909	0.00000	-2.0705 d
3.0140	47.07091	58.76364	0.00000	-2.0116 d
4.0187	48.07455	58.71818	0.00000	-1.9957 d
5.0233	49.07818	58.67273	0.00000	-2.0172 d
6.0280	50.08182	58.62727	0.00000	-2.0756 d
7.0327	51.08545	58.58182	0.00000	-2.1748 d
8.0373	52.08909	58.53636	0.00000	-2.3260 d
9.0420	53.09273	58.49091	0.00000	-2.5556 d
10.047	54.09636	58.44545	0.00000	-2.9379 d
11.051	55.10000	58.40000	0.00000	-3.9293 d

d - Displacements include imported displacements.

Structure: gb | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	55.10000	58.40000	0.00000	-3.9293 d
0.57001	55.67000	58.40300	0.00000	-4.4063 d
1.1400	56.24000	58.40600	0.00000	-4.6039 d
1.7100	56.81000	58.40900	0.00000	-4.6866 d
2.2800	57.38000	58.41200	0.00000	-4.6956 d
2.8500	57.95000	58.41500	0.00000	-4.6452 d
3.4200	58.52000	58.41800	0.00000	-4.5371 d
3.9901	59.09000	58.42100	0.00000	-4.3545 d
4.5601	59.66000	58.42400	0.00000	-3.9977 d
5.1301	60.23000	58.42700	0.00000	-3.4385 d
5.7001	60.80000	58.43000	0.00000	-3.1560 d
6.2701	61.37000	58.43300	0.00000	-2.9602 d
6.8401	61.94000	58.43600	0.00000	-2.7950 d
7.4101	62.51000	58.43900	0.00000	-2.6443 d
7.9801	63.08000	58.44200	0.00000	-2.4994 d
8.5501	63.65000	58.44500	0.00000	-2.3523 d
9.1201	64.22000	58.44800	0.00000	-2.1934 d
9.6901	64.79000	58.45100	0.00000	-2.0087 d
10.260	65.36000	58.45400	0.00000	-1.7738 d
10.830	65.93000	58.45700	0.00000	-1.4434 d
11.400	66.50000	58.46000	0.00000	-1.0862 d

d - Displacements include imported displacements.

Structure: bc | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	66.50000	58.46000	0.00000	-1.0862 d
0.27800	66.50000	58.18200	0.00000	-1.1878 d
0.55600	66.50000	57.90400	0.00000	-1.2830 d
0.83400	66.50000	57.62600	0.00000	-1.3652 d
1.1120	66.50000	57.34800	0.00000	-1.4335 d
1.3900	66.50000	57.07000	0.00000	-1.4892 d
1.6680	66.50000	56.79200	0.00000	-1.5338 d
1.9460	66.50000	56.51400	0.00000	-1.5686 d
2.2240	66.50000	56.23600	0.00000	-1.5948 d
2.5020	66.50000	55.95800	0.00000	-1.6132 d
2.7800	66.50000	55.68000	0.00000	-1.6242 d
3.0580	66.50000	55.40200	0.00000	-1.6283 d
3.3360	66.50000	55.12400	0.00000	-1.6256 d
3.6140	66.50000	54.84600	0.00000	-1.6159 d
3.8920	66.50000	54.56800	0.00000	-1.5991 d
4.1700	66.50000	54.29000	0.00000	-1.5747 d
4.4480	66.50000	54.01200	0.00000	-1.5419 d
4.7260	66.50000	53.73400	0.00000	-1.4998 d
5.0040	66.50000	53.45600	0.00000	-1.4472 d
5.2820	66.50000	53.17800	0.00000	-1.3828 d

5.5600 66.50000 52.90000 0.00000 -1.3054 d
d - Displacements include imported displacements.

Structure: cd | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0 66.50000 52.90000 0.00000 -1.3054 d
1.7493 65.00000 52.00000 0.00000 -1.6318 d
d - Displacements include imported displacements.

Structure: eh | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0 64.74000 51.60000 0.00000 -1.4076 d
1.0844 63.65556 51.60000 0.00000 -1.6696 d
2.1689 62.57111 51.60000 0.00000 -1.9244 d
3.2533 61.48667 51.60000 0.00000 -2.2318 d
4.3378 60.40222 51.60000 0.00000 -2.7488 d
5.4222 59.31778 51.60000 0.00000 -4.1812 d
6.5067 58.23333 51.60000 0.00000 -4.6184 d
7.5911 57.14889 51.60000 0.00000 -4.6809 d
8.6756 56.06444 51.60000 0.00000 -4.4783 d
9.7600 54.98000 51.60000 0.00000 -3.6970 d
d - Displacements include imported displacements.

Structure: hf | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0 54.98000 51.60000 0.00000 -3.6970 d
1.0880 53.89200 51.60000 0.00000 -2.9105 d
2.1760 52.80400 51.60000 0.00000 -2.6109 d
3.2640 51.71600 51.60000 0.00000 -2.4508 d
4.3520 50.62800 51.60000 0.00000 -2.3633 d
5.4400 49.54000 51.60000 0.00000 -2.3253 d
6.5280 48.45200 51.60000 0.00000 -2.3298 d
7.6160 47.36400 51.60000 0.00000 -2.3780 d
8.7040 46.27600 51.60000 0.00000 -2.4806 d
9.7920 45.18800 51.60000 0.00000 -2.6783 d
10.880 44.10000 51.60000 0.00000 -3.4154 d
d - Displacements include imported displacements.

Structure: de | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0 65.00000 52.00000 0.00000 -1.6318 d
0.11927 64.93500 51.90000 0.00000 -1.5666 d
0.23854 64.87000 51.80000 0.00000 -1.5082 d
0.35781 64.80500 51.70000 0.00000 -1.4555 d
0.47707 64.74000 51.60000 0.00000 -1.4076 d
d - Displacements include imported displacements.

Specific Building Damage Results - All Segments

Structure: 21-20 | Sub-structure:

Vertical Offset Segment Start Length Curvature Deflection Average Max Max
 Gradient Max Gradient Min Damage Ratio Horizontal Tensile of
 from Line for of Vertical Radius of Category Strain Strain
 of Vertical Vertical Horizontal Displacement Curvature
 Movement Displacement Curve
 Calculations
 Curve

[m] [m] [m] [m] [%] [%] [%]
 [m] 0.0 1 0.0 8.5455 Hogging 61.009E-6 0.0 59.330E-6
 0.0 -3.4879E-6 1.1295E+6 0

(Negligible)
 Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 19-20 | Sub-structure:

Vertical Offset Segment Start Length Curvature Deflection Average Max Max
 Gradient Max Gradient Min Damage Ratio Horizontal Tensile of
 from Line for of Vertical Radius of Category Strain Strain
 of Vertical Vertical Horizontal Displacement Curvature
 Movement Displacement Curve
 Calculations
 Curve

[m] [m] [m] [m] [%] [%] [%]
 [m] 0.0 1 0.0 5.0389 Sagging 293.87E-6 0.0 282.99E-6
 0.0 -44.437E-6 172880. 0

(Negligible)
 Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 19-18 | Sub-structure:

Vertical Offset Segment Start Length Curvature Deflection Average Max Max
 Gradient Max Gradient Min Damage Ratio Horizontal Tensile of
 from Line for of Vertical Radius of Category Strain Strain
 of Vertical Vertical Horizontal Displacement Curvature
 Movement Displacement Curve
 Calculations
 Curve

[m] [m] [m] [m] [%] [%] [%]
 [m] 0.0 1 0.0 2.0092 Sagging 586.81E-6 0.0 583.26E-6
 0.0 104.65E-6 42389. 0

(Negligible)
 Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 18-13 | Sub-structure:

Vertical Offset Segment Start Length Curvature Deflection Average Max Max
 Gradient Max Gradient Min Damage Ratio Horizontal Tensile
 from Line for of Vertical Radius of Category Strain Strain
 of Vertical Vertical Horizontal Displacement Curvature
 Movement Displacement Curve
 Calculations
 Curve

[m] [m] [m] [m] [%] [%] [%]
 [m]

0.0	0.0	1	0.0	7.0688	Hogging	427.65E-6	0.0	419.68E-6
0.0	18.099E-6	146770.	0					
(Negligible)								
0.0	-9.3470E-6	811090.	2	7.0688	Sagging	70.053E-6	0.0	67.842E-6
(Negligible)								
0.0	-9.2461E-6	305420.	3	11.713	Hogging	82.564E-6	0.0	82.219E-6
(Negligible)								

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 21-a | Sub-structure:

Vertical Offset	Segment	Start	Length	Curvature	Deflection	Average	Max	Max
Gradient Max Gradient	Min	Damage			Ratio	Horizontal	Tensile	
from Line for	Radius of	Category				Strain	Strain	
of Vertical	of Vertical							
Vertical	Displacement	Curvature						
Movement	Curve							
Displacement	Calculations							
Curve								
[m]	[m]	[m]	[m]	[m]	[%]	[%]	[%]	[%]
0.0	0.0	1	0.69535	11.125	Sagging	0.0079505	0.0	0.0088123
0.0	0.0010049	1042.6	0					
(Negligible)								

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: f-50 | Sub-structure:

Vertical Offset	Segment	Start	Length	Curvature	Deflection	Average	Max	Max
Gradient Max Gradient	Min	Damage			Ratio	Horizontal	Tensile	
from Line for	Radius of	Category				Strain	Strain	
of Vertical	of Vertical							
Vertical	Displacement	Curvature						
Movement	Curve							
Displacement	Calculations							
Curve								
[m]	[m]	[m]	[m]	[m]	[%]	[%]	[%]	[%]
0.0	0.0	1	0.0	10.919	Sagging	0.013549	0.0	0.014826
0.0	-0.0015161	834.71	0					
(Negligible)								

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 14-15 | Sub-structure:

Vertical Offset	Segment	Start	Length	Curvature	Deflection	Average	Max	Max
Gradient Max Gradient	Min	Damage			Ratio	Horizontal	Tensile	
from Line for	Radius of	Category				Strain	Strain	
of Vertical	of Vertical							
Vertical	Displacement	Curvature						
Movement	Curve							
Displacement	Calculations							
Curve								
[m]	[m]	[m]	[m]	[m]	[%]	[%]	[%]	[%]
0.0	0.0	1	0.0	2.1390	Sagging	0.0012089	0.0	0.0012005
0.0	191.92E-6	21905.	0					
(Negligible)								

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 15-16 | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Vertical Horizontal Displacement Movement Displacement Calculations	Segment Min Category	Start Damage	Length [m]	Curvature [m]	Deflection Ratio [%]	Average Horizontal Strain [%]	Max Tensile Strain [%]	Max of Curve
[m]								
0.0	1	0.0	1.6897	None	0.0	0.0	0.0	
0.0			0					

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 16-17 | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Vertical Horizontal Displacement Movement Displacement Calculations	Segment Min Category	Start Damage	Length [m]	Curvature [m]	Deflection Ratio [%]	Average Horizontal Strain [%]	Max Tensile Strain [%]	Max of Curve
[m]								
0.0	1	0.0	1.8990	None	0.0	0.0	0.0	
0.0			0					

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 17-g | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Vertical Horizontal Displacement Movement Displacement Calculations	Segment Min Category	Start Damage	Length [m]	Curvature [m]	Deflection Ratio [%]	Average Horizontal Strain [%]	Max Tensile Strain [%]	Max of Curve
[m]								
0.0	1	0.0	1.6115	None	0.0	0.0	0.0	
0.0			0					

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: h-49 | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Vertical Horizontal Displacement Movement Displacement Calculations	Segment Min Category	Start Damage	Length [m]	Curvature [m]	Deflection Ratio [%]	Average Horizontal Strain [%]	Max Tensile Strain [%]	Max of Curve
[m]								
0.0	1	0.0	2.1345	Sagging	0.010527	0.0	0.010455	
0.0			0					

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 49-36 | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Vertical Horizontal Displacement Movement Displacement Calculations Curve	Segment Min Category	Start Length Damage	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of
[m]		[m]	[m]	[%]	[%]	[%]	
0.0	1	0.0	2.3890	Sagging	0.0055652	0.0	0.0055174
0.0			0				

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 36-48 | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Vertical Horizontal Displacement Movement Displacement Calculations Curve	Segment Min Category	Start Length Damage	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of
[m]		[m]	[m]	[%]	[%]	[%]	
0.0	1	0.0	2.3002	Sagging	977.93E-6	0.0	970.14E-6
0.0			0				

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 48-47 | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Vertical Horizontal Displacement Movement Displacement Calculations Curve	Segment Min Category	Start Length Damage	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of
[m]		[m]	[m]	[%]	[%]	[%]	Curve
0.0	1	0.0	1.1690	None	0.0	0.0	0.0
0.0			0				

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 47-51 | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Vertical Horizontal Displacement Movement Displacement Calculations Curve	Segment Min Category	Start Length Damage	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of
[m]		[m]	[m]	[%]	[%]	[%]	
0.0	1	0.0	1.1690	None	0.0	0.0	0.0
0.0			0				

[m]	[m]	[m]	[m]	[m]	[m]	[%]	[%]	[%]	
0.0	0.0	1	0.0	3.3949	Hogging	69.887E-6	0.0	69.559E-6	
0.0	-6.9710E-6	358030.	0						
(Negligible)									
0.0	-6.9628E-6	1.4152E+6	2	3.3949	3.7150	Sagging	35.337E-6	0.0	34.583E-6
(Negligible)									
0.0	-9.1153E-6	345450.	3	7.1099	3.6391	Hogging	74.348E-6	0.0	73.993E-6
(Negligible)									

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 50-46 | Sub-structure:

Vertical Offset	Segment	Start Length	Curvature	Deflection	Average	Max	Max
Gradient Max Gradient	Min	Damage		Ratio	Horizontal	Tensile	of
from Line for	Radius of Category				Strain	Strain	
of Vertical	Vertical	Horizontal Displacement	Curvature				
Vertical	Displacement	Movement	Curve				
Horizontal Displacement	Calculations	Curve					
Curve							
[m]	[m]	[m]	[m]	[m]	[%]	[%]	[%]
0.0							

All settlements are less than the Settlement Trough Limit Sensitivity.
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 46-47 | Sub-structure:

Vertical Offset	Segment	Start Length	Curvature	Deflection	Average	Max	Max
Gradient Max Gradient	Min	Damage		Ratio	Horizontal	Tensile	
from Line for	Radius of Category				Strain	Strain	
of Vertical	Vertical	Horizontal Displacement	Curvature				
Vertical	Displacement	Movement	Curve				
Horizontal Displacement	Calculations	Curve					
Curve							
[m]	[m]	[m]	[m]	[m]	[%]	[%]	[%]
0.0							

All settlements are less than the Settlement Trough Limit Sensitivity.
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 24-25 | Sub-structure:

Vertical Offset	Segment	Start Length	Curvature	Deflection	Average	Max	Max
Gradient Max Gradient	Min	Damage		Ratio	Horizontal	Tensile	of
from Line for	Radius of Category				Strain	Strain	
of Vertical	Vertical	Horizontal Displacement	Curvature				
Vertical	Displacement	Movement	Curve				
Horizontal Displacement	Calculations	Curve					
Curve							
[m]	[m]	[m]	[m]	[m]	[%]	[%]	[%]
0.0							

All settlements are less than the Settlement Trough Limit Sensitivity.
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 25-26 | Sub-structure:

Vertical Offset **Segment** **Start Length Curvature Deflection** **Average** **Max** **Max**
Gradient Max Gradient **Min** **Damage** **Ratio** **Horizontal** **Tensile** **of**
from Line for **Radius of Category** **Vertical** **Strain** **Strain**
of Vertical **Displacement Curvature** **Horizontal** **Displacement Curvature**
Vertical **Movement** **Displacement** **Curve**
Horizontal **Displacement Curvature** **Calculations**
Movement **Curve**
Displacement **Curve**
Calculations
Curve
[m] [m] [m] [m] [%] [%] [%]
[m] 0.0 All settlements are less than the Settlement Trough Limit Sensitivity.
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 26-27 | Sub-structure:

Vertical Offset **Segment** **Start Length Curvature Deflection** **Average** **Max** **Max**
Gradient Max Gradient **Min** **Damage** **Ratio** **Horizontal** **Tensile** **of**
from Line for **Radius of Category** **Vertical** **Strain** **Strain**
of Vertical **Displacement Curvature** **Horizontal** **Displacement Curvature**
Vertical **Movement** **Displacement** **Curve**
Horizontal **Displacement Curvature** **Calculations**
Movement **Curve**
Displacement **Curve**
Calculations
Curve
[m] [m] [m] [m] [%] [%] [%]
[m] 0.0 All settlements are less than the Settlement Trough Limit Sensitivity.
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 27-28 | Sub-structure:

Vertical Offset **Segment** **Start Length Curvature Deflection** **Average** **Max** **Max**
Gradient Max Gradient **Min** **Damage** **Ratio** **Horizontal** **Tensile** **of**
from Line for **Radius of Category** **Vertical** **Strain** **Strain**
of Vertical **Displacement Curvature** **Horizontal** **Displacement Curvature**
Vertical **Movement** **Displacement** **Curve**
Horizontal **Displacement Curvature** **Calculations**
Movement **Curve**
Displacement **Curve**
Calculations
Curve
[m] [m] [m] [m] [%] [%] [%]
[m] 0.0 All settlements are less than the Settlement Trough Limit Sensitivity.
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 28-29 | Sub-structure:

Vertical Offset **Segment** **Start Length Curvature Deflection** **Average** **Max** **Max**
Gradient Max Gradient **Min** **Damage** **Ratio** **Horizontal** **Tensile** **of**
from Line for **Radius of Category** **Vertical** **Strain** **Strain**
of Vertical **Displacement Curvature** **Horizontal** **Displacement Curvature**
Vertical **Movement** **Displacement** **Curve**
Horizontal **Displacement Curvature** **Calculations**
Movement **Curve**
Displacement **Curve**
Calculations
Curve
[m] [m] [m] [m] [%] [%] [%]
[m] 0.0 All settlements are less than the Settlement Trough Limit Sensitivity.
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 27-32 | Sub-structure:

Vertical Offset **Segment** **Start Length Curvature Deflection** **Average** **Max** **Max**
Gradient Max Gradient **Min** **Damage** **Ratio** **Horizontal** **Tensile** **of**
from Line for **Radius of Category**

Vertical Strain Strain
Horizontal Displacement Curvature
Movement
Displacement Curve
Calculations
Curve
[m] [m] [m] [%] [%] [%]
[m]

0.0 All settlements are less than the Settlement Trough Limit Sensitivity.
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 33-31 | Sub-structure:

Vertical Offset Gradient Max from Line for of Vertical Horizontal Displacement Movement Displacement Calculations Curve	Segment Min Radius of	Start Damage Category	Length [m]	Curvature [m]	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max
[m]			[m]	[m]	[%]	[%]	[%]	
0.0		1	14.560	3.1190	Sagging	624.61E-6	0.0	615.51E-6
0.0	80.093E-6	46071.	0					

(Negligible)
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 31-34 | Sub-structure:

Vertical Offset Gradient Max from Line for of Vertical Horizontal Displacement Movement Displacement Calculations Curve	Segment Min Radius of	Start Damage Category	Length [m]	Curvature [m]	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max
[m]			[m]	[m]	[%]	[%]	[%]	
0.0		1	0.0	3.3333	Hogging	103.47E-6	0.0	103.03E-6
0.0	-32.562E-6	218950.	0					

(Negligible)
0.0 -32.562E-6 20.027E+6 2 3.3333 0.036434 None 0.0 0.0 0.0

(Negligible)
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 34-35 | Sub-structure:

Vertical Offset Gradient Max from Line for of Vertical Horizontal Displacement Movement Displacement Calculations Curve	Segment Min Radius of	Start Damage Category	Length [m]	Curvature [m]	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of Curve
[m]			[m]	[m]	[%]	[%]	[%]	
0.0		1	0.0	1.3290	None	0.0	0.0	0.0
0.0	-46.900E-6 -		0					

(Negligible)
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 35-41 | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Radius of Vertical Horizontal Displacement Curvature Movement Displacement Curve Calculations Curve	Segment Min Category	Start Damage	Length [m]	Curvature [m]	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of
[m]			[m]	[m]	[%]	[%]	[%]	
0.0	1	0.0	2.4001	Sagging	28.924E-6	0.0	28.646E-6	
0.0								

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 41-40 | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Radius of Vertical Horizontal Displacement Curvature Movement Displacement Curve Calculations Curve	Segment Min Category	Start Damage	Length [m]	Curvature [m]	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max
[m]			[m]	[m]	[%]	[%]	[%]	
0.0	1	1.0175	3.0515	Sagging	115.23E-6	0.0	113.62E-6	
0.0								

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 40-39 | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Radius of Vertical Horizontal Displacement Curvature Movement Displacement Curve Calculations Curve	Segment Min Category	Start Damage	Length [m]	Curvature [m]	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of
[m]			[m]	[m]	[%]	[%]	[%]	
0.0	1	0.0	2.6000	Sagging	186.66E-6	0.0	184.79E-6	
0.0								

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 39-38 | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Radius of Vertical Horizontal Displacement Curvature Movement Displacement Curve Calculations Curve	Segment Min Category	Start Damage	Length [m]	Curvature [m]	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of
[m]			[m]	[m]	[%]	[%]	[%]	

[m] [m] [m] [m] [%] [%] [%]
 [m] 0.0 All settlements are less than the Settlement Trough Limit Sensitivity.
 Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 38-25 | Sub-structure:

Vertical Offset Gradient Max from Line for of Vertical Vertical Horizontal Movement Displacement Calculations Curve	Segment Max Gradient Radius of Displacement Curve	Min	Start Damage	Length [m]	Curvature [m]	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of
[m]	[m]	[m]	[m]	[m]	[m]	[%]	[%]	[%]	

[m] 0.0 All settlements are less than the Settlement Trough Limit Sensitivity.
 Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 20-22 | Sub-structure:

Vertical Offset Gradient Max from Line for of Vertical Vertical Horizontal Movement Displacement Calculations Curve	Segment Max Gradient Radius of Displacement Curve	Min	Start Damage	Length [m]	Curvature [m]	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of
[m]	[m]	[m]	[m]	[m]	[m]	[%]	[%]	[%]	

[m] 0.0
 0.0 -5.4645E-6 1.0001E+6 1 0.0 3.0510 Hogging 34.000E-6 0.0 31.865E-6

(Negligible)
 Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 22-b | Sub-structure:

Vertical Offset Gradient Max from Line for of Vertical Vertical Horizontal Movement Displacement Calculations Curve	Segment Max Gradient Radius of Displacement Curve	Min	Start Damage	Length [m]	Curvature [m]	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of
[m]	[m]	[m]	[m]	[m]	[m]	[%]	[%]	[%]	

[m] 0.0
 0.0 299.97E-6 6717.1 1 2.7744 9.0158 Sagging 0.0029318 0.0 0.0040880

(Negligible)
 Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: e-45 | Sub-structure:

Vertical Offset Gradient Max from Line for of Vertical Vertical Horizontal Movement Displacement Calculations Curve	Segment Max Gradient Radius of Displacement Curve	Min	Start Damage	Length [m]	Curvature [m]	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of
[m]	[m]	[m]	[m]	[m]	[m]	[%]	[%]	[%]	

Calculations

Curve	[m]	[m]	[m]	[m]	[%]	[%]	[%]
0.0	0.0	1	0.0	9.8415	Sagging	0.0044138	0.0 0.0059254
0.0	-433.23E-6	4451.2	0				

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 18-31 | Sub-structure:

Vertical Offset	Segment	Start	Length	Curvature	Deflection	Average	Max	Max
Gradient Max Gradient	Min	Damage						
from Line for	Radius of	Category			Ratio	Horizontal	Tensile	
of Vertical	of Vertical					Strain	Strain	
Vertical	Displacement	Curvature						
Horizontal	Movement	Curve						
Displacement	Calculations	Curve						
Curve								

[m]	[m]	[m]	[m]	[%]	[%]	[%]
0.0	1	0.0	5.5299	Hogging	208.63E-6	0.0 242.94E-6
0.0	-37.274E-6	186010.	0			

(Negligible)

0.0	2	5.5299	1.2992	Sagging	5.1857E-6	0.0 4.9710E-6
0.0	-37.274E-6	1.4029E+6	0			

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 23-24 | Sub-structure:

Vertical Offset	Segment	Start	Length	Curvature	Deflection	Average	Max	Max
Gradient Max Gradient	Min	Damage						
from Line for	Radius of	Category			Ratio	Horizontal	Tensile	of
of Vertical	Radius of					Strain	Strain	
Vertical	Displacement	Curvature						
Horizontal	Movement	Curve						
Displacement	Calculations	Curve						
Curve								

[m]	[m]	[m]	[m]	[%]	[%]	[%]
0.0	1	0.0	5.3417	Sagging	342.93E-6	0.0 518.17E-6
0.0	-54.303E-6	182100.	0			

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: b-27 | Sub-structure:

Vertical Offset	Segment	Start	Length	Curvature	Deflection	Average	Max	Max
Gradient Max Gradient	Min	Damage						
from Line for	Radius of	Category			Ratio	Horizontal	Tensile	of
of Vertical	Radius of					Strain	Strain	
Vertical	Displacement	Curvature						
Horizontal	Movement	Curve						
Displacement	Calculations	Curve						
Curve								

[m]	[m]	[m]	[m]	[%]	[%]	[%]
0.0	1	0.0	7.4513	Sagging	0.0055114	0.0 0.0081570
0.0	-465.62E-6	4191.3	0			

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 42-37 | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Radius of Vertical Horizontal Displacement Curvature Movement Displacement Curve Calculations Curve	Segment Min Category	Start Length Damage	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of
[m]		[m]	[m]	[%]	[%]	[%]	
0.0	1	0.0	6.1100	Sagging	341.99E-6	0.0	519.24E-6
0.0			0				

(Negligible)
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 47-43 | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Radius of Vertical Horizontal Displacement Curvature Movement Displacement Curve Calculations Curve	Segment Min Category	Start Length Damage	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of
[m]		[m]	[m]	[%]	[%]	[%]	
0.0	1	0.0	9.3739	Hogging	494.64E-6	0.0	731.24E-6
0.0			0				

(Negligible)
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

(Negligible)

0.0	2	9.3739	0.16506	Sagging	0.0	0.0	0.0
0.0			0				

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 44-39 | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Radius of Vertical Horizontal Displacement Curvature Movement Displacement Curve Calculations Curve	Segment Min Category	Start Length Damage	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of
[m]		[m]	[m]	[%]	[%]	[%]	
0.0	1	0.0	0.0	None	0.0	0.0	0.0
0.0			0				

(Negligible)
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 46-45 | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Radius of Vertical Horizontal Displacement Curvature Movement Displacement Curve	Segment Min Category	Start Length Damage	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of
[m]		[m]	[m]	[%]	[%]	[%]	
0.0	1	0.0	0.0	None	0.0	0.0	0.0
0.0			0				

(Negligible)
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Calculations

Curve

[m] [m] [m] [m] [%] [%] [%]
 [m] 0.0 All settlements are less than the Settlement Trough Limit Sensitivity.
 Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: a-12 | Sub-structure:

Vertical Offset Gradient Max from Line for of Vertical Horizontal Movement Displacement Calculations	Segment Max Gradient Radius of Vertical Displacement Curve	Min Category	Start Damage	Length [m]	Curvature [m]	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of Curve
[m]				[m]	[m]	[%]	[%]	[%]	
0.0		1	0.0	4.4594	Hogging	0.014908	0.0	0.014931	
0.0	-572.43E-6	1327.8	0						

(Negligible)
 Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 12-11 | Sub-structure:

Vertical Offset Gradient Max from Line for of Vertical Horizontal Movement Displacement Calculations	Segment Max Gradient Radius of Vertical Displacement Curve	Min Category	Start Damage	Length [m]	Curvature [m]	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of Curve
[m]				[m]	[m]	[%]	[%]	[%]	
0.0		1	0.0	6.6990	Hogging	0.022393	0.0	0.029147	
0.0	988.56E-6	1313.9	0						

(Negligible)
 Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 11-f | Sub-structure:

Vertical Offset Gradient Max from Line for of Vertical Horizontal Movement Displacement Calculations	Segment Max Gradient Radius of Vertical Displacement Curve	Min Category	Start Damage	Length [m]	Curvature [m]	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of Curve
[m]				[m]	[m]	[%]	[%]	[%]	
0.0		1	0.0	4.4697	Hogging	0.020447	0.0	0.020515	
0.0	0.0014225	515.76	0						

(Negligible)
 Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: ag | Sub-structure:

Vertical Offset Gradient Max from Line for of Vertical Horizontal Movement Displacement Calculations	Segment Max Gradient Radius of Vertical Displacement Curve	Min Category	Start Damage	Length [m]	Curvature [m]	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of Curve
[m]				[m]	[m]	[%]	[%]	[%]	

Movement Displacement Calculations	Curve								Curve
[m]		[m]	[m]		[%]	[%]	[%]		
0.0	0.0	1	0.0	11.050	Sagging	0.010837	0.0	0.011957	
0.0	986.83E-6	1394.9		0					

(Negligible)
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: gb | Sub-structure:

Vertical Offset Gradient from Line of Vertical Movement Displacement Calculations	Segment Max Gradient	Min Radius of Curvature	Start Length Damage	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max	Max
0.0	-981.06E-6	1014.2	1	0.0	4.7929	Hogging	0.017571	0.0	0.018558
0.0	-981.06E-6	2714.2	2	4.7929	3.0149	Sagging	0.0080904	0.0	0.0099357
0.0	-626.61E-6	4882.8	3	7.8078	3.5914	Hogging	0.0063712	0.0	0.0058352

(Negligible)
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: bc | Sub-structure:

Vertical Offset Gradient from Line of Vertical Movement Displacement Calculations	Segment Max Gradient	Min Radius of Curvature	Start Length Damage	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max	Max
0.0	365.42E-6	5795.2	1	0.0	5.5590	Hogging	0.0077045	0.0	0.0090007

(Negligible)
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: cd | Sub-structure:

Vertical Offset Gradient from Line of Vertical Movement Displacement Calculations	Segment Max Gradient	Min Radius of Curvature	Start Length Damage	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max	Max
0.0	186.64E-6	-	1	0.0	1.7483	Sagging	0.0	0.0	0.0

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: eh | Sub-structure:

Vertical Offset	Segment	Start Length	Curvature	Deflection	Average	Max	Max
Gradient Max Gradient	Min	Damage		Ratio	Horizontal	Tensile	
from Line for	of Vertical	Radius of	Category		Strain	Strain	
of Vertical	Displacement	Curvature					
Vertical	Movement						
Horizontal	Displacement	Curvature					
Displacement	Calculations	Curve					
Curve							

[m]	[m]	[m]	[m]	[%]	[%]	[%]	
0.0	0.0	1	0.0	0.80461	None	0.0	0.0
0.0	241.63E-6	53048.	0				

(Negligible)

0.0	0.0013208	3397.2	2	0.80461	3.9875	Sagging	0.011102	0.0	0.015624
				0					

(Negligible)

0.0	0.0013208	1789.1	3	4.7921	4.9669	Hogging	0.023124	0.0	0.025048
				0					

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: hf | Sub-structure:

Vertical Offset	Segment	Start Length	Curvature	Deflection	Average	Max	Max
Gradient Max Gradient	Min	Damage		Ratio	Horizontal	Tensile	
from Line for	of Vertical	Radius of	Category		Strain	Strain	
of Vertical	Displacement	Curvature					
Vertical	Movement						
Horizontal	Displacement	Curvature					
Displacement	Calculations	Curve					
Curve							

[m]	[m]	[m]	[m]	[%]	[%]	[%]		
0.0	0.0	1	0.0	10.879	Sagging	0.011307	0.0	0.012341
0.0	-722.96E-6	1819.1	0					

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: de | Sub-structure:

Vertical Offset	Segment	Start Length	Curvature	Deflection	Average	Max	Max
Gradient Max Gradient	Min	Damage		Ratio	Horizontal	Tensile	
from Line for	of Vertical	Radius of	Category		Strain	Strain	
of Vertical	Displacement	Curvature					
Vertical	Movement						
Horizontal	Displacement	Curvature					
Displacement	Calculations	Curve					
Curve							

[m]	[m]	[m]	[m]	[%]	[%]	[%]		
0.0	0.0	1	0.0	0.47607	Sagging	0.0024089	0.0	0.0023935
0.0	-546.98E-6	2013.2	0					

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Specific Building Damage Results - Critical Values for All Segments within Each Sub-Structure

Structure: 21-20 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0 1.1295E+6	61.009E-6 - 0 (Negligible)	0.0	-3.4879E-6	0.11307	59.330E-6	0.0	-3.4879E-6

Structure: 19-20 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0 - 172880.0	293.87E-6 (Negligible)	0.0	-44.437E-6	0.28357	282.99E-6	0.0	-44.437E-6

Structure: 19-18 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0 - 42389.0	586.81E-6 (Negligible)	0.0	104.65E-6	0.47000	583.26E-6	0.0	104.65E-6

Structure: 18-13 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0 146770.	427.65E-6 811090.0	0.0	18.099E-6	0.50517	419.68E-6	0.0	18.099E-6

Structure: 21-a | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0	1042.6	0.0079505 (Negligible)	0.0	0.0010049	2.3983	0.0088123	0.0
-							0.0010049

Structure: f-50 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0	834.71	0.013549 (Negligible)	0.0	-0.0015161	3.4154	0.014826	0.0
-							-0.0015161

Structure: 14-15 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0	21905.0	0.0012089 (Negligible)	0.0	191.92E-6	0.86484	0.0012005	0.0
-							191.92E-6

Structure: 15-16 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0	-0	0.0 (Negligible)	0.0	209.09E-6	1.2183	0.0	0.0
-							209.09E-6

Structure: 16-17 | Sub-structure:

Vertical Min Offset from Radius of	Deflection Min Ratio	Average Damage Category Horizontal	Max Slope	Max Settlement	Max Tensile	Max Gradient of	Max Gradient of Vertical
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Line for Curvature Vertical (Hogging) Movement Calculations

Strain	Strain	Horizontal Displacement	Displacement
[m]	[%]	[mm]	[%]
0.0	0.0	565.96E-6	2.2933
- 0 (Negligible)			0.0

Structure: 17-g | Sub-structure:

Vertical Deflection Average Max Slope Max Max Max Gradient Max Gradient
 Min Min Damage Category
 Offset from Ratio Horizontal Settlement Tensile of of Vertical
 Radius of Radius of
 Line for Strain Strain Horizontal Displacement
 Curvature Curvature
 Vertical
 (Hogging) (Sagging)
 Movement
 Calculations

Strain	Strain	Horizontal Displacement	Displacement
[m]	[%]	[mm]	[%]
0.0	0.0	0.0010143	3.9283
- 0 (Negligible)			0.0

Structure: h-49 | Sub-structure:

Vertical Deflection Average Max Slope Max Max Max Gradient Max Gradient
 Min Min Damage Category
 Offset from Ratio Horizontal Settlement Tensile of of Vertical
 Radius of Radius of
 Line for Strain Strain Horizontal Displacement
 Curvature Curvature
 Vertical
 (Hogging) (Sagging)
 Movement
 Calculations

Strain	Strain	Horizontal Displacement	Displacement
[m]	[%]	[mm]	[%]
0.0	0.010527	-0.0010069	3.6970
- 2510.1 0 (Negligible)			0.010455

Structure: 49-36 | Sub-structure:

Vertical Deflection Average Max Slope Max Max Max Gradient Max Gradient
 Min Min Damage Category
 Offset from Ratio Horizontal Settlement Tensile of of Vertical
 Radius of Radius of
 Line for Strain Strain Horizontal Displacement
 Curvature Curvature
 Vertical
 (Hogging) (Sagging)
 Movement
 Calculations

Strain	Strain	Horizontal Displacement	Displacement
[m]	[%]	[mm]	[%]
0.0	0.0055652	-553.91E-6	2.0008
- 5314.0 0 (Negligible)			0.0055174

Structure: 36-48 | Sub-structure:

Vertical Deflection Average Max Slope Max Max Max Gradient Max Gradient
 Min Min Damage Category
 Offset from Ratio Horizontal Settlement Tensile of of Vertical
 Radius of Radius of
 Line for Strain Strain Horizontal Displacement
 Curvature Curvature
 Vertical
 (Hogging) (Sagging)
 Movement
 Calculations

Strain	Strain	Horizontal Displacement	Displacement
[m]	[%]	[mm]	[%]

[m] [%] [%] [mm] [%] [m]

Structure: 27-32 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve	Min Radius
[m]	[%]	[%]		[mm]	[%]			[m]

Structure: 33-31 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve	Min Radius
[m]	[%]	[%]		[mm]	[%]			[m]
0.0	624.61E-6	0.0	80.093E-6	0.32064	615.51E-6	0.0	80.093E-6	- 46071.0 (Negligible)

Structure: 31-34 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve	Min Radius
[m]	[%]	[%]		[mm]	[%]			[m]
0.0	103.47E-6	0.0	-32.562E-6	0.32072	103.03E-6	0.0	-32.562E-6	218950.0 (Negligible)

Structure: 34-35 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve	Min Radius
[m]	[%]	[%]		[mm]	[%]			[m]
0.0	0.0	0.0	-46.900E-6	0.21757	0.0	0.0	-46.900E-6	- 0 (Negligible)

Structure: 35-41 | Sub-structure:

Vertical Displacement Curve
(Hogging) (Sagging)
Movement
Calculations
[m] [%] [%] [mm] [%] [m]

Structure: 20-22 | Sub-structure:

Vertical Deflection Average Max Slope Max Max Max Gradient Max Gradient
Min Min Damage Category
Offset from Ratio Horizontal Settlement Tensile of of Vertical
Radius of Radius of
Line for Strain Strain Horizontal Displacement
Curvature Curvature
Vertical
(Hogging) (Sagging)
Movement
Calculations
[m] [%] [%] [mm] [%] [m]
0.0 [m] 34.000E-6 0.0 -5.4645E-6 0.11099 31.865E-6 0.0 -5.4645E-6
1.0001E+6 - 0 (Negligible)

Structure: 22-b | Sub-structure:

Vertical Deflection Average Max Slope Max Max Max Gradient Max Gradient
Min Min Damage Category
Offset from Ratio Horizontal Settlement Tensile of of Vertical
Radius of Radius of
Line for Strain Strain Horizontal Displacement
Curvature Curvature
Vertical
(Hogging) (Sagging)
Movement
Calculations
[m] [%] [%] [mm] [%] [m]
0.0 [m] 0.0029318 0.0 299.97E-6 1.0079 0.0040880 0.0 299.97E-6
- 6717.1 0 (Negligible)

Structure: e-45 | Sub-structure:

Vertical Deflection Average Max Slope Max Max Max Gradient Max Gradient
Min Min Damage Category
Offset from Ratio Horizontal Settlement Tensile of of Vertical
Radius of Radius of
Line for Strain Strain Horizontal Displacement
Curvature Curvature
Vertical
(Hogging) (Sagging)
Movement
Calculations
[m] [%] [%] [mm] [%] [m]
0.0 [m] 0.0044138 0.0 -433.23E-6 1.4076 0.0059254 0.0 -433.23E-6
- 4451.2 0 (Negligible)

Structure: 18-31 | Sub-structure:

Vertical Deflection Average Max Slope Max Max Max Gradient Max Gradient
Min Min Damage Category
Offset from Ratio Horizontal Settlement Tensile of of Vertical
Radius of Radius of
Line for Strain Strain Horizontal Displacement
Curvature Curvature
Vertical
(Hogging) (Sagging)
Movement
Calculations
[m] [%] [%] [mm] [%] [m]

0.0 208.63E-6 0.0 -37.274E-6 0.47011 242.94E-6 0.0 -37.274E-6
 186010. 1.4029E+6 0 (Negligible)

Structure: 23-24 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0	342.93E-6	0.0	-54.303E-6	0.34977	518.17E-6	0.0	-54.303E-6
- 182100. 0 (Negligible)							

Structure: b-27 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0	0.0055114	0.0	-465.62E-6	1.3236	0.0081570	0.0	-465.62E-6
- 4191.3 0 (Negligible)							

Structure: 42-37 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0	341.99E-6	0.0	-53.681E-6	0.38479	519.24E-6	0.0	-53.681E-6
- 209350. 0 (Negligible)							

Structure: 47-43 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0	494.64E-6	0.0	-32.706E-6	0.44907	731.24E-6	0.0	-32.706E-6
176840. 11.640E+6 0 (Negligible)							

Structure: 44-39 | Sub-structure:

Vertical Displacement Curve
(Hogging) (Sagging)
Movement Curve
Calculations

[m]	[m]	[%]	[%]	[mm]	[%]		
0.0	515.76	0.020447	0.0	0.0014225	3.8972	0.020515	0.0 0.0014225
- 0 (Negligible)							

Structure: ag | Sub-structure:

Vertical Deflection Average Max Slope Max Max Max Gradient Max Gradient
Min Min Damage Category
Offset from Ratio Horizontal Settlement Tensile of of Vertical
Radius of Radius of Strain Strain Horizontal Displacement
Line for Curvature Curvature
Vertical Curvature
(Hogging) (Sagging) Displacement Curve
Movement Curve
Calculations

[m]	[m]	[%]	[%]	[mm]	[%]		
0.0	1394.9	0.010837	0.0	986.83E-6	3.9284	0.011957	0.0 986.83E-6
- 1394.9 0 (Negligible)							

Structure: gb | Sub-structure:

Vertical Deflection Average Max Slope Max Max Max Gradient Max Gradient
Min Min Damage Category
Offset from Ratio Horizontal Settlement Tensile of of Vertical
Radius of Radius of Strain Strain Horizontal Displacement
Line for Curvature Curvature
Vertical Curvature
(Hogging) (Sagging) Displacement Curve
Movement Curve
Calculations

[m]	[m]	[%]	[%]	[mm]	[%]		
0.0	1014.2	0.017571	0.0	-981.06E-6	4.6955	0.018558	0.0 -981.06E-6
2714.2 0 (Negligible)							

Structure: bc | Sub-structure:

Vertical Deflection Average Max Slope Max Max Max Gradient Max Gradient
Min Min Damage Category
Offset from Ratio Horizontal Settlement Tensile of of Vertical
Radius of Radius of Strain Strain Horizontal Displacement
Line for Curvature Curvature
Vertical Curvature
(Hogging) (Sagging) Displacement Curve
Movement Curve
Calculations

[m]	[m]	[%]	[%]	[mm]	[%]		
0.0	5795.2	0.0077045	0.0	365.42E-6	1.6280	0.0090007	0.0 365.42E-6
- 0 (Negligible)							

Structure: cd | Sub-structure:

Vertical Deflection Average Max Slope Max Max Max Gradient Max Gradient
Min Min Damage Category
Offset from Ratio Horizontal Settlement Tensile of of Vertical
Radius of Radius of Strain Strain Horizontal Displacement
Line for Curvature Curvature
Vertical Curvature
(Hogging) (Sagging) Displacement Curve
Movement Curve
Calculations

[m]	[m]	[%]	[%]	[mm]	[%]		
0.0	0.0	0.0	0.0	186.64E-6	1.6317	0.0	186.64E-6
-	-	0	(Negligible)				

Structure: eh | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0	0.0	0.023124	0.0	0.0013208	4.6790	0.025048	0.0
1789.1	3397.2	0	(Negligible)				

Structure: hf | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0	0.0	0.011307	0.0	-722.96E-6	3.6970	0.012341	0.0
-	1819.1	0	(Negligible)				

Structure: de | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0	0.0	0.0024089	0.0	-546.98E-6	1.6318	0.0023935	0.0
-	2013.2	0	(Negligible)				

Specific Building Damage Results - Critical Segments within Each Structure

Structure Name	Parameter Max	Critical Min	Critical Damage Category	Start	End	Curvature	Max Slope
21-20	Max Slope	1	0 (Negligible)	0.0	8.5455	Hogging	3.4879E-6
0.11307	Max Settlement	1	0 (Negligible)	0.0	8.5455	Hogging	3.4879E-6
0.11307	Max Settlement	1	0 (Negligible)	0.0	8.5455	Hogging	3.4879E-6

0.11307	59.330E-6	1.1295E+6	- 0 (Negligible)	1	0.0	8.5455	Hogging	3.4879E-6
		Max Tensile Strain						
0.11307	59.330E-6	1.1295E+6	- 0 (Negligible)	1	0.0	8.5455	Hogging	3.4879E-6
		Min Radius of Curvature (Hogging)						
-	-	-	- -	-	-	-	-	-
		Curvature (Sagging)						
19-20		Max Slope		1	0.0	5.0389	Sagging	44.437E-6
0.28357	282.99E-6	-	172880. 0 (Negligible)					
		Max Settlement		1	0.0	5.0389	Sagging	44.437E-6
0.28357	282.99E-6	-	172880. 0 (Negligible)					
		Max Tensile Strain		1	0.0	5.0389	Sagging	44.437E-6
0.28357	282.99E-6	-	172880. 0 (Negligible)					
		Min Radius of Curvature (Hogging)		-	-	-	-	-
-	-	-	- -	-	-	-	-	-
		Min Radius of Curvature (Sagging)		1	0.0	5.0389	Sagging	44.437E-6
0.28357	282.99E-6	-	172880. 0 (Negligible)					
		Max Slope		1	0.0	2.0092	Sagging	104.65E-6
19-18		Max Settlement		1	0.0	2.0092	Sagging	104.65E-6
0.47000	583.26E-6	-	42389. 0 (Negligible)					
0.47000	583.26E-6	-	42389. 0 (Negligible)					
		Max Tensile Strain		1	0.0	2.0092	Sagging	104.65E-6
0.47000	583.26E-6	-	42389. 0 (Negligible)					
		Min Radius of Curvature (Hogging)		-	-	-	-	-
-	-	-	- -	-	-	-	-	-
		Min Radius of Curvature (Sagging)		1	0.0	2.0092	Sagging	104.65E-6
0.47000	583.26E-6	-	42389. 0 (Negligible)					
		Max Slope		1	0.0	7.0688	Hogging	18.099E-6
18-13		Max Settlement		1	0.0	7.0688	Hogging	18.099E-6
0.50517	419.68E-6	146770.	- 0 (Negligible)					
0.50517	419.68E-6	146770.	- 0 (Negligible)					
		Max Tensile Strain		1	0.0	7.0688	Hogging	18.099E-6
0.50517	419.68E-6	146770.	- 0 (Negligible)					
		Min Radius of Curvature (Hogging)		1	0.0	7.0688	Hogging	18.099E-6
0.50517	419.68E-6	146770.	- 0 (Negligible)					
		Min Radius of Curvature (Sagging)		2	7.0688	11.713	Sagging	9.3470E-6
0.48074	67.842E-6	-	811090. 0 (Negligible)					
		Max Slope		1	0.69535	11.820	Sagging	0.0010049
21-a		Max Settlement		1	0.69535	11.820	Sagging	0.0010049
2.3983	0.0088123	-	1042.6 0 (Negligible)					
2.3983	0.0088123	-	1042.6 0 (Negligible)					
		Max Tensile Strain		1	0.69535	11.820	Sagging	0.0010049
2.3983	0.0088123	-	1042.6 0 (Negligible)					
		Min Radius of Curvature (Hogging)		-	-	-	-	-
-	-	-	- -	-	-	-	-	-
		Min Radius of Curvature (Sagging)		1	0.69535	11.820	Sagging	0.0010049
2.3983	0.0088123	-	1042.6 0 (Negligible)					
		Max Slope		1	0.0	10.919	Sagging	0.0015161
f-50		Max Settlement		1	0.0	10.919	Sagging	0.0015161
3.4154	0.014826	-	834.71 0 (Negligible)					
3.4154	0.014826	-	834.71 0 (Negligible)					
		Max Tensile Strain		1	0.0	10.919	Sagging	0.0015161
3.4154	0.014826	-	834.71 0 (Negligible)					

-	-	Strain			-	-	-	-	-
-	-	Min Radius of			-	-	-	-	-
-	-	Curvature			-	-	-	-	-
		(Hogging)							
3.4154	0.014826	Min Radius of	-	834.71 0 (Negligible)	1	0.0	10.919	Sagging	0.0015161
		Curvature							
		(Sagging)							
14-15		Max Slope	-	21905. 0 (Negligible)	1	0.0	2.1390	Sagging	191.92E-6
0.86484	0.0012005	Max Settlement	-	21905. 0 (Negligible)	1	0.0	2.1390	Sagging	191.92E-6
0.86484	0.0012005	Max Tensile	-	21905. 0 (Negligible)	1	0.0	2.1390	Sagging	191.92E-6
0.86484	0.0012005	Strain							
-	-	Min Radius of			-	-	-	-	-
-	-	Curvature			-	-	-	-	-
		(Hogging)							
0.86484	0.0012005	Min Radius of	-	21905. 0 (Negligible)	1	0.0	2.1390	Sagging	191.92E-6
		Curvature							
		(Sagging)							
15-16		Max Slope	-	0 (Negligible)	1	0.0	1.6897	Sagging	209.09E-6
1.2183	0.0	Max Settlement	-	0 (Negligible)	1	0.0	1.6897	Sagging	209.09E-6
1.2183	0.0	Max Tensile	-	0 (Negligible)	1	0.0	1.6897	Sagging	209.09E-6
1.2183	0.0	Strain							
-	-	Min Radius of			-	-	-	-	-
-	-	Curvature			-	-	-	-	-
		(Hogging)							
-	-	Min Radius of			-	-	-	-	-
-	-	Curvature			-	-	-	-	-
		(Sagging)							
16-17		Max Slope	-	0 (Negligible)	1	0.0	1.8990	Sagging	565.96E-6
2.2933	0.0	Max Settlement	-	0 (Negligible)	1	0.0	1.8990	Sagging	565.96E-6
2.2933	0.0	Max Tensile	-	0 (Negligible)	1	0.0	1.8990	Sagging	565.96E-6
2.2933	0.0	Strain							
-	-	Min Radius of			-	-	-	-	-
-	-	Curvature			-	-	-	-	-
		(Hogging)							
-	-	Min Radius of			-	-	-	-	-
-	-	Curvature			-	-	-	-	-
		(Sagging)							
17-g		Max Slope	-	0 (Negligible)	1	0.0	1.6115	Sagging	0.0010143
3.9283	0.0	Max Settlement	-	0 (Negligible)	1	0.0	1.6115	Sagging	0.0010143
3.9283	0.0	Max Tensile	-	0 (Negligible)	1	0.0	1.6115	Sagging	0.0010143
3.9283	0.0	Strain							
-	-	Min Radius of			-	-	-	-	-
-	-	Curvature			-	-	-	-	-
		(Hogging)							
-	-	Min Radius of			-	-	-	-	-
-	-	Curvature			-	-	-	-	-
		(Sagging)							
h-49		Max Slope	-	2510.1 0 (Negligible)	1	0.0	2.1345	Sagging	0.0010069
3.6970	0.010455	Max Settlement	-	2510.1 0 (Negligible)	1	0.0	2.1345	Sagging	0.0010069
3.6970	0.010455	Max Tensile	-	2510.1 0 (Negligible)	1	0.0	2.1345	Sagging	0.0010069
3.6970	0.010455	Strain							

-	-	Min Radius of	-	-	-	-	-	-
-	-	Curvature (Hogging)	-	-	-	-	-	-
3.6970	0.010455	Min Radius of	-	2510.1	0 (Negligible)	1	0.0	2.1345 Sagging 0.0010069
49-36	0.0055174	Curvature (Sagging)	-	5314.0	0 (Negligible)	1	0.0	2.3890 Sagging 553.91E-6
2.0008	0.0055174	Max Slope	-	5314.0	0 (Negligible)	1	0.0	2.3890 Sagging 553.91E-6
2.0008	0.0055174	Max Settlement	-	5314.0	0 (Negligible)	1	0.0	2.3890 Sagging 553.91E-6
2.0008	0.0055174	Max Tensile	-	5314.0	0 (Negligible)	1	0.0	2.3890 Sagging 553.91E-6
-	-	Strain	-	-	-	-	-	-
-	-	Min Radius of	-	-	-	-	-	-
-	-	Curvature (Hogging)	-	-	-	-	-	-
2.0008	0.0055174	Min Radius of	-	5314.0	0 (Negligible)	1	0.0	2.3890 Sagging 553.91E-6
36-48	0.94554	Curvature (Sagging)	-	29117.0	0 (Negligible)	1	0.0	2.3002 Sagging 170.15E-6
0.94554	970.14E-6	Max Slope	-	29117.0	0 (Negligible)	1	0.0	2.3002 Sagging 170.15E-6
0.94554	970.14E-6	Max Settlement	-	29117.0	0 (Negligible)	1	0.0	2.3002 Sagging 170.15E-6
0.94554	970.14E-6	Max Tensile	-	29117.0	0 (Negligible)	1	0.0	2.3002 Sagging 170.15E-6
0.94554	970.14E-6	Strain	-	-	-	-	-	-
-	-	Min Radius of	-	-	-	-	-	-
-	-	Curvature (Hogging)	-	-	-	-	-	-
0.94554	970.14E-6	Min Radius of	-	29117.0	0 (Negligible)	1	0.0	2.3002 Sagging 170.15E-6
48-47	0.59943	Curvature (Sagging)	-	-	0 (Negligible)	1	0.0	1.1690 Sagging 128.51E-6
0.59943	0.0	Max Slope	-	-	0 (Negligible)	1	0.0	1.1690 Sagging 128.51E-6
0.59943	0.0	Max Settlement	-	-	0 (Negligible)	1	0.0	1.1690 Sagging 128.51E-6
0.59943	0.0	Max Tensile	-	-	0 (Negligible)	1	0.0	1.1690 Sagging 128.51E-6
0.59943	0.0	Strain	-	-	0 (Negligible)	-	-	-
-	-	Min Radius of	-	-	-	-	-	-
-	-	Curvature (Hogging)	-	-	-	-	-	-
-	-	Min Radius of	-	-	-	-	-	-
47-51	0.40869	Curvature (Sagging)	-	-	0 (Negligible)	3	7.1099	10.749 Hogging 9.1153E-6
0.40869	73.993E-6	Max Slope	345450.	-	0 (Negligible)	1	0.0	3.3949 Hogging 6.9710E-6
0.40869	73.993E-6	Max Settlement	358030.	-	0 (Negligible)	3	7.1099	10.749 Hogging 9.1153E-6
0.40869	73.993E-6	Max Tensile	345450.	-	0 (Negligible)	3	7.1099	10.749 Hogging 9.1153E-6
0.40869	73.993E-6	Strain	-	-	-	-	-	-
0.40869	73.993E-6	Min Radius of	345450.	-	0 (Negligible)	3	7.1099	10.749 Hogging 9.1153E-6
0.43068	34.583E-6	Curvature (Hogging)	-	1.4152E+6	0 (Negligible)	2	3.3949	7.1099 Sagging 6.9628E-6
0.43068	34.583E-6	Min Radius of	-	1.4152E+6	0 (Negligible)	2	3.3949	7.1099 Sagging 6.9628E-6
50-46	-	Curvature (Sagging)	-	-	-	-	-	-
46-47	0.44897	All settlements are less than the Settlement Trough Limit Sensitivity.	-	-	-	-	-	-
0.44897	871.86E-6	All settlements are less than the Settlement Trough Limit Sensitivity.	-	-	-	-	-	-
0.44897	871.86E-6	All settlements are less than the Settlement Trough Limit Sensitivity.	-	-	-	-	-	-
0.44897	871.86E-6	All settlements are less than the Settlement Trough Limit Sensitivity.	-	-	-	-	-	-
0.44897	871.86E-6	All settlements are less than the Settlement Trough Limit Sensitivity.	-	-	-	-	-	-
0.44897	871.86E-6	Max Slope	-	45223.0	0 (Negligible)	1	3.0450	8.1190 Sagging 97.305E-6
0.44897	871.86E-6	Max Settlement	-	45223.0	0 (Negligible)	1	3.0450	8.1190 Sagging 97.305E-6
0.44897	871.86E-6	Max Tensile	-	45223.0	0 (Negligible)	1	3.0450	8.1190 Sagging 97.305E-6
0.44897	871.86E-6	Strain	-	-	-	-	-	-

0.44897	871.86E-6	Max Tensile	-	45223.0 (Negligible)	1	3.0450	8.1190	Sagging	97.305E-6
-	-	Strain	-	-	-	-	-	-	-
-	-	Min Radius of	-	-	-	-	-	-	-
-	-	Curvature (Hogging)	-	-	-	-	-	-	-
0.44897	871.86E-6	Min Radius of	-	45223.0 (Negligible)	1	3.0450	8.1190	Sagging	97.305E-6
-	-	Curvature (Sagging)	-	-	-	-	-	-	-
24-25		All settlements are less than the Settlement Trough Limit Sensitivity.							
		All settlements are less than the Settlement Trough Limit Sensitivity.							
		All settlements are less than the Settlement Trough Limit Sensitivity.							
		All settlements are less than the Settlement Trough Limit Sensitivity.							
25-26		All settlements are less than the Settlement Trough Limit Sensitivity.							
		All settlements are less than the Settlement Trough Limit Sensitivity.							
		All settlements are less than the Settlement Trough Limit Sensitivity.							
		All settlements are less than the Settlement Trough Limit Sensitivity.							
26-27		All settlements are less than the Settlement Trough Limit Sensitivity.							
		All settlements are less than the Settlement Trough Limit Sensitivity.							
		All settlements are less than the Settlement Trough Limit Sensitivity.							
		All settlements are less than the Settlement Trough Limit Sensitivity.							
27-28		All settlements are less than the Settlement Trough Limit Sensitivity.							
		All settlements are less than the Settlement Trough Limit Sensitivity.							
		All settlements are less than the Settlement Trough Limit Sensitivity.							
		All settlements are less than the Settlement Trough Limit Sensitivity.							
28-29		All settlements are less than the Settlement Trough Limit Sensitivity.							
		All settlements are less than the Settlement Trough Limit Sensitivity.							
		All settlements are less than the Settlement Trough Limit Sensitivity.							
		All settlements are less than the Settlement Trough Limit Sensitivity.							
27-32		All settlements are less than the Settlement Trough Limit Sensitivity.							
		All settlements are less than the Settlement Trough Limit Sensitivity.							
		All settlements are less than the Settlement Trough Limit Sensitivity.							
		All settlements are less than the Settlement Trough Limit Sensitivity.							
33-31		All settlements are less than the Settlement Trough Limit Sensitivity.							
0.32064	615.51E-6	Max Slope	-	46071.0 (Negligible)	1	14.560	17.679	Sagging	80.093E-6
0.32064	615.51E-6	Max Settlement	-	46071.0 (Negligible)	1	14.560	17.679	Sagging	80.093E-6
0.32064	615.51E-6	Max Tensile	-	46071.0 (Negligible)	1	14.560	17.679	Sagging	80.093E-6
0.32064	615.51E-6	Strain	-	46071.0 (Negligible)	1	14.560	17.679	Sagging	80.093E-6
-	-	Min Radius of	-	-	-	-	-	-	-
-	-	Curvature (Hogging)	-	-	-	-	-	-	-
0.32064	615.51E-6	Min Radius of	-	46071.0 (Negligible)	1	14.560	17.679	Sagging	80.093E-6
-	-	Curvature (Sagging)	-	-	-	-	-	-	-
31-34		Max Slope	-	0 (Negligible)	1	0.0	3.3333	Hogging	32.562E-6
0.32072	103.03E-6	218950.	-	0 (Negligible)	1	0.0	3.3333	Hogging	32.562E-6
0.32072	103.03E-6	Max Settlement	-	0 (Negligible)	1	0.0	3.3333	Hogging	32.562E-6
0.32072	103.03E-6	218950.	-	0 (Negligible)	1	0.0	3.3333	Hogging	32.562E-6
0.32072	103.03E-6	Max Tensile	-	0 (Negligible)	1	0.0	3.3333	Hogging	32.562E-6
0.32072	103.03E-6	218950.	-	0 (Negligible)	1	0.0	3.3333	Hogging	32.562E-6
0.32072	103.03E-6	Strain	-	0 (Negligible)	1	0.0	3.3333	Hogging	32.562E-6
0.32072	103.03E-6	Min Radius of	-	0 (Negligible)	1	0.0	3.3333	Hogging	32.562E-6
-	-	218950.	-	0 (Negligible)	-	-	-	-	-
-	-	Curvature (Hogging)	-	-	-	-	-	-	-
-	-	Min Radius of	-	-	-	-	-	-	-
-	-	Curvature (Sagging)	-	-	-	-	-	-	-
34-35		Max Slope	-	0 (Negligible)	1	0.0	1.3290	Sagging	46.900E-6
0.21757	0.0	-	-	0 (Negligible)	1	0.0	1.3290	Sagging	46.900E-6
0.21757	0.0	Max Settlement	-	0 (Negligible)	1	0.0	1.3290	Sagging	46.900E-6
0.21757	0.0	-	-	0 (Negligible)	1	0.0	1.3290	Sagging	46.900E-6
0.21757	0.0	Max Tensile	-	0 (Negligible)	1	0.0	1.3290	Sagging	46.900E-6
0.21757	0.0	-	-	0 (Negligible)	1	0.0	1.3290	Sagging	46.900E-6

42-37		Max Slope		1	0.0	6.1100	Sagging	53.681E-6
0.38479	519.24E-6	-	209350.0 (Negligible)					
		Max Settlement		1	0.0	6.1100	Sagging	53.681E-6
0.38479	519.24E-6	-	209350.0 (Negligible)					
		Max Tensile		1	0.0	6.1100	Sagging	53.681E-6
0.38479	519.24E-6	-	209350.0 (Negligible)					
		Strain						
		Min Radius of		-	-	-	-	-
		Curvature (Hogging)						
		Min Radius of		1	0.0	6.1100	Sagging	53.681E-6
0.38479	519.24E-6	-	209350.0 (Negligible)					
		Curvature (Sagging)						
47-43		Max Slope		1	0.0	9.3739	Hogging	32.706E-6
0.44907	731.24E-6	176840.	- 0 (Negligible)					
		Max Settlement		1	0.0	9.3739	Hogging	32.706E-6
0.44907	731.24E-6	176840.	- 0 (Negligible)					
		Max Tensile		1	0.0	9.3739	Hogging	32.706E-6
0.44907	731.24E-6	176840.	- 0 (Negligible)					
		Strain						
		Min Radius of		1	0.0	9.3739	Hogging	32.706E-6
0.44907	731.24E-6	176840.	- 0 (Negligible)					
		Curvature (Hogging)						
		Min Radius of		2	9.3739	9.5390	Sagging	32.706E-6
0.25552	0.0	-	11.640E+6 0 (Negligible)					
		Curvature (Sagging)						
44-39		Max Slope		1	0.0	0.0	Sagging	15.714E-6
0.12293	0.0	-	1.9290E+6 0 (Negligible)					
		Max Settlement		1	0.0	0.0	Sagging	15.714E-6
0.12293	0.0	-	1.9290E+6 0 (Negligible)					
		Max Tensile		1	0.0	0.0	Sagging	15.714E-6
0.12293	0.0	-	1.9290E+6 0 (Negligible)					
		Strain						
		Min Radius of		-	-	-	-	-
		Curvature (Hogging)						
		Min Radius of		-	-	-	-	-
		Curvature (Sagging)						
46-45		All settlements are less than the Settlement Trough Limit Sensitivity.						
		All settlements are less than the Settlement Trough Limit Sensitivity.						
		All settlements are less than the Settlement Trough Limit Sensitivity.						
		All settlements are less than the Settlement Trough Limit Sensitivity.						
a-12		Max Slope		1	0.0	4.4594	Hogging	572.43E-6
3.1484	0.014931	1327.8	- 0 (Negligible)					
		Max Settlement		1	0.0	4.4594	Hogging	572.43E-6
3.1484	0.014931	1327.8	- 0 (Negligible)					
		Max Tensile		1	0.0	4.4594	Hogging	572.43E-6
3.1484	0.014931	1327.8	- 0 (Negligible)					
		Strain						
		Min Radius of		1	0.0	4.4594	Hogging	572.43E-6
3.1484	0.014931	1327.8	- 0 (Negligible)					
		Curvature (Hogging)						
		Min Radius of		-	-	-	-	-
		Curvature (Sagging)						
12-11		Max Slope		1	0.0	6.6990	Hogging	988.56E-6
4.0476	0.029147	1313.9	- 0 (Negligible)					
		Max Settlement		1	0.0	6.6990	Hogging	988.56E-6
4.0476	0.029147	1313.9	- 0 (Negligible)					
		Max Tensile		1	0.0	6.6990	Hogging	988.56E-6
4.0476	0.029147	1313.9	- 0 (Negligible)					
		Strain						
		Min Radius of		1	0.0	6.6990	Hogging	988.56E-6
4.0476	0.029147	1313.9	- 0 (Negligible)					
		Curvature (Hogging)						

		Min Radius of			-	-	-	-	-
		Curvature							
		(Sagging)							
11-f		Max Slope			1	0.0	4.4697	Hogging	0.0014225
3.8972	0.020515	515.76	- 0 (Negligible)						
		Max Settlement			1	0.0	4.4697	Hogging	0.0014225
3.8972	0.020515	515.76	- 0 (Negligible)						
		Max Tensile			1	0.0	4.4697	Hogging	0.0014225
3.8972	0.020515	515.76	- 0 (Negligible)						
		Strain							
		Min Radius of			1	0.0	4.4697	Hogging	0.0014225
3.8972	0.020515	515.76	- 0 (Negligible)						
		Curvature							
		(Hogging)							
		Min Radius of			-	-	-	-	-
		Curvature							
		(Sagging)							
ag		Max Slope			1	0.0	11.050	Sagging	986.83E-6
3.9284	0.011957	- 1394.9 0	(Negligible)						
		Max Settlement			1	0.0	11.050	Sagging	986.83E-6
3.9284	0.011957	- 1394.9 0	(Negligible)						
		Max Tensile			1	0.0	11.050	Sagging	986.83E-6
3.9284	0.011957	- 1394.9 0	(Negligible)						
		Strain							
		Min Radius of			-	-	-	-	-
		Curvature							
		(Hogging)							
		Min Radius of			1	0.0	11.050	Sagging	986.83E-6
3.9284	0.011957	- 1394.9 0	(Negligible)						
		Curvature							
		(Sagging)							
gb		Max Slope			1	0.0	4.7929	Hogging	981.06E-6
4.6955	0.018558	1014.2	- 0 (Negligible)						
		Max Settlement			1	0.0	4.7929	Hogging	981.06E-6
4.6955	0.018558	1014.2	- 0 (Negligible)						
		Max Tensile			1	0.0	4.7929	Hogging	981.06E-6
4.6955	0.018558	1014.2	- 0 (Negligible)						
		Strain							
		Min Radius of			1	0.0	4.7929	Hogging	981.06E-6
4.6955	0.018558	1014.2	- 0 (Negligible)						
		Curvature							
		(Hogging)							
		Min Radius of			2	4.7929	7.8078	Sagging	981.06E-6
3.7693	0.0099357	- 2714.2 0	(Negligible)						
		Curvature							
		(Sagging)							
bc		Max Slope			1	0.0	5.5590	Hogging	365.42E-6
1.6280	0.0090007	5795.2	- 0 (Negligible)						
		Max Settlement			1	0.0	5.5590	Hogging	365.42E-6
1.6280	0.0090007	5795.2	- 0 (Negligible)						
		Max Tensile			1	0.0	5.5590	Hogging	365.42E-6
1.6280	0.0090007	5795.2	- 0 (Negligible)						
		Strain							
		Min Radius of			1	0.0	5.5590	Hogging	365.42E-6
1.6280	0.0090007	5795.2	- 0 (Negligible)						
		Curvature							
		(Hogging)							
		Min Radius of			-	-	-	-	-
		Curvature							
		(Sagging)							
cd		Max Slope			1	0.0	1.7483	Sagging	186.64E-6
1.6317	0.0	- 0	(Negligible)						
		Max Settlement			1	0.0	1.7483	Sagging	186.64E-6
1.6317	0.0	- 0	(Negligible)						
		Max Tensile			1	0.0	1.7483	Sagging	186.64E-6
1.6317	0.0	- 0	(Negligible)						
		Strain							
		Min Radius of			-	-	-	-	-
		Curvature							
		(Hogging)							
		Min Radius of			-	-	-	-	-

Structure: 19-18 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: 18-13 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: 21-a | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: f-50 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: 14-15 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: 15-16 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: 16-17 | Sub-structure:

Vertical Offset from Line for	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
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Vertical Movement Calculations
 [m] [m] [m] [%] [%] [%]
 No structures have segments combined.

Structure: 17-g | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: h-49 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 49-36 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 36-48 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 48-47 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 47-51 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 50-46 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: 46-47 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: 24-25 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: 25-26 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: 26-27 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: 27-28 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: 28-29 | Sub-structure:

Vertical	Combined	Start	Length	Curvature	Deflection	Average	Max	Damage
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Offset from Line for Vertical Movement Calculations	Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 27-32 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 33-31 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 31-34 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 34-35 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 35-41 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 41-40 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

[m] [m] [m] [%] [%] [%]
No structures have segments combined.

Structure: 40-39 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]	[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 39-38 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]	[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 38-25 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]	[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 20-22 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]	[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 22-b | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]	[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: e-45 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]	[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 18-31 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: 23-24 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: b-27 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: 42-37 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: 47-43 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: 44-39 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: 46-45 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

**Movement
Calculations**

[m] [m] [m] [%] [%] [%]
No structures have segments combined.

Structure: a-12 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
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[m] [m] [m] [%] [%] [%]
No structures have segments combined.

Structure: 12-11 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
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[m] [m] [m] [%] [%] [%]
No structures have segments combined.

Structure: 11-f | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
---	---------------------	-------	--------	-----------	---------------------	---------------------------------	--------------------------	-----------------

[m] [m] [m] [%] [%] [%]
No structures have segments combined.

Structure: ag | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
---	---------------------	-------	--------	-----------	---------------------	---------------------------------	--------------------------	-----------------

[m] [m] [m] [%] [%] [%]
No structures have segments combined.

Structure: gb | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
---	---------------------	-------	--------	-----------	---------------------	---------------------------------	--------------------------	-----------------

[m] [m] [m] [%] [%] [%]
No structures have segments combined.

Structure: bc | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
---	---------------------	-------	--------	-----------	---------------------	---------------------------------	--------------------------	-----------------

[m] [m] [m] [%] [%] [%]
No structures have segments combined.

Structure: cd | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start [m]	Length [m]	Curvature	Deflection Ratio [%]	Average Horizontal Strain [%]	Max Tensile Strain [%]	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: eh | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start [m]	Length [m]	Curvature	Deflection Ratio [%]	Average Horizontal Strain [%]	Max Tensile Strain [%]	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: hf | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start [m]	Length [m]	Curvature	Deflection Ratio [%]	Average Horizontal Strain [%]	Max Tensile Strain [%]	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: de | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start [m]	Length [m]	Curvature	Deflection Ratio [%]	Average Horizontal Strain [%]	Max Tensile Strain [%]	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

DEMOLITION + EXCAVATION

Analysis Options

Analysis: Boussinesq
 Global Poisson's ratio: 0.50
 Maximum allowable ratio between values of E: 1.5
 Horizontal rigid boundary level: -45.40 [m OD]
 Displacements at area centroids calculated.

Soil Profiles Soil Profile 1

Layer	Level at top [mOD]	Number of intermediate displacement levels	Youngs Modulus	Poissons ratio	Non-linear curve	
			Top [kN/m ²]	Btm [kN/m ²]		
1	0.0	8	10000.	10000.	0.20000	None
2	-4.2000	4	30000.	30000.	0.50000	None
3	-6.2500	4	24000.	24000.	0.20000	None
4	-8.3500	1	30000.	30000.	0.50000	None
5	-9.0000	61	20000.	94160.	0.50000	None

6 -39.600 11 300000. 300000. 0.20000 None

Soil Zones

Zone	Name	X coordinates		Y coordinates		Profile
		min	max	min	max	
1	demo	0.0	110.00	0.0	110.00	Soil Profile 1

Load Data

Load ref.	Name	Shape Polygon	Orientation of Plane	Centre of load			Angle of Tangential local x from	Width x or Radius	Length
				Number (local z) X	Normal (local x) Y	Z (level)			
				[m]	[m]	[m]	[Degrees]	[m]	[m]
N/A	1 basement A	Polygonal	Horizontal	N/A	N/A	-0.60000	N/A	N/A	
	(66,58.3)	(66,53.2)	10.000	2	-10.000		N/A	N/A	
	(59.8,51.7)	(55,51.6)							
	(55,58.4)								
N/A	2 vault A	Polygonal	Horizontal	N/A	N/A	-3.1300	N/A	N/A	
	(55,58.4)	(59.8,58.4)	10.000	1	-20.000		N/A	N/A	
	(59.8,51.6)	(55,51.6)							
N/A	3 vault B	Polygonal	Horizontal	N/A	N/A	-3.1300	N/A	N/A	
	(44.3,58.4)	(44.3,51.6)	10.000	1	-20.000		N/A	N/A	
	(39.6,51.7)	(39.6,58.4)							
N/A	4 basement B	Polygonal	Horizontal	N/A	N/A	-3.1300	N/A	N/A	
	(55,58.4)	(55,51.6)	10.000	1	-10.000		N/A	N/A	
	(39.6,51.7)	(39.6,58.4)							
N/A	5 exc (3.6m)	Polygonal	Horizontal	N/A	N/A	-4.2000	N/A	N/A	
	(66,58.3)	(66,53.2)	10.000	1	-72.000		N/A	N/A	
	(59.8,51.7)	(59.8,58.3)							
N/A	6 exc (1.07m)	Polygonal	Horizontal	N/A	N/A	-4.2000	N/A	N/A	
	(59.8,58.3)	(59.8,51.7)	10.000	1	-21.400		N/A	N/A	
	(39.6,51.7)	(39.6,58.4)							
N/A	7 new basement	Polygonal	Horizontal	N/A	N/A	-4.2000	N/A	N/A	
	(66,58.3)	(66,53.2)	10.000	2	10.000		N/A	N/A	
	(59.8,51.7)	(39.6,51.7)							
	(39.6,58.4)								

Displacement Data

intrvl Ref.	Type	No. of intrvl	Direction of Extrusion	Line/Line for extrusion			No. of
				First point	Second point		
				Calculate	Detailed		
				X	Y	Z(level)	X Y Z(level)
				[m]	[m]	[m]	[m] [m] [m]
1	Grid	Grid 1	Global X	30.000	35.000	0.0	N/A 80.000 0.0
99	70.000		99	Yes	Yes		
2	Line	21-20	N/A	55.960	70.700	0.0	44.210 70.720 0.0
11	N/A		N/A	Yes	Yes		
3	Line	19-20	N/A	59.140	66.790	0.0	55.960 70.700 0.0
5	N/A		N/A	Yes	Yes		
4	Line	19-18	N/A	59.140	66.790	0.0	59.170 64.780 0.0
2	N/A		N/A	Yes	Yes		
5	Line	18-13	N/A	59.170	64.780	0.0	44.210 64.800 0.0
14	N/A		N/A	Yes	Yes		
6	Line	21-a	N/A	44.210	70.720	0.0	44.060 58.900 0.0
34	N/A		N/A	Yes	Yes		

7	Line	f-50	N/A	44.100	51.600	0.0	44.160	36.710	0.0
15	N/A	N/A	Yes	Yes					
8	Line	14-15	N/A	55.000	64.760	0.0	55.000	62.620	0.0
2	N/A	N/A	Yes	Yes					
9	Line	15-16	N/A	55.000	62.620	0.0	56.230	61.460	0.0
1	N/A	N/A	Yes	Yes					
10	Line	16-17	N/A	56.230	61.460	0.0	56.220	59.560	0.0
1	N/A	N/A	Yes	Yes					
11	Line	17-g	N/A	56.220	59.560	0.0	55.100	58.400	0.0
1	N/A	N/A	Yes	Yes					
12	Line	h-49	N/A	54.980	51.600	0.0	56.500	50.100	0.0
2	N/A	N/A	Yes	Yes					
13	Line	49-36	N/A	56.500	50.100	0.0	56.500	47.710	0.0
2	N/A	N/A	Yes	Yes					
14	Line	36-48	N/A	56.500	47.710	0.0	54.960	46.000	0.0
2	N/A	N/A	Yes	Yes					
15	Line	48-47	N/A	54.960	46.000	0.0	54.960	44.830	0.0
1	N/A	N/A	Yes	Yes					
16	Line	47-51	N/A	54.960	44.830	0.0	44.210	44.830	0.0
10	N/A	N/A	Yes	Yes					
17	Line	50-46	N/A	44.160	36.710	0.0	54.960	36.710	0.0
10	N/A	N/A	Yes	Yes					
18	Line	46-47	N/A	54.960	36.710	0.0	54.960	44.830	0.0
8	N/A	N/A	Yes	Yes					
19	Line	24-25	N/A	78.820	63.100	0.0	88.080	63.070	0.0
9	N/A	N/A	Yes	Yes					
20	Line	25-26	N/A	88.080	63.070	0.0	88.000	57.750	0.0
5	N/A	N/A	Yes	Yes					
21	Line	26-27	N/A	88.000	57.750	0.0	76.730	57.900	0.0
11	N/A	N/A	Yes	Yes					
22	Line	27-28	N/A	76.730	57.900	0.0	76.710	61.070	0.0
3	N/A	N/A	Yes	Yes					
23	Line	28-29	N/A	76.710	61.070	0.0	78.820	63.100	0.0
2	N/A	N/A	Yes	Yes					
24	Line	27-32	N/A	76.730	57.900	0.0	76.750	52.750	0.0
5	N/A	N/A	Yes	Yes					
25	Line	33-31	N/A	87.930	52.750	0.0	70.250	52.750	0.0
17	N/A	N/A	Yes	Yes					
26	Line	31-34	N/A	70.250	52.750	0.0	70.180	49.380	0.0
3	N/A	N/A	Yes	Yes					
27	Line	34-35	N/A	70.180	49.380	0.0	71.510	49.370	0.0
1	N/A	N/A	Yes	Yes					
28	Line	35-41	N/A	71.510	49.370	0.0	71.480	45.770	0.0
3	N/A	N/A	Yes	Yes					
29	Line	41-40	N/A	71.480	45.770	0.0	67.410	45.770	0.0
4	N/A	N/A	Yes	Yes					
30	Line	40-39	N/A	67.410	45.770	0.0	67.390	41.870	0.0
3	N/A	N/A	Yes	Yes					
31	Line	39-38	N/A	67.390	41.870	0.0	88.000	41.700	0.0
20	N/A	N/A	Yes	Yes					
32	Line	38-25	N/A	88.000	41.700	0.0	88.080	63.070	0.0
21	N/A	N/A	Yes	Yes					
33	Line	20-22	N/A	55.960	70.700	0.0	66.130	70.690	0.0
10	N/A	N/A	Yes	Yes					
34	Line	22-b	N/A	66.130	70.690	0.0	66.300	58.900	0.0
17	N/A	N/A	Yes	Yes					
35	Line	e-45	N/A	64.740	51.600	0.0	64.480	36.840	0.0
15	N/A	N/A	Yes	Yes					
36	Line	18-31	N/A	59.170	64.780	0.0	66.000	64.740	0.0
6	N/A	N/A	Yes	Yes					
37	Line	23-24	N/A	66.000	63.140	0.0	78.820	63.100	0.0
12	N/A	N/A	Yes	Yes					
38	Line	b-27	N/A	66.100	58.460	0.0	76.730	57.900	0.0
10	N/A	N/A	Yes	Yes					
39	Line	42-37	N/A	64.540	46.730	0.0	87.960	46.450	0.0
23	N/A	N/A	Yes	Yes					
40	Line	47-43	N/A	54.960	44.830	0.0	64.500	44.830	0.0
9	N/A	N/A	Yes	Yes					
41	Line	44-39	N/A	64.440	41.910	0.0	67.390	41.870	0.0
2	N/A	N/A	Yes	Yes					
42	Line	46-45	N/A	54.960	36.710	0.0	64.480	36.840	0.0
9	N/A	N/A	Yes	Yes					
43	Line	a-12	N/A	44.060	58.900	0.0	39.630	58.380	0.0
4	N/A	N/A	Yes	Yes					
44	Line	12-11	N/A	39.630	58.380	0.0	39.630	51.680	0.0
6	N/A	N/A	Yes	Yes					

45	Line	11-f	N/A	39.630	51.680	0.0	44.100	51.600	0.0
8	N/A	N/A	Yes	Yes					
46	Line	ag	N/A	44.060	58.900	0.0	55.100	58.400	0.0
11	N/A	N/A	Yes	Yes					
47	Line	gb	N/A	55.100	58.400	0.0	66.500	58.460	0.0
20	N/A	N/A	Yes	Yes					
48	Line	bc	N/A	66.500	58.460	0.0	66.500	52.900	0.0
20	N/A	N/A	Yes	Yes					
49	Line	cd	N/A	66.500	52.900	0.0	65.000	52.000	0.0
1	N/A	N/A	Yes	Yes					
50	Line	eh	N/A	64.740	51.600	0.0	54.980	51.600	0.0
9	N/A	N/A	Yes	Yes					
51	Line	hf	N/A	54.980	51.600	0.0	44.100	51.600	0.0
10	N/A	N/A	Yes	Yes					
52	Line	de	N/A	65.000	52.000	0.0	64.740	51.600	0.0
4	N/A	N/A	Yes	Yes					

Problem Type

Problem Type : Tunnelling and Embedded Wall Excavations

Displacement Data

Type of intervals across extrusion/line	Name of Extrusion	Direction No. of intervals of extrusion along	Calculate Surface of extrusion	Point/Line/Line for extrusion type for tunnels	No.				
				First point	Second point				
				X	Y	Z(level)	X	Y	Z(level)
				[m]	[m]	[m]	[m]	[m]	[m]
Grid 99	Grid 1	Global X	Yes	30.00000	35.00000	0.00000	-	80.00000	0.00000
Line 11	21-20	-	Yes	55.96000	70.70000	0.00000	44.21000	70.72000	0.00000
Line 5	19-20	-	Yes	59.14000	66.79000	0.00000	55.96000	70.70000	0.00000
Line 2	19-18	-	Yes	59.14000	66.79000	0.00000	59.17000	64.78000	0.00000
Line 14	18-13	-	Yes	59.17000	64.78000	0.00000	44.21000	64.80000	0.00000
Line 34	21-a	-	Yes	44.21000	70.72000	0.00000	44.06000	58.90000	0.00000
Line 15	f-50	-	Yes	44.10000	51.60000	0.00000	44.16000	36.71000	0.00000
Line 2	14-15	-	Yes	55.00000	64.76000	0.00000	55.00000	62.62000	0.00000
Line 1	15-16	-	Yes	55.00000	62.62000	0.00000	56.23000	61.46000	0.00000
Line 1	16-17	-	Yes	56.23000	61.46000	0.00000	56.22000	59.56000	0.00000
Line 1	17-g	-	Yes	56.22000	59.56000	0.00000	55.10000	58.40000	0.00000
Line 2	h-49	-	Yes	54.98000	51.60000	0.00000	56.50000	50.10000	0.00000
Line 2	49-36	-	Yes	56.50000	50.10000	0.00000	56.50000	47.71000	0.00000
Line 2	36-48	-	Yes	56.50000	47.71000	0.00000	54.96000	46.00000	0.00000
Line 1	48-47	-	Yes	54.96000	46.00000	0.00000	54.96000	44.83000	0.00000
Line 10	47-51	-	Yes	54.96000	44.83000	0.00000	44.21000	44.83000	0.00000
Line 10	50-46	-	Yes	44.16000	36.71000	0.00000	54.96000	36.71000	0.00000

Line 46-47	-	-	54.96000	36.71000	0.00000	54.96000	44.83000	0.00000
8	-	Yes	Surface					
Line 24-25	-	-	78.82000	63.10000	0.00000	88.08000	63.07000	0.00000
9	-	Yes	Surface					
Line 25-26	-	-	88.08000	63.07000	0.00000	88.00000	57.75000	0.00000
5	-	Yes	Surface					
Line 26-27	-	-	88.00000	57.75000	0.00000	76.73000	57.90000	0.00000
11	-	Yes	Surface					
Line 27-28	-	-	76.73000	57.90000	0.00000	76.71000	61.07000	0.00000
3	-	Yes	Surface					
Line 28-29	-	-	76.71000	61.07000	0.00000	78.82000	63.10000	0.00000
2	-	Yes	Surface					
Line 27-32	-	-	76.73000	57.90000	0.00000	76.75000	52.75000	0.00000
5	-	Yes	Surface					
Line 33-31	-	-	87.93000	52.75000	0.00000	70.25000	52.75000	0.00000
17	-	Yes	Surface					
Line 31-34	-	-	70.25000	52.75000	0.00000	70.18000	49.38000	0.00000
3	-	Yes	Surface					
Line 34-35	-	-	70.18000	49.38000	0.00000	71.51000	49.37000	0.00000
1	-	Yes	Surface					
Line 35-41	-	-	71.51000	49.37000	0.00000	71.48000	45.77000	0.00000
3	-	Yes	Surface					
Line 41-40	-	-	71.48000	45.77000	0.00000	67.41000	45.77000	0.00000
4	-	Yes	Surface					
Line 40-39	-	-	67.41000	45.77000	0.00000	67.39000	41.87000	0.00000
3	-	Yes	Surface					
Line 39-38	-	-	67.39000	41.87000	0.00000	88.00000	41.70000	0.00000
20	-	Yes	Surface					
Line 38-25	-	-	88.00000	41.70000	0.00000	88.08000	63.07000	0.00000
21	-	Yes	Surface					
Line 20-22	-	-	55.96000	70.70000	0.00000	66.13000	70.69000	0.00000
10	-	Yes	Surface					
Line 22-b	-	-	66.13000	70.69000	0.00000	66.30000	58.90000	0.00000
17	-	Yes	Surface					
Line e-45	-	-	64.74000	51.60000	0.00000	64.48000	36.84000	0.00000
15	-	Yes	Surface					
Line 18-31	-	-	59.17000	64.78000	0.00000	66.00000	64.74000	0.00000
6	-	Yes	Surface					
Line 23-24	-	-	66.00000	63.14000	0.00000	78.82000	63.10000	0.00000
12	-	Yes	Surface					
Line b-27	-	-	66.10000	58.46000	0.00000	76.73000	57.90000	0.00000
10	-	Yes	Surface					
Line 42-37	-	-	64.54000	46.73000	0.00000	87.96000	46.45000	0.00000
23	-	Yes	Surface					
Line 47-43	-	-	54.96000	44.83000	0.00000	64.50000	44.83000	0.00000
9	-	Yes	Surface					
Line 44-39	-	-	64.44000	41.91000	0.00000	67.39000	41.87000	0.00000
2	-	Yes	Surface					
Line 46-45	-	-	54.96000	36.71000	0.00000	64.48000	36.84000	0.00000
9	-	Yes	Surface					
Line a-12	-	-	44.06000	58.90000	0.00000	39.63000	58.38000	0.00000
4	-	Yes	Surface					
Line 12-11	-	-	39.63000	58.38000	0.00000	39.63000	51.68000	0.00000
6	-	Yes	Surface					
Line 11-f	-	-	39.63000	51.68000	0.00000	44.10000	51.60000	0.00000
8	-	Yes	Surface					
Line ag	-	-	44.06000	58.90000	0.00000	55.10000	58.40000	0.00000
11	-	Yes	Surface					
Line gb	-	-	55.10000	58.40000	0.00000	66.50000	58.46000	0.00000
20	-	Yes	Surface					
Line bc	-	-	66.50000	58.46000	0.00000	66.50000	52.90000	0.00000
20	-	Yes	Surface					
Line cd	-	-	66.50000	52.90000	0.00000	65.00000	52.00000	0.00000
1	-	Yes	Surface					
Line eh	-	-	64.74000	51.60000	0.00000	54.98000	51.60000	0.00000
9	-	Yes	Surface					
Line hf	-	-	54.98000	51.60000	0.00000	44.10000	51.60000	0.00000
10	-	Yes	Surface					
Line de	-	-	65.00000	52.00000	0.00000	64.74000	51.60000	0.00000
4	-	Yes	Surface					

Vertical Ground Movement Curves

Curve Name: No vertical ground movement

Coordinates: [Distance from wall / wall depth or max. excavation depth (x), Depth / wall depth or max. excavation depth (y), Settlement / wall depth or max. excavation depth (z) (%)]
 [0.000,0.000,0.000] [1.000,0.000,0.000] [0.000,1.000,0.000] [1.000,1.000,0.000]

Curve Fitting Method: Polynomial

x Order: 1
 y Order: 0
 Polynomial: $z = 0.0x + 0.0$
 Coeff. of Determination: -2147483648.E+2147483647

Curve Name: Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11 (b))

Coordinates: [Distance from wall / wall depth or max. excavation depth (x), Depth / wall depth or max. excavation depth (y), Settlement / wall depth or max. excavation depth (z) (%)]
 [0.000,0.000,0.039] [0.100,0.000,0.049] [0.200,0.000,0.056] [0.300,0.000,0.062] [0.400,0.000,0.067] [0.500,0.000,0.070] [0.600,0.000,0.072] [0.700,0.000,0.073] [0.800,0.000,0.073] [0.900,0.000,0.072] [1.000,0.000,0.070] [1.100,0.000,0.068] [1.200,0.000,0.065] [1.300,0.000,0.061] [1.400,0.000,0.058] [1.500,0.000,0.054] [1.600,0.000,0.050] [1.700,0.000,0.046] [1.800,0.000,0.042] [1.900,0.000,0.038] [2.000,0.000,0.034] [2.100,0.000,0.030] [2.200,0.000,0.027] [2.300,0.000,0.023] [2.400,0.000,0.020] [2.500,0.000,0.017] [2.600,0.000,0.014] [2.700,0.000,0.012] [2.800,0.000,0.010] [2.900,0.000,0.008] [3.000,0.000,0.007] [3.100,0.000,0.005] [3.200,0.000,0.004] [3.300,0.000,0.004] [3.400,0.000,0.003] [3.500,0.000,0.002] [3.600,0.000,0.002] [3.700,0.000,0.002] [3.800,0.000,0.001] [3.900,0.000,0.001] [4.000,0.000,0.000]

Curve Fitting Method: Polynomial

x Order: 4
 y Order: 0
 Polynomial: $z = -2.6455E-3x^4 + 2.8495E-2x^3 - 1.0051E-1x^2 + 1.0569E-1x + 3.8990E-2$
 Coeff. of Determination: 9.9991E-1

Horizontal Ground Movement Curves

Curve Name: No horizontal ground movement

Coordinates: [Distance from wall / wall depth or max. excavation depth (x), Depth / wall depth or max. excavation depth (y), Horizontal movement / wall depth or max. excavation depth (z) (%)]
 [0.000,0.000,0.000] [1.000,0.000,0.000] [0.000,1.000,0.000] [1.000,1.000,0.000]

Curve Fitting Method: Polynomial

x Order: 0
 y Order: 0
 Polynomial: $z = 0.0$
 Coeff. of Determination: -2147483648.E+2147483647

Curve Name: Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11 (a))

Coordinates: [Distance from wall / wall depth or max. excavation depth (x), Depth / wall depth or max. excavation depth (y), Horizontal movement / wall depth or max. excavation depth (z) (%)]
 [0.000,0.000,0.150] [4.000,0.000,0.000]

Curve Fitting Method: Polynomial

x Order: 1
 y Order: 0
 Polynomial: $z = -3.75E-2x + 1.50E-1$
 Coeff. of Determination: 1.00

Polygonal Excavations

Excavation Name: Excavation 1

Surface level [m]: 0.0
 Contribution: Positive
 Enabled: No
 Surface movement curves which are: -10.000

selected are applied between surface and [m]:

Corner	x	y	Base Level	Stiffened	Previous Side			Next Side		
					d	p1	p2*	d	p1	p2*
	[m]	[m]	[m]		[m]	[%]	[%]	[m]	[%]	[%]
1	66.020	58.310	-1.0700	No	-	-	-	-	-	-
2	66.000	53.200	-1.0700	No	-	-	-	-	-	-
3	59.820	51.680	-1.0700	No	-	-	-	-	-	-
4	39.630	51.680	-1.0700	No	-	-	-	-	-	-
5	39.630	58.380	-1.0700	No	-	-	-	-	-	-

Side	Corner 1		Corner 2		Ground Movement Curve	
	x	y	x	y	Vertical	Horizontal
	[m]	[m]	[m]	[m]		
1	66.020	58.310	66.000	53.200	Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(b))	Excavation in front stiffness wall in (CIRIA 580 Fig.
2.11(a))						
2	66.000	53.200	59.820	51.680	Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(b))	Excavation in front stiffness wall in (CIRIA 580 Fig.
2.11(a))						
3	59.820	51.680	39.630	51.680	Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(b))	Excavation in front stiffness wall in (CIRIA 580 Fig.
2.11(a))						
4	39.630	51.680	39.630	58.380	Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(b))	Excavation in front stiffness wall in (CIRIA 580 Fig.
2.11(a))						
5	39.630	58.380	66.020	58.310	Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(b))	Excavation in front stiffness wall in (CIRIA 580 Fig.
2.11(a))						

Excavation Name: **Excavation 2**
 Surface level [m]: 0.0
 Contribution: Positive
 Enabled: No
 Surface movement curves which are selected are applied between surface and [m]: -5.0000

Corner	x	y	Base Level	Stiffened	Previous Side			Next Side		
					d	p1	p2*	d	p1	p2*
	[m]	[m]	[m]		[m]	[%]	[%]	[m]	[%]	[%]
1	59.820	58.310	-3.6000	No	-	-	-	-	-	-
2	66.020	58.310	-3.6000	No	-	-	-	-	-	-
3	66.000	53.200	-3.6000	No	-	-	-	-	-	-
4	59.820	51.680	-3.6000	No	-	-	-	-	-	-

Side	Corner 1		Corner 2		Ground Movement Curve	
	x	y	x	y	Vertical	Horizontal
	[m]	[m]	[m]	[m]		
1	59.820	58.310	66.020	58.310	Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(b))	Excavation in front stiffness wall in (CIRIA 580 Fig.
2.11(a))						
2	66.020	58.310	66.000	53.200	Excavation in front of high stiffness wall in stiff clay	Excavation in front stiffness wall in
2.11(a))						

2.11(a))					(CIRIA 580 Fig. 2.11(b))	(CIRIA 580 Fig.
3	66.000	53.200	59.820	51.680	Excavation in front of high	Excavation in front
of high					stiffness wall in stiff clay	stiffness wall in
stiff clay					(CIRIA 580 Fig. 2.11(b))	(CIRIA 580 Fig.
2.11(a))						
4	59.820	51.680	59.820	58.310	No vertical ground movement	No horizontal ground
movement						

Excavation Name: Excavation 3
Surface level [m]: 0.0
Contribution: Negative
Enabled: No
Surface movement curves which are selected are applied between surface and [m]: -5.0000

Corner	x	y	Base Level	Stiffened	Previous d	Side p1	Side p2*	Next Side d	Next Side p1	Next Side p2*
	[m]	[m]	[m]		[m]	[%]	[%]	[m]	[%]	[%]
1	59.820	58.310	-1.0700	No	-	-	-	-	-	-
2	66.020	58.310	-1.0700	No	-	-	-	-	-	-
3	66.000	53.200	-1.0700	No	-	-	-	-	-	-
4	59.820	51.680	-1.0700	No	-	-	-	-	-	-

Side	Corner 1		Corner 2		Ground Movement Curve	
	x	y	x	y	Vertical	Horizontal
	[m]	[m]	[m]	[m]		
1	59.820	58.310	66.020	58.310	Excavation in front of high	Excavation in front
of high					stiffness wall in stiff clay	stiffness wall in
stiff clay					(CIRIA 580 Fig. 2.11(b))	(CIRIA 580 Fig.
2.11(a))						
2	66.020	58.310	66.000	53.200	Excavation in front of high	Excavation in front
of high					stiffness wall in stiff clay	stiffness wall in
stiff clay					(CIRIA 580 Fig. 2.11(b))	(CIRIA 580 Fig.
2.11(a))						
3	66.000	53.200	59.820	51.680	Excavation in front of high	Excavation in front
of high					stiffness wall in stiff clay	stiffness wall in
stiff clay					(CIRIA 580 Fig. 2.11(b))	(CIRIA 580 Fig.
2.11(a))						
4	59.820	51.680	59.820	58.310	No vertical ground movement	No horizontal ground
movement						

Damage Category Strains

Name	0 (Negligible) to 1 (Very Slight)	1 (Very Slight) to 2 (Slight)	2 (Slight) to 3 (Moderate)	3 (Moderate) to 4 (Severe)
Burland Strain Limits	0.0	500.00E-6	750.00E-6	0.0015000

Specific Structures - Geometry

Structure Name	Sub-Structure	Displacement	Start	End	Vertical	Vertical
Damage Category	Strains	Poisson's E/G	Distance	Distance	Offsets from	Displacement
Ratio	Name	Line	Along Line	Along Line	Line for Vertical Movement Calculations	Limit Sensitivity
			[m]	[m]	[m]	[mm]
21-20		21-20	0.00000	11.74902	0.0	0.10000
Burland Strain Limits	0.20000	2.6000				
19-20		19-20	0.00000	5.03889	0.0	0.10000
Burland Strain Limits	0.20000	2.6000				

19-18	19-18	0.00000	2.00922	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
18-13	18-13	0.00000	14.95901	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
21-a	21-a	0.00000	11.81995	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
f-50	f-50	0.00000	14.88912	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
14-15	14-15	0.00000	2.13900	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
15-16	15-16	0.00000	1.68971	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
16-17	16-17	0.00000	1.89903	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
17-g	17-g	0.00000	1.61145	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
h-49	h-49	0.00000	2.13451	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
49-36	49-36	0.00000	2.38900	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
36-48	36-48	0.00000	2.30024	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
48-47	48-47	0.00000	1.16900	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
47-51	47-51	0.00000	10.74900	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
50-46	50-46	0.00000	10.79900	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
46-47	46-47	0.00000	8.11900	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
24-25	24-25	0.00000	9.25905	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
25-26	25-26	0.00000	5.31960	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
26-27	26-27	0.00000	11.27000	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
27-28	27-28	0.00000	3.16906	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
28-29	28-29	0.00000	2.92697	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
27-32	27-32	0.00000	5.14904	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
33-31	33-31	0.00000	17.67900	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
31-34	31-34	0.00000	3.36973	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
34-35	34-35	0.00000	1.32904	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
35-41	35-41	0.00000	3.59912	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
41-40	41-40	0.00000	4.06900	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
40-39	40-39	0.00000	3.89905	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
39-38	39-38	0.00000	20.60970	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
38-25	38-25	0.00000	21.36915	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
20-22	20-22	0.00000	10.16900	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
22-b	22-b	0.00000	11.79023	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
e-45	e-45	0.00000	14.76129	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
18-31	18-31	0.00000	6.82912	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
23-24	23-24	0.00000	12.81906	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
b-27	b-27	0.00000	10.64374	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
42-37	42-37	0.00000	23.42067	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
47-43	47-43	0.00000	9.53900	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
44-39	44-39	0.00000	2.94927	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				

46-45	46-45	0.00000	9.51989	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
a-12	a-12	0.00000	4.45941	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
12-11	12-11	0.00000	6.69900	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
11-f	11-f	0.00000	4.46972	0.10000	0.10000
Burland Strain Limits	0.20000 2.6000				
ag	ag	0.00000	11.05032	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
gb	gb	0.00000	11.39916	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
bc	bc	0.00000	5.55900	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
cd	cd	0.00000	1.74829	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
eh	eh	0.00000	9.75900	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
hf	hf	0.00000	10.87900	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
de	de	0.00000	0.47607	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				

Specific Structures - Bending Parameters

Structure Name	Sub-Structure	Height	Default	Hogging			
Sagging	Name	Properties	2nd Moment	Distance	Distance	2nd Moment	
Distance	Distance		of Area	of Bending	of N.A.	of Area	
of Bending	of N.A.		(per unit	Strain	from Edge	(per unit	
Strain	from Edge		width)	from N.A.	of Beam in	width)	
from N.A.	of Beam in				Tension		
Tension							
[m]	[m]	[m]	[m ³]	[m]	[m]	[m ³]	
21-20	6.5000	13.000	Yes	732.33	13.000	13.000	183.08
19-20	6.5000	13.000	Yes	732.33	13.000	13.000	183.08
19-18	6.5000	13.000	Yes	732.33	13.000	13.000	183.08
18-13	6.5000	13.000	Yes	732.33	13.000	13.000	183.08
21-a	6.5000	13.000	Yes	732.33	13.000	13.000	183.08
f-50	6.5000	13.000	Yes	732.33	13.000	13.000	183.08
14-15	6.5000	13.000	Yes	732.33	13.000	13.000	183.08
15-16	6.5000	13.000	Yes	732.33	13.000	13.000	183.08
16-17	6.5000	13.000	Yes	732.33	13.000	13.000	183.08
17-g	6.5000	13.000	Yes	732.33	13.000	13.000	183.08
h-49	6.5000	13.000	Yes	732.33	13.000	13.000	183.08
49-36	6.5000	13.000	Yes	732.33	13.000	13.000	183.08
36-48	6.5000	13.000	Yes	732.33	13.000	13.000	183.08
48-47	6.5000	13.000	Yes	732.33	13.000	13.000	183.08
47-51	6.5000	13.000	Yes	732.33	13.000	13.000	183.08
50-46	6.5000	13.000	Yes	732.33	13.000	13.000	183.08
46-47	6.5000	13.000	Yes	732.33	13.000	13.000	183.08

24-25		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
25-26		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
26-27		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
27-28		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
28-29		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
27-32		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
33-31		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
31-34		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
34-35		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
35-41		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
41-40		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
40-39		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
39-38		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
38-25		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
20-22		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						
22-b		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						
e-45		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						
18-31		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						
23-24		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						
b-27		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						
42-37		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						
47-43		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						
44-39		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						
46-45		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						
a-12		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						
12-11		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						
11-f		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						
ag		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
gb		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						
bc		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						
cd		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						
eh		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						
hf		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
de		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						

Building Segment Combinations

Structure Name	Sub-Structure Name	Vertical Offset from Line for Vertical	Segment Start Length	Curvature	Combined Segment
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**Movement
Calculations**

[m] [m] [m]

No structures have segments combined.

Utility Strain Calculation Options

Neglect beneficial contribution of axial strains : No

Specific Building Damage Results - Horizontal Displacements

Structure: 21-20 | Sub-structure:

Dist.	Coordinates			Displacements		Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
	x	y	z	x	y		
	[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]
0.0	55.96000	70.70000	0.00000	0.0	0.0	0.0	0.0 d
1.0682	54.89182	70.70182	0.00000	0.0	0.0	0.0	0.0 d
2.1364	53.82364	70.70364	0.00000	0.0	0.0	0.0	0.0 d
3.2046	52.75545	70.70545	0.00000	0.0	0.0	0.0	0.0 d
4.2727	51.68727	70.70727	0.00000	0.0	0.0	0.0	0.0 d
5.3409	50.61909	70.70909	0.00000	0.0	0.0	0.0	0.0 d
6.4091	49.55091	70.71091	0.00000	0.0	0.0	0.0	0.0 d
7.4773	48.48273	70.71273	0.00000	0.0	0.0	0.0	0.0 d
8.5455	47.41455	70.71455	0.00000	0.0	0.0	0.0	0.0 d
9.6137	46.34636	70.71636	0.00000	0.0	0.0	0.0	0.0 d
10.682	45.27818	70.71818	0.00000	0.0	0.0	0.0	0.0 d
11.750	44.21000	70.72000	0.00000	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: 19-20 | Sub-structure:

Dist.	Coordinates			Displacements		Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
	x	y	z	x	y		
	[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]
0.0	59.14000	66.79000	0.00000	0.0	0.0	0.0	0.0 d
1.0080	58.50400	67.57200	0.00000	0.0	0.0	0.0	0.0 d
2.0160	57.86800	68.35400	0.00000	0.0	0.0	0.0	0.0 d
3.0239	57.23200	69.13600	0.00000	0.0	0.0	0.0	0.0 d
4.0319	56.59600	69.91800	0.00000	0.0	0.0	0.0	0.0 d
5.0399	55.96000	70.70000	0.00000	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: 19-18 | Sub-structure:

Dist.	Coordinates			Displacements		Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
	x	y	z	x	y		
	[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]
0.0	59.14000	66.79000	0.00000	0.0	0.0	0.0	0.0 d
1.0051	59.15500	65.78500	0.00000	0.0	0.0	0.0	0.0 d
2.0102	59.17000	64.78000	0.00000	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: 18-13 | Sub-structure:

Dist.	Coordinates			Displacements		Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
	x	y	z	x	y		
	[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]

0.0	59.17000	64.78000	0.00000	0.0	0.0	0.0	0.0	d
1.0686	58.10143	64.78143	0.00000	0.0	0.0	0.0	0.0	d
2.1371	57.03286	64.78286	0.00000	0.0	0.0	0.0	0.0	d
3.2057	55.96429	64.78429	0.00000	0.0	0.0	0.0	0.0	d
4.2743	54.89571	64.78571	0.00000	0.0	0.0	0.0	0.0	d
5.3429	53.82714	64.78714	0.00000	0.0	0.0	0.0	0.0	d
6.4114	52.75857	64.78857	0.00000	0.0	0.0	0.0	0.0	d
7.4800	51.69000	64.79000	0.00000	0.0	0.0	0.0	0.0	d
8.5486	50.62143	64.79143	0.00000	0.0	0.0	0.0	0.0	d
9.6172	49.55286	64.79286	0.00000	0.0	0.0	0.0	0.0	d
10.686	48.48429	64.79429	0.00000	0.0	0.0	0.0	0.0	d
11.754	47.41571	64.79571	0.00000	0.0	0.0	0.0	0.0	d
12.823	46.34714	64.79714	0.00000	0.0	0.0	0.0	0.0	d
13.891	45.27857	64.79857	0.00000	0.0	0.0	0.0	0.0	d
14.960	44.21000	64.80000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 21-a | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	44.21000	70.72000	0.00000	0.0	0.0	0.0	0.0	d
0.34768	44.20559	70.37235	0.00000	0.0	0.0	0.0	0.0	
0.69535	44.20118	70.02471	0.00000	0.0	0.0	0.0	0.0	
1.0430	44.19676	69.67706	0.00000	0.0	0.0	0.0	0.0	
1.3907	44.19235	69.32941	0.00000	0.0	0.0	0.0	0.0	
1.7384	44.18794	68.98176	0.00000	0.0	0.0	0.0	0.0	
2.0861	44.18353	68.63412	0.00000	0.0	0.0	0.0	0.0	
2.4337	44.17912	68.28647	0.00000	0.0	0.0	0.0	0.0	
2.7814	44.17471	67.93882	0.00000	0.0	0.0	0.0	0.0	
3.1291	44.17029	67.59118	0.00000	0.0	0.0	0.0	0.0	
3.4768	44.16588	67.24353	0.00000	0.0	0.0	0.0	0.0	
3.8244	44.16147	66.89588	0.00000	0.0	0.0	0.0	0.0	
4.1721	44.15706	66.54824	0.00000	0.0	0.0	0.0	0.0	
4.5198	44.15265	66.20059	0.00000	0.0	0.0	0.0	0.0	
4.8675	44.14824	65.85294	0.00000	0.0	0.0	0.0	0.0	
5.2151	44.14382	65.50529	0.00000	0.0	0.0	0.0	0.0	
5.5628	44.13941	65.15765	0.00000	0.0	0.0	0.0	0.0	
5.9105	44.13500	64.81000	0.00000	0.0	0.0	0.0	0.0	
6.2582	44.13059	64.46235	0.00000	0.0	0.0	0.0	0.0	
6.6058	44.12618	64.11471	0.00000	0.0	0.0	0.0	0.0	
6.9535	44.12176	63.76706	0.00000	0.0	0.0	0.0	0.0	
7.3012	44.11735	63.41941	0.00000	0.0	0.0	0.0	0.0	
7.6489	44.11294	63.07176	0.00000	0.0	0.0	0.0	0.0	
7.9965	44.10853	62.72412	0.00000	0.0	0.0	0.0	0.0	
8.3442	44.10412	62.37647	0.00000	0.0	0.0	0.0	0.0	
8.6919	44.09971	62.02882	0.00000	0.0	0.0	0.0	0.0	
9.0396	44.09529	61.68118	0.00000	0.0	0.0	0.0	0.0	
9.3872	44.09088	61.33353	0.00000	0.0	0.0	0.0	0.0	
9.7349	44.08647	60.98588	0.00000	0.0	0.0	0.0	0.0	
10.083	44.08206	60.63824	0.00000	0.0	0.0	0.0	0.0	
10.430	44.07765	60.29059	0.00000	0.0	0.0	0.0	0.0	
10.778	44.07324	59.94294	0.00000	0.0	0.0	0.0	0.0	
11.126	44.06882	59.59529	0.00000	0.0	0.0	0.0	0.0	
11.473	44.06441	59.24765	0.00000	0.0	0.0	0.0	0.0	
11.821	44.06000	58.90000	0.00000	0.0	0.0	0.0	0.0	

d - Displacements include imported displacements.

Structure: f-50 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	44.10000	51.60000	0.00000	0.0	0.0	0.0	0.0	d
0.99267	44.10400	50.60733	0.00000	0.0	0.0	0.0	0.0	
1.9853	44.10800	49.61467	0.00000	0.0	0.0	0.0	0.0	
2.9780	44.11200	48.62200	0.00000	0.0	0.0	0.0	0.0	
3.9707	44.11600	47.62933	0.00000	0.0	0.0	0.0	0.0	

4.9634	44.12000	46.63667	0.00000	0.0	0.0	0.0	0.0
5.9560	44.12400	45.64400	0.00000	0.0	0.0	0.0	0.0
6.9487	44.12800	44.65133	0.00000	0.0	0.0	0.0	0.0
7.9414	44.13200	43.65867	0.00000	0.0	0.0	0.0	0.0
8.9341	44.13600	42.66600	0.00000	0.0	0.0	0.0	0.0
9.9267	44.14000	41.67333	0.00000	0.0	0.0	0.0	0.0
10.919	44.14400	40.68067	0.00000	0.0	0.0	0.0	0.0
11.912	44.14800	39.68800	0.00000	0.0	0.0	0.0	0.0
12.905	44.15200	38.69533	0.00000	0.0	0.0	0.0	0.0
13.897	44.15600	37.70267	0.00000	0.0	0.0	0.0	0.0
14.890	44.16000	36.71000	0.00000	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: 14-15 | Sub-structure:

Dist.	Coordinates					Displacements	
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	55.00000	64.76000	0.00000	0.0	0.0	0.0	0.0 d
1.0700	55.00000	63.69000	0.00000	0.0	0.0	0.0	0.0 d
2.1400	55.00000	62.62000	0.00000	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: 15-16 | Sub-structure:

Dist.	Coordinates					Displacements	
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	55.00000	62.62000	0.00000	0.0	0.0	0.0	0.0 d
1.6907	56.23000	61.46000	0.00000	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: 16-17 | Sub-structure:

Dist.	Coordinates					Displacements	
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	56.23000	61.46000	0.00000	0.0	0.0	0.0	0.0 d
1.9000	56.22000	59.56000	0.00000	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: 17-g | Sub-structure:

Dist.	Coordinates					Displacements	
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	56.22000	59.56000	0.00000	0.0	0.0	0.0	0.0 d
1.6125	55.10000	58.40000	0.00000	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: h-49 | Sub-structure:

Dist.	Coordinates					Displacements	
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	54.98000	51.60000	0.00000	0.0	0.0	0.0	0.0 d
1.0678	55.74000	50.85000	0.00000	0.0	0.0	0.0	0.0 d

2.1355 56.50000 50.10000 0.00000 0.0 0.0 0.0 0.0 d
 d - Displacements include imported displacements.

Structure: 49-36 | Sub-structure:

Dist.	Coordinates			Displacements		Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
	x	y	z	x	y		
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
	0.0	56.50000	50.10000	0.00000	0.0	0.0	0.0 d
	1.1950	56.50000	48.90500	0.00000	0.0	0.0	0.0 d
	2.3900	56.50000	47.71000	0.00000	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: 36-48 | Sub-structure:

Dist.	Coordinates			Displacements		Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
	x	y	z	x	y		
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
	0.0	56.50000	47.71000	0.00000	0.0	0.0	0.0 d
	1.1506	55.73000	46.85500	0.00000	0.0	0.0	0.0 d
	2.3012	54.96000	46.00000	0.00000	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: 48-47 | Sub-structure:

Dist.	Coordinates			Displacements		Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
	x	y	z	x	y		
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
	0.0	54.96000	46.00000	0.00000	0.0	0.0	0.0 d
	1.1700	54.96000	44.83000	0.00000	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: 47-51 | Sub-structure:

Dist.	Coordinates			Displacements		Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
	x	y	z	x	y		
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
	0.0	54.96000	44.83000	0.00000	0.0	0.0	0.0 d
	1.0750	53.88500	44.83000	0.00000	0.0	0.0	0.0 d
	2.1500	52.81000	44.83000	0.00000	0.0	0.0	0.0 d
	3.2250	51.73500	44.83000	0.00000	0.0	0.0	0.0 d
	4.3000	50.66000	44.83000	0.00000	0.0	0.0	0.0 d
	5.3750	49.58500	44.83000	0.00000	0.0	0.0	0.0 d
	6.4500	48.51000	44.83000	0.00000	0.0	0.0	0.0 d
	7.5250	47.43500	44.83000	0.00000	0.0	0.0	0.0 d
	8.6000	46.36000	44.83000	0.00000	0.0	0.0	0.0 d
	9.6750	45.28500	44.83000	0.00000	0.0	0.0	0.0 d
	10.7500	44.21000	44.83000	0.00000	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: 50-46 | Sub-structure:

Dist.	Coordinates			Displacements		Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
	x	y	z	x	y		
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
	0.0	44.16000	36.71000	0.00000	0.0	0.0	0.0 d
	1.0800	45.24000	36.71000	0.00000	0.0	0.0	0.0 d

2.1600	46.32000	36.71000	0.00000	0.0	0.0	0.0	0.0	d
3.2400	47.40000	36.71000	0.00000	0.0	0.0	0.0	0.0	d
4.3200	48.48000	36.71000	0.00000	0.0	0.0	0.0	0.0	d
5.4000	49.56000	36.71000	0.00000	0.0	0.0	0.0	0.0	d
6.4800	50.64000	36.71000	0.00000	0.0	0.0	0.0	0.0	d
7.5600	51.72000	36.71000	0.00000	0.0	0.0	0.0	0.0	d
8.6400	52.80000	36.71000	0.00000	0.0	0.0	0.0	0.0	d
9.7200	53.88000	36.71000	0.00000	0.0	0.0	0.0	0.0	d
10.800	54.96000	36.71000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 46-47 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	54.96000	36.71000	0.00000	0.0	0.0	0.0	0.0	d
1.0150	54.96000	37.72500	0.00000	0.0	0.0	0.0	0.0	d
2.0300	54.96000	38.74000	0.00000	0.0	0.0	0.0	0.0	d
3.0450	54.96000	39.75500	0.00000	0.0	0.0	0.0	0.0	d
4.0600	54.96000	40.77000	0.00000	0.0	0.0	0.0	0.0	d
5.0750	54.96000	41.78500	0.00000	0.0	0.0	0.0	0.0	d
6.0900	54.96000	42.80000	0.00000	0.0	0.0	0.0	0.0	d
7.1050	54.96000	43.81500	0.00000	0.0	0.0	0.0	0.0	d
8.1200	54.96000	44.83000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 24-25 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	78.82000	63.10000	0.00000	0.0	0.0	0.0	0.0	d
1.0289	79.84889	63.09667	0.00000	0.0	0.0	0.0	0.0	d
2.0578	80.87778	63.09333	0.00000	0.0	0.0	0.0	0.0	d
3.0867	81.90667	63.09000	0.00000	0.0	0.0	0.0	0.0	d
4.1156	82.93556	63.08667	0.00000	0.0	0.0	0.0	0.0	d
5.1445	83.96444	63.08333	0.00000	0.0	0.0	0.0	0.0	d
6.1734	84.99333	63.08000	0.00000	0.0	0.0	0.0	0.0	d
7.2023	86.02222	63.07667	0.00000	0.0	0.0	0.0	0.0	d
8.2312	87.05111	63.07333	0.00000	0.0	0.0	0.0	0.0	d
9.2600	88.08000	63.07000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 25-26 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	88.08000	63.07000	0.00000	0.0	0.0	0.0	0.0	d
1.0641	88.06400	62.00600	0.00000	0.0	0.0	0.0	0.0	d
2.1282	88.04800	60.94200	0.00000	0.0	0.0	0.0	0.0	d
3.1924	88.03200	59.87800	0.00000	0.0	0.0	0.0	0.0	d
4.2565	88.01600	58.81400	0.00000	0.0	0.0	0.0	0.0	d
5.3206	88.00000	57.75000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 26-27 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	

[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	88.00000	57.75000	0.00000	0.0	0.0	0.0	0.0 d
1.0246	86.97545	57.76364	0.00000	0.0	0.0	0.0	0.0 d
2.0493	85.95091	57.77727	0.00000	0.0	0.0	0.0	0.0 d
3.0739	84.92636	57.79091	0.00000	0.0	0.0	0.0	0.0 d
4.0985	83.90182	57.80455	0.00000	0.0	0.0	0.0	0.0 d
5.1232	82.87727	57.81818	0.00000	0.0	0.0	0.0	0.0 d
6.1478	81.85273	57.83182	0.00000	0.0	0.0	0.0	0.0 d
7.1725	80.82818	57.84545	0.00000	0.0	0.0	0.0	0.0 d
8.1971	79.80364	57.85909	0.00000	0.0	0.0	0.0	0.0 d
9.2217	78.77909	57.87273	0.00000	0.0	0.0	0.0	0.0 d
10.246	77.75455	57.88636	0.00000	0.0	0.0	0.0	0.0 d
11.271	76.73000	57.90000	0.00000	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: 27-28 | Sub-structure:

Dist.	Coordinates			Displacements			
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	76.73000	57.90000	0.00000	0.0	0.0	0.0	0.0 d
1.0567	76.72333	58.95667	0.00000	0.0	0.0	0.0	0.0 d
2.1134	76.71667	60.01333	0.00000	0.0	0.0	0.0	0.0 d
3.1701	76.71000	61.07000	0.00000	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: 28-29 | Sub-structure:

Dist.	Coordinates			Displacements			
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	76.71000	61.07000	0.00000	0.0	0.0	0.0	0.0 d
1.4640	77.76500	62.08500	0.00000	0.0	0.0	0.0	0.0 d
2.9280	78.82000	63.10000	0.00000	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: 27-32 | Sub-structure:

Dist.	Coordinates			Displacements			
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	76.73000	57.90000	0.00000	0.0	0.0	0.0	0.0 d
1.0300	76.73400	56.87000	0.00000	0.0	0.0	0.0	0.0 d
2.0600	76.73800	55.84000	0.00000	0.0	0.0	0.0	0.0 d
3.0900	76.74200	54.81000	0.00000	0.0	0.0	0.0	0.0 d
4.1200	76.74600	53.78000	0.00000	0.0	0.0	0.0	0.0 d
5.1500	76.75000	52.75000	0.00000	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: 33-31 | Sub-structure:

Dist.	Coordinates			Displacements			
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	87.93000	52.75000	0.00000	0.0	0.0	0.0	0.0 d
1.0400	86.89000	52.75000	0.00000	0.0	0.0	0.0	0.0 d
2.0800	85.85000	52.75000	0.00000	0.0	0.0	0.0	0.0 d
3.1200	84.81000	52.75000	0.00000	0.0	0.0	0.0	0.0 d
4.1600	83.77000	52.75000	0.00000	0.0	0.0	0.0	0.0 d
5.2000	82.73000	52.75000	0.00000	0.0	0.0	0.0	0.0 d
6.2400	81.69000	52.75000	0.00000	0.0	0.0	0.0	0.0 d

7.2800	80.65000	52.75000	0.00000	0.0	0.0	0.0	0.0	d
8.3200	79.61000	52.75000	0.00000	0.0	0.0	0.0	0.0	d
9.3600	78.57000	52.75000	0.00000	0.0	0.0	0.0	0.0	d
10.400	77.53000	52.75000	0.00000	0.0	0.0	0.0	0.0	d
11.440	76.49000	52.75000	0.00000	0.0	0.0	0.0	0.0	d
12.480	75.45000	52.75000	0.00000	0.0	0.0	0.0	0.0	d
13.520	74.41000	52.75000	0.00000	0.0	0.0	0.0	0.0	d
14.560	73.37000	52.75000	0.00000	0.0	0.0	0.0	0.0	d
15.600	72.33000	52.75000	0.00000	0.0	0.0	0.0	0.0	d
16.640	71.29000	52.75000	0.00000	0.0	0.0	0.0	0.0	d
17.680	70.25000	52.75000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 31-34 | Sub-structure:

Dist.	Coordinates					Displacements		
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	70.25000	52.75000	0.00000	0.0	0.0	0.0	0.0	d
1.1236	70.22667	51.62667	0.00000	0.0	0.0	0.0	0.0	d
2.2472	70.20333	50.50333	0.00000	0.0	0.0	0.0	0.0	d
3.3707	70.18000	49.38000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 34-35 | Sub-structure:

Dist.	Coordinates					Displacements		
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	70.18000	49.38000	0.00000	0.0	0.0	0.0	0.0	d
1.3300	71.51000	49.37000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 35-41 | Sub-structure:

Dist.	Coordinates					Displacements		
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	71.51000	49.37000	0.00000	0.0	0.0	0.0	0.0	d
1.2000	71.50000	48.17000	0.00000	0.0	0.0	0.0	0.0	d
2.4001	71.49000	46.97000	0.00000	0.0	0.0	0.0	0.0	d
3.6001	71.48000	45.77000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 41-40 | Sub-structure:

Dist.	Coordinates					Displacements		
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	71.48000	45.77000	0.00000	0.0	0.0	0.0	0.0	d
1.0175	70.46250	45.77000	0.00000	0.0	0.0	0.0	0.0	d
2.0350	69.44500	45.77000	0.00000	0.0	0.0	0.0	0.0	d
3.0525	68.42750	45.77000	0.00000	0.0	0.0	0.0	0.0	d
4.0700	67.41000	45.77000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 40-39 | Sub-structure:

Dist.	Coordinates					Displacements	
	x	y	z	x	y	Horizontal	Horizontal

						displacement along the Line	displacement perpendicular to Line
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	67.41000	45.77000	0.00000	0.0	0.0	0.0	0.0 d
1.3000	67.40333	44.47000	0.00000	0.0	0.0	0.0	0.0 d
2.6000	67.39667	43.17000	0.00000	0.0	0.0	0.0	0.0 d
3.9001	67.39000	41.87000	0.00000	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: 39-38 | Sub-structure:

Dist.	Coordinates			Displacements			
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	67.39000	41.87000	0.00000	0.0	0.0	0.0	0.0 d
1.0305	68.42050	41.86150	0.00000	0.0	0.0	0.0	0.0 d
2.0611	69.45100	41.85300	0.00000	0.0	0.0	0.0	0.0 d
3.0916	70.48150	41.84450	0.00000	0.0	0.0	0.0	0.0 d
4.1221	71.51200	41.83600	0.00000	0.0	0.0	0.0	0.0 d
5.1527	72.54250	41.82750	0.00000	0.0	0.0	0.0	0.0 d
6.1832	73.57300	41.81900	0.00000	0.0	0.0	0.0	0.0 d
7.2137	74.60350	41.81050	0.00000	0.0	0.0	0.0	0.0 d
8.2443	75.63400	41.80200	0.00000	0.0	0.0	0.0	0.0 d
9.2748	76.66450	41.79350	0.00000	0.0	0.0	0.0	0.0 d
10.305	77.69500	41.78500	0.00000	0.0	0.0	0.0	0.0 d
11.336	78.72550	41.77650	0.00000	0.0	0.0	0.0	0.0 d
12.366	79.75600	41.76800	0.00000	0.0	0.0	0.0	0.0 d
13.397	80.78650	41.75950	0.00000	0.0	0.0	0.0	0.0 d
14.427	81.81700	41.75100	0.00000	0.0	0.0	0.0	0.0 d
15.458	82.84750	41.74250	0.00000	0.0	0.0	0.0	0.0 d
16.489	83.87800	41.73400	0.00000	0.0	0.0	0.0	0.0 d
17.519	84.90850	41.72550	0.00000	0.0	0.0	0.0	0.0 d
18.550	85.93900	41.71700	0.00000	0.0	0.0	0.0	0.0 d
19.580	86.96950	41.70850	0.00000	0.0	0.0	0.0	0.0 d
20.611	88.00000	41.70000	0.00000	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: 38-25 | Sub-structure:

Dist.	Coordinates			Displacements			
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	88.00000	41.70000	0.00000	0.0	0.0	0.0	0.0 d
1.0176	88.00381	42.71762	0.00000	0.0	0.0	0.0	0.0 d
2.0353	88.00762	43.73524	0.00000	0.0	0.0	0.0	0.0 d
3.0529	88.01143	44.75286	0.00000	0.0	0.0	0.0	0.0 d
4.0705	88.01524	45.77048	0.00000	0.0	0.0	0.0	0.0 d
5.0881	88.01905	46.78810	0.00000	0.0	0.0	0.0	0.0 d
6.1058	88.02286	47.80571	0.00000	0.0	0.0	0.0	0.0 d
7.1234	88.02667	48.82333	0.00000	0.0	0.0	0.0	0.0 d
8.1410	88.03048	49.84095	0.00000	0.0	0.0	0.0	0.0 d
9.1586	88.03429	50.85857	0.00000	0.0	0.0	0.0	0.0 d
10.176	88.03810	51.87619	0.00000	0.0	0.0	0.0	0.0 d
11.194	88.04190	52.89381	0.00000	0.0	0.0	0.0	0.0 d
12.212	88.04571	53.91143	0.00000	0.0	0.0	0.0	0.0 d
13.229	88.04952	54.92905	0.00000	0.0	0.0	0.0	0.0 d
14.247	88.05333	55.94667	0.00000	0.0	0.0	0.0	0.0 d
15.264	88.05714	56.96429	0.00000	0.0	0.0	0.0	0.0 d
16.282	88.06095	57.98190	0.00000	0.0	0.0	0.0	0.0 d
17.300	88.06476	58.99952	0.00000	0.0	0.0	0.0	0.0 d
18.317	88.06857	60.01714	0.00000	0.0	0.0	0.0	0.0 d
19.335	88.07238	61.03476	0.00000	0.0	0.0	0.0	0.0 d
20.353	88.07619	62.05238	0.00000	0.0	0.0	0.0	0.0 d
21.370	88.08000	63.07000	0.00000	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: 20-22 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	55.96000	70.70000	0.00000	0.0	0.0	0.0	0.0	d
1.0170	56.97700	70.69900	0.00000	0.0	0.0	0.0	0.0	d
2.0340	57.99400	70.69800	0.00000	0.0	0.0	0.0	0.0	d
3.0510	59.01100	70.69700	0.00000	0.0	0.0	0.0	0.0	d
4.0680	60.02800	70.69600	0.00000	0.0	0.0	0.0	0.0	d
5.0850	61.04500	70.69500	0.00000	0.0	0.0	0.0	0.0	d
6.1020	62.06200	70.69400	0.00000	0.0	0.0	0.0	0.0	d
7.1190	63.07900	70.69300	0.00000	0.0	0.0	0.0	0.0	d
8.1360	64.09600	70.69200	0.00000	0.0	0.0	0.0	0.0	d
9.1530	65.11300	70.69100	0.00000	0.0	0.0	0.0	0.0	d
10.170	66.13000	70.69000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 22-b | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	66.13000	70.69000	0.00000	0.0	0.0	0.0	0.0	d
0.69360	66.14000	69.99647	0.00000	0.0	0.0	0.0	0.0	
1.3872	66.15000	69.30294	0.00000	0.0	0.0	0.0	0.0	
2.0808	66.16000	68.60941	0.00000	0.0	0.0	0.0	0.0	
2.7744	66.17000	67.91588	0.00000	0.0	0.0	0.0	0.0	
3.4680	66.18000	67.22235	0.00000	0.0	0.0	0.0	0.0	
4.1616	66.19000	66.52882	0.00000	0.0	0.0	0.0	0.0	
4.8552	66.20000	65.83529	0.00000	0.0	0.0	0.0	0.0	
5.5488	66.21000	65.14176	0.00000	0.0	0.0	0.0	0.0	
6.2424	66.22000	64.44824	0.00000	0.0	0.0	0.0	0.0	
6.9360	66.23000	63.75471	0.00000	0.0	0.0	0.0	0.0	
7.6296	66.24000	63.06118	0.00000	0.0	0.0	0.0	0.0	
8.3232	66.25000	62.36765	0.00000	0.0	0.0	0.0	0.0	
9.0168	66.26000	61.67412	0.00000	0.0	0.0	0.0	0.0	
9.7104	66.27000	60.98059	0.00000	0.0	0.0	0.0	0.0	
10.404	66.28000	60.28706	0.00000	0.0	0.0	0.0	0.0	
11.098	66.29000	59.59353	0.00000	0.0	0.0	0.0	0.0	
11.791	66.30000	58.90000	0.00000	0.0	0.0	0.0	0.0	

d - Displacements include imported displacements.

Structure: e-45 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	64.74000	51.60000	0.00000	0.0	0.0	0.0	0.0	d
0.98415	64.72267	50.61600	0.00000	0.0	0.0	0.0	0.0	
1.9683	64.70533	49.63200	0.00000	0.0	0.0	0.0	0.0	
2.9525	64.68800	48.64800	0.00000	0.0	0.0	0.0	0.0	
3.9366	64.67067	47.66400	0.00000	0.0	0.0	0.0	0.0	
4.9208	64.65333	46.68000	0.00000	0.0	0.0	0.0	0.0	
5.9049	64.63600	45.69600	0.00000	0.0	0.0	0.0	0.0	
6.8891	64.61867	44.71200	0.00000	0.0	0.0	0.0	0.0	
7.8732	64.60133	43.72800	0.00000	0.0	0.0	0.0	0.0	
8.8574	64.58400	42.74400	0.00000	0.0	0.0	0.0	0.0	
9.8415	64.56667	41.76000	0.00000	0.0	0.0	0.0	0.0	
10.826	64.54933	40.77600	0.00000	0.0	0.0	0.0	0.0	
11.810	64.53200	39.79200	0.00000	0.0	0.0	0.0	0.0	
12.794	64.51467	38.80800	0.00000	0.0	0.0	0.0	0.0	
13.778	64.49733	37.82400	0.00000	0.0	0.0	0.0	0.0	
14.762	64.48000	36.84000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 18-31 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	59.17000	64.78000	0.00000	0.0	0.0	0.0	0.0	d
1.1384	60.30833	64.77333	0.00000	0.0	0.0	0.0	0.0	d
2.2767	61.44667	64.76667	0.00000	0.0	0.0	0.0	0.0	d
3.4151	62.58500	64.76000	0.00000	0.0	0.0	0.0	0.0	d
4.5534	63.72333	64.75333	0.00000	0.0	0.0	0.0	0.0	d
5.6918	64.86167	64.74667	0.00000	0.0	0.0	0.0	0.0	d
6.8301	66.00000	64.74000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 23-24 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	66.00000	63.14000	0.00000	0.0	0.0	0.0	0.0	d
1.0683	67.06833	63.13667	0.00000	0.0	0.0	0.0	0.0	d
2.1367	68.13667	63.13333	0.00000	0.0	0.0	0.0	0.0	d
3.2050	69.20500	63.13000	0.00000	0.0	0.0	0.0	0.0	d
4.2734	70.27333	63.12667	0.00000	0.0	0.0	0.0	0.0	d
5.3417	71.34167	63.12333	0.00000	0.0	0.0	0.0	0.0	d
6.4100	72.41000	63.12000	0.00000	0.0	0.0	0.0	0.0	d
7.4784	73.47833	63.11667	0.00000	0.0	0.0	0.0	0.0	d
8.5467	74.54667	63.11333	0.00000	0.0	0.0	0.0	0.0	d
9.6150	75.61500	63.11000	0.00000	0.0	0.0	0.0	0.0	d
10.683	76.68333	63.10667	0.00000	0.0	0.0	0.0	0.0	d
11.752	77.75167	63.10333	0.00000	0.0	0.0	0.0	0.0	d
12.820	78.82000	63.10000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: b-27 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	66.10000	58.46000	0.00000	0.0	0.0	0.0	0.0	d
1.0645	67.16300	58.40400	0.00000	0.0	0.0	0.0	0.0	d
2.1289	68.22600	58.34800	0.00000	0.0	0.0	0.0	0.0	d
3.1934	69.28900	58.29200	0.00000	0.0	0.0	0.0	0.0	d
4.2579	70.35200	58.23600	0.00000	0.0	0.0	0.0	0.0	d
5.3224	71.41500	58.18000	0.00000	0.0	0.0	0.0	0.0	d
6.3868	72.47800	58.12400	0.00000	0.0	0.0	0.0	0.0	d
7.4513	73.54100	58.06800	0.00000	0.0	0.0	0.0	0.0	d
8.5158	74.60400	58.01200	0.00000	0.0	0.0	0.0	0.0	d
9.5803	75.66700	57.95600	0.00000	0.0	0.0	0.0	0.0	d
10.645	76.73000	57.90000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 42-37 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	64.54000	46.73000	0.00000	0.0	0.0	0.0	0.0	d
1.0183	65.55826	46.71783	0.00000	0.0	0.0	0.0	0.0	d
2.0367	66.57652	46.70565	0.00000	0.0	0.0	0.0	0.0	d
3.0550	67.59478	46.69348	0.00000	0.0	0.0	0.0	0.0	d
4.0733	68.61304	46.68130	0.00000	0.0	0.0	0.0	0.0	d

5.0917	69.63130	46.66913	0.00000	0.0	0.0	0.0	0.0	0.0	d
6.1100	70.64957	46.65696	0.00000	0.0	0.0	0.0	0.0	0.0	d
7.1283	71.66783	46.64478	0.00000	0.0	0.0	0.0	0.0	0.0	d
8.1467	72.68609	46.63261	0.00000	0.0	0.0	0.0	0.0	0.0	d
9.1650	73.70435	46.62043	0.00000	0.0	0.0	0.0	0.0	0.0	d
10.183	74.72261	46.60826	0.00000	0.0	0.0	0.0	0.0	0.0	d
11.202	75.74087	46.59609	0.00000	0.0	0.0	0.0	0.0	0.0	d
12.220	76.75913	46.58391	0.00000	0.0	0.0	0.0	0.0	0.0	d
13.238	77.77739	46.57174	0.00000	0.0	0.0	0.0	0.0	0.0	d
14.257	78.79565	46.55957	0.00000	0.0	0.0	0.0	0.0	0.0	d
15.275	79.81391	46.54739	0.00000	0.0	0.0	0.0	0.0	0.0	d
16.293	80.83217	46.53522	0.00000	0.0	0.0	0.0	0.0	0.0	d
17.312	81.85043	46.52304	0.00000	0.0	0.0	0.0	0.0	0.0	d
18.330	82.86870	46.51087	0.00000	0.0	0.0	0.0	0.0	0.0	d
19.348	83.88696	46.49870	0.00000	0.0	0.0	0.0	0.0	0.0	d
20.367	84.90522	46.48652	0.00000	0.0	0.0	0.0	0.0	0.0	d
21.385	85.92348	46.47435	0.00000	0.0	0.0	0.0	0.0	0.0	d
22.403	86.94174	46.46217	0.00000	0.0	0.0	0.0	0.0	0.0	d
23.422	87.96000	46.45000	0.00000	0.0	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 47-43 | Sub-structure:

Dist.	Coordinates			Displacements		Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	d
	x	y	z	x	y			
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	54.96000	44.83000	0.00000	0.0	0.0	0.0	0.0	d
1.0600	56.02000	44.83000	0.00000	0.0	0.0	0.0	0.0	d
2.1200	57.08000	44.83000	0.00000	0.0	0.0	0.0	0.0	d
3.1800	58.14000	44.83000	0.00000	0.0	0.0	0.0	0.0	d
4.2400	59.20000	44.83000	0.00000	0.0	0.0	0.0	0.0	d
5.3000	60.26000	44.83000	0.00000	0.0	0.0	0.0	0.0	d
6.3600	61.32000	44.83000	0.00000	0.0	0.0	0.0	0.0	d
7.4200	62.38000	44.83000	0.00000	0.0	0.0	0.0	0.0	d
8.4800	63.44000	44.83000	0.00000	0.0	0.0	0.0	0.0	d
9.5400	64.50000	44.83000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 44-39 | Sub-structure:

Dist.	Coordinates			Displacements		Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	d
	x	y	z	x	y			
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	64.44000	41.91000	0.00000	0.0	0.0	0.0	0.0	d
1.4751	65.91500	41.89000	0.00000	0.0	0.0	0.0	0.0	d
2.9503	67.39000	41.87000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 46-45 | Sub-structure:

Dist.	Coordinates			Displacements		Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	d
	x	y	z	x	y			
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	54.96000	36.71000	0.00000	0.0	0.0	0.0	0.0	d
1.0579	56.01778	36.72444	0.00000	0.0	0.0	0.0	0.0	d
2.1158	57.07556	36.73889	0.00000	0.0	0.0	0.0	0.0	d
3.1736	58.13333	36.75333	0.00000	0.0	0.0	0.0	0.0	d
4.2315	59.19111	36.76778	0.00000	0.0	0.0	0.0	0.0	d
5.2894	60.24889	36.78222	0.00000	0.0	0.0	0.0	0.0	d
6.3473	61.30667	36.79667	0.00000	0.0	0.0	0.0	0.0	d
7.4051	62.36444	36.81111	0.00000	0.0	0.0	0.0	0.0	d
8.4630	63.42222	36.82556	0.00000	0.0	0.0	0.0	0.0	d
9.5209	64.48000	36.84000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: a-12 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
	0.0	44.06000	58.90000	0.00000	0.0	0.0	0.0	
1.1151	42.95250	58.77000	0.00000	0.0	0.0	0.0	0.0	
2.2302	41.84500	58.64000	0.00000	0.0	0.0	0.0	0.0	
3.3453	40.73750	58.51000	0.00000	0.0	0.0	0.0	0.0	
4.4604	39.63000	58.38000	0.00000	0.0	0.0	0.0	0.0 d	

d - Displacements include imported displacements.

Structure: 12-11 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
	0.0	39.63000	58.38000	0.00000	0.0	0.0	0.0 d	
1.1167	39.63000	57.26333	0.00000	0.0	0.0	0.0	0.0 d	
2.2333	39.63000	56.14667	0.00000	0.0	0.0	0.0	0.0 d	
3.3500	39.63000	55.03000	0.00000	0.0	0.0	0.0	0.0 d	
4.4667	39.63000	53.91333	0.00000	0.0	0.0	0.0	0.0 d	
5.5833	39.63000	52.79667	0.00000	0.0	0.0	0.0	0.0 d	
6.7000	39.63000	51.68000	0.00000	0.0	0.0	0.0	0.0 d	

d - Displacements include imported displacements.

Structure: 11-f | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
	0.0	39.63000	51.68000	0.00000	0.0	0.0	0.0 d	
0.55884	40.18875	51.67000	0.00000	0.0	0.0	0.0	0.0	
1.1177	40.74750	51.66000	0.00000	0.0	0.0	0.0	0.0	
1.6765	41.30625	51.65000	0.00000	0.0	0.0	0.0	0.0	
2.2354	41.86500	51.64000	0.00000	0.0	0.0	0.0	0.0	
2.7942	42.42375	51.63000	0.00000	0.0	0.0	0.0	0.0	
3.3530	42.98250	51.62000	0.00000	0.0	0.0	0.0	0.0	
3.9119	43.54125	51.61000	0.00000	0.0	0.0	0.0	0.0	
4.4707	44.10000	51.60000	0.00000	0.0	0.0	0.0	0.0 d	

d - Displacements include imported displacements.

Structure: ag | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
	0.0	44.06000	58.90000	0.00000	0.0	0.0	0.0	
1.0047	45.06364	58.85455	0.00000	0.0	0.0	0.0	0.0	
2.0093	46.06727	58.80909	0.00000	0.0	0.0	0.0	0.0	
3.0140	47.07091	58.76364	0.00000	0.0	0.0	0.0	0.0	
4.0187	48.07455	58.71818	0.00000	0.0	0.0	0.0	0.0	
5.0233	49.07818	58.67273	0.00000	0.0	0.0	0.0	0.0	
6.0280	50.08182	58.62727	0.00000	0.0	0.0	0.0	0.0	
7.0327	51.08545	58.58182	0.00000	0.0	0.0	0.0	0.0	
8.0373	52.08909	58.53636	0.00000	0.0	0.0	0.0	0.0	
9.0420	53.09273	58.49091	0.00000	0.0	0.0	0.0	0.0	
10.047	54.09636	58.44545	0.00000	0.0	0.0	0.0	0.0	
11.051	55.10000	58.40000	0.00000	0.0	0.0	0.0	0.0 d	

d - Displacements include imported displacements.

Structure: gb | Sub-structure:

Dist.	Coordinates			Displacements		Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
	x	y	z	x	y		
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	55.10000	58.40000	0.00000	0.0	0.0	0.0	0.0 d
0.57001	55.67000	58.40300	0.00000	0.0	0.0	0.0	0.0
1.1400	56.24000	58.40600	0.00000	0.0	0.0	0.0	0.0
1.7100	56.81000	58.40900	0.00000	0.0	0.0	0.0	0.0
2.2800	57.38000	58.41200	0.00000	0.0	0.0	0.0	0.0
2.8500	57.95000	58.41500	0.00000	0.0	0.0	0.0	0.0
3.4200	58.52000	58.41800	0.00000	0.0	0.0	0.0	0.0
3.9901	59.09000	58.42100	0.00000	0.0	0.0	0.0	0.0
4.5601	59.66000	58.42400	0.00000	0.0	0.0	0.0	0.0
5.1301	60.23000	58.42700	0.00000	0.0	0.0	0.0	0.0
5.7001	60.80000	58.43000	0.00000	0.0	0.0	0.0	0.0
6.2701	61.37000	58.43300	0.00000	0.0	0.0	0.0	0.0
6.8401	61.94000	58.43600	0.00000	0.0	0.0	0.0	0.0
7.4101	62.51000	58.43900	0.00000	0.0	0.0	0.0	0.0
7.9801	63.08000	58.44200	0.00000	0.0	0.0	0.0	0.0
8.5501	63.65000	58.44500	0.00000	0.0	0.0	0.0	0.0
9.1201	64.22000	58.44800	0.00000	0.0	0.0	0.0	0.0
9.6901	64.79000	58.45100	0.00000	0.0	0.0	0.0	0.0
10.260	65.36000	58.45400	0.00000	0.0	0.0	0.0	0.0
10.830	65.93000	58.45700	0.00000	0.0	0.0	0.0	0.0
11.400	66.50000	58.46000	0.00000	0.0	0.0	0.0	0.0

d - Displacements include imported displacements.

Structure: bc | Sub-structure:

Dist.	Coordinates			Displacements		Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
	x	y	z	x	y		
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	66.50000	58.46000	0.00000	0.0	0.0	0.0	0.0
0.27800	66.50000	58.18200	0.00000	0.0	0.0	0.0	0.0
0.55600	66.50000	57.90400	0.00000	0.0	0.0	0.0	0.0
0.83400	66.50000	57.62600	0.00000	0.0	0.0	0.0	0.0
1.1120	66.50000	57.34800	0.00000	0.0	0.0	0.0	0.0
1.3900	66.50000	57.07000	0.00000	0.0	0.0	0.0	0.0
1.6680	66.50000	56.79200	0.00000	0.0	0.0	0.0	0.0
1.9460	66.50000	56.51400	0.00000	0.0	0.0	0.0	0.0
2.2240	66.50000	56.23600	0.00000	0.0	0.0	0.0	0.0
2.5020	66.50000	55.95800	0.00000	0.0	0.0	0.0	0.0
2.7800	66.50000	55.68000	0.00000	0.0	0.0	0.0	0.0
3.0580	66.50000	55.40200	0.00000	0.0	0.0	0.0	0.0
3.3360	66.50000	55.12400	0.00000	0.0	0.0	0.0	0.0
3.6140	66.50000	54.84600	0.00000	0.0	0.0	0.0	0.0
3.8920	66.50000	54.56800	0.00000	0.0	0.0	0.0	0.0
4.1700	66.50000	54.29000	0.00000	0.0	0.0	0.0	0.0
4.4480	66.50000	54.01200	0.00000	0.0	0.0	0.0	0.0
4.7260	66.50000	53.73400	0.00000	0.0	0.0	0.0	0.0
5.0040	66.50000	53.45600	0.00000	0.0	0.0	0.0	0.0
5.2820	66.50000	53.17800	0.00000	0.0	0.0	0.0	0.0
5.5600	66.50000	52.90000	0.00000	0.0	0.0	0.0	0.0

Structure: cd | Sub-structure:

Dist.	Coordinates			Displacements		Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
	x	y	z	x	y		
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	66.50000	52.90000	0.00000	0.0	0.0	0.0	0.0
1.7493	65.00000	52.00000	0.00000	0.0	0.0	0.0	0.0

Structure: eh | Sub-structure:

Dist.	Coordinates			Displacements		Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
	x	y	z	x	y		
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	64.74000	51.60000	0.00000	0.0	0.0	0.0	0.0 d
1.0844	63.65556	51.60000	0.00000	0.0	0.0	0.0	0.0 d
2.1689	62.57111	51.60000	0.00000	0.0	0.0	0.0	0.0 d
3.2533	61.48667	51.60000	0.00000	0.0	0.0	0.0	0.0 d
4.3378	60.40222	51.60000	0.00000	0.0	0.0	0.0	0.0 d
5.4222	59.31778	51.60000	0.00000	0.0	0.0	0.0	0.0 d
6.5067	58.23333	51.60000	0.00000	0.0	0.0	0.0	0.0 d
7.5911	57.14889	51.60000	0.00000	0.0	0.0	0.0	0.0 d
8.6756	56.06444	51.60000	0.00000	0.0	0.0	0.0	0.0 d
9.7600	54.98000	51.60000	0.00000	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: hf | Sub-structure:

Dist.	Coordinates			Displacements		Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
	x	y	z	x	y		
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	54.98000	51.60000	0.00000	0.0	0.0	0.0	0.0 d
1.0880	53.89200	51.60000	0.00000	0.0	0.0	0.0	0.0 d
2.1760	52.80400	51.60000	0.00000	0.0	0.0	0.0	0.0 d
3.2640	51.71600	51.60000	0.00000	0.0	0.0	0.0	0.0 d
4.3520	50.62800	51.60000	0.00000	0.0	0.0	0.0	0.0 d
5.4400	49.54000	51.60000	0.00000	0.0	0.0	0.0	0.0 d
6.5280	48.45200	51.60000	0.00000	0.0	0.0	0.0	0.0 d
7.6160	47.36400	51.60000	0.00000	0.0	0.0	0.0	0.0 d
8.7040	46.27600	51.60000	0.00000	0.0	0.0	0.0	0.0 d
9.7920	45.18800	51.60000	0.00000	0.0	0.0	0.0	0.0 d
10.880	44.10000	51.60000	0.00000	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: de | Sub-structure:

Dist.	Coordinates			Displacements		Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
	x	y	z	x	y		
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	65.00000	52.00000	0.00000	0.0	0.0	0.0	0.0
0.11927	64.93500	51.90000	0.00000	0.0	0.0	0.0	0.0
0.23854	64.87000	51.80000	0.00000	0.0	0.0	0.0	0.0
0.35781	64.80500	51.70000	0.00000	0.0	0.0	0.0	0.0
0.47707	64.74000	51.60000	0.00000	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Specific Building Damage Results - Vertical Displacements

Structure: 21-20 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
	[m]	[m]	[m]	[mm]
0.0	55.96000	70.70000	0.00000	-0.27114 d
1.0682	54.89182	70.70182	0.00000	-0.26680 d
2.1364	53.82364	70.70364	0.00000	-0.26059 d
3.2046	52.75545	70.70545	0.00000	-0.25286 d
4.2727	51.68727	70.70727	0.00000	-0.24389 d
5.3409	50.61909	70.70909	0.00000	-0.23391 d
6.4091	49.55091	70.71091	0.00000	-0.22305 d
7.4773	48.48273	70.71273	0.00000	-0.21137 d

8.5455 47.41455 70.71455 0.00000 -0.19890 d
 9.6137 46.34636 70.71636 0.00000 -0.18558 d
 10.682 45.27818 70.71818 0.00000 -0.17136 d
 11.750 44.21000 70.72000 0.00000 -0.15621 d
 d - Displacements include imported displacements.

Structure: 19-20 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0 59.14000 66.79000 0.00000 -0.79498 d
 1.0080 58.50400 67.57200 0.00000 -0.65059 d
 2.0160 57.86800 68.35400 0.00000 -0.52992 d
 3.0239 57.23200 69.13600 0.00000 -0.42864 d
 4.0319 56.59600 69.91800 0.00000 -0.34329 d
 5.0399 55.96000 70.70000 0.00000 -0.27114 d
 d - Displacements include imported displacements.

Structure: 19-18 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0 59.14000 66.79000 0.00000 -0.79498 d
 1.0051 59.15500 65.78500 0.00000 -1.0312 d
 2.0102 59.17000 64.78000 0.00000 -1.3385 d
 d - Displacements include imported displacements.

Structure: 18-13 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0 59.17000 64.78000 0.00000 -1.3385 d
 1.0686 58.10143 64.78143 0.00000 -1.3304 d
 2.1371 57.03286 64.78286 0.00000 -1.3092 d
 3.2057 55.96429 64.78429 0.00000 -1.2784 d
 4.2743 54.89571 64.78571 0.00000 -1.2415 d
 5.3429 53.82714 64.78714 0.00000 -1.2016 d
 6.4114 52.75857 64.78857 0.00000 -1.1610 d
 7.4800 51.69000 64.79000 0.00000 -1.1216 d
 8.5486 50.62143 64.79143 0.00000 -1.0841 d
 9.6172 49.55286 64.79286 0.00000 -1.0487 d
 10.686 48.48429 64.79429 0.00000 -1.0149 d
 11.754 47.41571 64.79571 0.00000 -0.98148 d
 12.823 46.34714 64.79714 0.00000 -0.94662 d
 13.891 45.27857 64.79857 0.00000 -0.90817 d
 14.960 44.21000 64.80000 0.00000 -0.86377 d
 d - Displacements include imported displacements.

Structure: 21-a | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0 44.21000 70.72000 0.00000 -0.15621 d
 0.34768 44.20559 70.37235 0.00000 0.0
 0.69535 44.20118 70.02471 0.00000 0.0
 1.0430 44.19676 69.67706 0.00000 0.0
 1.3907 44.19235 69.32941 0.00000 0.0
 1.7384 44.18794 68.98176 0.00000 0.0
 2.0861 44.18353 68.63412 0.00000 0.0
 2.4337 44.17912 68.28647 0.00000 0.0
 2.7814 44.17471 67.93882 0.00000 0.0

3.1291	44.17029	67.59118	0.00000	0.0
3.4768	44.16588	67.24353	0.00000	0.0
3.8244	44.16147	66.89588	0.00000	0.0
4.1721	44.15706	66.54824	0.00000	0.0
4.5198	44.15265	66.20059	0.00000	0.0
4.8675	44.14824	65.85294	0.00000	0.0
5.2151	44.14382	65.50529	0.00000	0.0
5.5628	44.13941	65.15765	0.00000	0.0
5.9105	44.13500	64.81000	0.00000	0.0
6.2582	44.13059	64.46235	0.00000	0.0
6.6058	44.12618	64.11471	0.00000	0.0
6.9535	44.12176	63.76706	0.00000	0.0
7.3012	44.11735	63.41941	0.00000	0.0
7.6489	44.11294	63.07176	0.00000	0.0
7.9965	44.10853	62.72412	0.00000	0.0
8.3442	44.10412	62.37647	0.00000	0.0
8.6919	44.09971	62.02882	0.00000	0.0
9.0396	44.09529	61.68118	0.00000	0.0
9.3872	44.09088	61.33353	0.00000	0.0
9.7349	44.08647	60.98588	0.00000	0.0
10.083	44.08206	60.63824	0.00000	0.0
10.430	44.07765	60.29059	0.00000	0.0
10.778	44.07324	59.94294	0.00000	0.0
11.126	44.06882	59.59529	0.00000	0.0
11.473	44.06441	59.24765	0.00000	0.0
11.821	44.06000	58.90000	0.00000	0.0

d - Displacements include imported displacements.

Structure: f-50 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	44.10000	51.60000	0.00000	-6.3603 d
0.99267	44.10400	50.60733	0.00000	0.0
1.9853	44.10800	49.61467	0.00000	0.0
2.9780	44.11200	48.62200	0.00000	0.0
3.9707	44.11600	47.62933	0.00000	0.0
4.9634	44.12000	46.63667	0.00000	0.0
5.9560	44.12400	45.64400	0.00000	0.0
6.9487	44.12800	44.65133	0.00000	0.0
7.9414	44.13200	43.65867	0.00000	0.0
8.9341	44.13600	42.66600	0.00000	0.0
9.9267	44.14000	41.67333	0.00000	0.0
10.919	44.14400	40.68067	0.00000	0.0
11.912	44.14800	39.68800	0.00000	0.0
12.905	44.15200	38.69533	0.00000	0.0
13.897	44.15600	37.70267	0.00000	0.0
14.890	44.16000	36.71000	0.00000	-0.037920 d

d - Displacements include imported displacements.

Structure: 14-15 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	55.00000	64.76000	0.00000	-1.2531 d
1.0700	55.00000	63.69000	0.00000	-1.6274 d
2.1400	55.00000	62.62000	0.00000	-2.1213 d

d - Displacements include imported displacements.

Structure: 15-16 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	55.00000	62.62000	0.00000	-2.1213 d
1.6907	56.23000	61.46000	0.00000	-3.0094 d

d - Displacements include imported displacements.

Structure: 16-17 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0 56.23000 61.46000 0.00000 -3.0094 d
1.9000 56.22000 59.56000 0.00000 -5.2339 d

d - Displacements include imported displacements.

Structure: 17-g | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0 56.22000 59.56000 0.00000 -5.2339 d
1.6125 55.10000 58.40000 0.00000 -7.8766 d

d - Displacements include imported displacements.

Structure: h-49 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0 54.98000 51.60000 0.00000 -7.5630 d
1.0678 55.74000 50.85000 0.00000 -5.7131 d
2.1355 56.50000 50.10000 0.00000 -4.5870 d

d - Displacements include imported displacements.

Structure: 49-36 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0 56.50000 50.10000 0.00000 -4.5870 d
1.1950 56.50000 48.90500 0.00000 -3.2085 d
2.3900 56.50000 47.71000 0.00000 -2.3132 d

d - Displacements include imported displacements.

Structure: 36-48 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0 56.50000 47.71000 0.00000 -2.3132 d
1.1506 55.73000 46.85500 0.00000 -1.8203 d
2.3012 54.96000 46.00000 0.00000 -1.4426 d

d - Displacements include imported displacements.

Structure: 48-47 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0 54.96000 46.00000 0.00000 -1.4426 d
1.1700 54.96000 44.83000 0.00000 -1.0804 d

d - Displacements include imported displacements.

Structure: 47-51 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	54.96000	44.83000	0.00000	-1.0804	d
1.0750	53.88500	44.83000	0.00000	-1.0557	d
2.1500	52.81000	44.83000	0.00000	-1.0277	d
3.2250	51.73500	44.83000	0.00000	-0.99832	d
4.3000	50.66000	44.83000	0.00000	-0.96871	d
5.3750	49.58500	44.83000	0.00000	-0.93938	d
6.4500	48.51000	44.83000	0.00000	-0.91016	d
7.5250	47.43500	44.83000	0.00000	-0.88030	d
8.6000	46.36000	44.83000	0.00000	-0.84848	d
9.6750	45.28500	44.83000	0.00000	-0.81302	d
10.7500	44.21000	44.83000	0.00000	-0.77209	d

d - Displacements include imported displacements.

Structure: 50-46 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	44.16000	36.71000	0.00000	-0.037920	d
1.0800	45.24000	36.71000	0.00000	-0.046445	d
2.1600	46.32000	36.71000	0.00000	-0.054419	d
3.2400	47.40000	36.71000	0.00000	-0.061801	d
4.3200	48.48000	36.71000	0.00000	-0.068557	d
5.4000	49.56000	36.71000	0.00000	-0.074647	d
6.4800	50.64000	36.71000	0.00000	-0.080021	d
7.5600	51.72000	36.71000	0.00000	-0.084612	d
8.6400	52.80000	36.71000	0.00000	-0.088333	d
9.7200	53.88000	36.71000	0.00000	-0.091080	d
10.8000	54.96000	36.71000	0.00000	-0.092738	d

d - Displacements include imported displacements.

Structure: 46-47 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	54.96000	36.71000	0.00000	-0.092738	d
1.0150	54.96000	37.72500	0.00000	-0.14413	d
2.0300	54.96000	38.74000	0.00000	-0.20736	d
3.0450	54.96000	39.75500	0.00000	-0.28534	d
4.0600	54.96000	40.77000	0.00000	-0.38183	d
5.0750	54.96000	41.78500	0.00000	-0.50177	d
6.0900	54.96000	42.80000	0.00000	-0.65173	d
7.1050	54.96000	43.81500	0.00000	-0.84056	d
8.1200	54.96000	44.83000	0.00000	-1.0804	d

d - Displacements include imported displacements.

Structure: 24-25 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	78.82000	63.10000	0.00000	-0.028575	d
1.0289	79.84889	63.09667	0.00000	-0.0011128	d
2.0578	80.87778	63.09333	0.00000	0.021153	d
3.0867	81.90667	63.09000	0.00000	0.039123	d
4.1156	82.93556	63.08667	0.00000	0.053537	d
5.1445	83.96444	63.08333	0.00000	0.065005	d
6.1734	84.99333	63.08000	0.00000	0.074029	d
7.2023	86.02222	63.07667	0.00000	0.081025	d

8.2312 87.05111 63.07333 0.00000 0.086336 d
9.2600 88.08000 63.07000 0.00000 0.090249 d
d - Displacements include imported displacements.

Structure: 25-26 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0 88.08000 63.07000 0.00000 0.090249 d
1.0641 88.06400 62.00600 0.00000 0.089082 d
2.1282 88.04800 60.94200 0.00000 0.087978 d
3.1924 88.03200 59.87800 0.00000 0.086977 d
4.2565 88.01600 58.81400 0.00000 0.086118 d
5.3206 88.00000 57.75000 0.00000 0.085435 d
d - Displacements include imported displacements.

Structure: 26-27 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0 88.00000 57.75000 0.00000 0.085435 d
1.0246 86.97545 57.76364 0.00000 0.079687 d
2.0493 85.95091 57.77727 0.00000 0.072037 d
3.0739 84.92636 57.79091 0.00000 0.062052 d
4.0985 83.90182 57.80455 0.00000 0.049190 d
5.1232 82.87727 57.81818 0.00000 0.032770 d
6.1478 81.85273 57.83182 0.00000 0.011925 d
7.1725 80.82818 57.84545 0.00000 -0.014454 d
8.1971 79.80364 57.85909 0.00000 -0.047810 d
9.2217 78.77909 57.87273 0.00000 -0.090033 d
10.246 77.75455 57.88636 0.00000 -0.14364 d
11.271 76.73000 57.90000 0.00000 -0.21204 d
d - Displacements include imported displacements.

Structure: 27-28 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0 76.73000 57.90000 0.00000 -0.21204 d
1.0567 76.72333 58.95667 0.00000 -0.19623 d
2.1134 76.71667 60.01333 0.00000 -0.17647 d
3.1701 76.71000 61.07000 0.00000 -0.15389 d
d - Displacements include imported displacements.

Structure: 28-29 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0 76.71000 61.07000 0.00000 -0.15389 d
1.4640 77.76500 62.08500 0.00000 -0.081545 d
2.9280 78.82000 63.10000 0.00000 -0.028575 d
d - Displacements include imported displacements.

Structure: 27-32 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

Dist.	x	y	z	z	
[m]	[m]	[m]	[m]	[mm]	
0.0	76.73000	57.90000	0.00000	-0.21204	d
1.0300	76.73400	56.87000	0.00000	-0.22286	d
2.0600	76.73800	55.84000	0.00000	-0.22827	d
3.0900	76.74200	54.81000	0.00000	-0.22791	d
4.1200	76.74600	53.78000	0.00000	-0.22180	d
5.1500	76.75000	52.75000	0.00000	-0.21038	d

d - Displacements include imported displacements.

Structure: 33-31 | Sub-structure:

Dist.	Coordinates			Displacements	
	x	y	z	z	
[m]	[m]	[m]	[m]	[mm]	
Vertical Offset 1					
0.0	87.93000	52.75000	0.00000	0.085219	d
1.0400	86.89000	52.75000	0.00000	0.079268	d
2.0800	85.85000	52.75000	0.00000	0.071324	d
3.1200	84.81000	52.75000	0.00000	0.060925	d
4.1600	83.77000	52.75000	0.00000	0.047489	d
5.2000	82.73000	52.75000	0.00000	0.030283	d
6.2400	81.69000	52.75000	0.00000	0.0083679	d
7.2800	80.65000	52.75000	0.00000	-0.019466	d
8.3200	79.61000	52.75000	0.00000	-0.054798	d
9.3600	78.57000	52.75000	0.00000	-0.099718	d
10.400	77.53000	52.75000	0.00000	-0.15702	d
11.440	76.49000	52.75000	0.00000	-0.23053	d
12.480	75.45000	52.75000	0.00000	-0.32552	d
13.520	74.41000	52.75000	0.00000	-0.44944	d
14.560	73.37000	52.75000	0.00000	-0.61300	d
15.600	72.33000	52.75000	0.00000	-0.83195	d
16.640	71.29000	52.75000	0.00000	-1.1300	d
17.680	70.25000	52.75000	0.00000	-1.5441	d

d - Displacements include imported displacements.

Structure: 31-34 | Sub-structure:

Dist.	Coordinates			Displacements	
	x	y	z	z	
[m]	[m]	[m]	[m]	[mm]	
Vertical Offset 1					
0.0	70.25000	52.75000	0.00000	-1.5441	d
1.1236	70.22667	51.62667	0.00000	-1.3655	d
2.2472	70.20333	50.50333	0.00000	-1.1657	d
3.3707	70.18000	49.38000	0.00000	-0.96846	d

d - Displacements include imported displacements.

Structure: 34-35 | Sub-structure:

Dist.	Coordinates			Displacements	
	x	y	z	z	
[m]	[m]	[m]	[m]	[mm]	
Vertical Offset 1					
0.0	70.18000	49.38000	0.00000	-0.96846	d
1.3300	71.51000	49.37000	0.00000	-0.69581	d

d - Displacements include imported displacements.

Structure: 35-41 | Sub-structure:

Dist.	Coordinates			Displacements	
	x	y	z	z	
[m]	[m]	[m]	[m]	[mm]	
Vertical Offset 1					
0.0	71.51000	49.37000	0.00000	-0.69581	d
1.2000	71.50000	48.17000	0.00000	-0.56833	d
2.4001	71.49000	46.97000	0.00000	-0.45336	d
3.6001	71.48000	45.77000	0.00000	-0.35321	d

d - Displacements include imported displacements.

Structure: 41-40 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	71.48000	45.77000	0.00000	-0.35321	d
1.0175	70.46250	45.77000	0.00000	-0.43945	d
2.0350	69.44500	45.77000	0.00000	-0.53618	d
3.0525	68.42750	45.77000	0.00000	-0.64213	d
4.0700	67.41000	45.77000	0.00000	-0.75474	d

d - Displacements include imported displacements.

Structure: 40-39 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	67.41000	45.77000	0.00000	-0.75474	d
1.3000	67.40333	44.47000	0.00000	-0.54746	d
2.6000	67.39667	43.17000	0.00000	-0.39163	d
3.9001	67.39000	41.87000	0.00000	-0.27325	d

d - Displacements include imported displacements.

Structure: 39-38 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	67.39000	41.87000	0.00000	-0.27325	d
1.0305	68.42050	41.86150	0.00000	-0.23240	d
2.0611	69.45100	41.85300	0.00000	-0.19266	d
3.0916	70.48150	41.84450	0.00000	-0.15485	d
4.1221	71.51200	41.83600	0.00000	-0.11958	d
5.1527	72.54250	41.82750	0.00000	-0.087261	d
6.1832	73.57300	41.81900	0.00000	-0.058092	d
7.2137	74.60350	41.81050	0.00000	-0.032127	d
8.2443	75.63400	41.80200	0.00000	-0.0092967	d
9.2748	76.66450	41.79350	0.00000	0.010553	d
10.305	77.69500	41.78500	0.00000	0.027628	d
11.336	78.72550	41.77650	0.00000	0.042165	d
12.366	79.75600	41.76800	0.00000	0.054408	d
13.397	80.78650	41.75950	0.00000	0.064603	d
14.427	81.81700	41.75100	0.00000	0.072983	d
15.458	82.84750	41.74250	0.00000	0.079767	d
16.489	83.87800	41.73400	0.00000	0.085156	d
17.519	84.90850	41.72550	0.00000	0.089334	d
18.550	85.93900	41.71700	0.00000	0.092464	d
19.580	86.96950	41.70850	0.00000	0.094693	d
20.611	88.00000	41.70000	0.00000	0.096148	d

d - Displacements include imported displacements.

Structure: 38-25 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	88.00000	41.70000	0.00000	0.096148	d
1.0176	88.00381	42.71762	0.00000	0.095301	d
2.0353	88.00762	43.73524	0.00000	0.094344	d
3.0529	88.01143	44.75286	0.00000	0.093303	d
4.0705	88.01524	45.77048	0.00000	0.092203	d
5.0881	88.01905	46.78810	0.00000	0.091078	d
6.1058	88.02286	47.80571	0.00000	0.089960	d
7.1234	88.02667	48.82333	0.00000	0.088885	d
8.1410	88.03048	49.84095	0.00000	0.087887	d
9.1586	88.03429	50.85857	0.00000	0.087001	d

10.176	88.03810	51.87619	0.00000	0.086258	d
11.194	88.04190	52.89381	0.00000	0.085684	d
12.212	88.04571	53.91143	0.00000	0.085301	d
13.229	88.04952	54.92905	0.00000	0.085123	d
14.247	88.05333	55.94667	0.00000	0.085155	d
15.264	88.05714	56.96429	0.00000	0.085397	d
16.282	88.06095	57.98190	0.00000	0.085839	d
17.300	88.06476	58.99952	0.00000	0.086463	d
18.317	88.06857	60.01714	0.00000	0.087247	d
19.335	88.07238	61.03476	0.00000	0.088161	d
20.353	88.07619	62.05238	0.00000	0.089173	d
21.370	88.08000	63.07000	0.00000	0.090249	d

d - Displacements include imported displacements.

Structure: 20-22 | Sub-structure:

Dist.	Coordinates			Displacements
[m]	x	y	z	z
	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	55.96000	70.70000	0.00000	-0.27114	d
1.0170	56.97700	70.69900	0.00000	-0.27313	d
2.0340	57.99400	70.69800	0.00000	-0.27275	d
3.0510	59.01100	70.69700	0.00000	-0.26973	d
4.0680	60.02800	70.69600	0.00000	-0.26382	d
5.0850	61.04500	70.69500	0.00000	-0.25490	d
6.1020	62.06200	70.69400	0.00000	-0.24294	d
7.1190	63.07900	70.69300	0.00000	-0.22805	d
8.1360	64.09600	70.69200	0.00000	-0.21051	d
9.1530	65.11300	70.69100	0.00000	-0.19069	d
10.170	66.13000	70.69000	0.00000	-0.16910	d

d - Displacements include imported displacements.

Structure: 22-b | Sub-structure:

Dist.	Coordinates			Displacements
[m]	x	y	z	z
	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	66.13000	70.69000	0.00000	-0.16910	d
0.69360	66.14000	69.99647	0.00000	0.0	
1.3872	66.15000	69.30294	0.00000	0.0	
2.0808	66.16000	68.60941	0.00000	0.0	
2.7744	66.17000	67.91588	0.00000	0.0	
3.4680	66.18000	67.22235	0.00000	0.0	
4.1616	66.19000	66.52882	0.00000	0.0	
4.8552	66.20000	65.83529	0.00000	0.0	
5.5488	66.21000	65.14176	0.00000	0.0	
6.2424	66.22000	64.44824	0.00000	0.0	
6.9360	66.23000	63.75471	0.00000	0.0	
7.6296	66.24000	63.06118	0.00000	0.0	
8.3232	66.25000	62.36765	0.00000	0.0	
9.0168	66.26000	61.67412	0.00000	0.0	
9.7104	66.27000	60.98059	0.00000	0.0	
10.404	66.28000	60.28706	0.00000	0.0	
11.098	66.29000	59.59353	0.00000	0.0	
11.791	66.30000	58.90000	0.00000	0.0	

d - Displacements include imported displacements.

Structure: e-45 | Sub-structure:

Dist.	Coordinates			Displacements
[m]	x	y	z	z
	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	64.74000	51.60000	0.00000	-6.0573	d
0.98415	64.72267	50.61600	0.00000	0.0	
1.9683	64.70533	49.63200	0.00000	0.0	
2.9525	64.68800	48.64800	0.00000	0.0	
3.9366	64.67067	47.66400	0.00000	0.0	
4.9208	64.65333	46.68000	0.00000	0.0	

5.9049	64.63600	45.69600	0.00000	0.0
6.8891	64.61867	44.71200	0.00000	0.0
7.8732	64.60133	43.72800	0.00000	0.0
8.8574	64.58400	42.74400	0.00000	0.0
9.8415	64.56667	41.76000	0.00000	0.0
10.826	64.54933	40.77600	0.00000	0.0
11.810	64.53200	39.79200	0.00000	0.0
12.794	64.51467	38.80800	0.00000	0.0
13.778	64.49733	37.82400	0.00000	0.0
14.762	64.48000	36.84000	0.00000	-0.053274 d

d - Displacements include imported displacements.

Structure: 18-31 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]
Vertical Offset 1				
0.0	59.17000	64.78000	0.00000	-1.3385 d
1.1384	60.30833	64.77333	0.00000	-1.3302 d
2.2767	61.44667	64.76667	0.00000	-1.2991 d
3.4151	62.58500	64.76000	0.00000	-1.2425 d
4.5534	63.72333	64.75333	0.00000	-1.1607 d
5.6918	64.86167	64.74667	0.00000	-1.0565 d
6.8301	66.00000	64.74000	0.00000	-0.93614 d

d - Displacements include imported displacements.

Structure: 23-24 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]
Vertical Offset 1				
0.0	66.00000	63.14000	0.00000	-1.4239 d
1.0683	67.06833	63.13667	0.00000	-1.2177 d
2.1367	68.13667	63.13333	0.00000	-1.0156 d
3.2050	69.20500	63.13000	0.00000	-0.82905 d
4.2734	70.27333	63.12667	0.00000	-0.66434 d
5.3417	71.34167	63.12333	0.00000	-0.52332 d
6.4100	72.41000	63.12000	0.00000	-0.40500 d
7.4784	73.47833	63.11667	0.00000	-0.30701 d
8.5467	74.54667	63.11333	0.00000	-0.22653 d
9.6150	75.61500	63.11000	0.00000	-0.16077 d
10.683	76.68333	63.10667	0.00000	-0.10723 d
11.752	77.75167	63.10333	0.00000	-0.063766 d
12.820	78.82000	63.10000	0.00000	-0.028575 d

d - Displacements include imported displacements.

Structure: b-27 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]
Vertical Offset 1				
0.0	66.10000	58.46000	0.00000	-5.8444 d
1.0645	67.16300	58.40400	0.00000	-3.9432 d
2.1289	68.22600	58.34800	0.00000	-2.7785 d
3.1934	69.28900	58.29200	0.00000	-1.9978 d
4.2579	70.35200	58.23600	0.00000	-1.4543 d
5.3224	71.41500	58.18000	0.00000	-1.0668 d
6.3868	72.47800	58.12400	0.00000	-0.78525 d
7.4513	73.54100	58.06800	0.00000	-0.57720 d
8.5158	74.60400	58.01200	0.00000	-0.42124 d
9.5803	75.66700	57.95600	0.00000	-0.30285 d
10.645	76.73000	57.90000	0.00000	-0.21204 d

d - Displacements include imported displacements.

Structure: 42-37 | Sub-structure:

Dist.	Coordinates			Displacements
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	x	y	z	z
[m]	[m]	[m]	[m]	[mm]
Vertical Offset 1				
0.0	64.54000	46.73000	0.00000	-1.3803 d
1.0183	65.55826	46.71783	0.00000	-1.2305 d
2.0367	66.57652	46.70565	0.00000	-1.0736 d
3.0550	67.59478	46.69348	0.00000	-0.91733 d
4.0733	68.61304	46.68130	0.00000	-0.76884 d
5.0917	69.63130	46.66913	0.00000	-0.63297 d
6.1100	70.64957	46.65696	0.00000	-0.51230 d
7.1283	71.66783	46.64478	0.00000	-0.40747 d
8.1467	72.68609	46.63261	0.00000	-0.31786 d
9.1650	73.70435	46.62043	0.00000	-0.24212 d
10.183	74.72261	46.60826	0.00000	-0.17862 d
11.202	75.74087	46.59609	0.00000	-0.12572 d
12.220	76.75913	46.58391	0.00000	-0.081833 d
13.238	77.77739	46.57174	0.00000	-0.045578 d
14.257	78.79565	46.55957	0.00000	-0.015740 d
15.275	79.81391	46.54739	0.00000	0.0087193 d
16.293	80.83217	46.53522	0.00000	0.028677 d
17.312	81.85043	46.52304	0.00000	0.044869 d
18.330	82.86870	46.51087	0.00000	0.057913 d
19.348	83.88696	46.49870	0.00000	0.068324 d
20.367	84.90522	46.48652	0.00000	0.076535 d
21.385	85.92348	46.47435	0.00000	0.082905 d
22.403	86.94174	46.46217	0.00000	0.087738 d
23.422	87.96000	46.45000	0.00000	0.091286 d

d - Displacements include imported displacements.

Structure: 47-43 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]
Vertical Offset 1				
0.0	54.96000	44.83000	0.00000	-1.0804 d
1.0600	56.02000	44.83000	0.00000	-1.0993 d
2.1200	57.08000	44.83000	0.00000	-1.1104 d
3.1800	58.14000	44.83000	0.00000	-1.1113 d
4.2400	59.20000	44.83000	0.00000	-1.1002 d
5.3000	60.26000	44.83000	0.00000	-1.0758 d
6.3600	61.32000	44.83000	0.00000	-1.0373 d
7.4200	62.38000	44.83000	0.00000	-0.98474 d
8.4800	63.44000	44.83000	0.00000	-0.91914 d
9.5400	64.50000	44.83000	0.00000	-0.84229 d

d - Displacements include imported displacements.

Structure: 44-39 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]
Vertical Offset 1				
0.0	64.44000	41.91000	0.00000	-0.38860 d
1.4751	65.91500	41.89000	0.00000	-0.33236 d
2.9503	67.39000	41.87000	0.00000	-0.27325 d

d - Displacements include imported displacements.

Structure: 46-45 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]
Vertical Offset 1				
0.0	54.96000	36.71000	0.00000	-0.092738 d
1.0579	56.01778	36.72444	0.00000	-0.093855 d
2.1158	57.07556	36.73889	0.00000	-0.093707 d
3.1736	58.13333	36.75333	0.00000	-0.092194 d
4.2315	59.19111	36.76778	0.00000	-0.089243 d
5.2894	60.24889	36.78222	0.00000	-0.084815 d

6.3473 61.30667 36.79667 0.00000 -0.078919 d
 7.4051 62.36444 36.81111 0.00000 -0.071615 d
 8.4630 63.42222 36.82556 0.00000 -0.063013 d
 9.5209 64.48000 36.84000 0.00000 -0.053274 d
 d - Displacements include imported displacements.

Structure: a-12 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	44.06000	58.90000	0.00000	0.0
1.1151	42.95250	58.77000	0.00000	0.0
2.2302	41.84500	58.64000	0.00000	0.0
3.3453	40.73750	58.51000	0.00000	0.0
4.4604	39.63000	58.38000	0.00000	-4.2314 d

d - Displacements include imported displacements.

Structure: 12-11 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	39.63000	58.38000	0.00000	-4.2314 d
1.1167	39.63000	57.26333	0.00000	-5.8849 d
2.2333	39.63000	56.14667	0.00000	-6.4592 d
3.3500	39.63000	55.03000	0.00000	-6.6474 d
4.4667	39.63000	53.91333	0.00000	-6.5018 d
5.5833	39.63000	52.79667	0.00000	-5.9664 d
6.7000	39.63000	51.68000	0.00000	-4.2903 d

d - Displacements include imported displacements.

Structure: 11-f | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	39.63000	51.68000	0.10000	0.0
0.55884	40.18875	51.67000	0.10000	0.0
1.1177	40.74750	51.66000	0.10000	0.0
1.6765	41.30625	51.65000	0.10000	0.0
2.2354	41.86500	51.64000	0.10000	0.0
2.7942	42.42375	51.63000	0.10000	0.0
3.3530	42.98250	51.62000	0.10000	0.0
3.9119	43.54125	51.61000	0.10000	0.0
4.4707	44.10000	51.60000	0.10000	0.0

Structure: ag | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	44.06000	58.90000	0.00000	0.0
1.0047	45.06364	58.85455	0.00000	0.0
2.0093	46.06727	58.80909	0.00000	0.0
3.0140	47.07091	58.76364	0.00000	0.0
4.0187	48.07455	58.71818	0.00000	0.0
5.0233	49.07818	58.67273	0.00000	0.0
6.0280	50.08182	58.62727	0.00000	0.0
7.0327	51.08545	58.58182	0.00000	0.0
8.0373	52.08909	58.53636	0.00000	0.0
9.0420	53.09273	58.49091	0.00000	0.0
10.047	54.09636	58.44545	0.00000	0.0
11.051	55.10000	58.40000	0.00000	-7.8766 d

d - Displacements include imported displacements.

Structure: gb | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]
Vertical Offset 1				
0.0	55.10000	58.40000	0.00000	-7.8766 d
0.57001	55.67000	58.40300	0.00000	0.0
1.1400	56.24000	58.40600	0.00000	0.0
1.7100	56.81000	58.40900	0.00000	0.0
2.2800	57.38000	58.41200	0.00000	0.0
2.8500	57.95000	58.41500	0.00000	0.0
3.4200	58.52000	58.41800	0.00000	0.0
3.9901	59.09000	58.42100	0.00000	0.0
4.5601	59.66000	58.42400	0.00000	0.0
5.1301	60.23000	58.42700	0.00000	0.0
5.7001	60.80000	58.43000	0.00000	0.0
6.2701	61.37000	58.43300	0.00000	0.0
6.8401	61.94000	58.43600	0.00000	0.0
7.4101	62.51000	58.43900	0.00000	0.0
7.9801	63.08000	58.44200	0.00000	0.0
8.5501	63.65000	58.44500	0.00000	0.0
9.1201	64.22000	58.44800	0.00000	0.0
9.6901	64.79000	58.45100	0.00000	0.0
10.260	65.36000	58.45400	0.00000	0.0
10.830	65.93000	58.45700	0.00000	0.0
11.400	66.50000	58.46000	0.00000	0.0

d - Displacements include imported displacements.

Structure: bc | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]
Vertical Offset 1				
0.0	66.50000	58.46000	0.00000	0.0
0.27800	66.50000	58.18200	0.00000	0.0
0.55600	66.50000	57.90400	0.00000	0.0
0.83400	66.50000	57.62600	0.00000	0.0
1.1120	66.50000	57.34800	0.00000	0.0
1.3900	66.50000	57.07000	0.00000	0.0
1.6680	66.50000	56.79200	0.00000	0.0
1.9460	66.50000	56.51400	0.00000	0.0
2.2240	66.50000	56.23600	0.00000	0.0
2.5020	66.50000	55.95800	0.00000	0.0
2.7800	66.50000	55.68000	0.00000	0.0
3.0580	66.50000	55.40200	0.00000	0.0
3.3360	66.50000	55.12400	0.00000	0.0
3.6140	66.50000	54.84600	0.00000	0.0
3.8920	66.50000	54.56800	0.00000	0.0
4.1700	66.50000	54.29000	0.00000	0.0
4.4480	66.50000	54.01200	0.00000	0.0
4.7260	66.50000	53.73400	0.00000	0.0
5.0040	66.50000	53.45600	0.00000	0.0
5.2820	66.50000	53.17800	0.00000	0.0
5.5600	66.50000	52.90000	0.00000	0.0

Structure: cd | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]
Vertical Offset 1				
0.0	66.50000	52.90000	0.00000	0.0
1.7493	65.00000	52.00000	0.00000	0.0

Structure: eh | Sub-structure:

Dist.	Coordinates	Displacements
-------	-------------	---------------

	x	y	z	z	
[m]	[m]	[m]	[m]	[mm]	
Vertical Offset 1					
0.0	64.74000	51.60000	0.00000	-6.0573	d
1.0844	63.65556	51.60000	0.00000	-6.8685	d
2.1689	62.57111	51.60000	0.00000	-7.3740	d
3.2533	61.48667	51.60000	0.00000	-7.6655	d
4.3378	60.40222	51.60000	0.00000	-7.9454	d
5.4222	59.31778	51.60000	0.00000	-9.1622	d
6.5067	58.23333	51.60000	0.00000	-9.2229	d
7.5911	57.14889	51.60000	0.00000	-8.9669	d
8.6756	56.06444	51.60000	0.00000	-8.5237	d
9.7600	54.98000	51.60000	0.00000	-7.5630	d

d - Displacements include imported displacements.

Structure: hf | Sub-structure:

Dist.	Coordinates			Displacements	
	x	y	z	z	
[m]	[m]	[m]	[m]	[mm]	
Vertical Offset 1					
0.0	54.98000	51.60000	0.00000	-7.5630	d
1.0880	53.89200	51.60000	0.00000	-6.6401	d
2.1760	52.80400	51.60000	0.00000	-6.2342	d
3.2640	51.71600	51.60000	0.00000	-5.9874	d
4.3520	50.62800	51.60000	0.00000	-5.8251	d
5.4400	49.54000	51.60000	0.00000	-5.7184	d
6.5280	48.45200	51.60000	0.00000	-5.6548	d
7.6160	47.36400	51.60000	0.00000	-5.6306	d
8.7040	46.27600	51.60000	0.00000	-5.6509	d
9.7920	45.18800	51.60000	0.00000	-5.7493	d
10.880	44.10000	51.60000	0.00000	-6.3603	d

d - Displacements include imported displacements.

Structure: de | Sub-structure:

Dist.	Coordinates			Displacements	
	x	y	z	z	
[m]	[m]	[m]	[m]	[mm]	
Vertical Offset 1					
0.0	65.00000	52.00000	0.00000	0.0	
0.11927	64.93500	51.90000	0.00000	0.0	
0.23854	64.87000	51.80000	0.00000	0.0	
0.35781	64.80500	51.70000	0.00000	0.0	
0.47707	64.74000	51.60000	0.00000	-6.0573	d

d - Displacements include imported displacements.

Specific Building Damage Results - All Segments

Structure: 21-20 | Sub-structure:

Vertical Offset	Segment	Start	Length	Curvature	Deflection	Average	Max	Max
Gradient Max	Min	Damage			Ratio	Horizontal	Tensile	of
from Line for	Category					Strain	Strain	
of Vertical	Radius of	Curvature						
Vertical	Displacement	Curve						
Horizontal	Curve							
Movement								
Displacement								
Calculations								
Curve								
[m]	[m]	[m]	[m]	[%]	[%]	[%]	[%]	
0.0		1	0.0	11.749	Hogging	127.73E-6	0.0	121.34E-6
0.0	-14.186E-6	583360.	0					

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 19-20 | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Radius of Vertical Horizontal Displacement Movement Displacement Calculations Curve	Segment Min Category	Start Damage	Length [m]	Curvature [m]	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of
[m]			[m]	[m]	[%]	[%]	[%]	
0.0	1	0.0	5.0389	Sagging	0.0011003	0.0	0.0010595	
0.0			0					

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 19-18 | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Radius of Vertical Horizontal Displacement Movement Displacement Calculations Curve	Segment Min Category	Start Damage	Length [m]	Curvature [m]	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of
[m]			[m]	[m]	[%]	[%]	[%]	
0.0	1	0.0	2.0092	Sagging	0.0017494	0.0	0.0017388	
0.0			0					

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 18-13 | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Radius of Vertical Horizontal Displacement Movement Displacement Calculations Curve	Segment Min Category	Start Damage	Length [m]	Curvature [m]	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max
[m]			[m]	[m]	[%]	[%]	[%]	
0.0	1	0.0	5.8485	Hogging	473.31E-6	0.0	467.24E-6	
0.0			0					
(Negligible)								
0.0	2	5.8485	4.9687	Sagging	101.72E-6	0.0	98.026E-6	
0.0			0					
(Negligible)								
0.0	3	10.817	4.1419	Hogging	168.93E-6	0.0	167.83E-6	
0.0			0					

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 21-a | Sub-structure:

Vertical Offset Gradient Max Gradient	Segment Min	Start Damage	Length	Curvature	Deflection	Average	Max	Max
--	----------------	-----------------	--------	-----------	------------	---------	-----	-----

from Line for of Vertical Horizontal Movement Displacement Calculations	Radius of Vertical Displacement Curve	Category	Start	Length	Curvature	Deflection	Average	Max	Max	of
			Damage			Ratio	Horizontal	Tensile		Curve
[m]	[m]		[m]	[m]		[%]	Strain	Strain		
0.0	0.0	1	0.0	0.0	None	0.0	0.0	0.0	0.0	
0.0	-449.30E-6	619.06			0					

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: f-50 | Sub-structure:

Vertical Offset Gradient from Line for of Vertical Horizontal Movement Displacement Calculations	Segment Max Gradient Radius of Vertical Displacement Curve	Segment Min Category	Start	Length	Curvature	Deflection	Average	Max	Max	of
			Damage			Ratio	Horizontal	Tensile		Curve
[m]	[m]		[m]	[m]		[%]	Strain	Strain		
0.0	0.0	1	0.0	0.0	None	0.0	0.0	0.0	0.0	
0.0	-0.0064073	123.94			0					

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 14-15 | Sub-structure:

Vertical Offset Gradient from Line for of Vertical Horizontal Movement Displacement Calculations	Segment Max Gradient Radius of Vertical Displacement Curve	Segment Min Category	Start	Length	Curvature	Deflection	Average	Max	Max	of
			Damage			Ratio	Horizontal	Tensile		Curve
[m]	[m]		[m]	[m]		[%]	Strain	Strain		
0.0	0.0	1	0.0	2.1390	Sagging	0.0027694	0.0	0.0027503		
0.0	461.65E-6	9561.4			0					

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 15-16 | Sub-structure:

Vertical Offset Gradient from Line for of Vertical Horizontal Movement Displacement Calculations	Segment Max Gradient Radius of Vertical Displacement Curve	Segment Min Category	Start	Length	Curvature	Deflection	Average	Max	Max	of
			Damage			Ratio	Horizontal	Tensile		Curve
[m]	[m]		[m]	[m]		[%]	Strain	Strain		
0.0	0.0	1	0.0	1.6897	Hogging	0.0	0.0	0.0		
0.0	525.29E-6	-			0					

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 16-17 | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Vertical Horizontal Displacement Movement Displacement Calculations	Segment Min Category	Start Damage	Length [m]	Curvature [m]	Deflection Ratio [%]	Average Horizontal Strain [%]	Max Tensile Strain [%]	Max of Curve
[m] 0.0 0.0 0.0011708 -	1	0.0	1.8990	None	0.0	0.0	0.0	

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 17-g | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Vertical Horizontal Displacement Movement Displacement Calculations	Segment Min Category	Start Damage	Length [m]	Curvature [m]	Deflection Ratio [%]	Average Horizontal Strain [%]	Max Tensile Strain [%]	Max of Curve
[m] 0.0 0.0 0.0016389 -	1	0.0	1.6115	None	0.0	0.0	0.0	

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: h-49 | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Vertical Horizontal Displacement Movement Displacement Calculations	Segment Min Category	Start Damage	Length [m]	Curvature [m]	Deflection Ratio [%]	Average Horizontal Strain [%]	Max Tensile Strain [%]	Max of Curve
[m] 0.0 0.0 -0.0017325	1	0.0	2.1345	Sagging	0.016784	0.0	0.016669	
	1574.4		0					

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 49-36 | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Vertical Horizontal Displacement Movement Displacement Calculations	Segment Min Category	Start Damage	Length [m]	Curvature [m]	Deflection Ratio [%]	Average Horizontal Strain [%]	Max Tensile Strain [%]	Max of Curve
[m] 0.0 0.0 -0.0011536	1	0.0	2.3890	Sagging	0.010013	0.0	0.0099270	
	2953.5		0					

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 36-48 | Sub-structure:

Vertical Offset Gradient	Max Gradient from Line for of Vertical Vertical Horizontal Displacement Movement Displacement Calculations Curve	Segment Min Radius of Category	Start Damage	Length [m]	Curvature [m]	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of
[m]	[m]			[m]	[m]	[%]	[%]	[%]	
0.0	0.0	1	0.0	2.3002	Sagging	0.0024770	0.0	0.0024573	
0.0	-428.36E-6	11496.		0					

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 48-47 | Sub-structure:

Vertical Offset Gradient	Max Gradient from Line for of Vertical Vertical Horizontal Displacement Movement Displacement Calculations Curve	Segment Min Radius of Category	Start Damage	Length [m]	Curvature [m]	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of Curve
[m]	[m]			[m]	[m]	[%]	[%]	[%]	
0.0	0.0	1	0.0	1.1690	Sagging	0.0	0.0	0.0	
0.0	-309.55E-6 -			0					

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 47-51 | Sub-structure:

Vertical Offset Gradient	Max Gradient from Line for of Vertical Vertical Horizontal Displacement Movement Displacement Calculations Curve	Segment Min Radius of Category	Start Damage	Length [m]	Curvature [m]	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max
[m]	[m]			[m]	[m]	[%]	[%]	[%]	
0.0	0.0	1	0.0	4.0555	Hogging	76.460E-6	0.0	75.996E-6	
0.0	-27.546E-6	310530.		0					
(Negligible)									
0.0	-27.546E-6	10.054E+6	2	4.0555	1.0695 Sagging	4.6026E-6	0.0	4.6134E-6	
(Negligible)									
0.0	-38.071E-6	194960.	3	5.1251	5.6239 Hogging	174.61E-6	0.0	172.56E-6	
(Negligible)									

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 50-46 | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Vertical	Segment Min Radius of Category	Start Damage	Length [m]	Curvature [m]	Deflection Ratio [%]	Average Horizontal Strain [%]	Max Tensile Strain [%]	Max of
0.0								

All settlements are less than the Settlement Trough Limit Sensitivity.
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 46-47 | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical	Segment Min Radius of Category	Start Damage	Length [m]	Curvature [m]	Deflection Ratio [%]	Average Horizontal Strain [%]	Max Tensile Strain [%]	Max
0.0			1.0150	7.1040	Sagging	0.0024893	0.0	0.0023122
0.0	236.30E-6	19051.		0				

(Negligible)
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 24-25 | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Vertical	Segment Min Radius of Category	Start Damage	Length [m]	Curvature [m]	Deflection Ratio [%]	Average Horizontal Strain [%]	Max Tensile Strain [%]	Max of
0.0								

All settlements are less than the Settlement Trough Limit Sensitivity.
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 25-26 | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Vertical	Segment Min Radius of Category	Start Damage	Length [m]	Curvature [m]	Deflection Ratio [%]	Average Horizontal Strain [%]	Max Tensile Strain [%]	Max of
0.0								

All settlements are less than the Settlement Trough Limit Sensitivity.
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 26-27 | Sub-structure:

Vertical Offset Gradient Max Gradient	Segment Min	Start Damage	Length	Curvature	Deflection	Average	Max	Max
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from Line for of Vertical Horizontal Movement Displacement Calculations	Radius of Vertical Displacement Curve	Category	Start	Length	Curvature	Deflection	Average	Max	Max	of
			Damage			Ratio	Horizontal	Tensile		Curve
[m]	[m]		[m]	[m]	[m]	[%]	Strain	Strain		
0.0	66.750E-6	67110.	1	10.246	1.0236	None	0.0	0.0	0.0	

(Negligible)
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 27-28 | Sub-structure:

Vertical Offset Gradient from Line for of Vertical Horizontal Movement Displacement Calculations Curve	Max Gradient	Segment Min	Start Damage	Length	Curvature	Deflection	Average	Max	Max	of
						Ratio	Horizontal	Tensile		Curve
[m]	[m]		[m]	[m]	[m]	[%]	Strain	Strain		
0.0	-21.366E-6	262860.	1	0.0	3.1691	Hogging	112.83E-6	0.0	112.40E-6	

(Negligible)
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 28-29 | Sub-structure:

Vertical Offset Gradient from Line for of Vertical Horizontal Movement Displacement Calculations Curve	Max Gradient	Segment Min	Start Damage	Length	Curvature	Deflection	Average	Max	Max	of
						Ratio	Horizontal	Tensile		Curve
[m]	[m]		[m]	[m]	[m]	[%]	Strain	Strain		
0.0	-49.416E-6	110580.	1	0.0	0.0	None	0.0	0.0	0.0	

(Negligible)
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 27-32 | Sub-structure:

Vertical Offset Gradient from Line for of Vertical Horizontal Movement Displacement Calculations Curve	Max Gradient	Segment Min	Start Damage	Length	Curvature	Deflection	Average	Max	Max	of
						Ratio	Horizontal	Tensile		Curve
[m]	[m]		[m]	[m]	[m]	[%]	Strain	Strain		
0.0	-11.092E-6	186980.	1	0.0	5.1490	Hogging	328.04E-6	0.0	324.76E-6	

(Negligible)
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 33-31 | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Vertical Horizontal Displacement Movement Displacement Calculations Curve	Segment Min Radius of	Start Damage Category	Length [m]	Curvature [m]	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max
[m]					[%]	[%]	[%]	
0.0		1	10.400	7.2790	Sagging	0.0046143	0.0	0.0042710
0.0	398.09E-6	8639.8		0				

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 31-34 | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Vertical Horizontal Displacement Movement Displacement Calculations Curve	Segment Min Radius of	Start Damage Category	Length [m]	Curvature [m]	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max
[m]					[%]	[%]	[%]	
0.0		1	0.0	2.5585	Hogging	450.37E-6	0.0	449.22E-6
0.0	-177.88E-6	46186.		0				
		2	2.5585	0.81124	None	0.0	0.0	0.0
0.0	-175.51E-6	145620.		0				

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 34-35 | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Vertical Horizontal Displacement Movement Displacement Calculations Curve	Segment Min Radius of	Start Damage Category	Length [m]	Curvature [m]	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max
[m]					[%]	[%]	[%]	
0.0		1	0.0	1.3290	Sagging	0.0	0.0	0.0
0.0	-204.99E-6 -			0				

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 35-41 | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Vertical Horizontal Displacement Movement Displacement Calculations Curve	Segment Min Radius of	Start Damage Category	Length [m]	Curvature [m]	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max
[m]					[%]	[%]	[%]	

Calculations

Curve	[m]	[m]	[m]	[m]	[m]	[%]	[%]	[%]
[m]	0.0		1	0.0	3.5991	Sagging	390.08E-6	0.0 382.55E-6
0.0	-106.23E-6	93558.		0				

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 41-40 | Sub-structure:

Vertical Offset	Segment	Start Length	Curvature	Deflection	Average	Max	Max
Gradient Max Gradient	Min	Damage		Ratio	Horizontal	Tensile	of
from Line for	Category				Strain	Strain	
of Vertical	Radius of	Curvature					
Vertical	Displacement	Curve					
Horizontal	Movement						
Displacement	Calculations						
Curve							

[m]	[m]	[m]	[m]	[m]	[%]	[%]	[%]	
[m]	0.0		1	0.0	4.0690	Sagging	435.32E-6	0.0 424.68E-6
0.0	110.68E-6	95815.		0				

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 40-39 | Sub-structure:

Vertical Offset	Segment	Start Length	Curvature	Deflection	Average	Max	Max
Gradient Max Gradient	Min	Damage		Ratio	Horizontal	Tensile	of
from Line for	Category				Strain	Strain	
of Vertical	Radius of	Curvature					
Vertical	Displacement	Curve					
Horizontal	Movement						
Displacement	Calculations						
Curve							

[m]	[m]	[m]	[m]	[m]	[%]	[%]	[%]	
[m]	0.0		1	0.0	3.8991	Sagging	0.0011993	0.0 0.0011723
0.0	-159.45E-6	30755.		0				

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 39-38 | Sub-structure:

Vertical Offset	Segment	Start Length	Curvature	Deflection	Average	Max	Max
Gradient Max Gradient	Min	Damage		Ratio	Horizontal	Tensile	of
from Line for	Category				Strain	Strain	
of Vertical	Radius of	Curvature					
Vertical	Displacement	Curve					
Horizontal	Movement						
Displacement	Calculations						
Curve							

[m]	[m]	[m]	[m]	[m]	[%]	[%]	[%]	
[m]	0.0		1	0.0	4.1221	Sagging	90.830E-6	0.0 88.513E-6
0.0	-39.638E-6	366580.		0				

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 38-25 | Sub-structure:

Structure: 20-22 | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Vertical	Segment Min Radius of Category	Start Length Damage	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of
[m]		[m]	[m]	[%]	[%]	[%]	
0.0							

All settlements are less than the Settlement Trough Limit Sensitivity.
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 20-22 | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Vertical	Segment Min Radius of Category	Start Length Damage	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of
[m]		[m]	[m]	[%]	[%]	[%]	
0.0		1	0.0	10.169	Hogging	341.33E-6	0.0
0.0	-21.229E-6	344380.		0			512.52E-6

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 22-b | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Vertical	Segment Min Radius of Category	Start Length Damage	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of
[m]		[m]	[m]	[%]	[%]	[%]	
0.0		1	0.0	0.0	None	0.0	0.0
0.0	-243.80E-6	2276.0		0			0.0

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: e-45 | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Vertical	Segment Min Radius of Category	Start Length Damage	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of
[m]		[m]	[m]	[%]	[%]	[%]	
0.0		1	0.0	0.0	None	0.0	0.0
0.0	-0.0061548	127.92		0			0.0

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 18-31 | Sub-structure:

Vertical Offset Gradient Max from Line for of Vertical Vertical	Segment Max Gradient Radius of Category	Start Min	Length Damage	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max	Max
[m]			[m]	[m]	[%]	[%]	[%]		
0.0	0.0	1	0.0	6.8291	Hogging	0.0015356	0.0	0.0020185	
0.0	-105.77E-6	52379.		0					

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 23-24 | Sub-structure:

Vertical Offset Gradient Max from Line for of Vertical Vertical	Segment Max Gradient Radius of Category	Start Min	Length Damage	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max	Max
[m]			[m]	[m]	[%]	[%]	[%]		
0.0	0.0	1	0.0	10.683	Sagging	0.0022629	0.0	0.0029160	
0.0	-192.96E-6	49718.		0					

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: b-27 | Sub-structure:

Vertical Offset Gradient Max from Line for of Vertical Vertical	Segment Max Gradient Radius of Category	Start Min	Length Damage	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max	Max
[m]			[m]	[m]	[%]	[%]	[%]		
0.0	0.0	1	0.0	10.644	Sagging	0.020258	0.0	0.026155	
0.0	-0.0017860	1374.1		0					

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 42-37 | Sub-structure:

Vertical Offset Gradient Max from Line for of Vertical Vertical	Segment Max Gradient Radius of Category	Start Min	Length Damage	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max	Max
[m]			[m]	[m]	[%]	[%]	[%]		

0.0 0.0 1 0.0 1.9474 Hogging 176.12E-6 0.0 171.48E-6
 0.0 -154.15E-6 112500. 0

(Negligible)

0.0 0.0 2 1.9474 9.2542 Sagging 0.0015393 0.0 0.0021236
 0.0 -154.15E-6 66888. 0

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 47-43 | Sub-structure:

Vertical Offset Gradient Max from Line for of Vertical Vertical Horizontal Movement Displacement Calculations Curve	Segment Max Gradient Radius of Displacement Curve	Segment Min Category	Start Damage	Length [m]	Curvature [m]	Deflection Ratio [%]	Average Horizontal Strain [%]	Max Tensile Strain [%]	Max of
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[m] [m] [m] [%] [%] [%]
 0.0 0.0 1 0.0 9.5390 Hogging 0.0013379 0.0 0.0019856
 0.0 -72.499E-6 81034. 0

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 44-39 | Sub-structure:

Vertical Offset Gradient Max from Line for of Vertical Vertical Horizontal Movement Displacement Calculations Curve	Segment Max Gradient Radius of Displacement Curve	Segment Min Category	Start Damage	Length [m]	Curvature [m]	Deflection Ratio [%]	Average Horizontal Strain [%]	Max Tensile Strain [%]	Max of
--	---	----------------------------	-----------------	---------------	------------------	----------------------------	--	---------------------------------	-----------

[m] [m] [m] [%] [%] [%]
 0.0 0.0 1 0.0 2.9493 Hogging 48.225E-6 0.0 45.383E-6
 0.0 -40.070E-6 756980. 0

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 46-45 | Sub-structure:

Vertical Offset Gradient Max from Line for of Vertical Vertical Horizontal Movement Displacement Calculations Curve	Segment Max Gradient Radius of Displacement Curve	Segment Min Category	Start Damage	Length [m]	Curvature [m]	Deflection Ratio [%]	Average Horizontal Strain [%]	Max Tensile Strain [%]	Max of
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[m] [m] [m] [%] [%] [%]
 0.0 All settlements are less than the Settlement Trough Limit Sensitivity.
 Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: a-12 | Sub-structure:

Vertical Offset Gradient Max from Line for of Vertical Vertical Horizontal Movement Displacement Calculations Curve	Segment Max Gradient Radius of Displacement Curve	Segment Min Category	Start Damage	Length [m]	Curvature [m]	Deflection Ratio [%]	Average Horizontal Strain [%]	Max Tensile Strain [%]	Max of
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Vertical Horizontal Displacement Movement Displacement Calculations	Curve	Start	Length	Curvature	Deflection	Average	Max	Max
[m]	[m]	[m]	[m]	[m]	[m]	[%]	[%]	[%]
0.0	0.0037946	235.01	1	4.4594	0.0	None	0.0	0.0
0.0				0			0.0	0.0

(Negligible)
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 12-11 | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Vertical Horizontal Displacement Movement Displacement Calculations	Segment Min	Start Damage	Length	Curvature	Deflection Ratio	Average Horizontal	Max Tensile	Max
[m]	Category	[m]	[m]	[m]	[m]	[%]	[%]	[%]
0.0		1	0.0	6.6990	Hogging	0.035544	0.0	0.046266
0.0	-0.0015010	938.23		0				

(Negligible)
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 11-f | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Vertical Horizontal Displacement Movement Displacement Calculations	Segment Min	Start Damage	Length	Curvature	Deflection Ratio	Average Horizontal	Max Tensile	Max
[m]	Category	[m]	[m]	[m]	[m]	[%]	[%]	[%]
0.10000 All settlements are less than the Settlement Trough Limit Sensitivity.								

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: ag | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Vertical Horizontal Displacement Movement Displacement Calculations	Segment Min	Start Damage	Length	Curvature	Deflection Ratio	Average Horizontal	Max Tensile	Max
[m]	Category	[m]	[m]	[m]	[m]	[%]	[%]	[%]
0.0		1	11.050	0.0	None	0.0	0.0	0.0
0.0	0.0078400	102.48		0				

(Negligible)
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: gb | Sub-structure:

Vertical Offset Gradient Max Gradient	Segment Min	Start Damage	Length	Curvature	Deflection	Average	Max	Max
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from Line for of Vertical Vertical Horizontal Movement Displacement Calculations	Radius of Displacement Curve	Category	Start	Length	Curvature	Deflection	Average	Max	Max
[m]	[m]		[m]	[m]		[%]	[%]	[%]	Curve
0.0	0.0	1	0.0	0.0	None	0.0	0.0	0.0	
0.0	-0.013818	33.000		0					

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: bc | Sub-structure:

Vertical Offset Gradient Max from Line for of Vertical Vertical Horizontal Movement Displacement Calculations Curve	Segment Max Gradient Radius of Displacement Curve	Start Damage	Length	Curvature	Deflection	Average	Max	Max
[m]			[m]	[m]		[%]	[%]	[%]
0.0								

All settlements are less than the Settlement Trough Limit Sensitivity.
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: cd | Sub-structure:

Vertical Offset Gradient Max from Line for of Vertical Vertical Horizontal Movement Displacement Calculations Curve	Segment Max Gradient Radius of Displacement Curve	Start Damage	Length	Curvature	Deflection	Average	Max	Max
[m]			[m]	[m]		[%]	[%]	[%]
0.0								

All settlements are less than the Settlement Trough Limit Sensitivity.
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: eh | Sub-structure:

Vertical Offset Gradient Max from Line for of Vertical Horizontal Movement Displacement Calculations Curve	Segment Max Gradient Radius of Displacement Curve	Start Damage	Length	Curvature	Deflection	Average	Max	Max
[m]			[m]	[m]		[%]	[%]	[%]
0.0								

0.0 748.09E-6 3578.1 1 0.0 2.7283 Hogging 0.0083139 0.0 0.0078953

(Negligible)

0.0 0.0011221 6661.4 2 2.7283 1.9289 Sagging 0.011799 0.0 0.010668

(Negligible)

0.0 0.0011221 1958.7 3 4.6571 5.1019 Hogging 0.023264 0.0 0.025674

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: hf | Sub-structure:

Vertical Offset Gradient Max from Line for of Vertical Horizontal Displacement Calculations	Segment Max Gradient Radius of Displacement Curve	Min Category	Start Damage	Length [m]	Curvature [m]	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of Curve
[m]	[m]		[m]	[m]	[%]	[%]	[%]		
0.0	0.0	1	0.0	10.879	Sagging	0.011545	0.0	0.012601	
0.0	-848.21E-6	1904.7		0					

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: de | Sub-structure:

Vertical Offset Gradient Max from Line for of Vertical Horizontal Displacement Calculations	Segment Max Gradient Radius of Displacement Curve	Min Category	Start Damage	Length [m]	Curvature [m]	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of Curve
[m]	[m]		[m]	[m]	[%]	[%]	[%]		
0.0	0.0	1	0.47607	0.0	None	0.0	0.0	0.0	
0.0	0.050787	1.8724		0					

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Specific Building Damage Results - Critical Values for All Segments within Each Sub-Structure

Structure: 21-20 | Sub-structure:

Vertical Offset from Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Horizontal Strain	Max Slope Category	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0	127.73E-6	0.0	-14.186E-6	0.27114	121.34E-6	0.0	-14.186E-6
583360.	- 0 (Negligible)						

Structure: 19-20 | Sub-structure:

Vertical Offset from Radius of Line for Curvature	Deflection Min Ratio	Average Damage Horizontal Strain	Max Slope Category	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement	Max Gradient of Vertical Displacement
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Vertical (Hogging) (Sagging) Displacement Curve
 Movement Curve
 Calculations

[m]	[m]	[%]	[%]	[mm]	[%]		
0.0	0.0011003		0.0	-143.25E-6	0.79498	0.0010595	0.0 -143.25E-6
- 40970.0 (Negligible)							

Structure: 19-18 | Sub-structure:

Vertical Deflection Average Max Slope Max Max Max Gradient Max Gradient
 Min Min Damage Category
 Offset from Ratio Horizontal Settlement Tensile of of Vertical
 Radius of Radius of
 Line for Strain Strain Horizontal Displacement
 Curvature Curvature
 Vertical Displacement Curve
 (Hogging) (Sagging)
 Movement Curve
 Calculations

[m]	[m]	[%]	[%]	[mm]	[%]		
0.0	0.0017494		0.0	305.69E-6	1.3382	0.0017388	0.0 305.69E-6
- 14218.0 (Negligible)							

Structure: 18-13 | Sub-structure:

Vertical Deflection Average Max Slope Max Max Max Gradient Max Gradient
 Min Min Damage Category
 Offset from Ratio Horizontal Settlement Tensile of of Vertical
 Radius of Radius of
 Line for Strain Strain Horizontal Displacement
 Curvature Curvature
 Vertical Displacement Curve
 (Hogging) (Sagging)
 Movement Curve
 Calculations

[m]	[m]	[%]	[%]	[mm]	[%]		
0.0	473.31E-6		0.0	-41.559E-6	1.3385	467.24E-6	0.0 -41.559E-6
80840.588270.0 (Negligible)							

Structure: 21-a | Sub-structure:

Vertical Deflection Average Max Slope Max Max Max Gradient Max Gradient
 Min Min Damage Category
 Offset from Ratio Horizontal Settlement Tensile of of Vertical
 Radius of Radius of
 Line for Strain Strain Horizontal Displacement
 Curvature Curvature
 Vertical Displacement Curve
 (Hogging) (Sagging)
 Movement Curve
 Calculations

[m]	[m]	[%]	[%]	[mm]	[%]		
0.0	0.0		0.0	-449.30E-6	0.15621	0.0	0.0 -449.30E-6
- 0 (Negligible)							

Structure: f-50 | Sub-structure:

Vertical Deflection Average Max Slope Max Max Max Gradient Max Gradient
 Min Min Damage Category
 Offset from Ratio Horizontal Settlement Tensile of of Vertical
 Radius of Radius of
 Line for Strain Strain Horizontal Displacement
 Curvature Curvature
 Vertical Displacement Curve
 (Hogging) (Sagging)
 Movement Curve
 Calculations

	[m]		[%]		[%]		[mm]		[%]	
[m]	0.0	[m]	0.0	0.0	-0.0064073		6.3603	0.0	0.0	-0.0064073
-	-	0	(Negligible)							

Structure: 14-15 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0	0.0027694	0.0	461.65E-6	2.1209	0.0027503	0.0	461.65E-6
-	9561.4	0	(Negligible)				

Structure: 15-16 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0	0.0	0.0	525.29E-6	3.0089	0.0	0.0	525.29E-6
-	-	0	(Negligible)				

Structure: 16-17 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0	0.0	0.0	0.0011708	5.2328	0.0	0.0	0.0011708
-	-	0	(Negligible)				

Structure: 17-g | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0	0.0	0.0	0.0016389	7.8749	0.0	0.0	0.0016389
-	-	0	(Negligible)				

Structure: h-49 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0	0.016784	0.0	-0.0017325	7.5630	0.016669	0.0	-0.0017325
- 1574.4	0 (Negligible)						

Structure: 49-36 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0	0.010013	0.0	-0.0011536	4.5870	0.0099270	0.0	-0.0011536
- 2953.5	0 (Negligible)						

Structure: 36-48 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0	0.0024770	0.0	-428.36E-6	2.3132	0.0024573	0.0	-428.36E-6
- 11496.0	0 (Negligible)						

Structure: 48-47 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0	0.0	0.0	-309.55E-6	1.4426	0.0	0.0	-309.55E-6
-	- 0 (Negligible)						

Structure: 47-51 | Sub-structure:

Vertical Min	Deflection Min	Average Damage Category	Max Slope	Max	Max	Max Gradient	Max Gradient
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[m] [%] [%] [mm] [%] [m]

Structure: 26-27 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0	0.0	0.0	0.0	66.750E-6	0.21197	0.0	66.750E-6
-	- 0	(Negligible)					

Structure: 27-28 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0	112.83E-6	0.0	-21.366E-6	0.21204	112.40E-6	0.0	-21.366E-6
262860.	- 0	(Negligible)					

Structure: 28-29 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0	0.0	0.0	0.0	-49.416E-6	0.15389	0.0	-49.416E-6
-	- 0	(Negligible)					

Structure: 27-32 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0	328.04E-6	0.0	-11.092E-6	0.22826	324.76E-6	0.0	-11.092E-6
186980.	- 0	(Negligible)					

Structure: 33-31 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[%]	[%]		[mm]	[%]		
0.0	0.0046143	0.0	398.09E-6	1.5437	0.0042710	0.0	398.09E-6
- 8639.8	0 (Negligible)						

Structure: 31-34 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[%]	[%]		[mm]	[%]		
0.0	450.37E-6	0.0	-177.88E-6	1.5441	449.22E-6	0.0	-177.88E-6
46186.	- 0 (Negligible)						

Structure: 34-35 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[%]	[%]		[mm]	[%]		
0.0	0.0	0.0	-204.99E-6	0.96846	0.0	0.0	-204.99E-6
-	- 0 (Negligible)						

Structure: 35-41 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[%]	[%]		[mm]	[%]		
0.0	390.08E-6	0.0	-106.23E-6	0.69581	382.55E-6	0.0	-106.23E-6
- 93558.	0 (Negligible)						

Structure: 41-40 | Sub-structure:

Vertical Min Offset from Radius of	Deflection Min Ratio	Average Damage Category Horizontal	Max Slope	Max Settlement	Max Tensile	Max Gradient of	Max Gradient of Vertical
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Structure: b-27 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0	0.020258	0.0	-0.0017860	5.8444	0.026155	0.0	-0.0017860
- 1374.1	0	(Negligible)					

Structure: 42-37 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0	0.0015393	0.0	-154.15E-6	1.3803	0.0021236	0.0	-154.15E-6
112500.	66888.	0 (Negligible)					

Structure: 47-43 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0	0.0013379	0.0	-72.499E-6	1.1113	0.0019856	0.0	-72.499E-6
81034.	- 0	(Negligible)					

Structure: 44-39 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0	48.225E-6	0.0	-40.070E-6	0.38860	45.383E-6	0.0	-40.070E-6
756980.	- 0	(Negligible)					

Structure: 46-45 | Sub-structure:

Vertical Min	Deflection Min	Average Damage Category	Max	Max	Max	Max Gradient	Max Gradient	Min
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[m]	[m]	[%]	[%]		[mm]	[%]		
0.0	0.0	0.0	0.0	0.0078400	7.8687	0.0	0.0	0.0078400
-	-	0	(Negligible)					

Structure: gb | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve	Min Radius
[m]	[m]	[%]	[%]	[mm]	[%]			[m]
0.0	0.0	0.0	0.0	-0.013818	7.8766	0.0	0.0	-0.013818
-	-	0	(Negligible)					

Structure: bc | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve	Min Radius
[m]	[m]	[%]	[%]	[mm]	[%]			[m]
0.0	0.0	0.0	0.0	-0.013818	7.8766	0.0	0.0	-0.013818
-	-	0	(Negligible)					

Structure: cd | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve	Min Radius
[m]	[m]	[%]	[%]	[mm]	[%]			[m]
0.0	0.0	0.0	0.0	-0.013818	7.8766	0.0	0.0	-0.013818
-	-	0	(Negligible)					

Structure: eh | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve	Min Radius
[m]	[m]	[%]	[%]	[mm]	[%]			[m]
0.0	0.0	0.023264	0.0	0.0011221	9.2216	0.025674	0.0	0.0011221
1958.7	6661.4	0	(Negligible)					

Structure: hf | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0	0.011545	0.0	-848.21E-6	7.5630	0.012601	0.0	-848.21E-6
- 1904.7 0	(Negligible)						

Structure: de | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0	0.0	0.0	0.0	0.050787	6.0065	0.0	0.050787
-	- 0	(Negligible)					

Specific Building Damage Results - Critical Segments within Each Structure

Structure Name	Parameter	Critical Min	Critical Damage Category	Start	End	Curvature	Max Slope
Max	Max	Min	Min	Sub-Structure	Segment	Radius of	Radius of
Settlement	Tensile	Radius of	Radius of	Strain	Curvature	Curvature	
	(Hogging)	(Sagging)					
[mm]	[%]	[m]	[m]		[m]	[m]	
21-20	Max Slope	583360.	- 0 (Negligible)	1	0.0	11.749	Hogging 14.186E-6
0.27114	121.34E-6	583360.	- 0 (Negligible)	1	0.0	11.749	Hogging 14.186E-6
0.27114	121.34E-6	583360.	- 0 (Negligible)	1	0.0	11.749	Hogging 14.186E-6
0.27114	121.34E-6	583360.	- 0 (Negligible)	1	0.0	11.749	Hogging 14.186E-6
0.27114	121.34E-6	583360.	- 0 (Negligible)	1	0.0	11.749	Hogging 14.186E-6
-	-	-	-	-	-	-	-
19-20	Max Slope	-	40970. 0 (Negligible)	1	0.0	5.0389	Sagging 143.25E-6
0.79498	0.0010595	-	40970. 0 (Negligible)	1	0.0	5.0389	Sagging 143.25E-6
0.79498	0.0010595	-	40970. 0 (Negligible)	1	0.0	5.0389	Sagging 143.25E-6
0.79498	0.0010595	-	40970. 0 (Negligible)	1	0.0	5.0389	Sagging 143.25E-6
-	-	-	-	-	-	-	-
0.79498	0.0010595	-	40970. 0 (Negligible)	1	0.0	5.0389	Sagging 143.25E-6
	Curvature (Sagging)						

19-18		Max Slope			1	0.0	2.0092	Sagging	305.69E-6
1.3382	0.0017388	-	14218.0	(Negligible)					
		Max Settlement			1	0.0	2.0092	Sagging	305.69E-6
1.3382	0.0017388	-	14218.0	(Negligible)					
		Max Tensile			1	0.0	2.0092	Sagging	305.69E-6
1.3382	0.0017388	-	14218.0	(Negligible)					
		Strain			-	-	-	-	-
		Min Radius of							
		-	-	-					
		Curvature (Hogging)							
		Min Radius of			1	0.0	2.0092	Sagging	305.69E-6
1.3382	0.0017388	-	14218.0	(Negligible)					
		Curvature (Sagging)							
18-13		Max Slope			3	10.817	14.959	Hogging	41.559E-6
1.0108	167.83E-6	174280.	-	0 (Negligible)					
		Max Settlement			1	0.0	5.8485	Hogging	37.957E-6
1.3385	467.24E-6	80840.	-	0 (Negligible)					
		Max Tensile			1	0.0	5.8485	Hogging	37.957E-6
1.3385	467.24E-6	80840.	-	0 (Negligible)					
		Strain							
		Min Radius of			1	0.0	5.8485	Hogging	37.957E-6
1.3385	467.24E-6	80840.	-	0 (Negligible)					
		Curvature (Hogging)							
		Min Radius of			2	5.8485	10.817	Sagging	37.957E-6
1.1824	98.026E-6	-	588270.0	(Negligible)					
		Curvature (Sagging)							
21-a		Max Slope			1	0.0	0.0	Sagging	449.30E-6
0.15621	0.0	-	619.06	0 (Negligible)					
		Max Settlement			1	0.0	0.0	Sagging	449.30E-6
0.15621	0.0	-	619.06	0 (Negligible)					
		Max Tensile			1	0.0	0.0	Sagging	449.30E-6
0.15621	0.0	-	619.06	0 (Negligible)					
		Strain							
		Min Radius of			-	-	-	-	-
		-	-	-					
		Curvature (Hogging)							
		Min Radius of			-	-	-	-	-
		-	-	-					
		Curvature (Sagging)							
f-50		Max Slope			1	0.0	0.0	Sagging	0.0064073
6.3603	0.0	-	123.94	0 (Negligible)					
		Max Settlement			1	0.0	0.0	Sagging	0.0064073
6.3603	0.0	-	123.94	0 (Negligible)					
		Max Tensile			1	0.0	0.0	Sagging	0.0064073
6.3603	0.0	-	123.94	0 (Negligible)					
		Strain							
		Min Radius of			-	-	-	-	-
		-	-	-					
		Curvature (Hogging)							
		Min Radius of			-	-	-	-	-
		-	-	-					
		Curvature (Sagging)							
14-15		Max Slope			1	0.0	2.1390	Sagging	461.65E-6
2.1209	0.0027503	-	9561.4	0 (Negligible)					
		Max Settlement			1	0.0	2.1390	Sagging	461.65E-6
2.1209	0.0027503	-	9561.4	0 (Negligible)					
		Max Tensile			1	0.0	2.1390	Sagging	461.65E-6
2.1209	0.0027503	-	9561.4	0 (Negligible)					
		Strain							
		Min Radius of			-	-	-	-	-
		-	-	-					
		Curvature (Hogging)							
		Min Radius of			1	0.0	2.1390	Sagging	461.65E-6
2.1209	0.0027503	-	9561.4	0 (Negligible)					
		Curvature (Sagging)							
15-16		Max Slope			1	0.0	1.6897	Hogging	525.29E-6
3.0089	0.0	-	-	0 (Negligible)					

3.0089				Max Settlement	1	0.0	1.6897	Hogging	525.29E-6
	0.0	-	-	0 (Negligible)					
3.0089				Max Tensile	1	0.0	1.6897	Hogging	525.29E-6
	0.0	-	-	0 (Negligible)					
-	-	-	-	Strain	-	-	-	-	-
				Min Radius of					
-	-	-	-	Curvature	-	-	-	-	-
				(Hogging)					
-	-	-	-	Min Radius of	-	-	-	-	-
				Curvature					
				(Sagging)					
16-17				Max Slope	1	0.0	1.8990	Sagging	0.0011708
5.2328	0.0	-	-	0 (Negligible)					
5.2328				Max Settlement	1	0.0	1.8990	Sagging	0.0011708
	0.0	-	-	0 (Negligible)					
5.2328				Max Tensile	1	0.0	1.8990	Sagging	0.0011708
	0.0	-	-	0 (Negligible)					
-	-	-	-	Strain	-	-	-	-	-
				Min Radius of					
-	-	-	-	Curvature	-	-	-	-	-
				(Hogging)					
-	-	-	-	Min Radius of	-	-	-	-	-
				Curvature					
				(Sagging)					
17-g				Max Slope	1	0.0	1.6115	Sagging	0.0016389
7.8749	0.0	-	-	0 (Negligible)					
7.8749				Max Settlement	1	0.0	1.6115	Sagging	0.0016389
	0.0	-	-	0 (Negligible)					
7.8749				Max Tensile	1	0.0	1.6115	Sagging	0.0016389
	0.0	-	-	0 (Negligible)					
-	-	-	-	Strain	-	-	-	-	-
				Min Radius of					
-	-	-	-	Curvature	-	-	-	-	-
				(Hogging)					
-	-	-	-	Min Radius of	-	-	-	-	-
				Curvature					
				(Sagging)					
h-49				Max Slope	1	0.0	2.1345	Sagging	0.0017325
7.5630	0.016669	-	1574.4	0 (Negligible)					
7.5630				Max Settlement	1	0.0	2.1345	Sagging	0.0017325
	0.016669	-	1574.4	0 (Negligible)					
7.5630				Max Tensile	1	0.0	2.1345	Sagging	0.0017325
	0.016669	-	1574.4	0 (Negligible)					
-	-	-	-	Strain	-	-	-	-	-
				Min Radius of					
-	-	-	-	Curvature	-	-	-	-	-
				(Hogging)					
7.5630				Min Radius of	1	0.0	2.1345	Sagging	0.0017325
	0.016669	-	1574.4	0 (Negligible)					
				Curvature					
				(Sagging)					
49-36				Max Slope	1	0.0	2.3890	Sagging	0.0011536
4.5870	0.0099270	-	2953.5	0 (Negligible)					
4.5870				Max Settlement	1	0.0	2.3890	Sagging	0.0011536
	0.0099270	-	2953.5	0 (Negligible)					
4.5870				Max Tensile	1	0.0	2.3890	Sagging	0.0011536
	0.0099270	-	2953.5	0 (Negligible)					
-	-	-	-	Strain	-	-	-	-	-
				Min Radius of					
-	-	-	-	Curvature	-	-	-	-	-
				(Hogging)					
4.5870				Min Radius of	1	0.0	2.3890	Sagging	0.0011536
	0.0099270	-	2953.5	0 (Negligible)					
				Curvature					
				(Sagging)					
36-48				Max Slope	1	0.0	2.3002	Sagging	428.36E-6
2.3132	0.0024573	-	11496.0	0 (Negligible)					
2.3132				Max Settlement	1	0.0	2.3002	Sagging	428.36E-6
	0.0024573	-	11496.0	0 (Negligible)					

2.3132	0.0024573	Max Tensile	-	11496.0 (Negligible)	1	0.0	2.3002	Sagging	428.36E-6
-	-	Strain	-	-	-	-	-	-	-
-	-	Min Radius of	-	-	-	-	-	-	-
-	-	Curvature (Hogging)	-	-	-	-	-	-	-
2.3132	0.0024573	Min Radius of	-	11496.0 (Negligible)	1	0.0	2.3002	Sagging	428.36E-6
48-47	1.4426	Curvature (Sagging)	-	-	-	-	-	-	-
1.4426	0.0	Max Slope	-	- 0 (Negligible)	1	0.0	1.1690	Sagging	309.55E-6
1.4426	0.0	Max Settlement	-	- 0 (Negligible)	1	0.0	1.1690	Sagging	309.55E-6
1.4426	0.0	Max Tensile	-	- 0 (Negligible)	1	0.0	1.1690	Sagging	309.55E-6
-	-	Strain	-	-	-	-	-	-	-
-	-	Min Radius of	-	-	-	-	-	-	-
-	-	Curvature (Hogging)	-	-	-	-	-	-	-
-	-	Min Radius of	-	-	-	-	-	-	-
-	-	Curvature (Sagging)	-	-	-	-	-	-	-
47-51	0.94620	Max Slope	172.56E-6	194960. - 0 (Negligible)	3	5.1251	10.749	Hogging	38.071E-6
1.0804	75.996E-6	Max Settlement	310530. - 0 (Negligible)	-	1	0.0	4.0555	Hogging	27.546E-6
0.94620	172.56E-6	Max Tensile	194960. - 0 (Negligible)	-	3	5.1251	10.749	Hogging	38.071E-6
0.94620	172.56E-6	Strain	-	-	-	-	-	-	-
0.94620	172.56E-6	Min Radius of	194960. - 0 (Negligible)	-	3	5.1251	10.749	Hogging	38.071E-6
0.97544	4.6134E-6	Curvature (Hogging)	-	-	-	-	-	-	-
0.97544	4.6134E-6	Min Radius of	- 10.054E+6 0 (Negligible)	-	2	4.0555	5.1251	Sagging	27.546E-6
50-46		Curvature (Sagging)							
		All settlements are less than the Settlement Trough Limit Sensitivity.							
		All settlements are less than the Settlement Trough Limit Sensitivity.							
		All settlements are less than the Settlement Trough Limit Sensitivity.							
		All settlements are less than the Settlement Trough Limit Sensitivity.							
46-47	1.0802	Max Slope	0.0023122	- 19051.0 (Negligible)	1	1.0150	8.1190	Sagging	236.30E-6
1.0802	0.0023122	Max Settlement	-	19051.0 (Negligible)	1	1.0150	8.1190	Sagging	236.30E-6
1.0802	0.0023122	Max Tensile	-	19051.0 (Negligible)	1	1.0150	8.1190	Sagging	236.30E-6
-	-	Strain	-	-	-	-	-	-	-
-	-	Min Radius of	-	-	-	-	-	-	-
-	-	Curvature (Hogging)	-	-	-	-	-	-	-
1.0802	0.0023122	Min Radius of	-	19051.0 (Negligible)	1	1.0150	8.1190	Sagging	236.30E-6
24-25		Curvature (Sagging)							
		All settlements are less than the Settlement Trough Limit Sensitivity.							
		All settlements are less than the Settlement Trough Limit Sensitivity.							
		All settlements are less than the Settlement Trough Limit Sensitivity.							
		All settlements are less than the Settlement Trough Limit Sensitivity.							
25-26		All settlements are less than the Settlement Trough Limit Sensitivity.							
		All settlements are less than the Settlement Trough Limit Sensitivity.							
		All settlements are less than the Settlement Trough Limit Sensitivity.							
		All settlements are less than the Settlement Trough Limit Sensitivity.							
26-27	0.21197	Max Slope	0.0	- 67110.0 (Negligible)	1	10.246	11.270	Sagging	66.750E-6
0.21197	0.0	Max Settlement	-	67110.0 (Negligible)	1	10.246	11.270	Sagging	66.750E-6
0.21197	0.0	Max Tensile	-	67110.0 (Negligible)	1	10.246	11.270	Sagging	66.750E-6
0.21197	0.0	Strain	-	-	-	-	-	-	-
0.21197	0.0	Min Radius of	-	-	-	-	-	-	-

-	-	-	Strain	-	-	-	-	-	-
-	-	-	Min Radius of	-	-	-	-	-	-
-	-	-	Curvature	-	-	-	-	-	-
-	-	-	(Hogging)	-	-	-	-	-	-
-	-	-	Min Radius of	-	-	-	-	-	-
-	-	-	Curvature	-	-	-	-	-	-
-	-	-	(Sagging)	-	-	-	-	-	-
27-28			Max Slope	1	0.0	3.1691	Hogging	21.366E-6	
0.21204	112.40E-6	262860.	- 0 (Negligible)	1	0.0	3.1691	Hogging	21.366E-6	
0.21204	112.40E-6	262860.	- 0 (Negligible)	1	0.0	3.1691	Hogging	21.366E-6	
0.21204	112.40E-6	262860.	- 0 (Negligible)	1	0.0	3.1691	Hogging	21.366E-6	
0.21204	112.40E-6	262860.	- 0 (Negligible)	1	0.0	3.1691	Hogging	21.366E-6	
0.21204	112.40E-6	262860.	- 0 (Negligible)	1	0.0	3.1691	Hogging	21.366E-6	
-	-	-	Strain	-	-	-	-	-	-
-	-	-	Min Radius of	-	-	-	-	-	-
-	-	-	Curvature	-	-	-	-	-	-
-	-	-	(Hogging)	-	-	-	-	-	-
-	-	-	Min Radius of	-	-	-	-	-	-
-	-	-	Curvature	-	-	-	-	-	-
-	-	-	(Sagging)	-	-	-	-	-	-
28-29			Max Slope	1	0.0	0.0	Sagging	49.416E-6	
0.15389	0.0	- 110580.0	0 (Negligible)	1	0.0	0.0	Sagging	49.416E-6	
0.15389	0.0	- 110580.0	0 (Negligible)	1	0.0	0.0	Sagging	49.416E-6	
0.15389	0.0	- 110580.0	0 (Negligible)	1	0.0	0.0	Sagging	49.416E-6	
0.15389	0.0	- 110580.0	0 (Negligible)	1	0.0	0.0	Sagging	49.416E-6	
-	-	-	Strain	-	-	-	-	-	-
-	-	-	Min Radius of	-	-	-	-	-	-
-	-	-	Curvature	-	-	-	-	-	-
-	-	-	(Hogging)	-	-	-	-	-	-
-	-	-	Min Radius of	-	-	-	-	-	-
-	-	-	Curvature	-	-	-	-	-	-
-	-	-	(Sagging)	-	-	-	-	-	-
27-32			Max Slope	1	0.0	5.1490	Hogging	11.092E-6	
0.22826	324.76E-6	186980.	- 0 (Negligible)	1	0.0	5.1490	Hogging	11.092E-6	
0.22826	324.76E-6	186980.	- 0 (Negligible)	1	0.0	5.1490	Hogging	11.092E-6	
0.22826	324.76E-6	186980.	- 0 (Negligible)	1	0.0	5.1490	Hogging	11.092E-6	
0.22826	324.76E-6	186980.	- 0 (Negligible)	1	0.0	5.1490	Hogging	11.092E-6	
0.22826	324.76E-6	186980.	- 0 (Negligible)	1	0.0	5.1490	Hogging	11.092E-6	
-	-	-	Strain	-	-	-	-	-	-
-	-	-	Min Radius of	-	-	-	-	-	-
-	-	-	Curvature	-	-	-	-	-	-
-	-	-	(Hogging)	-	-	-	-	-	-
-	-	-	Min Radius of	-	-	-	-	-	-
-	-	-	Curvature	-	-	-	-	-	-
-	-	-	(Sagging)	-	-	-	-	-	-
33-31			Max Slope	1	10.400	17.679	Sagging	398.09E-6	
1.5437	0.0042710	- 8639.80	0 (Negligible)	1	10.400	17.679	Sagging	398.09E-6	
1.5437	0.0042710	- 8639.80	0 (Negligible)	1	10.400	17.679	Sagging	398.09E-6	
1.5437	0.0042710	- 8639.80	0 (Negligible)	1	10.400	17.679	Sagging	398.09E-6	
1.5437	0.0042710	- 8639.80	0 (Negligible)	1	10.400	17.679	Sagging	398.09E-6	
-	-	-	Strain	-	-	-	-	-	-
-	-	-	Min Radius of	-	-	-	-	-	-
-	-	-	Curvature	-	-	-	-	-	-
-	-	-	(Hogging)	-	-	-	-	-	-
-	-	-	Min Radius of	-	-	-	-	-	-
1.5437	0.0042710	- 8639.8 0	0 (Negligible)	1	10.400	17.679	Sagging	398.09E-6	
1.5437	0.0042710	- 8639.80	0 (Negligible)	1	10.400	17.679	Sagging	398.09E-6	
-	-	-	Curvature	-	-	-	-	-	-
-	-	-	(Sagging)	-	-	-	-	-	-
31-34			Max Slope	1	0.0	2.5585	Hogging	177.88E-6	
1.5441	449.22E-6	46186.	- 0 (Negligible)	1	0.0	2.5585	Hogging	177.88E-6	
1.5441	449.22E-6	46186.	- 0 (Negligible)	1	0.0	2.5585	Hogging	177.88E-6	
1.5441	449.22E-6	46186.	- 0 (Negligible)	1	0.0	2.5585	Hogging	177.88E-6	
1.5441	449.22E-6	46186.	- 0 (Negligible)	1	0.0	2.5585	Hogging	177.88E-6	
1.5441	449.22E-6	46186.	- 0 (Negligible)	1	0.0	2.5585	Hogging	177.88E-6	
-	-	-	Strain	-	-	-	-	-	-

1.5441	449.22E-6	Min Radius of Curvature (Hogging)	46186.	- 0 (Negligible)	1	0.0	2.5585	Hogging	177.88E-6
-	-	Min Radius of Curvature (Sagging)	-	-	-	-	-	-	-
34-35	0.96846	Max Slope	0.0	- 0 (Negligible)	1	0.0	1.3290	Sagging	204.99E-6
0.96846	0.0	Max Settlement	0.0	- 0 (Negligible)	1	0.0	1.3290	Sagging	204.99E-6
0.96846	0.0	Max Tensile Strain	0.0	- 0 (Negligible)	1	0.0	1.3290	Sagging	204.99E-6
-	-	Min Radius of Curvature (Hogging)	-	-	-	-	-	-	-
-	-	Min Radius of Curvature (Sagging)	-	-	-	-	-	-	-
35-41	0.69581	Max Slope	382.55E-6	- 93558. 0 (Negligible)	1	0.0	3.5991	Sagging	106.23E-6
0.69581	382.55E-6	Max Settlement	382.55E-6	- 93558. 0 (Negligible)	1	0.0	3.5991	Sagging	106.23E-6
0.69581	382.55E-6	Max Tensile Strain	382.55E-6	- 93558. 0 (Negligible)	1	0.0	3.5991	Sagging	106.23E-6
-	-	Min Radius of Curvature (Hogging)	-	-	-	-	-	-	-
0.69581	382.55E-6	Min Radius of Curvature (Sagging)	382.55E-6	- 93558. 0 (Negligible)	1	0.0	3.5991	Sagging	106.23E-6
41-40	0.75463	Max Slope	424.68E-6	- 95815. 0 (Negligible)	1	0.0	4.0690	Sagging	110.68E-6
0.75463	424.68E-6	Max Settlement	424.68E-6	- 95815. 0 (Negligible)	1	0.0	4.0690	Sagging	110.68E-6
0.75463	424.68E-6	Max Tensile Strain	424.68E-6	- 95815. 0 (Negligible)	1	0.0	4.0690	Sagging	110.68E-6
-	-	Min Radius of Curvature (Hogging)	-	-	-	-	-	-	-
0.75463	424.68E-6	Min Radius of Curvature (Sagging)	424.68E-6	- 95815. 0 (Negligible)	1	0.0	4.0690	Sagging	110.68E-6
40-39	0.75474	Max Slope	0.0011723	- 30755. 0 (Negligible)	1	0.0	3.8991	Sagging	159.45E-6
0.75474	0.0011723	Max Settlement	0.0011723	- 30755. 0 (Negligible)	1	0.0	3.8991	Sagging	159.45E-6
0.75474	0.0011723	Max Tensile Strain	0.0011723	- 30755. 0 (Negligible)	1	0.0	3.8991	Sagging	159.45E-6
-	-	Min Radius of Curvature (Hogging)	-	-	-	-	-	-	-
0.75474	0.0011723	Min Radius of Curvature (Sagging)	0.0011723	- 30755. 0 (Negligible)	1	0.0	3.8991	Sagging	159.45E-6
39-38	0.27325	Max Slope	88.513E-6	- 366580. 0 (Negligible)	1	0.0	4.1221	Sagging	39.638E-6
0.27325	88.513E-6	Max Settlement	88.513E-6	- 366580. 0 (Negligible)	1	0.0	4.1221	Sagging	39.638E-6
0.27325	88.513E-6	Max Tensile Strain	88.513E-6	- 366580. 0 (Negligible)	1	0.0	4.1221	Sagging	39.638E-6
-	-	Min Radius of Curvature (Hogging)	-	-	-	-	-	-	-
-	-	Min Radius of Curvature (Sagging)	-	-	-	-	-	-	-

			Strain									
			Min Radius of									
-	-	-	-	-	-	-	-	-	-	-	-	-
			Curvature									
			(Hogging)									
			Min Radius of									
1.4239	0.0029160	-	49718.	0	(Negligible)	1	0.0	10.683	Sagging	192.96E-6		
			Curvature									
			(Sagging)									
b-27			Max Slope			1	0.0	10.644	Sagging	0.0017860		
5.8444	0.026155	-	1374.1	0	(Negligible)	1	0.0	10.644	Sagging	0.0017860		
			Max Settlement			1	0.0	10.644	Sagging	0.0017860		
5.8444	0.026155	-	1374.1	0	(Negligible)	1	0.0	10.644	Sagging	0.0017860		
			Max Tensile			1	0.0	10.644	Sagging	0.0017860		
5.8444	0.026155	-	1374.1	0	(Negligible)	1	0.0	10.644	Sagging	0.0017860		
			Strain									
			Min Radius of									
-	-	-	-	-	-	-	-	-	-	-	-	-
			Curvature									
			(Hogging)									
			Min Radius of			1	0.0	10.644	Sagging	0.0017860		
5.8444	0.026155	-	1374.1	0	(Negligible)	1	0.0	10.644	Sagging	0.0017860		
			Curvature									
			(Sagging)									
42-37			Max Slope			1	0.0	1.9474	Hogging	154.15E-6		
1.3803	171.48E-6	112500.	-	0	(Negligible)	1	0.0	1.9474	Hogging	154.15E-6		
			Max Settlement			1	0.0	1.9474	Hogging	154.15E-6		
1.3803	171.48E-6	112500.	-	0	(Negligible)	1	0.0	1.9474	Hogging	154.15E-6		
			Max Tensile			2	1.9474	11.202	Sagging	154.15E-6		
1.0873	0.0021236	-	66888.	0	(Negligible)	2	1.9474	11.202	Sagging	154.15E-6		
			Strain									
			Min Radius of			1	0.0	1.9474	Hogging	154.15E-6		
1.3803	171.48E-6	112500.	-	0	(Negligible)	1	0.0	1.9474	Hogging	154.15E-6		
			Curvature									
			(Hogging)									
			Min Radius of			2	1.9474	11.202	Sagging	154.15E-6		
1.0873	0.0021236	-	66888.	0	(Negligible)	2	1.9474	11.202	Sagging	154.15E-6		
			Curvature									
			(Sagging)									
47-43			Max Slope			1	0.0	9.5390	Hogging	72.499E-6		
1.1113	0.0019856	81034.	-	0	(Negligible)	1	0.0	9.5390	Hogging	72.499E-6		
			Max Settlement			1	0.0	9.5390	Hogging	72.499E-6		
1.1113	0.0019856	81034.	-	0	(Negligible)	1	0.0	9.5390	Hogging	72.499E-6		
			Max Tensile			1	0.0	9.5390	Hogging	72.499E-6		
1.1113	0.0019856	81034.	-	0	(Negligible)	1	0.0	9.5390	Hogging	72.499E-6		
			Strain									
			Min Radius of			1	0.0	9.5390	Hogging	72.499E-6		
1.1113	0.0019856	81034.	-	0	(Negligible)	1	0.0	9.5390	Hogging	72.499E-6		
			Curvature									
			(Hogging)									
			Min Radius of									
-	-	-	-	-	-	-	-	-	-	-	-	-
			Curvature									
			(Sagging)									
44-39			Max Slope			1	0.0	2.9493	Hogging	40.070E-6		
0.38860	45.383E-6	756980.	-	0	(Negligible)	1	0.0	2.9493	Hogging	40.070E-6		
			Max Settlement			1	0.0	2.9493	Hogging	40.070E-6		
0.38860	45.383E-6	756980.	-	0	(Negligible)	1	0.0	2.9493	Hogging	40.070E-6		
			Max Tensile			1	0.0	2.9493	Hogging	40.070E-6		
0.38860	45.383E-6	756980.	-	0	(Negligible)	1	0.0	2.9493	Hogging	40.070E-6		
			Strain									
			Min Radius of			1	0.0	2.9493	Hogging	40.070E-6		
0.38860	45.383E-6	756980.	-	0	(Negligible)	1	0.0	2.9493	Hogging	40.070E-6		
			Curvature									
			(Hogging)									
			Min Radius of									
-	-	-	-	-	-	-	-	-	-	-	-	-
			Curvature									
			(Sagging)									
46-45			All settlements are less than the Settlement Trough Limit Sensitivity.									
			All settlements are less than the Settlement Trough Limit Sensitivity.									
			All settlements are less than the Settlement Trough Limit Sensitivity.									
			All settlements are less than the Settlement Trough Limit Sensitivity.									
			All settlements are less than the Settlement Trough Limit Sensitivity.									
a-12			Max Slope			1	4.4594	4.4594	Sagging	0.0037946		
4.2276	0.0	-	235.01	0	(Negligible)	1	4.4594	4.4594	Sagging	0.0037946		

			Max Settlement		1	4.4594	4.4594	Sagging	0.0037946
4.2276	0.0	-	235.01 0 (Negligible)						
			Max Tensile		1	4.4594	4.4594	Sagging	0.0037946
4.2276	0.0	-	235.01 0 (Negligible)						
			Strain		-	-	-	-	-
-	-	-	Min Radius of		-	-	-	-	-
			Curvature		-	-	-	-	-
-	-	-	(Hogging)		-	-	-	-	-
			Min Radius of		-	-	-	-	-
			Curvature		-	-	-	-	-
-	-	-	(Sagging)		-	-	-	-	-
12-11			Max Slope		1	0.0	6.6990	Hogging	0.0015010
6.6430	0.046266	938.23	- 0 (Negligible)						
			Max Settlement		1	0.0	6.6990	Hogging	0.0015010
6.6430	0.046266	938.23	- 0 (Negligible)						
			Max Tensile		1	0.0	6.6990	Hogging	0.0015010
6.6430	0.046266	938.23	- 0 (Negligible)						
			Strain		1	0.0	6.6990	Hogging	0.0015010
6.6430	0.046266	938.23	- 0 (Negligible)						
			Min Radius of		-	-	-	-	-
-	-	-	Curvature		-	-	-	-	-
			(Hogging)		-	-	-	-	-
-	-	-	Min Radius of		-	-	-	-	-
			Curvature		-	-	-	-	-
-	-	-	(Sagging)		-	-	-	-	-
11-f			All settlements are less than the Settlement Trough Limit Sensitivity.						
			All settlements are less than the Settlement Trough Limit Sensitivity.						
			All settlements are less than the Settlement Trough Limit Sensitivity.						
			All settlements are less than the Settlement Trough Limit Sensitivity.						
			All settlements are less than the Settlement Trough Limit Sensitivity.						
ag			Max Slope		1	11.050	11.050	Sagging	0.0078400
7.8687	0.0	-	102.48 0 (Negligible)						
			Max Settlement		1	11.050	11.050	Sagging	0.0078400
7.8687	0.0	-	102.48 0 (Negligible)						
			Max Tensile		1	11.050	11.050	Sagging	0.0078400
7.8687	0.0	-	102.48 0 (Negligible)						
			Strain		-	-	-	-	-
-	-	-	Min Radius of		-	-	-	-	-
			Curvature		-	-	-	-	-
-	-	-	(Hogging)		-	-	-	-	-
			Min Radius of		-	-	-	-	-
-	-	-	Curvature		-	-	-	-	-
			(Sagging)		-	-	-	-	-
gb			Max Slope		1	0.0	0.0	Sagging	0.013818
7.8766	0.0	-	33.000 0 (Negligible)						
			Max Settlement		1	0.0	0.0	Sagging	0.013818
7.8766	0.0	-	33.000 0 (Negligible)						
			Max Tensile		1	0.0	0.0	Sagging	0.013818
7.8766	0.0	-	33.000 0 (Negligible)						
			Strain		-	-	-	-	-
-	-	-	Min Radius of		-	-	-	-	-
			Curvature		-	-	-	-	-
-	-	-	(Hogging)		-	-	-	-	-
			Min Radius of		-	-	-	-	-
-	-	-	Curvature		-	-	-	-	-
			(Sagging)		-	-	-	-	-
bc			All settlements are less than the Settlement Trough Limit Sensitivity.						
			All settlements are less than the Settlement Trough Limit Sensitivity.						
			All settlements are less than the Settlement Trough Limit Sensitivity.						
			All settlements are less than the Settlement Trough Limit Sensitivity.						
cd			All settlements are less than the Settlement Trough Limit Sensitivity.						
			All settlements are less than the Settlement Trough Limit Sensitivity.						
			All settlements are less than the Settlement Trough Limit Sensitivity.						
			All settlements are less than the Settlement Trough Limit Sensitivity.						
eh			Max Slope		2	2.7283	4.6571	Sagging	0.0011221
8.3037	0.010668	-	6661.4 0 (Negligible)						
			Max Settlement		3	4.6571	9.7590	Hogging	0.0011221
9.2216	0.025674	1958.7	- 0 (Negligible)						

9.2216	0.025674	Max Tensile Strain	1958.7	- 0 (Negligible)	3	4.6571	9.7590	Hogging	0.0011221
9.2216	0.025674	Min Radius of Curvature (Hogging)	1958.7	- 0 (Negligible)	3	4.6571	9.7590	Hogging	0.0011221
8.3037	0.010668	Min Radius of Curvature (Sagging)	-	6661.4 0 (Negligible)	2	2.7283	4.6571	Sagging	0.0011221
hf		Max Slope			1	0.0	10.879	Sagging	848.21E-6
7.5630	0.012601	Max Settlement	-	1904.7 0 (Negligible)	1	0.0	10.879	Sagging	848.21E-6
7.5630	0.012601	Max Tensile Strain	-	1904.7 0 (Negligible)	1	0.0	10.879	Sagging	848.21E-6
-	-	Min Radius of Curvature (Hogging)	-	-	-	-	-	-	-
7.5630	0.012601	Min Radius of Curvature (Sagging)	-	1904.7 0 (Negligible)	1	0.0	10.879	Sagging	848.21E-6
de		Max Slope			1	0.47607	0.47607	Sagging	0.050787
6.0065	0.0	Max Settlement	-	1.8724 0 (Negligible)	1	0.47607	0.47607	Sagging	0.050787
6.0065	0.0	Max Tensile Strain	-	1.8724 0 (Negligible)	1	0.47607	0.47607	Sagging	0.050787
6.0065	0.0	Min Radius of Curvature (Hogging)	-	1.8724 0 (Negligible)	-	-	-	-	-
-	-	Min Radius of Curvature (Sagging)	-	-	-	-	-	-	-

Specific Building Damage Results - All Combined Segments

Structure: 21-20 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start [m]	Length [m]	Curvature	Deflection Ratio [%]	Average Horizontal Strain [%]	Max Tensile Strain [%]	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: 19-20 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start [m]	Length [m]	Curvature	Deflection Ratio [%]	Average Horizontal Strain [%]	Max Tensile Strain [%]	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: 19-18 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start [m]	Length [m]	Curvature	Deflection Ratio [%]	Average Horizontal Strain [%]	Max Tensile Strain [%]	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

**Movement
Calculations**

[m] [m] [m] [%] [%] [%]
No structures have segments combined.

Structure: 18-13 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
---	-----------------------------	--------------	---------------	------------------	-----------------------------	--	-----------------------------------	------------------------

[m] [m] [m] [%] [%] [%]
No structures have segments combined.

Structure: 21-a | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
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[m] [m] [m] [%] [%] [%]
No structures have segments combined.

Structure: f-50 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
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[m] [m] [m] [%] [%] [%]
No structures have segments combined.

Structure: 14-15 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
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[m] [m] [m] [%] [%] [%]
No structures have segments combined.

Structure: 15-16 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
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[m] [m] [m] [%] [%] [%]
No structures have segments combined.

Structure: 16-17 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
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[m] [m] [m] [%] [%] [%]
No structures have segments combined.

Structure: 17-g | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: h-49 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: 49-36 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: 36-48 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: 48-47 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: 47-51 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: 50-46 | Sub-structure:

Vertical Offset from	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
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Line for Vertical Movement Calculations	Strain	Strain
[m] [m] [m]	[%]	[%]

No structures have segments combined.

Structure: 46-47 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]	[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 24-25 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]	[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 25-26 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]	[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 26-27 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]	[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 27-28 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]	[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 28-29 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]	[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 27-32 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 33-31 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 31-34 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 34-35 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 35-41 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 41-40 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 40-39 | Sub-structure:

Calculations

[m] [m] [m] [%] [%] [%]
No structures have segments combined.

Structure: 23-24 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
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[m] [m] [m] [%] [%] [%]
No structures have segments combined.

Structure: b-27 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
--	------------------	--------------	-----------	------------------	---------------------------	--------------------	-----------------

[m] [m] [m] [%] [%] [%]
No structures have segments combined.

Structure: 42-37 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
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[m] [m] [m] [%] [%] [%]
No structures have segments combined.

Structure: 47-43 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
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[m] [m] [m] [%] [%] [%]
No structures have segments combined.

Structure: 44-39 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
--	------------------	--------------	-----------	------------------	---------------------------	--------------------	-----------------

[m] [m] [m] [%] [%] [%]
No structures have segments combined.

Structure: 46-45 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
--	------------------	--------------	-----------	------------------	---------------------------	--------------------	-----------------

[m] [m] [m] [%] [%] [%]
No structures have segments combined.

Structure: a-12 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: 12-11 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: 11-f | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: ag | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: gb | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: bc | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: cd | Sub-structure:

Vertical Offset from Line for	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
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Vertical Movement Calculations
 [m] [m] [m] [%] [%] [%]
 No structures have segments combined.

Structure: eh | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: hf | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: de | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

DEMOLITION + EXCAVATION + LOADING (LONG TERM)

Analysis Options

Analysis: Boussinesq
 Global Poisson's ratio: 0.20
 Maximum allowable ratio between values of E: 1.5
 Horizontal rigid boundary level: -45.40 [m OD]
 Displacements at area centroids calculated.

Soil Profiles Soil Profile 1

Layer	Level at top	Number of intermediate displacement levels	Youngs Modulus		Poissons ratio	Non-linear curve
	[mOD]		Top	Btm		
			[kN/m ²]	[kN/m ²]		
1	0.0	8	10000.	10000.	0.20000	None
2	-4.2000	4	24000.	24000.	0.20000	None
3	-6.2500	4	24000.	24000.	0.20000	None
4	-8.3500	1	24000.	24000.	0.20000	None
5	-9.0000	61	16000.	75328.	0.20000	None
6	-39.600	11	300000.	300000.	0.20000	None

Soil Zones

Zone	Name	X coordinates	Y coordinates	Profile
------	------	---------------	---------------	---------

		min	max	min	max	
		[m]	[m]	[m]	[m]	
1	demo	0.0	110.00	0.0	110.00	Soil Profile 1

Load Data

Load ref.	Name	Shape Polygon	Orientation of Plane	Centre of load Number (local z) X	Normal (Global) (local x) Y	Angle of Tangential local x (local y) Z	Width x or Radius	Length
Y	Coordinates	Rectangle	of	(local z) X	(local x) Y	(local y) Z	from	Radius
tolerance	rectangles					(level)		
[m]				[kN/m ²]	[kN/m ²]	[kN/m ²]	[Degrees]	[m]
1	basement A	Polygonal	Horizontal	N/A	N/A	-0.60000	N/A	N/A
N/A	(66,58.3) (66,53.2)		10.000	2	-10.000	N/A	N/A	
	(59.8,51.7) (55,51.6)							
	(55,58.4)							
2	vault A	Polygonal	Horizontal	N/A	N/A	-3.1300	N/A	N/A
N/A	(55,58.4) (59.8,58.4)		10.000	1	-20.000	N/A	N/A	
	(59.8,51.6) (55,51.6)							
3	vault B	Polygonal	Horizontal	N/A	N/A	-3.1300	N/A	N/A
N/A	(44.3,58.4) (44.3,51.6)		10.000	1	-20.000	N/A	N/A	
	(39.6,51.7) (39.6,58.4)							
4	basement B	Polygonal	Horizontal	N/A	N/A	-3.1300	N/A	N/A
N/A	(55,58.4) (55,51.6)		10.000	1	-10.000	N/A	N/A	
	(39.6,51.7) (39.6,58.4)							
5	exc (3.6m)	Polygonal	Horizontal	N/A	N/A	-4.2000	N/A	N/A
N/A	(66,58.3) (66,53.2)		10.000	1	-72.000	N/A	N/A	
	(59.8,51.7) (59.8,58.3)							
6	exc (1.07m)	Polygonal	Horizontal	N/A	N/A	-4.2000	N/A	N/A
N/A	(59.8,58.3) (59.8,51.7)		10.000	1	-21.400	N/A	N/A	
	(39.6,51.7) (39.6,58.4)							
7	new basement	Polygonal	Horizontal	N/A	N/A	-4.2000	N/A	N/A
N/A	(66,58.3) (66,53.2)		10.000	2	10.000	N/A	N/A	
	(59.8,51.7) (39.6,51.7)							
	(39.6,58.4)							

Displacement Data

intrvl	Ref.	Type	Name	Direction of	Line/Line for extrusion	No. of
across	Extrusion	Depth	along	Calculate	Detailed	results
extrusion/line	Depth	extrusion	extrusion	X	Y	Z(level)
[m]				[m]	[m]	[m]
1	Grid	Grid 1	Global X	30.000	35.000	0.0
99	70.000	99	Yes	Yes	N/A	80.000
2	Line	21-20	N/A	55.960	70.700	0.0
11	N/A	N/A	Yes	Yes	44.210	70.720
3	Line	19-20	N/A	59.140	66.790	0.0
5	N/A	N/A	Yes	Yes	55.960	70.700
4	Line	19-18	N/A	59.140	66.790	0.0
2	N/A	N/A	Yes	Yes	59.170	64.780
5	Line	18-13	N/A	59.170	64.780	0.0
14	N/A	N/A	Yes	Yes	44.210	64.800
6	Line	21-a	N/A	44.210	70.720	0.0
34	N/A	N/A	Yes	Yes	44.060	58.900
7	Line	f-50	N/A	44.100	51.600	0.0
15	N/A	N/A	Yes	Yes	44.160	36.710
8	Line	14-15	N/A	55.000	64.760	0.0
2	N/A	N/A	Yes	Yes	55.000	62.620

9	Line	15-16	N/A	55.000	62.620	0.0	56.230	61.460	0.0
1	N/A	N/A	Yes	Yes					
10	Line	16-17	N/A	56.230	61.460	0.0	56.220	59.560	0.0
1	N/A	N/A	Yes	Yes					
11	Line	17-g	N/A	56.220	59.560	0.0	55.100	58.400	0.0
1	N/A	N/A	Yes	Yes					
12	Line	h-49	N/A	54.980	51.600	0.0	56.500	50.100	0.0
2	N/A	N/A	Yes	Yes					
13	Line	49-36	N/A	56.500	50.100	0.0	56.500	47.710	0.0
2	N/A	N/A	Yes	Yes					
14	Line	36-48	N/A	56.500	47.710	0.0	54.960	46.000	0.0
2	N/A	N/A	Yes	Yes					
15	Line	48-47	N/A	54.960	46.000	0.0	54.960	44.830	0.0
1	N/A	N/A	Yes	Yes					
16	Line	47-51	N/A	54.960	44.830	0.0	44.210	44.830	0.0
10	N/A	N/A	Yes	Yes					
17	Line	50-46	N/A	44.160	36.710	0.0	54.960	36.710	0.0
10	N/A	N/A	Yes	Yes					
18	Line	46-47	N/A	54.960	36.710	0.0	54.960	44.830	0.0
8	N/A	N/A	Yes	Yes					
19	Line	24-25	N/A	78.820	63.100	0.0	88.080	63.070	0.0
9	N/A	N/A	Yes	Yes					
20	Line	25-26	N/A	88.080	63.070	0.0	88.000	57.750	0.0
5	N/A	N/A	Yes	Yes					
21	Line	26-27	N/A	88.000	57.750	0.0	76.730	57.900	0.0
11	N/A	N/A	Yes	Yes					
22	Line	27-28	N/A	76.730	57.900	0.0	76.710	61.070	0.0
3	N/A	N/A	Yes	Yes					
23	Line	28-29	N/A	76.710	61.070	0.0	78.820	63.100	0.0
2	N/A	N/A	Yes	Yes					
24	Line	27-32	N/A	76.730	57.900	0.0	76.750	52.750	0.0
5	N/A	N/A	Yes	Yes					
25	Line	33-31	N/A	87.930	52.750	0.0	70.250	52.750	0.0
17	N/A	N/A	Yes	Yes					
26	Line	31-34	N/A	70.250	52.750	0.0	70.180	49.380	0.0
3	N/A	N/A	Yes	Yes					
27	Line	34-35	N/A	70.180	49.380	0.0	71.510	49.370	0.0
1	N/A	N/A	Yes	Yes					
28	Line	35-41	N/A	71.510	49.370	0.0	71.480	45.770	0.0
3	N/A	N/A	Yes	Yes					
29	Line	41-40	N/A	71.480	45.770	0.0	67.410	45.770	0.0
4	N/A	N/A	Yes	Yes					
30	Line	40-39	N/A	67.410	45.770	0.0	67.390	41.870	0.0
3	N/A	N/A	Yes	Yes					
31	Line	39-38	N/A	67.390	41.870	0.0	88.000	41.700	0.0
20	N/A	N/A	Yes	Yes					
32	Line	38-25	N/A	88.000	41.700	0.0	88.080	63.070	0.0
21	N/A	N/A	Yes	Yes					
33	Line	20-22	N/A	55.960	70.700	0.0	66.130	70.690	0.0
10	N/A	N/A	Yes	Yes					
34	Line	22-b	N/A	66.130	70.690	0.0	66.300	58.900	0.0
17	N/A	N/A	Yes	Yes					
35	Line	e-45	N/A	64.740	51.600	0.0	64.480	36.840	0.0
15	N/A	N/A	Yes	Yes					
36	Line	18-31	N/A	59.170	64.780	0.0	66.000	64.740	0.0
6	N/A	N/A	Yes	Yes					
37	Line	23-24	N/A	66.000	63.140	0.0	78.820	63.100	0.0
12	N/A	N/A	Yes	Yes					
38	Line	b-27	N/A	66.100	58.460	0.0	76.730	57.900	0.0
10	N/A	N/A	Yes	Yes					
39	Line	42-37	N/A	64.540	46.730	0.0	87.960	46.450	0.0
23	N/A	N/A	Yes	Yes					
40	Line	47-43	N/A	54.960	44.830	0.0	64.500	44.830	0.0
9	N/A	N/A	Yes	Yes					
41	Line	44-39	N/A	64.440	41.910	0.0	67.390	41.870	0.0
2	N/A	N/A	Yes	Yes					
42	Line	46-45	N/A	54.960	36.710	0.0	64.480	36.840	0.0
9	N/A	N/A	Yes	Yes					
43	Line	a-12	N/A	44.060	58.900	0.0	39.630	58.380	0.0
4	N/A	N/A	Yes	Yes					
44	Line	12-11	N/A	39.630	58.380	0.0	39.630	51.680	0.0
6	N/A	N/A	Yes	Yes					
45	Line	11-f	N/A	39.630	51.680	0.0	44.100	51.600	0.0
8	N/A	N/A	Yes	Yes					
46	Line	ag	N/A	44.060	58.900	0.0	55.100	58.400	0.0
11	N/A	N/A	Yes	Yes					

47	Line	gb	N/A	55.100	58.400	0.0	66.500	58.460	0.0
20	N/A	N/A	Yes	Yes					
48	Line	bc	N/A	66.500	58.460	0.0	66.500	52.900	0.0
20	N/A	N/A	Yes	Yes					
49	Line	cd	N/A	66.500	52.900	0.0	65.000	52.000	0.0
1	N/A	N/A	Yes	Yes					
50	Line	eh	N/A	64.740	51.600	0.0	54.980	51.600	0.0
9	N/A	N/A	Yes	Yes					
51	Line	hf	N/A	54.980	51.600	0.0	44.100	51.600	0.0
10	N/A	N/A	Yes	Yes					
52	Line	de	N/A	65.000	52.000	0.0	64.740	51.600	0.0
4	N/A	N/A	No	N/A					

Problem Type

Problem Type : Tunnelling and Embedded Wall Excavations

Displacement Data

Type of intervals across extrusion/line	Name of Extrusion	Direction of intervals of extrusion along	No. of Calculate Surface	Point/Line/Line for extrusion type for					No.
				First point			Second point		
				X	Y	Z(level)	X	Y	Z(level)
				[m]	[m]	[m]	[m]	[m]	[m]
[m]									
Grid 99	Grid 1	Global X	Yes	30.00000	35.00000	0.00000	-	80.00000	0.00000
Line 11	21-20	-	Yes	55.96000	70.70000	0.00000	44.21000	70.72000	0.00000
Line 5	19-20	-	Yes	59.14000	66.79000	0.00000	55.96000	70.70000	0.00000
Line 2	19-18	-	Yes	59.14000	66.79000	0.00000	59.17000	64.78000	0.00000
Line 14	18-13	-	Yes	59.17000	64.78000	0.00000	44.21000	64.80000	0.00000
Line 34	21-a	-	Yes	44.21000	70.72000	0.00000	44.06000	58.90000	0.00000
Line 15	f-50	-	Yes	44.10000	51.60000	0.00000	44.16000	36.71000	0.00000
Line 2	14-15	-	Yes	55.00000	64.76000	0.00000	55.00000	62.62000	0.00000
Line 1	15-16	-	Yes	55.00000	62.62000	0.00000	56.23000	61.46000	0.00000
Line 1	16-17	-	Yes	56.23000	61.46000	0.00000	56.22000	59.56000	0.00000
Line 1	17-g	-	Yes	56.22000	59.56000	0.00000	55.10000	58.40000	0.00000
Line 2	h-49	-	Yes	54.98000	51.60000	0.00000	56.50000	50.10000	0.00000
Line 2	49-36	-	Yes	56.50000	50.10000	0.00000	56.50000	47.71000	0.00000
Line 2	36-48	-	Yes	56.50000	47.71000	0.00000	54.96000	46.00000	0.00000
Line 1	48-47	-	Yes	54.96000	46.00000	0.00000	54.96000	44.83000	0.00000
Line 10	47-51	-	Yes	54.96000	44.83000	0.00000	44.21000	44.83000	0.00000
Line 10	50-46	-	Yes	44.16000	36.71000	0.00000	54.96000	36.71000	0.00000
Line 8	46-47	-	Yes	54.96000	36.71000	0.00000	54.96000	44.83000	0.00000
Line 9	24-25	-	Yes	78.82000	63.10000	0.00000	88.08000	63.07000	0.00000

Line 25-26	-	-	88.08000	63.07000	0.00000	88.00000	57.75000	0.00000
5	-	Yes	Surface					
Line 26-27	-	-	88.00000	57.75000	0.00000	76.73000	57.90000	0.00000
11	-	Yes	Surface					
Line 27-28	-	-	76.73000	57.90000	0.00000	76.71000	61.07000	0.00000
3	-	Yes	Surface					
Line 28-29	-	-	76.71000	61.07000	0.00000	78.82000	63.10000	0.00000
2	-	Yes	Surface					
Line 27-32	-	-	76.73000	57.90000	0.00000	76.75000	52.75000	0.00000
5	-	Yes	Surface					
Line 33-31	-	-	87.93000	52.75000	0.00000	70.25000	52.75000	0.00000
17	-	Yes	Surface					
Line 31-34	-	-	70.25000	52.75000	0.00000	70.18000	49.38000	0.00000
3	-	Yes	Surface					
Line 34-35	-	-	70.18000	49.38000	0.00000	71.51000	49.37000	0.00000
1	-	Yes	Surface					
Line 35-41	-	-	71.51000	49.37000	0.00000	71.48000	45.77000	0.00000
3	-	Yes	Surface					
Line 41-40	-	-	71.48000	45.77000	0.00000	67.41000	45.77000	0.00000
4	-	Yes	Surface					
Line 40-39	-	-	67.41000	45.77000	0.00000	67.39000	41.87000	0.00000
3	-	Yes	Surface					
Line 39-38	-	-	67.39000	41.87000	0.00000	88.00000	41.70000	0.00000
20	-	Yes	Surface					
Line 38-25	-	-	88.00000	41.70000	0.00000	88.08000	63.07000	0.00000
21	-	Yes	Surface					
Line 20-22	-	-	55.96000	70.70000	0.00000	66.13000	70.69000	0.00000
10	-	Yes	Surface					
Line 22-b	-	-	66.13000	70.69000	0.00000	66.30000	58.90000	0.00000
17	-	Yes	Surface					
Line e-45	-	-	64.74000	51.60000	0.00000	64.48000	36.84000	0.00000
15	-	Yes	Surface					
Line 18-31	-	-	59.17000	64.78000	0.00000	66.00000	64.74000	0.00000
6	-	Yes	Surface					
Line 23-24	-	-	66.00000	63.14000	0.00000	78.82000	63.10000	0.00000
12	-	Yes	Surface					
Line b-27	-	-	66.10000	58.46000	0.00000	76.73000	57.90000	0.00000
10	-	Yes	Surface					
Line 42-37	-	-	64.54000	46.73000	0.00000	87.96000	46.45000	0.00000
23	-	Yes	Surface					
Line 47-43	-	-	54.96000	44.83000	0.00000	64.50000	44.83000	0.00000
9	-	Yes	Surface					
Line 44-39	-	-	64.44000	41.91000	0.00000	67.39000	41.87000	0.00000
2	-	Yes	Surface					
Line 46-45	-	-	54.96000	36.71000	0.00000	64.48000	36.84000	0.00000
9	-	Yes	Surface					
Line a-12	-	-	44.06000	58.90000	0.00000	39.63000	58.38000	0.00000
4	-	Yes	Surface					
Line 12-11	-	-	39.63000	58.38000	0.00000	39.63000	51.68000	0.00000
6	-	Yes	Surface					
Line 11-f	-	-	39.63000	51.68000	0.00000	44.10000	51.60000	0.00000
8	-	Yes	Surface					
Line ag	-	-	44.06000	58.90000	0.00000	55.10000	58.40000	0.00000
11	-	Yes	Surface					
Line gb	-	-	55.10000	58.40000	0.00000	66.50000	58.46000	0.00000
20	-	Yes	Surface					
Line bc	-	-	66.50000	58.46000	0.00000	66.50000	52.90000	0.00000
20	-	Yes	Surface					
Line cd	-	-	66.50000	52.90000	0.00000	65.00000	52.00000	0.00000
1	-	Yes	Surface					
Line eh	-	-	64.74000	51.60000	0.00000	54.98000	51.60000	0.00000
9	-	Yes	Surface					
Line hf	-	-	54.98000	51.60000	0.00000	44.10000	51.60000	0.00000
10	-	Yes	Surface					
Line de	-	-	65.00000	52.00000	0.00000	64.74000	51.60000	0.00000
4	-	Yes	Surface					

Vertical Ground Movement Curves

Curve Name: No vertical ground movement

Coordinates: [Distance from wall / wall depth or max. excavation depth (x), Depth / wall depth or max. excavation depth (y), Settlement / wall depth or max.

excavation

depth (z) (%)]

Curve Fitting [0.000,0.000,0.000] [1.000,0.000,0.000] [0.000,1.000,0.000] [1.000,1.000,0.000]
Method: Polynomial
x Order: 1
y Order: 0
Polynomial: z = 0.0x + 0.0
Coeff. of -2147483648.E+2147483647
Determination:

Curve Name: Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11 (b))

Coordinates: [Distance from wall / wall depth or max. excavation depth (x), Depth / wall depth or max. excavation depth (y), Settlement / wall depth or max. excavation

depth (z) (%)
[0.000,0.000,0.039] [0.100,0.000,0.049] [0.200,0.000,0.056] [0.300,0.000,0.062]
[0.400,0.000,0.067] [0.500,0.000,0.070] [0.600,0.000,0.072] [0.700,0.000,0.073]
[0.800,0.000,0.073] [0.900,0.000,0.072] [1.000,0.000,0.070] [1.100,0.000,0.068]
[1.200,0.000,0.065] [1.300,0.000,0.061] [1.400,0.000,0.058] [1.500,0.000,0.054]
[1.600,0.000,0.050] [1.700,0.000,0.046] [1.800,0.000,0.042] [1.900,0.000,0.038]
[2.000,0.000,0.034] [2.100,0.000,0.030] [2.200,0.000,0.027] [2.300,0.000,0.023]
[2.400,0.000,0.020] [2.500,0.000,0.017] [2.600,0.000,0.014] [2.700,0.000,0.012]
[2.800,0.000,0.010] [2.900,0.000,0.008] [3.000,0.000,0.007] [3.100,0.000,0.005]
[3.200,0.000,0.004] [3.300,0.000,0.004] [3.400,0.000,0.003] [3.500,0.000,0.002]
[3.600,0.000,0.002] [3.700,0.000,0.002] [3.800,0.000,0.001] [3.900,0.000,0.001]
[4.000,0.000,0.000]

Curve Fitting Polynomial
Method:
x Order: 4
y Order: 0
Polynomial: z = -2.6455E-3x⁴ + 2.8495E-2x³ - 1.0051E-1x² + 1.0569E-1x + 3.8990E-2
Coeff. of 9.9991E-1
Determination:

Horizontal Ground Movement Curves

Curve Name: No horizontal ground movement

Coordinates: [Distance from wall / wall depth or max. excavation depth (x), Depth / wall depth or max. excavation depth (y), Horizontal movement / wall depth or max. excavation depth (z) (%)]

[0.000,0.000,0.000] [1.000,0.000,0.000] [0.000,1.000,0.000] [1.000,1.000,0.000]

Curve Fitting Polynomial
Method:
x Order: 0
y Order: 0
Polynomial: z = 0.0
Coeff. of -2147483648.E+2147483647
Determination:

Curve Name: Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11 (a))

Coordinates: [Distance from wall / wall depth or max. excavation depth (x), Depth / wall depth or max. excavation depth (y), Horizontal movement / wall depth or max. excavation depth (z) (%)]

[0.000,0.000,0.150] [4.000,0.000,0.000]

Curve Fitting Polynomial
Method:
x Order: 1
y Order: 0
Polynomial: z = -3.75E-2x + 1.50E-1
Coeff. of 1.00
Determination:

Polygonal Excavations

Excavation Name: Excavation 1
Surface level [m]: 0.0
Contribution: Positive
Enabled: No
Surface movement curves which are selected are applied between surface and [m]: -10.000

Corner **x** **y** **Base** **Stiffened** **Previous Side** **Next Side**

	Level				d	p1	p2*	d	p1	p2*
	[m]	[m]	[m]		[m]	[%]	[%]	[m]	[%]	[%]
1	66.020	58.310	-1.0700	No	-	-	-	-	-	-
2	66.000	53.200	-1.0700	No	-	-	-	-	-	-
3	59.820	51.680	-1.0700	No	-	-	-	-	-	-
4	39.630	51.680	-1.0700	No	-	-	-	-	-	-
5	39.630	58.380	-1.0700	No	-	-	-	-	-	-

Side	Corner 1		Corner 2		Ground Movement Curve	
	x	y	x	y	Vertical	Horizontal
	[m]	[m]	[m]	[m]		
1 of high stiff clay 2.11(a)	66.020	58.310	66.000	53.200	Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(b))	Excavation in front stiffness wall in (CIRIA 580 Fig.
2 of high stiff clay 2.11(a)	66.000	53.200	59.820	51.680	Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(b))	Excavation in front stiffness wall in (CIRIA 580 Fig.
3 of high stiff clay 2.11(a)	59.820	51.680	39.630	51.680	Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(b))	Excavation in front stiffness wall in (CIRIA 580 Fig.
4 of high stiff clay 2.11(a)	39.630	51.680	39.630	58.380	Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(b))	Excavation in front stiffness wall in (CIRIA 580 Fig.
5 of high stiff clay 2.11(a)	39.630	58.380	66.020	58.310	Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(b))	Excavation in front stiffness wall in (CIRIA 580 Fig.

Excavation Name: Excavation 2
Surface level [m]: 0.0
Contribution: Positive
Enabled: No
Surface movement curves which are selected are applied between surface and [m]: -5.0000

Corner	x	y	Base Level	Stiffened	Previous Side			Next Side		
					d	p1	p2*	d	p1	p2*
	[m]	[m]	[m]		[m]	[%]	[%]	[m]	[%]	[%]
1	59.820	58.310	-3.6000	No	-	-	-	-	-	-
2	66.020	58.310	-3.6000	No	-	-	-	-	-	-
3	66.000	53.200	-3.6000	No	-	-	-	-	-	-
4	59.820	51.680	-3.6000	No	-	-	-	-	-	-

Side	Corner 1		Corner 2		Ground Movement Curve	
	x	y	x	y	Vertical	Horizontal
	[m]	[m]	[m]	[m]		
1 of high stiff clay 2.11(a)	59.820	58.310	66.020	58.310	Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(b))	Excavation in front stiffness wall in (CIRIA 580 Fig.
2 of high stiff clay 2.11(a)	66.020	58.310	66.000	53.200	Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(b))	Excavation in front stiffness wall in (CIRIA 580 Fig.
3 of high	66.000	53.200	59.820	51.680	Excavation in front of high	Excavation in front

21-a	21-a	0.00000	11.81995	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
f-50	f-50	0.00000	14.88912	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
14-15	14-15	0.00000	2.13900	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
15-16	15-16	0.00000	1.68971	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
16-17	16-17	0.00000	1.89903	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
17-g	17-g	0.00000	1.61145	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
h-49	h-49	0.00000	2.13451	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
49-36	49-36	0.00000	2.38900	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
36-48	36-48	0.00000	2.30024	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
48-47	48-47	0.00000	1.16900	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
47-51	47-51	0.00000	10.74900	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
50-46	50-46	0.00000	10.79900	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
46-47	46-47	0.00000	8.11900	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
24-25	24-25	0.00000	9.25905	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
25-26	25-26	0.00000	5.31960	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
26-27	26-27	0.00000	11.27000	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
27-28	27-28	0.00000	3.16906	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
28-29	28-29	0.00000	2.92697	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
27-32	27-32	0.00000	5.14904	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
33-31	33-31	0.00000	17.67900	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
31-34	31-34	0.00000	3.36973	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
34-35	34-35	0.00000	1.32904	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
35-41	35-41	0.00000	3.59912	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
41-40	41-40	0.00000	4.06900	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
40-39	40-39	0.00000	3.89905	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
39-38	39-38	0.00000	20.60970	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
38-25	38-25	0.00000	21.36915	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
20-22	20-22	0.00000	10.16900	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
22-b	22-b	0.00000	11.79023	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
e-45	e-45	0.00000	14.76129	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
18-31	18-31	0.00000	6.82912	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
23-24	23-24	0.00000	12.81906	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
b-27	b-27	0.00000	10.64374	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
42-37	42-37	0.00000	23.42067	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
47-43	47-43	0.00000	9.53900	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
44-39	44-39	0.00000	2.94927	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
46-45	46-45	0.00000	9.51989	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
a-12	a-12	0.00000	4.45941	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				

12-11	12-11	0.00000	6.69900	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
11-f	11-f	0.00000	4.46972	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
ag	ag	0.00000	11.05032	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
gb	gb	0.00000	11.39916	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
bc	bc	0.00000	5.55900	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
cd	cd	0.00000	1.74829	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
eh	eh	0.00000	9.75900	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
hf	hf	0.00000	10.87900	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
de	de	0.00000	0.47607	0.10000	0.10000
Burland Strain Limits	0.20000 2.6000				

Specific Structures - Bending Parameters

Structure Name	Sub-Structure	Height	Default	Hogging			
				Sagging	Name	Properties	2nd Moment
Distance	Distance			of Area	of Bending	of N.A.	of Area
of Bending	of N.A.			(per unit	Strain	from Edge	(per unit
Strain	from Edge			width)	from N.A.	of Beam in	width)
from N.A.	of Beam in					Tension	
Tension							
[m]	[m]	[m]		[m ³]	[m]	[m]	[m ³]
21-20		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
19-20		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
19-18		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
18-13		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
21-a		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
f-50		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
14-15		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
15-16		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
16-17		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
17-g		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
h-49		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
49-36		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
36-48		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
48-47		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
47-51		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
50-46		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
46-47		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
24-25		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
25-26		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						

26-27		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
27-28		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
28-29		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
27-32		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
33-31		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
31-34		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
34-35		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
35-41		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
41-40		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
40-39		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
39-38		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
38-25		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
20-22		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						
22-b		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						
e-45		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						
18-31		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						
23-24		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						
b-27		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						
42-37		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						
47-43		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						
44-39		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						
46-45		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						
a-12		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						
12-11		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						
11-f		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						
ag		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
gb		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						
bc		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						
cd		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						
eh		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						
hf		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
de		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						

Building Segment Combinations

Structure Name	Sub-Structure Name	Vertical Offset from Line for Vertical Movement Calculations	Segment Start	Length	Curvature	Combined Segment
		[m]	[m]	[m]		

No structures have segments combined.

Utility Strain Calculation Options

Neglect beneficial contribution of axial strains : No

Specific Building Damage Results - Horizontal Displacements

Structure: 21-20 | Sub-structure:

Dist.	Coordinates			Displacements		Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
	x	y	z	x	y		
	[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]
0.0	55.96000	70.70000	0.00000	0.0	0.0	0.0	0.0 d
1.0682	54.89182	70.70182	0.00000	0.0	0.0	0.0	0.0 d
2.1364	53.82364	70.70364	0.00000	0.0	0.0	0.0	0.0 d
3.2046	52.75545	70.70545	0.00000	0.0	0.0	0.0	0.0 d
4.2727	51.68727	70.70727	0.00000	0.0	0.0	0.0	0.0 d
5.3409	50.61909	70.70909	0.00000	0.0	0.0	0.0	0.0 d
6.4091	49.55091	70.71091	0.00000	0.0	0.0	0.0	0.0 d
7.4773	48.48273	70.71273	0.00000	0.0	0.0	0.0	0.0 d
8.5455	47.41455	70.71455	0.00000	0.0	0.0	0.0	0.0 d
9.6137	46.34636	70.71636	0.00000	0.0	0.0	0.0	0.0 d
10.682	45.27818	70.71818	0.00000	0.0	0.0	0.0	0.0 d
11.750	44.21000	70.72000	0.00000	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: 19-20 | Sub-structure:

Dist.	Coordinates			Displacements		Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
	x	y	z	x	y		
	[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]
0.0	59.14000	66.79000	0.00000	0.0	0.0	0.0	0.0 d
1.0080	58.50400	67.57200	0.00000	0.0	0.0	0.0	0.0 d
2.0160	57.86800	68.35400	0.00000	0.0	0.0	0.0	0.0 d
3.0239	57.23200	69.13600	0.00000	0.0	0.0	0.0	0.0 d
4.0319	56.59600	69.91800	0.00000	0.0	0.0	0.0	0.0 d
5.0399	55.96000	70.70000	0.00000	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: 19-18 | Sub-structure:

Dist.	Coordinates			Displacements		Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
	x	y	z	x	y		
	[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]
0.0	59.14000	66.79000	0.00000	0.0	0.0	0.0	0.0 d
1.0051	59.15500	65.78500	0.00000	0.0	0.0	0.0	0.0 d
2.0102	59.17000	64.78000	0.00000	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: 18-13 | Sub-structure:

Dist.	Coordinates			Displacements		Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
	x	y	z	x	y		
	[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]
0.0	59.17000	64.78000	0.00000	0.0	0.0	0.0	0.0 d
1.0686	58.10143	64.78143	0.00000	0.0	0.0	0.0	0.0 d
2.1371	57.03286	64.78286	0.00000	0.0	0.0	0.0	0.0 d
3.2057	55.96429	64.78429	0.00000	0.0	0.0	0.0	0.0 d

4.2743	54.89571	64.78571	0.00000	0.0	0.0	0.0	0.0 d
5.3429	53.82714	64.78714	0.00000	0.0	0.0	0.0	0.0 d
6.4114	52.75857	64.78857	0.00000	0.0	0.0	0.0	0.0 d
7.4800	51.69000	64.79000	0.00000	0.0	0.0	0.0	0.0 d
8.5486	50.62143	64.79143	0.00000	0.0	0.0	0.0	0.0 d
9.6172	49.55286	64.79286	0.00000	0.0	0.0	0.0	0.0 d
10.686	48.48429	64.79429	0.00000	0.0	0.0	0.0	0.0 d
11.754	47.41571	64.79571	0.00000	0.0	0.0	0.0	0.0 d
12.823	46.34714	64.79714	0.00000	0.0	0.0	0.0	0.0 d
13.891	45.27857	64.79857	0.00000	0.0	0.0	0.0	0.0 d
14.960	44.21000	64.80000	0.00000	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: 21-a | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	44.21000	70.72000	0.00000	0.0	0.0	0.0	0.0	0.0 d
0.34768	44.20559	70.37235	0.00000	0.0	0.0	0.0	0.0	0.0 d
0.69535	44.20118	70.02471	0.00000	0.0	0.0	0.0	0.0	0.0 d
1.0430	44.19676	69.67706	0.00000	0.0	0.0	0.0	0.0	0.0 d
1.3907	44.19235	69.32941	0.00000	0.0	0.0	0.0	0.0	0.0 d
1.7384	44.18794	68.98176	0.00000	0.0	0.0	0.0	0.0	0.0 d
2.0861	44.18353	68.63412	0.00000	0.0	0.0	0.0	0.0	0.0 d
2.4337	44.17912	68.28647	0.00000	0.0	0.0	0.0	0.0	0.0 d
2.7814	44.17471	67.93882	0.00000	0.0	0.0	0.0	0.0	0.0 d
3.1291	44.17029	67.59118	0.00000	0.0	0.0	0.0	0.0	0.0 d
3.4768	44.16588	67.24353	0.00000	0.0	0.0	0.0	0.0	0.0 d
3.8244	44.16147	66.89588	0.00000	0.0	0.0	0.0	0.0	0.0 d
4.1721	44.15706	66.54824	0.00000	0.0	0.0	0.0	0.0	0.0 d
4.5198	44.15265	66.20059	0.00000	0.0	0.0	0.0	0.0	0.0 d
4.8675	44.14824	65.85294	0.00000	0.0	0.0	0.0	0.0	0.0 d
5.2151	44.14382	65.50529	0.00000	0.0	0.0	0.0	0.0	0.0 d
5.5628	44.13941	65.15765	0.00000	0.0	0.0	0.0	0.0	0.0 d
5.9105	44.13500	64.81000	0.00000	0.0	0.0	0.0	0.0	0.0 d
6.2582	44.13059	64.46235	0.00000	0.0	0.0	0.0	0.0	0.0 d
6.6058	44.12618	64.11471	0.00000	0.0	0.0	0.0	0.0	0.0 d
6.9535	44.12176	63.76706	0.00000	0.0	0.0	0.0	0.0	0.0 d
7.3012	44.11735	63.41941	0.00000	0.0	0.0	0.0	0.0	0.0 d
7.6489	44.11294	63.07176	0.00000	0.0	0.0	0.0	0.0	0.0 d
7.9965	44.10853	62.72412	0.00000	0.0	0.0	0.0	0.0	0.0 d
8.3442	44.10412	62.37647	0.00000	0.0	0.0	0.0	0.0	0.0 d
8.6919	44.09971	62.02882	0.00000	0.0	0.0	0.0	0.0	0.0 d
9.0396	44.09529	61.68118	0.00000	0.0	0.0	0.0	0.0	0.0 d
9.3872	44.09088	61.33353	0.00000	0.0	0.0	0.0	0.0	0.0 d
9.7349	44.08647	60.98588	0.00000	0.0	0.0	0.0	0.0	0.0 d
10.083	44.08206	60.63824	0.00000	0.0	0.0	0.0	0.0	0.0 d
10.430	44.07765	60.29059	0.00000	0.0	0.0	0.0	0.0	0.0 d
10.778	44.07324	59.94294	0.00000	0.0	0.0	0.0	0.0	0.0 d
11.126	44.06882	59.59529	0.00000	0.0	0.0	0.0	0.0	0.0 d
11.473	44.06441	59.24765	0.00000	0.0	0.0	0.0	0.0	0.0 d
11.821	44.06000	58.90000	0.00000	0.0	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: f-50 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	44.10000	51.60000	0.00000	0.0	0.0	0.0	0.0	0.0 d
0.99267	44.10400	50.60733	0.00000	0.0	0.0	0.0	0.0	0.0 d
1.9853	44.10800	49.61467	0.00000	0.0	0.0	0.0	0.0	0.0 d
2.9780	44.11200	48.62200	0.00000	0.0	0.0	0.0	0.0	0.0 d
3.9707	44.11600	47.62933	0.00000	0.0	0.0	0.0	0.0	0.0 d
4.9634	44.12000	46.63667	0.00000	0.0	0.0	0.0	0.0	0.0 d
5.9560	44.12400	45.64400	0.00000	0.0	0.0	0.0	0.0	0.0 d
6.9487	44.12800	44.65133	0.00000	0.0	0.0	0.0	0.0	0.0 d
7.9414	44.13200	43.65867	0.00000	0.0	0.0	0.0	0.0	0.0 d

8.9341	44.13600	42.66600	0.00000	0.0	0.0	0.0	0.0	d
9.9267	44.14000	41.67333	0.00000	0.0	0.0	0.0	0.0	d
10.919	44.14400	40.68067	0.00000	0.0	0.0	0.0	0.0	d
11.912	44.14800	39.68800	0.00000	0.0	0.0	0.0	0.0	d
12.905	44.15200	38.69533	0.00000	0.0	0.0	0.0	0.0	d
13.897	44.15600	37.70267	0.00000	0.0	0.0	0.0	0.0	d
14.890	44.16000	36.71000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 14-15 | Sub-structure:

Dist.	Coordinates					Displacements		
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	55.00000	64.76000	0.00000	0.0	0.0	0.0	0.0	d
1.0700	55.00000	63.69000	0.00000	0.0	0.0	0.0	0.0	d
2.1400	55.00000	62.62000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 15-16 | Sub-structure:

Dist.	Coordinates					Displacements		
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	55.00000	62.62000	0.00000	0.0	0.0	0.0	0.0	d
1.6907	56.23000	61.46000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 16-17 | Sub-structure:

Dist.	Coordinates					Displacements		
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	56.23000	61.46000	0.00000	0.0	0.0	0.0	0.0	d
1.9000	56.22000	59.56000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 17-g | Sub-structure:

Dist.	Coordinates					Displacements		
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	56.22000	59.56000	0.00000	0.0	0.0	0.0	0.0	d
1.6125	55.10000	58.40000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: h-49 | Sub-structure:

Dist.	Coordinates					Displacements		
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	54.98000	51.60000	0.00000	0.0	0.0	0.0	0.0	d
1.0678	55.74000	50.85000	0.00000	0.0	0.0	0.0	0.0	d
2.1355	56.50000	50.10000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 49-36 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	56.50000	50.10000	0.00000	0.0	0.0	0.0	0.0 d	
1.1950	56.50000	48.90500	0.00000	0.0	0.0	0.0	0.0 d	
2.3900	56.50000	47.71000	0.00000	0.0	0.0	0.0	0.0 d	

d - Displacements include imported displacements.

Structure: 36-48 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	56.50000	47.71000	0.00000	0.0	0.0	0.0	0.0 d	
1.1506	55.73000	46.85500	0.00000	0.0	0.0	0.0	0.0 d	
2.3012	54.96000	46.00000	0.00000	0.0	0.0	0.0	0.0 d	

d - Displacements include imported displacements.

Structure: 48-47 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	54.96000	46.00000	0.00000	0.0	0.0	0.0	0.0 d	
1.1700	54.96000	44.83000	0.00000	0.0	0.0	0.0	0.0 d	

d - Displacements include imported displacements.

Structure: 47-51 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	54.96000	44.83000	0.00000	0.0	0.0	0.0	0.0 d	
1.0750	53.88500	44.83000	0.00000	0.0	0.0	0.0	0.0 d	
2.1500	52.81000	44.83000	0.00000	0.0	0.0	0.0	0.0 d	
3.2250	51.73500	44.83000	0.00000	0.0	0.0	0.0	0.0 d	
4.3000	50.66000	44.83000	0.00000	0.0	0.0	0.0	0.0 d	
5.3750	49.58500	44.83000	0.00000	0.0	0.0	0.0	0.0 d	
6.4500	48.51000	44.83000	0.00000	0.0	0.0	0.0	0.0 d	
7.5250	47.43500	44.83000	0.00000	0.0	0.0	0.0	0.0 d	
8.6000	46.36000	44.83000	0.00000	0.0	0.0	0.0	0.0 d	
9.6750	45.28500	44.83000	0.00000	0.0	0.0	0.0	0.0 d	
10.750	44.21000	44.83000	0.00000	0.0	0.0	0.0	0.0 d	

d - Displacements include imported displacements.

Structure: 50-46 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	44.16000	36.71000	0.00000	0.0	0.0	0.0	0.0 d	
1.0800	45.24000	36.71000	0.00000	0.0	0.0	0.0	0.0 d	
2.1600	46.32000	36.71000	0.00000	0.0	0.0	0.0	0.0 d	
3.2400	47.40000	36.71000	0.00000	0.0	0.0	0.0	0.0 d	
4.3200	48.48000	36.71000	0.00000	0.0	0.0	0.0	0.0 d	
5.4000	49.56000	36.71000	0.00000	0.0	0.0	0.0	0.0 d	

6.4800	50.64000	36.71000	0.00000	0.0	0.0	0.0	0.0 d
7.5600	51.72000	36.71000	0.00000	0.0	0.0	0.0	0.0 d
8.6400	52.80000	36.71000	0.00000	0.0	0.0	0.0	0.0 d
9.7200	53.88000	36.71000	0.00000	0.0	0.0	0.0	0.0 d
10.800	54.96000	36.71000	0.00000	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: 46-47 | Sub-structure:

Dist.	Coordinates			Displacements			
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	54.96000	36.71000	0.00000	0.0	0.0	0.0	0.0 d
1.0150	54.96000	37.72500	0.00000	0.0	0.0	0.0	0.0 d
2.0300	54.96000	38.74000	0.00000	0.0	0.0	0.0	0.0 d
3.0450	54.96000	39.75500	0.00000	0.0	0.0	0.0	0.0 d
4.0600	54.96000	40.77000	0.00000	0.0	0.0	0.0	0.0 d
5.0750	54.96000	41.78500	0.00000	0.0	0.0	0.0	0.0 d
6.0900	54.96000	42.80000	0.00000	0.0	0.0	0.0	0.0 d
7.1050	54.96000	43.81500	0.00000	0.0	0.0	0.0	0.0 d
8.1200	54.96000	44.83000	0.00000	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: 24-25 | Sub-structure:

Dist.	Coordinates			Displacements			
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	78.82000	63.10000	0.00000	0.0	0.0	0.0	0.0 d
1.0289	79.84889	63.09667	0.00000	0.0	0.0	0.0	0.0 d
2.0578	80.87778	63.09333	0.00000	0.0	0.0	0.0	0.0 d
3.0867	81.90667	63.09000	0.00000	0.0	0.0	0.0	0.0 d
4.1156	82.93556	63.08667	0.00000	0.0	0.0	0.0	0.0 d
5.1445	83.96444	63.08333	0.00000	0.0	0.0	0.0	0.0 d
6.1734	84.99333	63.08000	0.00000	0.0	0.0	0.0	0.0 d
7.2023	86.02222	63.07667	0.00000	0.0	0.0	0.0	0.0 d
8.2312	87.05111	63.07333	0.00000	0.0	0.0	0.0	0.0 d
9.2600	88.08000	63.07000	0.00000	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: 25-26 | Sub-structure:

Dist.	Coordinates			Displacements			
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	88.08000	63.07000	0.00000	0.0	0.0	0.0	0.0 d
1.0641	88.06400	62.00600	0.00000	0.0	0.0	0.0	0.0 d
2.1282	88.04800	60.94200	0.00000	0.0	0.0	0.0	0.0 d
3.1924	88.03200	59.87800	0.00000	0.0	0.0	0.0	0.0 d
4.2565	88.01600	58.81400	0.00000	0.0	0.0	0.0	0.0 d
5.3206	88.00000	57.75000	0.00000	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: 26-27 | Sub-structure:

Dist.	Coordinates			Displacements			
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	88.00000	57.75000	0.00000	0.0	0.0	0.0	0.0 d
1.0246	86.97545	57.76364	0.00000	0.0	0.0	0.0	0.0 d
2.0493	85.95091	57.77727	0.00000	0.0	0.0	0.0	0.0 d

3.0739	84.92636	57.79091	0.00000	0.0	0.0	0.0	0.0	d
4.0985	83.90182	57.80455	0.00000	0.0	0.0	0.0	0.0	d
5.1232	82.87727	57.81818	0.00000	0.0	0.0	0.0	0.0	d
6.1478	81.85273	57.83182	0.00000	0.0	0.0	0.0	0.0	d
7.1725	80.82818	57.84545	0.00000	0.0	0.0	0.0	0.0	d
8.1971	79.80364	57.85909	0.00000	0.0	0.0	0.0	0.0	d
9.2217	78.77909	57.87273	0.00000	0.0	0.0	0.0	0.0	d
10.246	77.75455	57.88636	0.00000	0.0	0.0	0.0	0.0	d
11.271	76.73000	57.90000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 27-28 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	76.73000	57.90000	0.00000	0.0	0.0	0.0	0.0	d
1.0567	76.72333	58.95667	0.00000	0.0	0.0	0.0	0.0	d
2.1134	76.71667	60.01333	0.00000	0.0	0.0	0.0	0.0	d
3.1701	76.71000	61.07000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 28-29 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	76.71000	61.07000	0.00000	0.0	0.0	0.0	0.0	d
1.4640	77.76500	62.08500	0.00000	0.0	0.0	0.0	0.0	d
2.9280	78.82000	63.10000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 27-32 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	76.73000	57.90000	0.00000	0.0	0.0	0.0	0.0	d
1.0300	76.73400	56.87000	0.00000	0.0	0.0	0.0	0.0	d
2.0600	76.73800	55.84000	0.00000	0.0	0.0	0.0	0.0	d
3.0900	76.74200	54.81000	0.00000	0.0	0.0	0.0	0.0	d
4.1200	76.74600	53.78000	0.00000	0.0	0.0	0.0	0.0	d
5.1500	76.75000	52.75000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 33-31 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	87.93000	52.75000	0.00000	0.0	0.0	0.0	0.0	d
1.0400	86.89000	52.75000	0.00000	0.0	0.0	0.0	0.0	d
2.0800	85.85000	52.75000	0.00000	0.0	0.0	0.0	0.0	d
3.1200	84.81000	52.75000	0.00000	0.0	0.0	0.0	0.0	d
4.1600	83.77000	52.75000	0.00000	0.0	0.0	0.0	0.0	d
5.2000	82.73000	52.75000	0.00000	0.0	0.0	0.0	0.0	d
6.2400	81.69000	52.75000	0.00000	0.0	0.0	0.0	0.0	d
7.2800	80.65000	52.75000	0.00000	0.0	0.0	0.0	0.0	d
8.3200	79.61000	52.75000	0.00000	0.0	0.0	0.0	0.0	d
9.3600	78.57000	52.75000	0.00000	0.0	0.0	0.0	0.0	d
10.400	77.53000	52.75000	0.00000	0.0	0.0	0.0	0.0	d

Dist.	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
11.440	76.49000	52.75000	0.00000	0.0	0.0	0.0	0.0 d
12.480	75.45000	52.75000	0.00000	0.0	0.0	0.0	0.0 d
13.520	74.41000	52.75000	0.00000	0.0	0.0	0.0	0.0 d
14.560	73.37000	52.75000	0.00000	0.0	0.0	0.0	0.0 d
15.600	72.33000	52.75000	0.00000	0.0	0.0	0.0	0.0 d
16.640	71.29000	52.75000	0.00000	0.0	0.0	0.0	0.0 d
17.680	70.25000	52.75000	0.00000	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: 31-34 | Sub-structure:

Dist.	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	70.25000	52.75000	0.00000	0.0	0.0	0.0	0.0 d
1.1236	70.22667	51.62667	0.00000	0.0	0.0	0.0	0.0 d
2.2472	70.20333	50.50333	0.00000	0.0	0.0	0.0	0.0 d
3.3707	70.18000	49.38000	0.00000	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: 34-35 | Sub-structure:

Dist.	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	70.18000	49.38000	0.00000	0.0	0.0	0.0	0.0 d
1.3300	71.51000	49.37000	0.00000	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: 35-41 | Sub-structure:

Dist.	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	71.51000	49.37000	0.00000	0.0	0.0	0.0	0.0 d
1.2000	71.50000	48.17000	0.00000	0.0	0.0	0.0	0.0 d
2.4001	71.49000	46.97000	0.00000	0.0	0.0	0.0	0.0 d
3.6001	71.48000	45.77000	0.00000	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: 41-40 | Sub-structure:

Dist.	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	71.48000	45.77000	0.00000	0.0	0.0	0.0	0.0 d
1.0175	70.46250	45.77000	0.00000	0.0	0.0	0.0	0.0 d
2.0350	69.44500	45.77000	0.00000	0.0	0.0	0.0	0.0 d
3.0525	68.42750	45.77000	0.00000	0.0	0.0	0.0	0.0 d
4.0700	67.41000	45.77000	0.00000	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: 40-39 | Sub-structure:

Dist.	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]

0.0	67.41000	45.77000	0.00000	0.0	0.0	0.0	0.0	d
1.3000	67.40333	44.47000	0.00000	0.0	0.0	0.0	0.0	d
2.6000	67.39667	43.17000	0.00000	0.0	0.0	0.0	0.0	d
3.9001	67.39000	41.87000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 39-38 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	67.39000	41.87000	0.00000	0.0	0.0	0.0	0.0	d
1.0305	68.42050	41.86150	0.00000	0.0	0.0	0.0	0.0	d
2.0611	69.45100	41.85300	0.00000	0.0	0.0	0.0	0.0	d
3.0916	70.48150	41.84450	0.00000	0.0	0.0	0.0	0.0	d
4.1221	71.51200	41.83600	0.00000	0.0	0.0	0.0	0.0	d
5.1527	72.54250	41.82750	0.00000	0.0	0.0	0.0	0.0	d
6.1832	73.57300	41.81900	0.00000	0.0	0.0	0.0	0.0	d
7.2137	74.60350	41.81050	0.00000	0.0	0.0	0.0	0.0	d
8.2443	75.63400	41.80200	0.00000	0.0	0.0	0.0	0.0	d
9.2748	76.66450	41.79350	0.00000	0.0	0.0	0.0	0.0	d
10.305	77.69500	41.78500	0.00000	0.0	0.0	0.0	0.0	d
11.336	78.72550	41.77650	0.00000	0.0	0.0	0.0	0.0	d
12.366	79.75600	41.76800	0.00000	0.0	0.0	0.0	0.0	d
13.397	80.78650	41.75950	0.00000	0.0	0.0	0.0	0.0	d
14.427	81.81700	41.75100	0.00000	0.0	0.0	0.0	0.0	d
15.458	82.84750	41.74250	0.00000	0.0	0.0	0.0	0.0	d
16.489	83.87800	41.73400	0.00000	0.0	0.0	0.0	0.0	d
17.519	84.90850	41.72550	0.00000	0.0	0.0	0.0	0.0	d
18.550	85.93900	41.71700	0.00000	0.0	0.0	0.0	0.0	d
19.580	86.96950	41.70850	0.00000	0.0	0.0	0.0	0.0	d
20.611	88.00000	41.70000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 38-25 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	88.00000	41.70000	0.00000	0.0	0.0	0.0	0.0	d
1.0176	88.00381	42.71762	0.00000	0.0	0.0	0.0	0.0	d
2.0353	88.00762	43.73524	0.00000	0.0	0.0	0.0	0.0	d
3.0529	88.01143	44.75286	0.00000	0.0	0.0	0.0	0.0	d
4.0705	88.01524	45.77048	0.00000	0.0	0.0	0.0	0.0	d
5.0881	88.01905	46.78810	0.00000	0.0	0.0	0.0	0.0	d
6.1058	88.02286	47.80571	0.00000	0.0	0.0	0.0	0.0	d
7.1234	88.02667	48.82333	0.00000	0.0	0.0	0.0	0.0	d
8.1410	88.03048	49.84095	0.00000	0.0	0.0	0.0	0.0	d
9.1586	88.03429	50.85857	0.00000	0.0	0.0	0.0	0.0	d
10.176	88.03810	51.87619	0.00000	0.0	0.0	0.0	0.0	d
11.194	88.04190	52.89381	0.00000	0.0	0.0	0.0	0.0	d
12.212	88.04571	53.91143	0.00000	0.0	0.0	0.0	0.0	d
13.229	88.04952	54.92905	0.00000	0.0	0.0	0.0	0.0	d
14.247	88.05333	55.94667	0.00000	0.0	0.0	0.0	0.0	d
15.264	88.05714	56.96429	0.00000	0.0	0.0	0.0	0.0	d
16.282	88.06095	57.98190	0.00000	0.0	0.0	0.0	0.0	d
17.300	88.06476	58.99952	0.00000	0.0	0.0	0.0	0.0	d
18.317	88.06857	60.01714	0.00000	0.0	0.0	0.0	0.0	d
19.335	88.07238	61.03476	0.00000	0.0	0.0	0.0	0.0	d
20.353	88.07619	62.05238	0.00000	0.0	0.0	0.0	0.0	d
21.370	88.08000	63.07000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 20-22 | Sub-structure:

Dist.	Coordinates			Displacements		
	x	y	z	x	y	Horizontal displacement

						along the Line	perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	55.96000	70.70000	0.00000	0.0	0.0	0.0	0.0	d
1.0170	56.97700	70.69900	0.00000	0.0	0.0	0.0	0.0	d
2.0340	57.99400	70.69800	0.00000	0.0	0.0	0.0	0.0	d
3.0510	59.01100	70.69700	0.00000	0.0	0.0	0.0	0.0	d
4.0680	60.02800	70.69600	0.00000	0.0	0.0	0.0	0.0	d
5.0850	61.04500	70.69500	0.00000	0.0	0.0	0.0	0.0	d
6.1020	62.06200	70.69400	0.00000	0.0	0.0	0.0	0.0	d
7.1190	63.07900	70.69300	0.00000	0.0	0.0	0.0	0.0	d
8.1360	64.09600	70.69200	0.00000	0.0	0.0	0.0	0.0	d
9.1530	65.11300	70.69100	0.00000	0.0	0.0	0.0	0.0	d
10.170	66.13000	70.69000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 22-b | Sub-structure:

Dist.	Coordinates					Displacements		
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	66.13000	70.69000	0.00000	0.0	0.0	0.0	0.0	d
0.69360	66.14000	69.99647	0.00000	0.0	0.0	0.0	0.0	d
1.3872	66.15000	69.30294	0.00000	0.0	0.0	0.0	0.0	d
2.0808	66.16000	68.60941	0.00000	0.0	0.0	0.0	0.0	d
2.7744	66.17000	67.91588	0.00000	0.0	0.0	0.0	0.0	d
3.4680	66.18000	67.22235	0.00000	0.0	0.0	0.0	0.0	d
4.1616	66.19000	66.52882	0.00000	0.0	0.0	0.0	0.0	d
4.8552	66.20000	65.83529	0.00000	0.0	0.0	0.0	0.0	d
5.5488	66.21000	65.14176	0.00000	0.0	0.0	0.0	0.0	d
6.2424	66.22000	64.44824	0.00000	0.0	0.0	0.0	0.0	d
6.9360	66.23000	63.75471	0.00000	0.0	0.0	0.0	0.0	d
7.6296	66.24000	63.06118	0.00000	0.0	0.0	0.0	0.0	d
8.3232	66.25000	62.36765	0.00000	0.0	0.0	0.0	0.0	d
9.0168	66.26000	61.67412	0.00000	0.0	0.0	0.0	0.0	d
9.7104	66.27000	60.98059	0.00000	0.0	0.0	0.0	0.0	d
10.404	66.28000	60.28706	0.00000	0.0	0.0	0.0	0.0	d
11.098	66.29000	59.59353	0.00000	0.0	0.0	0.0	0.0	d
11.791	66.30000	58.90000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: e-45 | Sub-structure:

Dist.	Coordinates					Displacements		
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	64.74000	51.60000	0.00000	0.0	0.0	0.0	0.0	d
0.98415	64.72267	50.61600	0.00000	0.0	0.0	0.0	0.0	d
1.9683	64.70533	49.63200	0.00000	0.0	0.0	0.0	0.0	d
2.9525	64.68800	48.64800	0.00000	0.0	0.0	0.0	0.0	d
3.9366	64.67067	47.66400	0.00000	0.0	0.0	0.0	0.0	d
4.9208	64.65333	46.68000	0.00000	0.0	0.0	0.0	0.0	d
5.9049	64.63600	45.69600	0.00000	0.0	0.0	0.0	0.0	d
6.8891	64.61867	44.71200	0.00000	0.0	0.0	0.0	0.0	d
7.8732	64.60133	43.72800	0.00000	0.0	0.0	0.0	0.0	d
8.8574	64.58400	42.74400	0.00000	0.0	0.0	0.0	0.0	d
9.8415	64.56667	41.76000	0.00000	0.0	0.0	0.0	0.0	d
10.826	64.54933	40.77600	0.00000	0.0	0.0	0.0	0.0	d
11.810	64.53200	39.79200	0.00000	0.0	0.0	0.0	0.0	d
12.794	64.51467	38.80800	0.00000	0.0	0.0	0.0	0.0	d
13.778	64.49733	37.82400	0.00000	0.0	0.0	0.0	0.0	d
14.762	64.48000	36.84000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 18-31 | Sub-structure:

Dist.	Coordinates					Displacements	
	x	y	z	x	y	Horizontal	Horizontal

						displacement along the Line	displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	59.17000	64.78000	0.00000	0.0	0.0	0.0	0.0	d
1.1384	60.30833	64.77333	0.00000	0.0	0.0	0.0	0.0	d
2.2767	61.44667	64.76667	0.00000	0.0	0.0	0.0	0.0	d
3.4151	62.58500	64.76000	0.00000	0.0	0.0	0.0	0.0	d
4.5534	63.72333	64.75333	0.00000	0.0	0.0	0.0	0.0	d
5.6918	64.86167	64.74667	0.00000	0.0	0.0	0.0	0.0	d
6.8301	66.00000	64.74000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 23-24 | Sub-structure:

Dist.	Coordinates					Displacements		
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	66.00000	63.14000	0.00000	0.0	0.0	0.0	0.0	d
1.0683	67.06833	63.13667	0.00000	0.0	0.0	0.0	0.0	d
2.1367	68.13667	63.13333	0.00000	0.0	0.0	0.0	0.0	d
3.2050	69.20500	63.13000	0.00000	0.0	0.0	0.0	0.0	d
4.2734	70.27333	63.12667	0.00000	0.0	0.0	0.0	0.0	d
5.3417	71.34167	63.12333	0.00000	0.0	0.0	0.0	0.0	d
6.4100	72.41000	63.12000	0.00000	0.0	0.0	0.0	0.0	d
7.4784	73.47833	63.11667	0.00000	0.0	0.0	0.0	0.0	d
8.5467	74.54667	63.11333	0.00000	0.0	0.0	0.0	0.0	d
9.6150	75.61500	63.11000	0.00000	0.0	0.0	0.0	0.0	d
10.683	76.68333	63.10667	0.00000	0.0	0.0	0.0	0.0	d
11.752	77.75167	63.10333	0.00000	0.0	0.0	0.0	0.0	d
12.820	78.82000	63.10000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: b-27 | Sub-structure:

Dist.	Coordinates					Displacements		
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	66.10000	58.46000	0.00000	0.0	0.0	0.0	0.0	d
1.0645	67.16300	58.40400	0.00000	0.0	0.0	0.0	0.0	d
2.1289	68.22600	58.34800	0.00000	0.0	0.0	0.0	0.0	d
3.1934	69.28900	58.29200	0.00000	0.0	0.0	0.0	0.0	d
4.2579	70.35200	58.23600	0.00000	0.0	0.0	0.0	0.0	d
5.3224	71.41500	58.18000	0.00000	0.0	0.0	0.0	0.0	d
6.3868	72.47800	58.12400	0.00000	0.0	0.0	0.0	0.0	d
7.4513	73.54100	58.06800	0.00000	0.0	0.0	0.0	0.0	d
8.5158	74.60400	58.01200	0.00000	0.0	0.0	0.0	0.0	d
9.5803	75.66700	57.95600	0.00000	0.0	0.0	0.0	0.0	d
10.645	76.73000	57.90000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 42-37 | Sub-structure:

Dist.	Coordinates					Displacements		
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	64.54000	46.73000	0.00000	0.0	0.0	0.0	0.0	d
1.0183	65.55826	46.71783	0.00000	0.0	0.0	0.0	0.0	d
2.0367	66.57652	46.70565	0.00000	0.0	0.0	0.0	0.0	d
3.0550	67.59478	46.69348	0.00000	0.0	0.0	0.0	0.0	d
4.0733	68.61304	46.68130	0.00000	0.0	0.0	0.0	0.0	d
5.0917	69.63130	46.66913	0.00000	0.0	0.0	0.0	0.0	d
6.1100	70.64957	46.65696	0.00000	0.0	0.0	0.0	0.0	d
7.1283	71.66783	46.64478	0.00000	0.0	0.0	0.0	0.0	d
8.1467	72.68609	46.63261	0.00000	0.0	0.0	0.0	0.0	d

9.1650	73.70435	46.62043	0.00000	0.0	0.0	0.0	0.0	d
10.183	74.72261	46.60826	0.00000	0.0	0.0	0.0	0.0	d
11.202	75.74087	46.59609	0.00000	0.0	0.0	0.0	0.0	d
12.220	76.75913	46.58391	0.00000	0.0	0.0	0.0	0.0	d
13.238	77.77739	46.57174	0.00000	0.0	0.0	0.0	0.0	d
14.257	78.79565	46.55957	0.00000	0.0	0.0	0.0	0.0	d
15.275	79.81391	46.54739	0.00000	0.0	0.0	0.0	0.0	d
16.293	80.83217	46.53522	0.00000	0.0	0.0	0.0	0.0	d
17.312	81.85043	46.52304	0.00000	0.0	0.0	0.0	0.0	d
18.330	82.86870	46.51087	0.00000	0.0	0.0	0.0	0.0	d
19.348	83.88696	46.49870	0.00000	0.0	0.0	0.0	0.0	d
20.367	84.90522	46.48652	0.00000	0.0	0.0	0.0	0.0	d
21.385	85.92348	46.47435	0.00000	0.0	0.0	0.0	0.0	d
22.403	86.94174	46.46217	0.00000	0.0	0.0	0.0	0.0	d
23.422	87.96000	46.45000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 47-43 | Sub-structure:

Dist.	Coordinates			Displacements		Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	x	y	z	x	y			
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	54.96000	44.83000	0.00000	0.0	0.0	0.0	0.0	d
1.0600	56.02000	44.83000	0.00000	0.0	0.0	0.0	0.0	d
2.1200	57.08000	44.83000	0.00000	0.0	0.0	0.0	0.0	d
3.1800	58.14000	44.83000	0.00000	0.0	0.0	0.0	0.0	d
4.2400	59.20000	44.83000	0.00000	0.0	0.0	0.0	0.0	d
5.3000	60.26000	44.83000	0.00000	0.0	0.0	0.0	0.0	d
6.3600	61.32000	44.83000	0.00000	0.0	0.0	0.0	0.0	d
7.4200	62.38000	44.83000	0.00000	0.0	0.0	0.0	0.0	d
8.4800	63.44000	44.83000	0.00000	0.0	0.0	0.0	0.0	d
9.5400	64.50000	44.83000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 44-39 | Sub-structure:

Dist.	Coordinates			Displacements		Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	x	y	z	x	y			
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	64.44000	41.91000	0.00000	0.0	0.0	0.0	0.0	d
1.4751	65.91500	41.89000	0.00000	0.0	0.0	0.0	0.0	d
2.9503	67.39000	41.87000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 46-45 | Sub-structure:

Dist.	Coordinates			Displacements		Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	x	y	z	x	y			
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	54.96000	36.71000	0.00000	0.0	0.0	0.0	0.0	d
1.0579	56.01778	36.72444	0.00000	0.0	0.0	0.0	0.0	d
2.1158	57.07556	36.73889	0.00000	0.0	0.0	0.0	0.0	d
3.1736	58.13333	36.75333	0.00000	0.0	0.0	0.0	0.0	d
4.2315	59.19111	36.76778	0.00000	0.0	0.0	0.0	0.0	d
5.2894	60.24889	36.78222	0.00000	0.0	0.0	0.0	0.0	d
6.3473	61.30667	36.79667	0.00000	0.0	0.0	0.0	0.0	d
7.4051	62.36444	36.81111	0.00000	0.0	0.0	0.0	0.0	d
8.4630	63.42222	36.82556	0.00000	0.0	0.0	0.0	0.0	d
9.5209	64.48000	36.84000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: a-12 | Sub-structure:

Dist. Coordinates Displacements

	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
	0.0	44.06000	58.90000	0.00000	0.0	0.0	0.0 d
1.1151	42.95250	58.77000	0.00000	0.0	0.0	0.0	0.0 d
2.2302	41.84500	58.64000	0.00000	0.0	0.0	0.0	0.0 d
3.3453	40.73750	58.51000	0.00000	0.0	0.0	0.0	0.0 d
4.4604	39.63000	58.38000	0.00000	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: 12-11 | Sub-structure:

Dist.	Coordinates			Displacements			
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
	0.0	39.63000	58.38000	0.00000	0.0	0.0	0.0 d
1.1167	39.63000	57.26333	0.00000	0.0	0.0	0.0	0.0 d
2.2333	39.63000	56.14667	0.00000	0.0	0.0	0.0	0.0 d
3.3500	39.63000	55.03000	0.00000	0.0	0.0	0.0	0.0 d
4.4667	39.63000	53.91333	0.00000	0.0	0.0	0.0	0.0 d
5.5833	39.63000	52.79667	0.00000	0.0	0.0	0.0	0.0 d
6.7000	39.63000	51.68000	0.00000	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: 11-f | Sub-structure:

Dist.	Coordinates			Displacements			
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
	0.0	39.63000	51.68000	0.00000	0.0	0.0	0.0 d
0.55884	40.18875	51.67000	0.00000	0.0	0.0	0.0	0.0 d
1.1177	40.74750	51.66000	0.00000	0.0	0.0	0.0	0.0 d
1.6765	41.30625	51.65000	0.00000	0.0	0.0	0.0	0.0 d
2.2354	41.86500	51.64000	0.00000	0.0	0.0	0.0	0.0 d
2.7942	42.42375	51.63000	0.00000	0.0	0.0	0.0	0.0 d
3.3530	42.98250	51.62000	0.00000	0.0	0.0	0.0	0.0 d
3.9119	43.54125	51.61000	0.00000	0.0	0.0	0.0	0.0 d
4.4707	44.10000	51.60000	0.00000	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: ag | Sub-structure:

Dist.	Coordinates			Displacements			
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
	0.0	44.06000	58.90000	0.00000	0.0	0.0	0.0 d
1.0047	45.06364	58.85455	0.00000	0.0	0.0	0.0	0.0 d
2.0093	46.06727	58.80909	0.00000	0.0	0.0	0.0	0.0 d
3.0140	47.07091	58.76364	0.00000	0.0	0.0	0.0	0.0 d
4.0187	48.07455	58.71818	0.00000	0.0	0.0	0.0	0.0 d
5.0233	49.07818	58.67273	0.00000	0.0	0.0	0.0	0.0 d
6.0280	50.08182	58.62727	0.00000	0.0	0.0	0.0	0.0 d
7.0327	51.08545	58.58182	0.00000	0.0	0.0	0.0	0.0 d
8.0373	52.08909	58.53636	0.00000	0.0	0.0	0.0	0.0 d
9.0420	53.09273	58.49091	0.00000	0.0	0.0	0.0	0.0 d
10.047	54.09636	58.44545	0.00000	0.0	0.0	0.0	0.0 d
11.051	55.10000	58.40000	0.00000	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: gb | Sub-structure:

Dist. **Coordinates** **Displacements**

	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
	0.0	55.10000	58.40000	0.00000	0.0	0.0	0.0	d
0.57001	55.67000	58.40300	0.00000	0.0	0.0	0.0	0.0	d
1.1400	56.24000	58.40600	0.00000	0.0	0.0	0.0	0.0	d
1.7100	56.81000	58.40900	0.00000	0.0	0.0	0.0	0.0	d
2.2800	57.38000	58.41200	0.00000	0.0	0.0	0.0	0.0	d
2.8500	57.95000	58.41500	0.00000	0.0	0.0	0.0	0.0	d
3.4200	58.52000	58.41800	0.00000	0.0	0.0	0.0	0.0	d
3.9901	59.09000	58.42100	0.00000	0.0	0.0	0.0	0.0	d
4.5601	59.66000	58.42400	0.00000	0.0	0.0	0.0	0.0	d
5.1301	60.23000	58.42700	0.00000	0.0	0.0	0.0	0.0	d
5.7001	60.80000	58.43000	0.00000	0.0	0.0	0.0	0.0	d
6.2701	61.37000	58.43300	0.00000	0.0	0.0	0.0	0.0	d
6.8401	61.94000	58.43600	0.00000	0.0	0.0	0.0	0.0	d
7.4101	62.51000	58.43900	0.00000	0.0	0.0	0.0	0.0	d
7.9801	63.08000	58.44200	0.00000	0.0	0.0	0.0	0.0	d
8.5501	63.65000	58.44500	0.00000	0.0	0.0	0.0	0.0	d
9.1201	64.22000	58.44800	0.00000	0.0	0.0	0.0	0.0	d
9.6901	64.79000	58.45100	0.00000	0.0	0.0	0.0	0.0	d
10.260	65.36000	58.45400	0.00000	0.0	0.0	0.0	0.0	d
10.830	65.93000	58.45700	0.00000	0.0	0.0	0.0	0.0	d
11.400	66.50000	58.46000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: bc | Sub-structure:

Dist.	Coordinates			Displacements		Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
	0.0	66.50000	58.46000	0.00000	0.0	0.0	0.0	d
0.27800	66.50000	58.18200	0.00000	0.0	0.0	0.0	0.0	d
0.55600	66.50000	57.90400	0.00000	0.0	0.0	0.0	0.0	d
0.83400	66.50000	57.62600	0.00000	0.0	0.0	0.0	0.0	d
1.1120	66.50000	57.34800	0.00000	0.0	0.0	0.0	0.0	d
1.3900	66.50000	57.07000	0.00000	0.0	0.0	0.0	0.0	d
1.6680	66.50000	56.79200	0.00000	0.0	0.0	0.0	0.0	d
1.9460	66.50000	56.51400	0.00000	0.0	0.0	0.0	0.0	d
2.2240	66.50000	56.23600	0.00000	0.0	0.0	0.0	0.0	d
2.5020	66.50000	55.95800	0.00000	0.0	0.0	0.0	0.0	d
2.7800	66.50000	55.68000	0.00000	0.0	0.0	0.0	0.0	d
3.0580	66.50000	55.40200	0.00000	0.0	0.0	0.0	0.0	d
3.3360	66.50000	55.12400	0.00000	0.0	0.0	0.0	0.0	d
3.6140	66.50000	54.84600	0.00000	0.0	0.0	0.0	0.0	d
3.8920	66.50000	54.56800	0.00000	0.0	0.0	0.0	0.0	d
4.1700	66.50000	54.29000	0.00000	0.0	0.0	0.0	0.0	d
4.4480	66.50000	54.01200	0.00000	0.0	0.0	0.0	0.0	d
4.7260	66.50000	53.73400	0.00000	0.0	0.0	0.0	0.0	d
5.0040	66.50000	53.45600	0.00000	0.0	0.0	0.0	0.0	d
5.2820	66.50000	53.17800	0.00000	0.0	0.0	0.0	0.0	d
5.5600	66.50000	52.90000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: cd | Sub-structure:

Dist.	Coordinates			Displacements		Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
	0.0	66.50000	52.90000	0.00000	0.0	0.0	0.0	d
1.7493	65.00000	52.00000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: eh | Sub-structure:

Dist.	Coordinates			Displacements	
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	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
	0.0	64.74000	51.60000	0.00000	0.0	0.0	0.0 d
1.0844	63.65556	51.60000	0.00000	0.0	0.0	0.0	0.0 d
2.1689	62.57111	51.60000	0.00000	0.0	0.0	0.0	0.0 d
3.2533	61.48667	51.60000	0.00000	0.0	0.0	0.0	0.0 d
4.3378	60.40222	51.60000	0.00000	0.0	0.0	0.0	0.0 d
5.4222	59.31778	51.60000	0.00000	0.0	0.0	0.0	0.0 d
6.5067	58.23333	51.60000	0.00000	0.0	0.0	0.0	0.0 d
7.5911	57.14889	51.60000	0.00000	0.0	0.0	0.0	0.0 d
8.6756	56.06444	51.60000	0.00000	0.0	0.0	0.0	0.0 d
9.7600	54.98000	51.60000	0.00000	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: hf | Sub-structure:

Dist.	Coordinates			Displacements		Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
	0.0	54.98000	51.60000	0.00000	0.0	0.0	0.0 d
1.0880	53.89200	51.60000	0.00000	0.0	0.0	0.0	0.0 d
2.1760	52.80400	51.60000	0.00000	0.0	0.0	0.0	0.0 d
3.2640	51.71600	51.60000	0.00000	0.0	0.0	0.0	0.0 d
4.3520	50.62800	51.60000	0.00000	0.0	0.0	0.0	0.0 d
5.4400	49.54000	51.60000	0.00000	0.0	0.0	0.0	0.0 d
6.5280	48.45200	51.60000	0.00000	0.0	0.0	0.0	0.0 d
7.6160	47.36400	51.60000	0.00000	0.0	0.0	0.0	0.0 d
8.7040	46.27600	51.60000	0.00000	0.0	0.0	0.0	0.0 d
9.7920	45.18800	51.60000	0.00000	0.0	0.0	0.0	0.0 d
10.880	44.10000	51.60000	0.00000	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: de | Sub-structure:

Dist.	Coordinates			Displacements		Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
	0.0	65.00000	52.00000	0.00000	0.0	0.0	0.0 d
0.11927	64.93500	51.90000	0.00000	0.0	0.0	0.0	0.0
0.23854	64.87000	51.80000	0.00000	0.0	0.0	0.0	0.0
0.35781	64.80500	51.70000	0.00000	0.0	0.0	0.0	0.0
0.47707	64.74000	51.60000	0.00000	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Specific Building Damage Results - Vertical Displacements

Structure: 21-20 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
	[m]	[m]	[m]	[mm]
Vertical Offset 1				
	0.0	55.96000	70.70000	0.00000 -0.93865 d
1.0682	54.89182	70.70182	0.00000 -0.92913 d	
2.1364	53.82364	70.70364	0.00000 -0.91588 d	
3.2046	52.75545	70.70545	0.00000 -0.89949 d	
4.2727	51.68727	70.70727	0.00000 -0.88048 d	
5.3409	50.61909	70.70909	0.00000 -0.85929 d	
6.4091	49.55091	70.71091	0.00000 -0.83619 d	
7.4773	48.48273	70.71273	0.00000 -0.81137 d	
8.5455	47.41455	70.71455	0.00000 -0.78490 d	
9.6137	46.34636	70.71636	0.00000 -0.75678 d	

10.682 45.27818 70.71818 0.00000 -0.72699 d
 11.750 44.21000 70.72000 0.00000 -0.69550 d
 d - Displacements include imported displacements.

Structure: 19-20 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	59.14000	66.79000	0.00000	-1.7510	d
1.0080	58.50400	67.57200	0.00000	-1.5378	d
2.0160	57.86800	68.35400	0.00000	-1.3545	d
3.0239	57.23200	69.13600	0.00000	-1.1961	d
4.0319	56.59600	69.91800	0.00000	-1.0586	d
5.0399	55.96000	70.70000	0.00000	-0.93865	d

d - Displacements include imported displacements.

Structure: 19-18 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	59.14000	66.79000	0.00000	-1.7510	d
1.0051	59.15500	65.78500	0.00000	-2.0862	d
2.0102	59.17000	64.78000	0.00000	-2.5058	d

d - Displacements include imported displacements.

Structure: 18-13 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	59.17000	64.78000	0.00000	-2.5058	d
1.0686	58.10143	64.78143	0.00000	-2.4874	d
2.1371	57.03286	64.78286	0.00000	-2.4489	d
3.2057	55.96429	64.78429	0.00000	-2.3957	d
4.2743	54.89571	64.78571	0.00000	-2.3330	d
5.3429	53.82714	64.78714	0.00000	-2.2652	d
6.4114	52.75857	64.78857	0.00000	-2.1960	d
7.4800	51.69000	64.79000	0.00000	-2.1281	d
8.5486	50.62143	64.79143	0.00000	-2.0630	d
9.6172	49.55286	64.79286	0.00000	-2.0011	d
10.686	48.48429	64.79429	0.00000	-1.9417	d
11.754	47.41571	64.79571	0.00000	-1.8835	d
12.823	46.34714	64.79714	0.00000	-1.8242	d
13.891	45.27857	64.79857	0.00000	-1.7609	d
14.960	44.21000	64.80000	0.00000	-1.6905	d

d - Displacements include imported displacements.

Structure: 21-a | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	44.21000	70.72000	0.00000	-0.69550	d
0.34768	44.20559	70.37235	0.00000	-0.72951	d
0.69535	44.20118	70.02471	0.00000	-0.76546	d
1.0430	44.19676	69.67706	0.00000	-0.80350	d
1.3907	44.19235	69.32941	0.00000	-0.84377	d
1.7384	44.18794	68.98176	0.00000	-0.88646	d
2.0861	44.18353	68.63412	0.00000	-0.93175	d
2.4337	44.17912	68.28647	0.00000	-0.97985	d
2.7814	44.17471	67.93882	0.00000	-1.0310	d
3.1291	44.17029	67.59118	0.00000	-1.0854	d
3.4768	44.16588	67.24353	0.00000	-1.1435	d

3.8244	44.16147	66.89588	0.00000	-1.2054	d
4.1721	44.15706	66.54824	0.00000	-1.2716	d
4.5198	44.15265	66.20059	0.00000	-1.3425	d
4.8675	44.14824	65.85294	0.00000	-1.4184	d
5.2151	44.14382	65.50529	0.00000	-1.5000	d
5.5628	44.13941	65.15765	0.00000	-1.5878	d
5.9105	44.13500	64.81000	0.00000	-1.6824	d
6.2582	44.13059	64.46235	0.00000	-1.7846	d
6.6058	44.12618	64.11471	0.00000	-1.8952	d
6.9535	44.12176	63.76706	0.00000	-2.0151	d
7.3012	44.11735	63.41941	0.00000	-2.1454	d
7.6489	44.11294	63.07176	0.00000	-2.2875	d
7.9965	44.10853	62.72412	0.00000	-2.4427	d
8.3442	44.10412	62.37647	0.00000	-2.6128	d
8.6919	44.09971	62.02882	0.00000	-2.7998	d
9.0396	44.09529	61.68118	0.00000	-3.0060	d
9.3872	44.09088	61.33353	0.00000	-3.2343	d
9.7349	44.08647	60.98588	0.00000	-3.4885	d
10.083	44.08206	60.63824	0.00000	-3.7730	d
10.430	44.07765	60.29059	0.00000	-4.0941	d
10.778	44.07324	59.94294	0.00000	-4.4609	d
11.126	44.06882	59.59529	0.00000	-4.8882	d
11.473	44.06441	59.24765	0.00000	-5.4040	d
11.821	44.06000	58.90000	0.00000	-6.0761	d

d - Displacements include imported displacements.

Structure: f-50 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	44.10000	51.60000	0.00000	-7.6558	d
0.99267	44.10400	50.60733	0.00000	-5.1054	d
1.9853	44.10800	49.61467	0.00000	-3.9580	d
2.9780	44.11200	48.62200	0.00000	-3.1702	d
3.9707	44.11600	47.62933	0.00000	-2.5884	d
4.9634	44.12000	46.63667	0.00000	-2.1440	d
5.9560	44.12400	45.64400	0.00000	-1.7966	d
6.9487	44.12800	44.65133	0.00000	-1.5198	d
7.9414	44.13200	43.65867	0.00000	-1.2958	d
8.9341	44.13600	42.66600	0.00000	-1.1119	d
9.9267	44.14000	41.67333	0.00000	-0.95919	d
10.919	44.14400	40.68067	0.00000	-0.83111	d
11.912	44.14800	39.68800	0.00000	-0.72275	d
12.905	44.15200	38.69533	0.00000	-0.63041	d
13.897	44.15600	37.70267	0.00000	-0.55124	d
14.890	44.16000	36.71000	0.00000	-0.48300	d

d - Displacements include imported displacements.

Structure: 14-15 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	55.00000	64.76000	0.00000	-2.3495	d
1.0700	55.00000	63.69000	0.00000	-2.8266	d
2.1400	55.00000	62.62000	0.00000	-3.4281	d

d - Displacements include imported displacements.

Structure: 15-16 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	55.00000	62.62000	0.00000	-3.4281	d
1.6907	56.23000	61.46000	0.00000	-4.5116	d

d - Displacements include imported displacements.

Structure: 16-17 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	56.23000	61.46000	0.00000	-4.5116	d
1.9000	56.22000	59.56000	0.00000	-6.9891	d

d - Displacements include imported displacements.

Structure: 17-g | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	56.22000	59.56000	0.00000	-6.9891	d
1.6125	55.10000	58.40000	0.00000	-9.6494	d

d - Displacements include imported displacements.

Structure: h-49 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	54.98000	51.60000	0.00000	-9.2873	d
1.0678	55.74000	50.85000	0.00000	-7.4334	d
2.1355	56.50000	50.10000	0.00000	-6.2693	d

d - Displacements include imported displacements.

Structure: 49-36 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	56.50000	50.10000	0.00000	-6.2693	d
1.1950	56.50000	48.90500	0.00000	-4.7243	d
2.3900	56.50000	47.71000	0.00000	-3.6794	d

d - Displacements include imported displacements.

Structure: 36-48 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	56.50000	47.71000	0.00000	-3.6794	d
1.1506	55.73000	46.85500	0.00000	-3.0636	d
2.3012	54.96000	46.00000	0.00000	-2.5784	d

d - Displacements include imported displacements.

Structure: 48-47 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	54.96000	46.00000	0.00000	-2.5784	d
1.1700	54.96000	44.83000	0.00000	-2.1094	d

d - Displacements include imported displacements.

Structure: 47-51 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	54.96000	44.83000	0.00000	-2.1094 d
1.0750	53.88500	44.83000	0.00000	-2.0636 d
2.1500	52.81000	44.83000	0.00000	-2.0131 d
3.2250	51.73500	44.83000	0.00000	-1.9603 d
4.3000	50.66000	44.83000	0.00000	-1.9073 d
5.3750	49.58500	44.83000	0.00000	-1.8547 d
6.4500	48.51000	44.83000	0.00000	-1.8027 d
7.5250	47.43500	44.83000	0.00000	-1.7501 d
8.6000	46.36000	44.83000	0.00000	-1.6955 d
9.6750	45.28500	44.83000	0.00000	-1.6365 d
10.750	44.21000	44.83000	0.00000	-1.5707 d

d - Displacements include imported displacements.

Structure: 50-46 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	44.16000	36.71000	0.00000	-0.48300 d
1.0800	45.24000	36.71000	0.00000	-0.50366 d
2.1600	46.32000	36.71000	0.00000	-0.52305 d
3.2400	47.40000	36.71000	0.00000	-0.54107 d
4.3200	48.48000	36.71000	0.00000	-0.55763 d
5.4000	49.56000	36.71000	0.00000	-0.57263 d
6.4800	50.64000	36.71000	0.00000	-0.58595 d
7.5600	51.72000	36.71000	0.00000	-0.59742 d
8.6400	52.80000	36.71000	0.00000	-0.60686 d
9.7200	53.88000	36.71000	0.00000	-0.61407 d
10.800	54.96000	36.71000	0.00000	-0.61881 d

d - Displacements include imported displacements.

Structure: 46-47 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	54.96000	36.71000	0.00000	-0.61881 d
1.0150	54.96000	37.72500	0.00000	-0.71358 d
2.0300	54.96000	38.74000	0.00000	-0.82474 d
3.0450	54.96000	39.75500	0.00000	-0.95570 d
4.0600	54.96000	40.77000	0.00000	-1.1108 d
5.0750	54.96000	41.78500	0.00000	-1.2954 d
6.0900	54.96000	42.80000	0.00000	-1.5168 d
7.1050	54.96000	43.81500	0.00000	-1.7840 d
8.1200	54.96000	44.83000	0.00000	-2.1094 d

d - Displacements include imported displacements.

Structure: 24-25 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	78.82000	63.10000	0.00000	-0.45574 d
1.0289	79.84889	63.09667	0.00000	-0.39572 d
2.0578	80.87778	63.09333	0.00000	-0.34398 d
3.0867	81.90667	63.09000	0.00000	-0.29929 d
4.1156	82.93556	63.08667	0.00000	-0.26062 d
5.1445	83.96444	63.08333	0.00000	-0.22708 d
6.1734	84.99333	63.08000	0.00000	-0.19795 d
7.2023	86.02222	63.07667	0.00000	-0.17260 d
8.2312	87.05111	63.07333	0.00000	-0.15051 d
9.2600	88.08000	63.07000	0.00000	-0.13123 d

d - Displacements include imported displacements.

Structure: 25-26 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	88.08000	63.07000	0.00000	-0.13123	d
1.0641	88.06400	62.00600	0.00000	-0.13663	d
2.1282	88.04800	60.94200	0.00000	-0.14152	d
3.1924	88.03200	59.87800	0.00000	-0.14579	d
4.2565	88.01600	58.81400	0.00000	-0.14936	d
5.3206	88.00000	57.75000	0.00000	-0.15216	d

d - Displacements include imported displacements.

Structure: 26-27 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	88.00000	57.75000	0.00000	-0.15216	d
1.0246	86.97545	57.76364	0.00000	-0.17541	d
2.0493	85.95091	57.77727	0.00000	-0.20234	d
3.0739	84.92636	57.79091	0.00000	-0.23362	d
4.0985	83.90182	57.80455	0.00000	-0.27009	d
5.1232	82.87727	57.81818	0.00000	-0.31276	d
6.1478	81.85273	57.83182	0.00000	-0.36290	d
7.1725	80.82818	57.84545	0.00000	-0.42208	d
8.1971	79.80364	57.85909	0.00000	-0.49233	d
9.2217	78.77909	57.87273	0.00000	-0.57622	d
10.246	77.75455	57.88636	0.00000	-0.67711	d
11.271	76.73000	57.90000	0.00000	-0.79941	d

d - Displacements include imported displacements.

Structure: 27-28 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	76.73000	57.90000	0.00000	-0.79941	d
1.0567	76.72333	58.95667	0.00000	-0.77222	d
2.1134	76.71667	60.01333	0.00000	-0.73786	d
3.1701	76.71000	61.07000	0.00000	-0.69804	d

d - Displacements include imported displacements.

Structure: 28-29 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	76.71000	61.07000	0.00000	-0.69804	d
1.4640	77.76500	62.08500	0.00000	-0.56254	d
2.9280	78.82000	63.10000	0.00000	-0.45574	d

d - Displacements include imported displacements.

Structure: 27-32 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	76.73000	57.90000	0.00000	-0.79941	d
1.0300	76.73400	56.87000	0.00000	-0.81791	d

2.0600 76.73800 55.84000 0.00000 -0.82716 d
 3.0900 76.74200 54.81000 0.00000 -0.82664 d
 4.1200 76.74600 53.78000 0.00000 -0.81640 d
 5.1500 76.75000 52.75000 0.00000 -0.79703 d
 d - Displacements include imported displacements.

Structure: 33-31 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0 87.93000 52.75000 0.00000 -0.15348 d
 1.0400 86.89000 52.75000 0.00000 -0.17733 d
 2.0800 85.85000 52.75000 0.00000 -0.20503 d
 3.1200 84.81000 52.75000 0.00000 -0.23730 d
 4.1600 83.77000 52.75000 0.00000 -0.27502 d
 5.2000 82.73000 52.75000 0.00000 -0.31929 d
 6.2400 81.69000 52.75000 0.00000 -0.37148 d
 7.2800 80.65000 52.75000 0.00000 -0.43330 d
 8.3200 79.61000 52.75000 0.00000 -0.50696 d
 9.3600 78.57000 52.75000 0.00000 -0.59529 d
 10.400 77.53000 52.75000 0.00000 -0.70202 d
 11.440 76.49000 52.75000 0.00000 -0.83206 d
 12.480 75.45000 52.75000 0.00000 -0.99206 d
 13.520 74.41000 52.75000 0.00000 -1.1912 d
 14.560 73.37000 52.75000 0.00000 -1.4421 d
 15.600 72.33000 52.75000 0.00000 -1.7632 d
 16.640 71.29000 52.75000 0.00000 -2.1813 d
 17.680 70.25000 52.75000 0.00000 -2.7371 d
 d - Displacements include imported displacements.

Structure: 31-34 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0 70.25000 52.75000 0.00000 -2.7371 d
 1.1236 70.22667 51.62667 0.00000 -2.5028 d
 2.2472 70.20333 50.50333 0.00000 -2.2359 d
 3.3707 70.18000 49.38000 0.00000 -1.9663 d
 d - Displacements include imported displacements.

Structure: 34-35 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0 70.18000 49.38000 0.00000 -1.9663 d
 1.3300 71.51000 49.37000 0.00000 -1.5722 d
 d - Displacements include imported displacements.

Structure: 35-41 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0 71.51000 49.37000 0.00000 -1.5722 d
 1.2000 71.50000 48.17000 0.00000 -1.3843 d
 2.4001 71.49000 46.97000 0.00000 -1.2093 d
 3.6001 71.48000 45.77000 0.00000 -1.0514 d
 d - Displacements include imported displacements.

Structure: 41-40 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	71.48000	45.77000	0.00000	-1.0514 d
1.0175	70.46250	45.77000	0.00000	-1.1918 d
2.0350	69.44500	45.77000	0.00000	-1.3450 d
3.0525	68.42750	45.77000	0.00000	-1.5085 d
4.0700	67.41000	45.77000	0.00000	-1.6786 d

d - Displacements include imported displacements.

Structure: 40-39 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	67.41000	45.77000	0.00000	-1.6786 d
1.3000	67.40333	44.47000	0.00000	-1.3702 d
2.6000	67.39667	43.17000	0.00000	-1.1270 d
3.9001	67.39000	41.87000	0.00000	-0.93292 d

d - Displacements include imported displacements.

Structure: 39-38 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	67.39000	41.87000	0.00000	-0.93292 d
1.0305	68.42050	41.86150	0.00000	-0.86079 d
2.0611	69.45100	41.85300	0.00000	-0.78906 d
3.0916	70.48150	41.84450	0.00000	-0.71911 d
4.1221	71.51200	41.83600	0.00000	-0.65205 d
5.1527	72.54250	41.82750	0.00000	-0.58867 d
6.1832	73.57300	41.81900	0.00000	-0.52950 d
7.2137	74.60350	41.81050	0.00000	-0.47479 d
8.2443	75.63400	41.80200	0.00000	-0.42463 d
9.2748	76.66450	41.79350	0.00000	-0.37893 d
10.305	77.69500	41.78500	0.00000	-0.33752 d
11.336	78.72550	41.77650	0.00000	-0.30015 d
12.366	79.75600	41.76800	0.00000	-0.26655 d
13.397	80.78650	41.75950	0.00000	-0.23642 d
14.427	81.81700	41.75100	0.00000	-0.20946 d
15.458	82.84750	41.74250	0.00000	-0.18537 d
16.489	83.87800	41.73400	0.00000	-0.16387 d
17.519	84.90850	41.72550	0.00000	-0.14471 d
18.550	85.93900	41.71700	0.00000	-0.12764 d
19.580	86.96950	41.70850	0.00000	-0.11245 d
20.611	88.00000	41.70000	0.00000	-0.098938 d

d - Displacements include imported displacements.

Structure: 38-25 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	88.00000	41.70000	0.00000	-0.098938 d
1.0176	88.00381	42.71762	0.00000	-0.10511 d
2.0353	88.00762	43.73524	0.00000	-0.11124 d
3.0529	88.01143	44.75286	0.00000	-0.11724 d
4.0705	88.01524	45.77048	0.00000	-0.12304 d
5.0881	88.01905	46.78810	0.00000	-0.12857 d
6.1058	88.02286	47.80571	0.00000	-0.13374 d
7.1234	88.02667	48.82333	0.00000	-0.13847 d
8.1410	88.03048	49.84095	0.00000	-0.14267 d
9.1586	88.03429	50.85857	0.00000	-0.14626 d
10.176	88.03810	51.87619	0.00000	-0.14919 d
11.194	88.04190	52.89381	0.00000	-0.15139 d

12.212	88.04571	53.91143	0.00000	-0.15282	d
13.229	88.04952	54.92905	0.00000	-0.15343	d
14.247	88.05333	55.94667	0.00000	-0.15324	d
15.264	88.05714	56.96429	0.00000	-0.15222	d
16.282	88.06095	57.98190	0.00000	-0.15042	d
17.300	88.06476	58.99952	0.00000	-0.14785	d
18.317	88.06857	60.01714	0.00000	-0.14458	d
19.335	88.07238	61.03476	0.00000	-0.14067	d
20.353	88.07619	62.05238	0.00000	-0.13619	d
21.370	88.08000	63.07000	0.00000	-0.13123	d

d - Displacements include imported displacements.

Structure: 20-22 | Sub-structure:

Dist.	Coordinates			Displacements	
	x	y	z	z	
[m]	[m]	[m]	[m]	[mm]	

Vertical Offset 1

0.0	55.96000	70.70000	0.00000	-0.93865	d
1.0170	56.97700	70.69900	0.00000	-0.94352	d
2.0340	57.99400	70.69800	0.00000	-0.94386	d
3.0510	59.01100	70.69700	0.00000	-0.93914	d
4.0680	60.02800	70.69600	0.00000	-0.92898	d
5.0850	61.04500	70.69500	0.00000	-0.91313	d
6.1020	62.06200	70.69400	0.00000	-0.89153	d
7.1190	63.07900	70.69300	0.00000	-0.86435	d
8.1360	64.09600	70.69200	0.00000	-0.83199	d
9.1530	65.11300	70.69100	0.00000	-0.79505	d
10.170	66.13000	70.69000	0.00000	-0.75432	d

d - Displacements include imported displacements.

Structure: 22-b | Sub-structure:

Dist.	Coordinates			Displacements	
	x	y	z	z	
[m]	[m]	[m]	[m]	[mm]	

Vertical Offset 1

0.0	66.13000	70.69000	0.00000	-0.75432	d
0.69360	66.14000	69.99647	0.00000	-0.83358	d
1.3872	66.15000	69.30294	0.00000	-0.92271	d
2.0808	66.16000	68.60941	0.00000	-1.0233	d
2.7744	66.17000	67.91588	0.00000	-1.1372	d
3.4680	66.18000	67.22235	0.00000	-1.2667	d
4.1616	66.19000	66.52882	0.00000	-1.4146	d
4.8552	66.20000	65.83529	0.00000	-1.5843	d
5.5488	66.21000	65.14176	0.00000	-1.7801	d
6.2424	66.22000	64.44824	0.00000	-2.0073	d
6.9360	66.23000	63.75471	0.00000	-2.2727	d
7.6296	66.24000	63.06118	0.00000	-2.5849	d
8.3232	66.25000	62.36765	0.00000	-2.9553	d
9.0168	66.26000	61.67412	0.00000	-3.3990	d
9.7104	66.27000	60.98059	0.00000	-3.9372	d
10.404	66.28000	60.28706	0.00000	-4.6010	d
11.098	66.29000	59.59353	0.00000	-5.4403	d
11.791	66.30000	58.90000	0.00000	-6.5445	d

d - Displacements include imported displacements.

Structure: e-45 | Sub-structure:

Dist.	Coordinates			Displacements	
	x	y	z	z	
[m]	[m]	[m]	[m]	[mm]	

Vertical Offset 1

0.0	64.74000	51.60000	0.00000	-8.2758	d
0.98415	64.72267	50.61600	0.00000	-6.0760	d
1.9683	64.70533	49.63200	0.00000	-4.7083	d
2.9525	64.68800	48.64800	0.00000	-3.7551	d
3.9366	64.67067	47.66400	0.00000	-3.0527	d
4.9208	64.65333	46.68000	0.00000	-2.5170	d
5.9049	64.63600	45.69600	0.00000	-2.0988	d
6.8891	64.61867	44.71200	0.00000	-1.7661	d

7.8732	64.60133	43.72800	0.00000	-1.4974	d
8.8574	64.58400	42.74400	0.00000	-1.2777	d
9.8415	64.56667	41.76000	0.00000	-1.0961	d
10.826	64.54933	40.77600	0.00000	-0.94466	d
11.810	64.53200	39.79200	0.00000	-0.81732	d
12.794	64.51467	38.80800	0.00000	-0.70951	d
13.778	64.49733	37.82400	0.00000	-0.61768	d
14.762	64.48000	36.84000	0.00000	-0.53904	d

d - Displacements include imported displacements.

Structure: 18-31 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	59.17000	64.78000	0.00000	-2.5058	d
1.1384	60.30833	64.77333	0.00000	-2.4998	d
2.2767	61.44667	64.76667	0.00000	-2.4596	d
3.4151	62.58500	64.76000	0.00000	-2.3818	d
4.5534	63.72333	64.75333	0.00000	-2.2664	d
5.6918	64.86167	64.74667	0.00000	-2.1174	d
6.8301	66.00000	64.74000	0.00000	-1.9430	d

d - Displacements include imported displacements.

Structure: 23-24 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	66.00000	63.14000	0.00000	-2.6097	d
1.0683	67.06833	63.13667	0.00000	-2.3254	d
2.1367	68.13667	63.13333	0.00000	-2.0415	d
3.2050	69.20500	63.13000	0.00000	-1.7734	d
4.2734	70.27333	63.12667	0.00000	-1.5300	d
5.3417	71.34167	63.12333	0.00000	-1.3150	d
6.4100	72.41000	63.12000	0.00000	-1.1282	d
7.4784	73.47833	63.11667	0.00000	-0.96762	d
8.5467	74.54667	63.11333	0.00000	-0.83032	d
9.6150	75.61500	63.11000	0.00000	-0.71325	d
10.683	76.68333	63.10667	0.00000	-0.61347	d
11.752	77.75167	63.10333	0.00000	-0.52839	d
12.820	78.82000	63.10000	0.00000	-0.45574	d

d - Displacements include imported displacements.

Structure: b-27 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	66.10000	58.46000	0.00000	-8.0360	d
1.0645	67.16300	58.40400	0.00000	-5.7136	d
2.1289	68.22600	58.34800	0.00000	-4.2968	d
3.1934	69.28900	58.29200	0.00000	-3.3219	d
4.2579	70.35200	58.23600	0.00000	-2.6171	d
5.3224	71.41500	58.18000	0.00000	-2.0930	d
6.3868	72.47800	58.12400	0.00000	-1.6950	d
7.4513	73.54100	58.06800	0.00000	-1.3874	d
8.5158	74.60400	58.01200	0.00000	-1.1460	d
9.5803	75.66700	57.95600	0.00000	-0.95397	d
10.645	76.73000	57.90000	0.00000	-0.79941	d

d - Displacements include imported displacements.

Structure: 42-37 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	64.54000	46.73000	0.00000	-2.5627	d
1.0183	65.55826	46.71783	0.00000	-2.3554	d
2.0367	66.57652	46.70565	0.00000	-2.1344	d
3.0550	67.59478	46.69348	0.00000	-1.9104	d
4.0733	68.61304	46.68130	0.00000	-1.6931	d
5.0917	69.63130	46.66913	0.00000	-1.4894	d
6.1100	70.64957	46.65696	0.00000	-1.3034	d
7.1283	71.66783	46.64478	0.00000	-1.1369	d
8.1467	72.68609	46.63261	0.00000	-0.98984	d
9.1650	73.70435	46.62043	0.00000	-0.86101	d
10.183	74.72261	46.60826	0.00000	-0.74880	d
11.202	75.74087	46.59609	0.00000	-0.65138	d
12.220	76.75913	46.58391	0.00000	-0.56694	d
13.238	77.77739	46.57174	0.00000	-0.49379	d
14.257	78.79565	46.55957	0.00000	-0.43040	d
15.275	79.81391	46.54739	0.00000	-0.37542	d
16.293	80.83217	46.53522	0.00000	-0.32770	d
17.312	81.85043	46.52304	0.00000	-0.28621	d
18.330	82.86870	46.51087	0.00000	-0.25010	d
19.348	83.88696	46.49870	0.00000	-0.21863	d
20.367	84.90522	46.48652	0.00000	-0.19116	d
21.385	85.92348	46.47435	0.00000	-0.16715	d
22.403	86.94174	46.46217	0.00000	-0.14614	d
23.422	87.96000	46.45000	0.00000	-0.12774	d

d - Displacements include imported displacements.

Structure: 47-43 | Sub-structure:

Dist.	Coordinates			Displacements	
	x	y	z	z	
[m]	[m]	[m]	[m]	[mm]	

Vertical Offset 1

0.0	54.96000	44.83000	0.00000	-2.1094	d
1.0600	56.02000	44.83000	0.00000	-2.1463	d
2.1200	57.08000	44.83000	0.00000	-2.1716	d
3.1800	58.14000	44.83000	0.00000	-2.1817	d
4.2400	59.20000	44.83000	0.00000	-2.1736	d
5.3000	60.26000	44.83000	0.00000	-2.1450	d
6.3600	61.32000	44.83000	0.00000	-2.0945	d
7.4200	62.38000	44.83000	0.00000	-2.0219	d
8.4800	63.44000	44.83000	0.00000	-1.9282	d
9.5400	64.50000	44.83000	0.00000	-1.8160	d

d - Displacements include imported displacements.

Structure: 44-39 | Sub-structure:

Dist.	Coordinates			Displacements	
	x	y	z	z	
[m]	[m]	[m]	[m]	[mm]	

Vertical Offset 1

0.0	64.44000	41.91000	0.00000	-1.1292	d
1.4751	65.91500	41.89000	0.00000	-1.0348	d
2.9503	67.39000	41.87000	0.00000	-0.93292	d

d - Displacements include imported displacements.

Structure: 46-45 | Sub-structure:

Dist.	Coordinates			Displacements	
	x	y	z	z	
[m]	[m]	[m]	[m]	[mm]	

Vertical Offset 1

0.0	54.96000	36.71000	0.00000	-0.61881	d
1.0579	56.01778	36.72444	0.00000	-0.62209	d
2.1158	57.07556	36.73889	0.00000	-0.62257	d
3.1736	58.13333	36.75333	0.00000	-0.62007	d
4.2315	59.19111	36.76778	0.00000	-0.61442	d
5.2894	60.24889	36.78222	0.00000	-0.60555	d
6.3473	61.30667	36.79667	0.00000	-0.59345	d
7.4051	62.36444	36.81111	0.00000	-0.57820	d

8.4630 63.42222 36.82556 0.00000 -0.55997 d
9.5209 64.48000 36.84000 0.00000 -0.53904 d
d - Displacements include imported displacements.

Structure: a-12 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0 44.06000 58.90000 0.00000 -6.0761 d
1.1151 42.95250 58.77000 0.00000 -6.4739 d
2.2302 41.84500 58.64000 0.00000 -6.6535 d
3.3453 40.73750 58.51000 0.00000 -6.5774 d
4.4604 39.63000 58.38000 0.00000 -5.3848 d
d - Displacements include imported displacements.

Structure: 12-11 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0 39.63000 58.38000 0.00000 -5.3848 d
1.1167 39.63000 57.26333 0.00000 -7.1622 d
2.2333 39.63000 56.14667 0.00000 -7.7941 d
3.3500 39.63000 55.03000 0.00000 -8.0000 d
4.4667 39.63000 53.91333 0.00000 -7.8401 d
5.5833 39.63000 52.79667 0.00000 -7.2499 d
6.7000 39.63000 51.68000 0.00000 -5.4529 d
d - Displacements include imported displacements.

Structure: 11-f | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0 39.63000 51.68000 0.00000 -5.4529 d
0.55884 40.18875 51.67000 0.00000 -6.6787 d
1.1177 40.74750 51.66000 0.00000 -7.2502 d
1.6765 41.30625 51.65000 0.00000 -7.6145 d
2.2354 41.86500 51.64000 0.00000 -7.8525 d
2.7942 42.42375 51.63000 0.00000 -7.9887 d
3.3530 42.98250 51.62000 0.00000 -8.0288 d
3.9119 43.54125 51.61000 0.00000 -7.9557 d
4.4707 44.10000 51.60000 0.00000 -7.6558 d
d - Displacements include imported displacements.

Structure: ag | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0 44.06000 58.90000 0.00000 -6.0761 d
1.0047 45.06364 58.85455 0.00000 -5.9626 d
2.0093 46.06727 58.80909 0.00000 -5.9385 d
3.0140 47.07091 58.76364 0.00000 -5.9859 d
4.0187 48.07455 58.71818 0.00000 -6.0868 d
5.0233 49.07818 58.67273 0.00000 -6.2379 d
6.0280 50.08182 58.62727 0.00000 -6.4425 d
7.0327 51.08545 58.58182 0.00000 -6.7106 d
8.0373 52.08909 58.53636 0.00000 -7.0619 d
9.0420 53.09273 58.49091 0.00000 -7.5361 d
10.047 54.09636 58.44545 0.00000 -8.2292 d
11.051 55.10000 58.40000 0.00000 -9.6494 d
d - Displacements include imported displacements.

Structure: gb | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	55.10000	58.40000	0.00000	-9.6494 d
0.57001	55.67000	58.40300	0.00000	-10.349 d
1.1400	56.24000	58.40600	0.00000	-10.772 d
1.7100	56.81000	58.40900	0.00000	-11.100 d
2.2800	57.38000	58.41200	0.00000	-11.387 d
2.8500	57.95000	58.41500	0.00000	-11.664 d
3.4200	58.52000	58.41800	0.00000	-11.953 d
3.9901	59.09000	58.42100	0.00000	-12.279 d
4.5601	59.66000	58.42400	0.00000	-12.638 d
5.1301	60.23000	58.42700	0.00000	-12.971 d
5.7001	60.80000	58.43000	0.00000	-13.206 d
6.2701	61.37000	58.43300	0.00000	-13.311 d
6.8401	61.94000	58.43600	0.00000	-13.285 d
7.4101	62.51000	58.43900	0.00000	-13.136 d
7.9801	63.08000	58.44200	0.00000	-12.861 d
8.5501	63.65000	58.44500	0.00000	-12.451 d
9.1201	64.22000	58.44800	0.00000	-11.884 d
9.6901	64.79000	58.45100	0.00000	-11.120 d
10.260	65.36000	58.45400	0.00000	-10.083 d
10.830	65.93000	58.45700	0.00000	-8.5925 d
11.400	66.50000	58.46000	0.00000	-6.9570 d

d - Displacements include imported displacements.

Structure: bc | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	66.50000	58.46000	0.00000	-6.9570 d
0.27800	66.50000	58.18200	0.00000	-7.4582 d
0.55600	66.50000	57.90400	0.00000	-7.9319 d
0.83400	66.50000	57.62600	0.00000	-8.3519 d
1.1120	66.50000	57.34800	0.00000	-8.7123 d
1.3900	66.50000	57.07000	0.00000	-9.0155 d
1.6680	66.50000	56.79200	0.00000	-9.2657 d
1.9460	66.50000	56.51400	0.00000	-9.4665 d
2.2240	66.50000	56.23600	0.00000	-9.6209 d
2.5020	66.50000	55.95800	0.00000	-9.7311 d
2.7800	66.50000	55.68000	0.00000	-9.7988 d
3.0580	66.50000	55.40200	0.00000	-9.8249 d
3.3360	66.50000	55.12400	0.00000	-9.8096 d
3.6140	66.50000	54.84600	0.00000	-9.7528 d
3.8920	66.50000	54.56800	0.00000	-9.6537 d
4.1700	66.50000	54.29000	0.00000	-9.5108 d
4.4480	66.50000	54.01200	0.00000	-9.3220 d
4.7260	66.50000	53.73400	0.00000	-9.0846 d
5.0040	66.50000	53.45600	0.00000	-8.7951 d
5.2820	66.50000	53.17800	0.00000	-8.4494 d
5.5600	66.50000	52.90000	0.00000	-8.0448 d

d - Displacements include imported displacements.

Structure: cd | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	66.50000	52.90000	0.00000	-8.0448 d
1.7493	65.00000	52.00000	0.00000	-9.3385 d

d - Displacements include imported displacements.

Structure: eh | Sub-structure:

Dist.	Coordinates			Displacements	
	x	y	z	z	
[m]	[m]	[m]	[m]	[mm]	

Vertical Offset 1

0.0	64.74000	51.60000	0.00000	-8.2758	d
1.0844	63.65556	51.60000	0.00000	-9.2408	d
2.1689	62.57111	51.60000	0.00000	-9.8280	d
3.2533	61.48667	51.60000	0.00000	-10.134	d
4.3378	60.40222	51.60000	0.00000	-10.362	d
5.4222	59.31778	51.60000	0.00000	-11.502	d
6.5067	58.23333	51.60000	0.00000	-11.442	d
7.5911	57.14889	51.60000	0.00000	-11.052	d
8.6756	56.06444	51.60000	0.00000	-10.453	d
9.7600	54.98000	51.60000	0.00000	-9.2873	d

d - Displacements include imported displacements.

Structure: hf | Sub-structure:

Dist.	Coordinates			Displacements	
	x	y	z	z	
[m]	[m]	[m]	[m]	[mm]	

Vertical Offset 1

0.0	54.98000	51.60000	0.00000	-9.2873	d
1.0880	53.89200	51.60000	0.00000	-8.1684	d
2.1760	52.80400	51.60000	0.00000	-7.6312	d
3.2640	51.71600	51.60000	0.00000	-7.2884	d
4.3520	50.62800	51.60000	0.00000	-7.0550	d
5.4400	49.54000	51.60000	0.00000	-6.8973	d
6.5280	48.45200	51.60000	0.00000	-6.8008	d
7.6160	47.36400	51.60000	0.00000	-6.7625	d
8.7040	46.27600	51.60000	0.00000	-6.7918	d
9.7920	45.18800	51.60000	0.00000	-6.9352	d
10.880	44.10000	51.60000	0.00000	-7.6558	d

d - Displacements include imported displacements.

Structure: de | Sub-structure:

Dist.	Coordinates			Displacements	
	x	y	z	z	
[m]	[m]	[m]	[m]	[mm]	

Vertical Offset 1

0.0	65.00000	52.00000	0.10000	0.0
0.11927	64.93500	51.90000	0.10000	0.0
0.23854	64.87000	51.80000	0.10000	0.0
0.35781	64.80500	51.70000	0.10000	0.0
0.47707	64.74000	51.60000	0.10000	0.0

Specific Building Damage Results - All Segments

Structure: 21-20 | Sub-structure:

Vertical Offset	Segment	Start Length	Curvature	Deflection	Average	Max	Max	
Gradient Max	Min	Damage		Ratio	Horizontal	Tensile	of	
from Line for	Category				Strain	Strain		
of Vertical	Displacement	Curvature						
Vertical	Movement							
Horizontal	Displacement	Curve						
Calculations								
Curve								
[m]	[m]	[m]	[m]	[%]	[%]	[%]		
0.0		1	0.0	11.749	Hogging	265.19E-6	0.0	252.02E-6
0.0	-29.485E-6	292850.		0				

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 19-20 | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Radius of Vertical Horizontal Displacement Movement Displacement Calculations Curve	Segment Min Category	Start Length Damage	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of
[m]		[m]	[m]	[%]	[%]	[%]	
0.0	1	0.0	5.0389	Sagging	0.0014184	0.0	0.0013657
0.0			0				

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 19-18 | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Radius of Vertical Horizontal Displacement Movement Displacement Calculations Curve	Segment Min Category	Start Length Damage	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of
[m]		[m]	[m]	[%]	[%]	[%]	
0.0	1	0.0	2.0092	Sagging	0.0020799	0.0	0.0020673
0.0			0				

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 18-13 | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Radius of Vertical Horizontal Displacement Movement Displacement Calculations Curve	Segment Min Category	Start Length Damage	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max
[m]		[m]	[m]	[%]	[%]	[%]	
0.0	1	0.0	6.0065	Hogging	730.50E-6	0.0	720.66E-6
0.0			0				
(Negligible)							
0.0	2	6.0065	5.1307	Sagging	157.17E-6	0.0	151.10E-6
0.0			0				
(Negligible)							
0.0	3	11.137	3.8219	Hogging	184.40E-6	0.0	183.36E-6
0.0			0				

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 21-a | Sub-structure:

Vertical Offset Gradient Max Gradient	Segment Min	Start Length Damage	Curvature	Deflection	Average	Max	Max
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from Line for of Vertical Horizontal Movement Displacement Calculations	Radius of Vertical Displacement Curve	Category	Start	Length	Curvature	Deflection	Average	Max	Max
			Damage				Ratio	Horizontal	Tensile
								Strain	Strain
[m]	[m]		[m]	[m]			[%]	[%]	[%]
0.0	0.0019331	696.94	1	0.0	11.820	Sagging	0.016003	0.0	0.018470

(Negligible)
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: f-50 | Sub-structure:

Vertical Offset Gradient from Line for of Vertical Horizontal Movement Displacement Calculations	Max Gradient	Segment Min	Start	Length	Curvature	Deflection	Average	Max	Max
			Damage				Ratio	Horizontal	Tensile
								Strain	Strain
[m]	[m]		[m]	[m]			[%]	[%]	[%]
0.0	-0.0025692	592.25	1	0.0	14.889	Sagging	0.021166	0.0	0.027908

(Negligible)
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 14-15 | Sub-structure:

Vertical Offset Gradient from Line for of Vertical Horizontal Movement Displacement Calculations	Max Gradient	Segment Min	Start	Length	Curvature	Deflection	Average	Max	Max
			Damage				Ratio	Horizontal	Tensile
								Strain	Strain
[m]	[m]		[m]	[m]			[%]	[%]	[%]
0.0	562.20E-6	9190.1	1	0.0	2.1390	Sagging	0.0028813	0.0	0.0028615

(Negligible)
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 15-16 | Sub-structure:

Vertical Offset Gradient from Line for of Vertical Horizontal Movement Displacement Calculations	Max Gradient	Segment Min	Start	Length	Curvature	Deflection	Average	Max	Max
			Damage				Ratio	Horizontal	Tensile
								Strain	Strain
[m]	[m]		[m]	[m]			[%]	[%]	[%]
0.0	640.86E-6	-	1	0.0	1.6897	None	0.0	0.0	0.0

(Negligible)
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 16-17 | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Radius of Vertical Horizontal Displacement Movement Displacement Calculations	Segment Min Category	Start Damage	Length [m]	Curvature [m]	Deflection Ratio [%]	Average Horizontal Strain [%]	Max Tensile Strain [%]	Max of Curve
[m] 0.0 0.0013039 -	1	0.0	1.8990	None	0.0	0.0	0.0	

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 17-g | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Radius of Vertical Horizontal Displacement Movement Displacement Calculations	Segment Min Category	Start Damage	Length [m]	Curvature [m]	Deflection Ratio [%]	Average Horizontal Strain [%]	Max Tensile Strain [%]	Max of Curve
[m] 0.0 0.0016498 -	1	0.0	1.6115	None	0.0	0.0	0.0	

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: h-49 | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Radius of Vertical Horizontal Displacement Movement Displacement Calculations	Segment Min Category	Start Damage	Length [m]	Curvature [m]	Deflection Ratio [%]	Average Horizontal Strain [%]	Max Tensile Strain [%]	Max of Curve
[m] 0.0 -0.0017362	1	0.0	2.1345	Sagging	0.015994	0.0	0.015885	
	1652.1							

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 49-36 | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Radius of Vertical Horizontal Displacement Movement Displacement Calculations	Segment Min Category	Start Damage	Length [m]	Curvature [m]	Deflection Ratio [%]	Average Horizontal Strain [%]	Max Tensile Strain [%]	Max of Curve
[m] 0.0 -0.0012929	1	0.0	2.3890	Sagging	0.010360	0.0	0.010271	
	2854.6							

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 36-48 | Sub-structure:

Vertical Offset Gradient Max from Line for of Vertical Vertical Horizontal Movement Displacement Calculations Curve	Segment Max Gradient Radius of Displacement Curve	Segment Min Category	Start Damage	Length [m]	Curvature [m]	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of
[m]				[m]	[m]	[%]	[%]	[%]	
0.0	0.0	1	0.0	2.3002	Sagging	0.0028090	0.0	0.0027867	
0.0	-535.15E-6	10137.		0					

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 48-47 | Sub-structure:

Vertical Offset Gradient Max from Line for of Vertical Vertical Horizontal Movement Displacement Calculations Curve	Segment Max Gradient Radius of Displacement Curve	Segment Min Category	Start Damage	Length [m]	Curvature [m]	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of
[m]				[m]	[m]	[%]	[%]	[%]	Curve
0.0	0.0	1	0.0	1.1690	None	0.0	0.0	0.0	
0.0	-400.90E-6	-		0					

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 47-51 | Sub-structure:

Vertical Offset Gradient Max from Line for of Vertical Vertical Horizontal Movement Displacement Calculations Curve	Segment Max Gradient Radius of Displacement Curve	Segment Min Category	Start Damage	Length [m]	Curvature [m]	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of
[m]				[m]	[m]	[%]	[%]	[%]	
0.0	0.0	1	0.0	3.9217	Hogging	116.27E-6	0.0	115.62E-6	
0.0	-49.356E-6	207550.		0					
(Negligible)									
0.0	-49.356E-6	3.8062E+6	2	3.9217	1.7485	Sagging	10.012E-6	0.0	9.9778E-6
(Negligible)									
0.0	-61.181E-6	156600.	3	5.6702	5.0788	Hogging	208.58E-6	0.0	206.53E-6
(Negligible)									

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 50-46 | Sub-structure:

Vertical Offset Gradient Max from Line for of Vertical Vertical Horizontal Movement Displacement Calculations Curve	Segment Max Gradient Radius of Displacement Curve	Segment Min Category	Start Damage	Length [m]	Curvature [m]	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of
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Vertical Offset	Segment	Start Length	Curvature	Deflection	Average	Max	Max		
Gradient Max Gradient	Min	Damage		Ratio	Horizontal	Tensile	of		
from Line for	Radius of	Category			Strain	Strain			
of Vertical	Vertical								
Vertical	Displacement	Curvature							
Horizontal	Movement								
Displacement	Curve								
Calculations									
Curve									
[m]	[m]	[m]	[m]	[%]	[%]	[%]			
0.0	19.126E-6	461220.	1	0.0	10.799	Hogging	201.04E-6	0.0	192.51E-6
0.0				0					

(Negligible)
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 46-47 | Sub-structure:

Vertical Offset	Segment	Start Length	Curvature	Deflection	Average	Max	Max		
Gradient Max Gradient	Min	Damage		Ratio	Horizontal	Tensile	of		
from Line for	Radius of	Category			Strain	Strain			
of Vertical	Vertical								
Vertical	Displacement	Curvature							
Horizontal	Movement								
Displacement	Curve								
Calculations									
Curve									
[m]	[m]	[m]	[m]	[%]	[%]	[%]			
0.0	320.55E-6	16827.	1	0.0	8.1190	Sagging	0.0031379	0.0	0.0028526
0.0				0					

(Negligible)
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 24-25 | Sub-structure:

Vertical Offset	Segment	Start Length	Curvature	Deflection	Average	Max	Max		
Gradient Max Gradient	Min	Damage		Ratio	Horizontal	Tensile	of		
from Line for	Radius of	Category			Strain	Strain			
of Vertical	Vertical								
Vertical	Displacement	Curvature							
Horizontal	Movement								
Displacement	Curve								
Calculations									
Curve									
[m]	[m]	[m]	[m]	[%]	[%]	[%]			
0.0	-58.335E-6	123270.	1	0.0	9.2590	Sagging	549.61E-6	0.0	532.90E-6
0.0				0					

(Negligible)
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 25-26 | Sub-structure:

Vertical Offset	Segment	Start Length	Curvature	Deflection	Average	Max	Max		
Gradient Max Gradient	Min	Damage		Ratio	Horizontal	Tensile	of		
from Line for	Radius of	Category			Strain	Strain			
of Vertical	Vertical								
Vertical	Displacement	Curvature							
Horizontal	Movement								
Displacement	Curve								
Calculations									
Curve									
[m]	[m]	[m]	[m]	[%]	[%]	[%]			
0.0	5.0782E-6	1.4242E+6	1	0.0	5.3196	Hogging	37.600E-6	0.0	37.229E-6
0.0				0					

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 26-27 | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Vertical Horizontal Displacement Movement Displacement Calculations Curve	Segment Min Category	Start Length Damage	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of
[m]		[m]	[m]	[%]	[%]	[%]	
0.0	1	0.0	11.270	Sagging	0.0012623	0.0	0.0014116
0.0	119.36E-6	46608.	0				

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 27-28 | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Vertical Horizontal Displacement Movement Displacement Calculations Curve	Segment Min Category	Start Length Damage	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of
[m]		[m]	[m]	[%]	[%]	[%]	
0.0	1	0.0	3.1691	Hogging	208.26E-6	0.0	207.46E-6
0.0	-37.681E-6	146800.	0				

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 28-29 | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Vertical Horizontal Displacement Movement Displacement Calculations Curve	Segment Min Category	Start Length Damage	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of
[m]		[m]	[m]	[%]	[%]	[%]	
0.0	1	0.0	2.9270	Sagging	485.49E-6	0.0	479.26E-6
0.0	-92.560E-6	74625.	0				

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 27-32 | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Vertical Horizontal Displacement Movement Displacement Calculations Curve	Segment Min Category	Start Length Damage	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of
[m]		[m]	[m]	[%]	[%]	[%]	

Calculations

Curve	[m]	[m]	[m]	[m]	[%]	[%]	[%]
[m]	0.0	1	0.0	5.1490	Hogging	557.32E-6	0.0 551.78E-6
0.0	-18.800E-6	110180.	0				

(Negligible)
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 33-31 | Sub-structure:

Vertical Offset	Segment	Start Length	Curvature	Deflection	Average	Max	Max
Gradient Max Gradient	Min	Damage		Ratio	Horizontal	Tensile	of
from Line for	Radius of	Category			Strain	Strain	
of Vertical	Vertical						
of Vertical	Horizontal Displacement	Curvature					
Vertical	Movement						
Horizontal	Displacement	Curve					
Displacement	Calculations						
Curve							

[m]	[m]	[m]	[m]	[%]	[%]	[%]	
[m]	0.0	1	0.0	17.679	Sagging	0.0056150	0.0 0.0079688
0.0	534.40E-6	7309.4	0				

(Negligible)
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 31-34 | Sub-structure:

Vertical Offset	Segment	Start Length	Curvature	Deflection	Average	Max	Max
Gradient Max Gradient	Min	Damage		Ratio	Horizontal	Tensile	of
from Line for	Radius of	Category			Strain	Strain	
of Vertical	Vertical						
of Vertical	Horizontal Displacement	Curvature					
Vertical	Movement						
Horizontal	Displacement	Curve					
Displacement	Calculations						
Curve							

[m]	[m]	[m]	[m]	[%]	[%]	[%]	
[m]	0.0	1	0.0	3.0156	Hogging	701.59E-6	0.0 699.20E-6
0.0	-240.00E-6	31456.	0				

0.0	-240.00E-6	267760.	2	3.0156	0.35417	None	0.0	0.0	0.0
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(Negligible)
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 34-35 | Sub-structure:

Vertical Offset	Segment	Start Length	Curvature	Deflection	Average	Max	Max
Gradient Max Gradient	Min	Damage		Ratio	Horizontal	Tensile	of
from Line for	Radius of	Category			Strain	Strain	
of Vertical	Vertical						
of Vertical	Horizontal Displacement	Curvature					
Vertical	Movement						
Horizontal	Displacement	Curve					
Displacement	Calculations						
Curve							Curve

[m]	[m]	[m]	[m]	[%]	[%]	[%]	
[m]	0.0	1	0.0	1.3290	None	0.0	0.0 0.0
0.0	-296.25E-6	-	0				

(Negligible)
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 35-41 | Sub-structure:

Vertical Offset Gradient Max from Line for of Vertical Vertical	Segment Max Gradient Radius of Category	Start Length Min Damage	Curvature Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of
[m]	[m]	[m]	[m]	[%]	[%]	[%]
0.0	0.0	1	0.0 3.5991	Sagging	436.36E-6	0.0 427.97E-6
0.0	-156.61E-6	79399.	0			

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 41-40 | Sub-structure:

Vertical Offset Gradient Max from Line for of Vertical Vertical	Segment Max Gradient Radius of Category	Start Length Min Damage	Curvature Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of
[m]	[m]	[m]	[m]	[%]	[%]	[%]
0.0	0.0	1	0.0 4.0690	Sagging	489.59E-6	0.0 477.61E-6
0.0	167.11E-6	77995.	0			

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 40-39 | Sub-structure:

Vertical Offset Gradient Max from Line for of Vertical Vertical	Segment Max Gradient Radius of Category	Start Length Min Damage	Curvature Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of
[m]	[m]	[m]	[m]	[%]	[%]	[%]
0.0	0.0	1	0.0 3.8991	Sagging	0.0015324	0.0 0.0014979
0.0	-237.17E-6	24457.	0			

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 39-38 | Sub-structure:

Vertical Offset Gradient Max from Line for of Vertical Vertical	Segment Max Gradient Radius of Category	Start Length Min Damage	Curvature Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of
[m]	[m]	[m]	[m]	[%]	[%]	[%]

0.0 1 0.0 19.580 Sagging 844.30E-6 0.0 0.0012369
 0.0 -69.989E-6 236150. 0

(Negligible)
 Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 38-25 | Sub-structure:

Vertical Offset	Segment	Start	Length	Curvature	Deflection	Average	Max	Max
Gradient Max Gradient	Min	Damage			Ratio	Horizontal	Tensile	
from Line for	Radius of	Category				Strain	Strain	
of Vertical	Vertical							
of Vertical	Radius of	Category						
Vertical	Vertical							
Horizontal Displacement	Curvature							
Movement	Curve							
Displacement	Curve							
Calculations								
Curve								
[m]		[m]	[m]		[%]	[%]	[%]	
[m]		[m]	[m]		[%]	[%]	[%]	
0.0	1	1.0176	20.352	Hogging	163.75E-6	0.0	170.41E-6	
0.0		6.0676E-6	1.2730E+6	0				

(Negligible)
 Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 20-22 | Sub-structure:

Vertical Offset	Segment	Start	Length	Curvature	Deflection	Average	Max	Max
Gradient Max Gradient	Min	Damage			Ratio	Horizontal	Tensile	
from Line for	Radius of	Category				Strain	Strain	of
of Vertical	Vertical							
of Vertical	Radius of	Category						
Vertical	Vertical							
Horizontal Displacement	Curvature							
Movement	Curve							
Displacement	Curve							
Calculations								
Curve								
[m]		[m]	[m]		[%]	[%]	[%]	
[m]		[m]	[m]		[%]	[%]	[%]	
0.0	1	0.0	10.169	Hogging	654.00E-6	0.0	982.01E-6	
0.0		-40.045E-6	181790.	0				

(Negligible)
 Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 22-b | Sub-structure:

Vertical Offset	Segment	Start	Length	Curvature	Deflection	Average	Max	Max
Gradient Max Gradient	Min	Damage			Ratio	Horizontal	Tensile	
from Line for	Radius of	Category				Strain	Strain	of
of Vertical	Vertical							
of Vertical	Radius of	Category						
Vertical	Vertical							
Horizontal Displacement	Curvature							
Movement	Curve							
Displacement	Curve							
Calculations								Curve
[m]		[m]	[m]		[%]	[%]	[%]	
[m]		[m]	[m]		[%]	[%]	[%]	
0.0	1	0.0	11.790	Sagging	0.016242	0.0	0.019798	
0.0		0.0015920	1674.2	0				

(Negligible)
 Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: e-45 | Sub-structure:

Vertical Offset	Segment	Start	Length	Curvature	Deflection	Average	Max	Max
Gradient Max Gradient	Min	Damage			Ratio	Horizontal	Tensile	
from Line for	Radius of	Category				Strain	Strain	of
of Vertical	Vertical							
of Vertical	Radius of	Category						
Vertical	Vertical							
Horizontal Displacement	Curvature							

Movement Displacement Calculations		Curve							Curve
[m]	[m]	[m]	[m]	[%]	[%]	[%]			
0.0	0.0	1	0.0	14.761	Sagging	0.021541	0.0	0.022623	
0.0	-0.0022353	1034.0		0					

(Negligible)
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 18-31 | Sub-structure:

Vertical Offset Gradient from Line of Vertical Movement Displacement Calculations	Segment Max Gradient Radius of Vertical Displacement Curve	Start Min Category	Length Damage	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of
0.0	1	0.0	6.8291	Hogging	0.0022979	0.0	0.0030204	
0.0	-153.25E-6	35240.		0				

(Negligible)
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 23-24 | Sub-structure:

Vertical Offset Gradient from Line of Vertical Movement Displacement Calculations	Segment Max Gradient Radius of Vertical Displacement Curve	Start Min Category	Length Damage	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of
0.0	1	0.0	0.46855	None	0.0	0.0	0.0	
0.0	-266.14E-6	341020.		0				

0.0	-266.14E-6	41120.	2	0.46855	12.351	Sagging	0.0030765	0.0	0.0036451
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(Negligible)
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: b-27 | Sub-structure:

Vertical Offset Gradient from Line of Vertical Movement Displacement Calculations	Segment Max Gradient Radius of Vertical Displacement Curve	Start Min Category	Length Damage	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of
0.0	1	0.0	10.644	Sagging	0.023887	0.0	0.030840	
0.0	-0.0021818	1109.1		0				

(Negligible)
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 42-37 | Sub-structure:

Vertical Offset Gradient	Max Gradient	Segment Min	Start Damage	Length	Curvature	Deflection	Average	Max	Max
from Line for						Ratio	Horizontal	Tensile	
of Vertical Radius of							Strain	Strain	
Vertical									
Horizontal Displacement									
Movement									
Displacement									
Calculations									
Curve									

[m]	[m]		[m]	[m]		[%]	[%]	[%]	
0.0	0.0	1	0.0	2.3949	Hogging	345.51E-6	0.0	331.91E-6	
0.0	-219.92E-6	63482.		0					
(Negligible)									
0.0	-219.92E-6	54252.	2	2.3949	21.026	Sagging	0.0028362	0.0	0.0022494
				0					

(Negligible)
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 47-43 | Sub-structure:

Vertical Offset Gradient	Max Gradient	Segment Min	Start Damage	Length	Curvature	Deflection	Average	Max	Max
from Line for						Ratio	Horizontal	Tensile	of
of Vertical Radius of							Strain	Strain	
Vertical									
Horizontal Displacement									
Movement									
Displacement									
Calculations									
Curve									

[m]	[m]		[m]	[m]		[%]	[%]	[%]
0.0	0.0	1	0.0	9.5390	Hogging	0.0020812	0.0	0.0030887
0.0	-105.86E-6	51569.		0				

(Negligible)
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 44-39 | Sub-structure:

Vertical Offset Gradient	Max Gradient	Segment Min	Start Damage	Length	Curvature	Deflection	Average	Max	Max
from Line for						Ratio	Horizontal	Tensile	of
of Vertical Radius of							Strain	Strain	
Vertical									
Horizontal Displacement									
Movement									
Displacement									
Calculations									
Curve									

[m]	[m]		[m]	[m]		[%]	[%]	[%]
0.0	0.0	1	0.0	2.9493	Hogging	124.40E-6	0.0	117.12E-6
0.0	-69.050E-6	293450.		0				

(Negligible)
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 46-45 | Sub-structure:

Vertical Offset Gradient	Max Gradient	Segment Min	Start Damage	Length	Curvature	Deflection	Average	Max	Max
from Line for						Ratio	Horizontal	Tensile	of
of Vertical Radius of							Strain	Strain	
Vertical									
Horizontal Displacement									
Movement									
Displacement									
Calculations									
Curve									

**Movement
Displacement
Calculations
Curve**

[m]	[m]	[m]	[m]	[m]	[m]	[%]	[%]	[%]
0.0	0.0	1	0.0	9.5199	Hogging	326.27E-6	0.0	483.98E-6
0.0	-19.784E-6	348610.		0				

(Negligible)
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: a-12 | Sub-structure:

Vertical Offset Gradient Max from Line for of Vertical Horizontal Movement Displacement Calculations	Segment Max Gradient Radius of Displacement Curve	Start Min Category	Length Damage	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of Curve
[m]	[m]	[m]	[m]	[m]	[%]	[%]	[%]	
0.0	0.0	1	0.0	4.4594	Hogging	0.022829	0.0	0.022865
0.0	-0.0010695	933.34		0				

(Negligible)
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 12-11 | Sub-structure:

Vertical Offset Gradient Max from Line for of Vertical Horizontal Movement Displacement Calculations	Segment Max Gradient Radius of Displacement Curve	Start Min Category	Length Damage	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of Curve
[m]	[m]	[m]	[m]	[m]	[%]	[%]	[%]	
0.0	0.0	1	0.0	6.6990	Hogging	0.038441	0.0	0.050036
0.0	-0.0016092	889.65	1 (Very					

Slight)
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 11-f | Sub-structure:

Vertical Offset Gradient Max from Line for of Vertical Horizontal Movement Displacement Calculations	Segment Max Gradient Radius of Displacement Curve	Start Min Category	Length Damage	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of Curve
[m]	[m]	[m]	[m]	[m]	[%]	[%]	[%]	
0.0	0.0	1	0.0	4.4697	Hogging	0.029850	0.0	0.029948
0.0	0.0021934	407.68		0				

(Negligible)
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: ag | Sub-structure:

Vertical Offset Gradient Max	Segment Max Gradient Min	Start Damage	Length	Curvature	Deflection	Average	Max	Max
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[m]	[m]	[m]	[m]	[%]	[%]	[%]		
0.0	0.0	1	0.0	1.7483	None	0.0	0.0	0.0
0.0	739.57E-6 -		0					

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: eh | Sub-structure:

Vertical Offset	Segment	Start	Length	Curvature	Deflection	Average	Max	Max
Gradient Max Gradient	Min	Damage				Horizontal	Tensile	
from Line for	Radius of	Category			Ratio	Strain	Strain	
of Vertical	Vertical							
Vertical	Displacement	Curvature						
Horizontal	Movement							
Displacement	Curve							
Calculations								
Curve								

[m]	[m]	[m]	[m]	[%]	[%]	[%]		
0.0	0.0	1	0.0	2.9086	Hogging	0.010597	0.0	0.0099948
0.0	889.81E-6	2926.7	0					

(Negligible)

0.0	0.0010507	8629.1	2	2.9086	1.6795	Sagging	0.010400	0.0	0.0096269
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(Negligible)

0.0	-0.0010754	1785.6	3	4.5880	5.1710	Hogging	0.025361	0.0	0.028246
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(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: hf | Sub-structure:

Vertical Offset	Segment	Start	Length	Curvature	Deflection	Average	Max	Max
Gradient Max Gradient	Min	Damage				Horizontal	Tensile	
from Line for	Radius of	Category			Ratio	Strain	Strain	
of Vertical	Vertical							
Vertical	Displacement	Curvature						
Horizontal	Movement							
Displacement	Curve							
Calculations								
Curve								

[m]	[m]	[m]	[m]	[%]	[%]	[%]		
0.0	0.0	1	0.0	10.879	Sagging	0.014515	0.0	0.015843
0.0	-0.0010284	1707.6	0					

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: de | Sub-structure:

Vertical Offset	Segment	Start	Length	Curvature	Deflection	Average	Max	Max
Gradient Max Gradient	Min	Damage				Horizontal	Tensile	
from Line for	Radius of	Category			Ratio	Strain	Strain	
of Vertical	Vertical							
Vertical	Displacement	Curvature						
Horizontal	Movement							
Displacement	Curve							
Calculations								
Curve								

[m]	[m]	[m]	[m]	[%]	[%]	[%]
0.10000						

All settlements are less than the Settlement Trough Limit Sensitivity.

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Specific Building Damage Results - Critical Values for All Segments within Each Sub-Structure

Structure: 21-20 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0 292850.	265.19E-6 - 0 (Negligible)	0.0	-29.485E-6	0.93865	252.02E-6	0.0	-29.485E-6

Structure: 19-20 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0 - 32609.0	0.0014184 (Negligible)	0.0	-211.52E-6	1.7510	0.0013657	0.0	-211.52E-6

Structure: 19-18 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0 - 11959.0	0.0020799 (Negligible)	0.0	417.46E-6	2.5054	0.0020673	0.0	417.46E-6

Structure: 18-13 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0 53295.	730.50E-6 388950.0 (Negligible)	0.0	-65.886E-6	2.5058	720.66E-6	0.0	-65.886E-6

Structure: 21-a | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[%]	[%]		[mm]	[%]		
0.0	0.016003	0.0	0.0019331	6.0742	0.018470	0.0	0.0019331
- 696.94 0	(Negligible)						

Structure: f-50 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[%]	[%]		[mm]	[%]		
0.0	0.021166	0.0	-0.0025692	7.6558	0.027908	0.0	-0.0025692
- 592.25 0	(Negligible)						

Structure: 14-15 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[%]	[%]		[mm]	[%]		
0.0	0.0028813	0.0	562.20E-6	3.4275	0.0028615	0.0	562.20E-6
- 9190.1 0	(Negligible)						

Structure: 15-16 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[%]	[%]		[mm]	[%]		
0.0	0.0	0.0	640.86E-6	4.5110	0.0	0.0	640.86E-6
- - 0	(Negligible)						

Structure: 16-17 | Sub-structure:

Vertical Min Offset from Radius of	Deflection Min Ratio	Average Damage Category Horizontal	Max Slope	Max Settlement	Max Tensile	Max Gradient of	Max Gradient of Vertical
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Line for Curvature Vertical (Hogging) Movement Calculations	Curvature	Strain	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]		[mm]	[%]		
0.0	0.0	0.0	0.0	0.0013039	6.9878	0.0	0.0	0.0013039
-	-	0	(Negligible)					

Structure: 17-g | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]		[mm]	[%]	
0.0	0.0	0.0	0.0	0.0016498	9.6477	0.0	0.0016498
-	-	0	(Negligible)				

Structure: h-49 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]		[mm]	[%]	
0.0	0.015994	0.0	-0.0017362	9.2873	0.015885	0.0	-0.0017362
-	1652.1	0	(Negligible)				

Structure: 49-36 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]		[mm]	[%]	
0.0	0.010360	0.0	-0.0012929	6.2693	0.010271	0.0	-0.0012929
-	2854.6	0	(Negligible)				

Structure: 36-48 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]		[mm]	[%]	

Calculations

[m]	[m]	[%]	[%]		[mm]	[%]		
[m]	[m]							
0.0	0.0028090	0.0	-535.15E-6	3.6794	0.0027867	0.0	-535.15E-6	
-	10137.0	0	(Negligible)					

Structure: 48-47 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
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[m]	[m]	[%]	[%]	[mm]	[%]		
[m]	[m]						
0.0	0.0	0.0	-400.90E-6	2.5784	0.0	0.0	-400.90E-6
-	0	0	(Negligible)				

Structure: 47-51 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
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[m]	[m]	[%]	[%]	[mm]	[%]		
[m]	[m]						
0.0	208.58E-6	0.0	-61.181E-6	2.1094	206.53E-6	0.0	-61.181E-6
156600.	3.8062E+6	0	(Negligible)				

Structure: 50-46 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
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[m]	[m]	[%]	[%]	[mm]	[%]		
[m]	[m]						
0.0	201.04E-6	0.0	19.126E-6	0.61880	192.51E-6	0.0	19.126E-6
461220.		0	(Negligible)				

Structure: 46-47 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
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[m]	[m]	[%]	[%]	[mm]	[%]		
[m]	[m]						
0.0	0.0031379	0.0	320.55E-6	2.1090	0.0028526	0.0	320.55E-6
-	16827.0	0	(Negligible)				

Structure: 24-25 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0 - 123270.0 (Negligible)	549.61E-6	0.0	-58.335E-6	0.45574	532.90E-6	0.0	-58.335E-6

Structure: 25-26 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0 1.4242E+6	37.600E-6 - 0 (Negligible)	0.0	5.0782E-6	0.15216	37.229E-6	0.0	5.0782E-6

Structure: 26-27 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0 - 46608.0 (Negligible)	0.0012623	0.0	119.36E-6	0.79929	0.0014116	0.0	119.36E-6

Structure: 27-28 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0 146800.	208.26E-6 - 0 (Negligible)	0.0	-37.681E-6	0.79941	207.46E-6	0.0	-37.681E-6

Structure: 28-29 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0	485.49E-6	0.0	-92.560E-6	0.69804	479.26E-6	0.0	-92.560E-6
- 74625.0	(Negligible)						

Structure: 27-32 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0	557.32E-6	0.0	-18.800E-6	0.82715	551.78E-6	0.0	-18.800E-6
110180.	- 0 (Negligible)						

Structure: 33-31 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0	0.0056150	0.0	534.40E-6	2.7365	0.0079688	0.0	534.40E-6
- 7309.4	0 (Negligible)						

Structure: 31-34 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0	701.59E-6	0.0	-240.00E-6	2.7371	699.20E-6	0.0	-240.00E-6
31456.	- 0 (Negligible)						

Structure: 34-35 | Sub-structure:

Vertical Min Offset from Radius of	Deflection Min Ratio	Average Damage Category Horizontal	Max Slope	Max Settlement	Max Tensile	Max Gradient of	Max Gradient of Vertical
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Line for Curvature Vertical (Hogging) Movement Calculations	Curvature	Strain	Strain	Horizontal Displacement	Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]
0.0	0.0	0.0	0.0	-296.25E-6	1.9663
-	-	0 (Negligible)		0.0	-296.25E-6

Structure: 35-41 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0	0.0	436.36E-6	0.0	-156.61E-6	1.5722	427.97E-6	0.0
-	-	79399.0 (Negligible)					-156.61E-6

Structure: 41-40 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0	0.0	489.59E-6	0.0	167.11E-6	1.6784	477.61E-6	0.0
-	-	77995.0 (Negligible)					167.11E-6

Structure: 40-39 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0	0.0	0.0015324	0.0	-237.17E-6	1.6786	0.0014979	0.0
-	-	24457.0 (Negligible)					-237.17E-6

Structure: 39-38 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0	0.0	0.0015324	0.0	-237.17E-6	1.6786	0.0014979	0.0
-	-	24457.0 (Negligible)					-237.17E-6

Calculations

[m]	[m]	[%]	[%]		[mm]	[%]		
0.0	844.30E-6	0.0	-69.989E-6	0.93292	0.0012369	0.0	-69.989E-6	
- 236150.0	(Negligible)							

Structure: 38-25 | Sub-structure:

Vertical	Deflection	Average	Max Slope	Max	Max	Max Gradient	Max Gradient
Min	Min	Damage	Category	Settlement	Tensile	of	of Vertical
Offset from	Ratio	Horizontal				of	of Vertical
Radius of	Radius of	Strain				Horizontal	Displacement
Line for	Curvature					Displacement	Curve
Curvature	Curvature						
Vertical	Vertical						
(Hogging)	(Sagging)						
Movement							
Calculations							
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0	163.75E-6	0.0	6.0676E-6	0.15341	170.41E-6	0.0	6.0676E-6
1.2730E+6	- 0	(Negligible)					

Structure: 20-22 | Sub-structure:

Vertical	Deflection	Average	Max Slope	Max	Max	Max Gradient	Max Gradient
Min	Min	Damage	Category	Settlement	Tensile	of	of Vertical
Offset from	Ratio	Horizontal				of	of Vertical
Radius of	Radius of	Strain				Horizontal	Displacement
Line for	Curvature					Displacement	Curve
Curvature	Curvature						
Vertical	Vertical						
(Hogging)	(Sagging)						
Movement							
Calculations							
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0	654.00E-6	0.0	-40.045E-6	0.94383	982.01E-6	0.0	-40.045E-6
181790.	- 0	(Negligible)					

Structure: 22-b | Sub-structure:

Vertical	Deflection	Average	Max Slope	Max	Max	Max Gradient	Max Gradient
Min	Min	Damage	Category	Settlement	Tensile	of	of Vertical
Offset from	Ratio	Horizontal				of	of Vertical
Radius of	Radius of	Strain				Horizontal	Displacement
Line for	Curvature					Displacement	Curve
Curvature	Curvature						
Vertical	Vertical						
(Hogging)	(Sagging)						
Movement							
Calculations							
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0	0.016242	0.0	0.0015920	6.5429	0.019798	0.0	0.0015920
- 1674.2	0	(Negligible)					

Structure: e-45 | Sub-structure:

Vertical	Deflection	Average	Max Slope	Max	Max	Max Gradient	Max Gradient
Min	Min	Damage	Category	Settlement	Tensile	of	of Vertical
Offset from	Ratio	Horizontal				of	of Vertical
Radius of	Radius of	Strain				Horizontal	Displacement
Line for	Curvature					Displacement	Curve
Curvature	Curvature						
Vertical	Vertical						
(Hogging)	(Sagging)						
Movement							
Calculations							
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0	0.021541	0.0	-0.0022353	8.2758	0.022623	0.0	-0.0022353
- 1034.0	0	(Negligible)					

Structure: 18-31 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio Radius of Curvature Vertical (Sagging) Movement Calculations	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0	0.0022979	0.0	-153.25E-6	2.5058	0.0030204	0.0	-153.25E-6
35240.	- 0 (Negligible)						

Structure: 23-24 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio Radius of Curvature Vertical (Sagging) Movement Calculations	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0	0.0030765	0.0	-266.14E-6	2.6097	0.0036451	0.0	-266.14E-6
- 41120.	0 (Negligible)						

Structure: b-27 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio Radius of Curvature Vertical (Sagging) Movement Calculations	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0	0.023887	0.0	-0.0021818	8.0360	0.030840	0.0	-0.0021818
- 1109.1	0 (Negligible)						

Structure: 42-37 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio Radius of Curvature Vertical (Sagging) Movement Calculations	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0	0.0028362	0.0	-219.92E-6	2.5627	0.0022494	0.0	-219.92E-6
63482.	54252. 0 (Negligible)						

Structure: 47-43 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0 51569.	0.0020812 - 0 (Negligible)	0.0	-105.86E-6	2.1817	0.0030887	0.0	-105.86E-6

Structure: 44-39 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0 293450.	124.40E-6 - 0 (Negligible)	0.0	-69.050E-6	1.1292	117.12E-6	0.0	-69.050E-6

Structure: 46-45 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0 348610.	326.27E-6 - 0 (Negligible)	0.0	-19.784E-6	0.62257	483.98E-6	0.0	-19.784E-6

Structure: a-12 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0 933.34	0.022829 - 0 (Negligible)	0.0	-0.0010695	6.6520	0.022865	0.0	-0.0010695

Structure: 12-11 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		

Line for Curvature Vertical (Hogging) Movement Calculations	Curvature	Strain	Strain	Horizontal Displacement	Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]
0.0	0.038441	0.0	-0.0016092	7.9952	0.050036
889.65	- 1 (Very Slight)				0.0 -0.0016092

Structure: 11-f | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0	0.029850	0.0	0.0021934	8.0279	0.029948	0.0	0.0021934
407.68	- 0 (Negligible)						

Structure: ag | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0	0.014829	0.0	0.0014136	9.6480	0.016362	0.0	0.0014136
- 1181.0	0 (Negligible)						

Structure: gb | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0	0.046259	0.0	-0.0028692	13.308	0.062295	0.0	-0.0028692
984.79	11024. 1 (Very Slight)						

Structure: bc | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		

Calculations

[m]	[m]	[%]	[%]		[mm]	[%]		
0.0	1291.9	0.041298	- 0 (Negligible)	0.0	0.0018029	9.8232	0.048246	0.0 0.0018029

Structure: cd | Sub-structure:

Vertical	Deflection	Average	Max Slope	Max	Max	Max Gradient	Max Gradient
Min	Min	Damage	Category				
Offset from	Ratio	Horizontal		Settlement	Tensile	of	of Vertical
Radius of	Radius of	Strain			Strain	Horizontal	Displacement
Line for	Curvature	Curvature				Displacement	Curve
Vertical	(Hogging)	(Sagging)					
Movement							
Calculations							

[m]	[m]	[%]	[%]		[mm]	[%]		
0.0	-	0.0	- 0 (Negligible)	0.0	739.57E-6	9.3377	0.0	739.57E-6

Structure: eh | Sub-structure:

Vertical	Deflection	Average	Max Slope	Max	Max	Max Gradient	Max Gradient
Min	Min	Damage	Category				
Offset from	Ratio	Horizontal		Settlement	Tensile	of	of Vertical
Radius of	Radius of	Strain			Strain	Horizontal	Displacement
Line for	Curvature	Curvature				Displacement	Curve
Vertical	(Hogging)	(Sagging)					
Movement							
Calculations							

[m]	[m]	[%]	[%]		[mm]	[%]		
0.0	1785.6	0.025361	0 (Negligible)	0.0	-0.0010754	11.502	0.028246	0.0 -0.0010754

Structure: hf | Sub-structure:

Vertical	Deflection	Average	Max Slope	Max	Max	Max Gradient	Max Gradient
Min	Min	Damage	Category				
Offset from	Ratio	Horizontal		Settlement	Tensile	of	of Vertical
Radius of	Radius of	Strain			Strain	Horizontal	Displacement
Line for	Curvature	Curvature				Displacement	Curve
Vertical	(Hogging)	(Sagging)					
Movement							
Calculations							

[m]	[m]	[%]	[%]		[mm]	[%]		
0.0	-	0.014515	- 0 (Negligible)	0.0	-0.0010284	9.2873	0.015843	0.0 -0.0010284

Structure: de | Sub-structure:

Vertical	Deflection	Average	Max	Max	Max	Max Gradient	Max Gradient	Min
Min	Damage	Category	Slope	Settlement	Tensile	of	of Vertical	Radius
Offset from	Ratio	Horizontal				of	of Vertical	
Radius of	Radius of	Strain			Strain	Horizontal	Displacement	
Line for	Curvature	Curvature				Displacement	Curve	
Vertical	(Hogging)	(Sagging)						
Movement								
Calculations								

[m]	[m]	[%]	[%]		[mm]	[%]		[m]
-----	-----	-----	-----	--	------	-----	--	-----

Specific Building Damage Results - Critical Segments within Each Structure

Structure Name	Parameter	Critical	Critical	Start	End	Curvature	Max Slope	
Max	Max	Min	Min	Damage Category				
Settlement	Tensile	Radius of	Radius of					
Strain	Curvature	Curvature						
(Hogging)	(Sagging)							
[mm]	[%]	[m]	[m]		[m]	[m]		
21-20		Max Slope		1	0.0	11.749	Hogging	29.485E-6
0.93865	252.02E-6	292850.	- 0 (Negligible)					
		Max Settlement		1	0.0	11.749	Hogging	29.485E-6
0.93865	252.02E-6	292850.	- 0 (Negligible)					
		Max Tensile		1	0.0	11.749	Hogging	29.485E-6
0.93865	252.02E-6	292850.	- 0 (Negligible)					
		Strain						
		Min Radius of		1	0.0	11.749	Hogging	29.485E-6
0.93865	252.02E-6	292850.	- 0 (Negligible)					
		Curvature (Hogging)						
		Min Radius of		-	-	-	-	-
-	-	-	-					
		Curvature (Sagging)						
19-20		Max Slope		1	0.0	5.0389	Sagging	211.52E-6
1.7510	0.0013657	-	32609.0 (Negligible)					
		Max Settlement		1	0.0	5.0389	Sagging	211.52E-6
1.7510	0.0013657	-	32609.0 (Negligible)					
		Max Tensile		1	0.0	5.0389	Sagging	211.52E-6
1.7510	0.0013657	-	32609.0 (Negligible)					
		Strain						
		Min Radius of		-	-	-	-	-
-	-	-	-					
		Curvature (Hogging)						
		Min Radius of		1	0.0	5.0389	Sagging	211.52E-6
1.7510	0.0013657	-	32609.0 (Negligible)					
		Curvature (Sagging)						
19-18		Max Slope		1	0.0	2.0092	Sagging	417.46E-6
2.5054	0.0020673	-	11959.0 (Negligible)					
		Max Settlement		1	0.0	2.0092	Sagging	417.46E-6
2.5054	0.0020673	-	11959.0 (Negligible)					
		Max Tensile		1	0.0	2.0092	Sagging	417.46E-6
2.5054	0.0020673	-	11959.0 (Negligible)					
		Strain						
		Min Radius of		-	-	-	-	-
-	-	-	-					
		Curvature (Hogging)						
		Min Radius of		1	0.0	2.0092	Sagging	417.46E-6
2.5054	0.0020673	-	11959.0 (Negligible)					
		Curvature (Sagging)						
18-13		Max Slope		3	11.137	14.959	Hogging	65.886E-6
1.9171	183.36E-6	144870.	- 0 (Negligible)					
		Max Settlement		1	0.0	6.0065	Hogging	64.727E-6
2.5058	720.66E-6	53295.	- 0 (Negligible)					
		Max Tensile		1	0.0	6.0065	Hogging	64.727E-6
2.5058	720.66E-6	53295.	- 0 (Negligible)					
		Strain						
		Min Radius of		1	0.0	6.0065	Hogging	64.727E-6
2.5058	720.66E-6	53295.	- 0 (Negligible)					
		Curvature (Hogging)						
		Min Radius of		2	6.0065	11.137	Sagging	64.727E-6
2.2222	151.10E-6	-	388950.0 (Negligible)					
		Curvature (Sagging)						
21-a		Max Slope		1	0.0	11.820	Sagging	0.0019331
6.0742	0.018470	-	696.94 0 (Negligible)					
		Max Settlement		1	0.0	11.820	Sagging	0.0019331
6.0742	0.018470	-	696.94 0 (Negligible)					

6.0742	0.018470	Max Tensile	-	696.94	0 (Negligible)	1	0.0	11.820	Sagging	0.0019331
-	-	Strain	-	-	-	-	-	-	-	-
-	-	Min Radius of	-	-	-	-	-	-	-	-
-	-	Curvature (Hogging)	-	-	-	-	-	-	-	-
6.0742	0.018470	Min Radius of	-	696.94	0 (Negligible)	1	0.0	11.820	Sagging	0.0019331
f-50		Curvature (Sagging)	-	-	-	-	-	-	-	-
7.6558	0.027908	Max Slope	-	592.25	0 (Negligible)	1	0.0	14.889	Sagging	0.0025692
7.6558	0.027908	Max Settlement	-	592.25	0 (Negligible)	1	0.0	14.889	Sagging	0.0025692
7.6558	0.027908	Max Tensile	-	592.25	0 (Negligible)	1	0.0	14.889	Sagging	0.0025692
-	-	Strain	-	-	-	-	-	-	-	-
-	-	Min Radius of	-	-	-	-	-	-	-	-
-	-	Curvature (Hogging)	-	-	-	-	-	-	-	-
7.6558	0.027908	Min Radius of	-	592.25	0 (Negligible)	1	0.0	14.889	Sagging	0.0025692
14-15		Curvature (Sagging)	-	-	-	-	-	-	-	-
3.4275	0.0028615	Max Slope	-	9190.1	0 (Negligible)	1	0.0	2.1390	Sagging	562.20E-6
3.4275	0.0028615	Max Settlement	-	9190.1	0 (Negligible)	1	0.0	2.1390	Sagging	562.20E-6
3.4275	0.0028615	Max Tensile	-	9190.1	0 (Negligible)	1	0.0	2.1390	Sagging	562.20E-6
-	-	Strain	-	-	-	-	-	-	-	-
-	-	Min Radius of	-	-	-	-	-	-	-	-
-	-	Curvature (Hogging)	-	-	-	-	-	-	-	-
3.4275	0.0028615	Min Radius of	-	9190.1	0 (Negligible)	1	0.0	2.1390	Sagging	562.20E-6
15-16		Curvature (Sagging)	-	-	-	-	-	-	-	-
4.5110	0.0	Max Slope	-	-	0 (Negligible)	1	0.0	1.6897	Sagging	640.86E-6
4.5110	0.0	Max Settlement	-	-	0 (Negligible)	1	0.0	1.6897	Sagging	640.86E-6
4.5110	0.0	Max Tensile	-	-	0 (Negligible)	1	0.0	1.6897	Sagging	640.86E-6
-	-	Strain	-	-	-	-	-	-	-	-
-	-	Min Radius of	-	-	-	-	-	-	-	-
-	-	Curvature (Hogging)	-	-	-	-	-	-	-	-
-	-	Min Radius of	-	-	-	-	-	-	-	-
-	-	Curvature (Sagging)	-	-	-	-	-	-	-	-
16-17		Max Slope	-	-	0 (Negligible)	1	0.0	1.8990	Sagging	0.0013039
6.9878	0.0	Max Settlement	-	-	0 (Negligible)	1	0.0	1.8990	Sagging	0.0013039
6.9878	0.0	Max Tensile	-	-	0 (Negligible)	1	0.0	1.8990	Sagging	0.0013039
6.9878	0.0	Strain	-	-	0 (Negligible)	1	0.0	1.8990	Sagging	0.0013039
-	-	Min Radius of	-	-	-	-	-	-	-	-
-	-	Curvature (Hogging)	-	-	-	-	-	-	-	-
-	-	Min Radius of	-	-	-	-	-	-	-	-
-	-	Curvature (Sagging)	-	-	-	-	-	-	-	-
17-g		Max Slope	-	-	0 (Negligible)	1	0.0	1.6115	Sagging	0.0016498
9.6477	0.0	Max Settlement	-	-	0 (Negligible)	1	0.0	1.6115	Sagging	0.0016498
9.6477	0.0	Max Tensile	-	-	0 (Negligible)	1	0.0	1.6115	Sagging	0.0016498
9.6477	0.0	Strain	-	-	0 (Negligible)	1	0.0	1.6115	Sagging	0.0016498

1.8404	206.53E-6	Min Radius of Curvature (Hogging)	156600.	- 0 (Negligible)	3	5.6702	10.749	Hogging	61.181E-6
1.9259	9.9778E-6	Min Radius of Curvature (Sagging)	3.8062E+6	0 (Negligible)	2	3.9217	5.6702	Sagging	49.356E-6
50-46		Max Slope			1	0.0	10.799	Hogging	19.126E-6
0.61880	192.51E-6	Max Settlement	461220.	- 0 (Negligible)	1	0.0	10.799	Hogging	19.126E-6
0.61880	192.51E-6	Max Tensile	461220.	- 0 (Negligible)	1	0.0	10.799	Hogging	19.126E-6
0.61880	192.51E-6	Strain			1	0.0	10.799	Hogging	19.126E-6
0.61880	192.51E-6	Min Radius of Curvature (Hogging)	461220.	- 0 (Negligible)	1	0.0	10.799	Hogging	19.126E-6
-	-	Min Radius of Curvature (Sagging)	-	-	-	-	-	-	-
46-47		Max Slope			1	0.0	8.1190	Sagging	320.55E-6
2.1090	0.0028526	Max Settlement	16827.0	0 (Negligible)	1	0.0	8.1190	Sagging	320.55E-6
2.1090	0.0028526	Max Tensile	16827.0	0 (Negligible)	1	0.0	8.1190	Sagging	320.55E-6
2.1090	0.0028526	Strain			1	0.0	8.1190	Sagging	320.55E-6
-	-	Min Radius of Curvature (Hogging)	-	-	-	-	-	-	-
2.1090	0.0028526	Min Radius of Curvature (Sagging)	16827.0	0 (Negligible)	1	0.0	8.1190	Sagging	320.55E-6
24-25		Max Slope			1	0.0	9.2590	Sagging	58.335E-6
0.45574	532.90E-6	Max Settlement	123270.0	0 (Negligible)	1	0.0	9.2590	Sagging	58.335E-6
0.45574	532.90E-6	Max Tensile	123270.0	0 (Negligible)	1	0.0	9.2590	Sagging	58.335E-6
0.45574	532.90E-6	Strain			1	0.0	9.2590	Sagging	58.335E-6
-	-	Min Radius of Curvature (Hogging)	-	-	-	-	-	-	-
0.45574	532.90E-6	Min Radius of Curvature (Sagging)	123270.0	0 (Negligible)	1	0.0	9.2590	Sagging	58.335E-6
25-26		Max Slope			1	0.0	5.3196	Hogging	5.0782E-6
0.15216	37.229E-6	Max Settlement	1.4242E+6	- 0 (Negligible)	1	0.0	5.3196	Hogging	5.0782E-6
0.15216	37.229E-6	Max Tensile	1.4242E+6	- 0 (Negligible)	1	0.0	5.3196	Hogging	5.0782E-6
0.15216	37.229E-6	Strain			1	0.0	5.3196	Hogging	5.0782E-6
0.15216	37.229E-6	Min Radius of Curvature (Hogging)	1.4242E+6	- 0 (Negligible)	1	0.0	5.3196	Hogging	5.0782E-6
-	-	Min Radius of Curvature (Sagging)	-	-	-	-	-	-	-
26-27		Max Slope			1	0.0	11.270	Sagging	119.36E-6
0.79929	0.0014116	Max Settlement	46608.0	0 (Negligible)	1	0.0	11.270	Sagging	119.36E-6
0.79929	0.0014116	Max Tensile	46608.0	0 (Negligible)	1	0.0	11.270	Sagging	119.36E-6
0.79929	0.0014116	Strain			1	0.0	11.270	Sagging	119.36E-6
-	-	Min Radius of Curvature (Hogging)	-	-	-	-	-	-	-
-	-	Min Radius of Curvature (Sagging)	-	-	-	-	-	-	-

-	-	Min Radius of	-	-	-	-	-
-	-	Curvature	-	-	-	-	-
-	-	(Sagging)	-	-	-	-	-
34-35		Max Slope	1	0.0	1.3290	Sagging	296.25E-6
1.9663	0.0	-	-	-	-	-	-
		Max Settlement	1	0.0	1.3290	Sagging	296.25E-6
1.9663	0.0	-	-	-	-	-	-
		Max Tensile	1	0.0	1.3290	Sagging	296.25E-6
1.9663	0.0	-	-	-	-	-	-
		Strain	-	-	-	-	-
-	-	Min Radius of	-	-	-	-	-
-	-	Curvature	-	-	-	-	-
-	-	(Hogging)	-	-	-	-	-
-	-	Min Radius of	-	-	-	-	-
-	-	Curvature	-	-	-	-	-
-	-	(Sagging)	-	-	-	-	-
35-41		Max Slope	1	0.0	3.5991	Sagging	156.61E-6
1.5722	427.97E-6	-	-	-	-	-	-
		Max Settlement	1	0.0	3.5991	Sagging	156.61E-6
1.5722	427.97E-6	-	-	-	-	-	-
		Max Tensile	1	0.0	3.5991	Sagging	156.61E-6
1.5722	427.97E-6	-	-	-	-	-	-
		Strain	-	-	-	-	-
-	-	Min Radius of	-	-	-	-	-
-	-	Curvature	-	-	-	-	-
-	-	(Hogging)	-	-	-	-	-
-	-	Min Radius of	-	-	-	-	-
1.5722	427.97E-6	-	1	0.0	3.5991	Sagging	156.61E-6
		79399.0 (Negligible)	-	-	-	-	-
-	-	Curvature	-	-	-	-	-
-	-	(Sagging)	-	-	-	-	-
41-40		Max Slope	1	0.0	4.0690	Sagging	167.11E-6
1.6784	477.61E-6	-	-	-	-	-	-
		Max Settlement	1	0.0	4.0690	Sagging	167.11E-6
1.6784	477.61E-6	-	-	-	-	-	-
		Max Tensile	1	0.0	4.0690	Sagging	167.11E-6
1.6784	477.61E-6	-	-	-	-	-	-
		Strain	-	-	-	-	-
-	-	Min Radius of	-	-	-	-	-
-	-	Curvature	-	-	-	-	-
-	-	(Hogging)	-	-	-	-	-
-	-	Min Radius of	-	-	-	-	-
1.6784	477.61E-6	-	1	0.0	4.0690	Sagging	167.11E-6
		77995.0 (Negligible)	-	-	-	-	-
-	-	Curvature	-	-	-	-	-
-	-	(Sagging)	-	-	-	-	-
40-39		Max Slope	1	0.0	3.8991	Sagging	237.17E-6
1.6786	0.0014979	-	-	-	-	-	-
		Max Settlement	1	0.0	3.8991	Sagging	237.17E-6
1.6786	0.0014979	-	-	-	-	-	-
		Max Tensile	1	0.0	3.8991	Sagging	237.17E-6
1.6786	0.0014979	-	-	-	-	-	-
		Strain	-	-	-	-	-
-	-	Min Radius of	-	-	-	-	-
-	-	Curvature	-	-	-	-	-
-	-	(Hogging)	-	-	-	-	-
-	-	Min Radius of	-	-	-	-	-
1.6786	0.0014979	-	1	0.0	3.8991	Sagging	237.17E-6
		24457.0 (Negligible)	-	-	-	-	-
-	-	Curvature	-	-	-	-	-
-	-	(Sagging)	-	-	-	-	-
39-38		Max Slope	1	0.0	19.580	Sagging	69.989E-6
0.93292	0.0012369	-	-	-	-	-	-
		Max Settlement	1	0.0	19.580	Sagging	69.989E-6
0.93292	0.0012369	-	-	-	-	-	-
		Max Tensile	1	0.0	19.580	Sagging	69.989E-6
0.93292	0.0012369	-	-	-	-	-	-
		Strain	-	-	-	-	-
-	-	Min Radius of	-	-	-	-	-
-	-	Curvature	-	-	-	-	-
-	-	(Hogging)	-	-	-	-	-
-	-	Min Radius of	-	-	-	-	-
0.93292	0.0012369	-	1	0.0	19.580	Sagging	69.989E-6
		236150.0 (Negligible)	-	-	-	-	-

23-24		Max Slope			1	0.0	0.46855	Sagging	266.14E-6	
2.6097	0.0	-	341020.0	(Negligible)	1	0.0	0.46855	Sagging	266.14E-6	
2.6097	0.0	Max Settlement	-	341020.0	(Negligible)	1	0.0	0.46855	Sagging	266.14E-6
		Max Tensile			2	0.46855	12.819	Sagging	266.14E-6	
2.4850	0.0036451	-	41120.0	(Negligible)						
		Strain			-	-	-	-	-	
		Min Radius of								
		-	-	-						
		Curvature (Hogging)								
		Min Radius of			2	0.46855	12.819	Sagging	266.14E-6	
2.4850	0.0036451	-	41120.0	(Negligible)						
		Curvature (Sagging)								
b-27		Max Slope			1	0.0	10.644	Sagging	0.0021818	
8.0360	0.030840	-	1109.10	(Negligible)	1	0.0	10.644	Sagging	0.0021818	
8.0360	0.030840	Max Settlement	-	1109.10	(Negligible)	1	0.0	10.644	Sagging	0.0021818
		Max Tensile			1	0.0	10.644	Sagging	0.0021818	
8.0360	0.030840	-	1109.10	(Negligible)						
		Strain			-	-	-	-	-	
		Min Radius of								
		-	-	-						
		Curvature (Hogging)								
		Min Radius of			1	0.0	10.644	Sagging	0.0021818	
8.0360	0.030840	-	1109.10	(Negligible)						
		Curvature (Sagging)								
42-37		Max Slope			1	0.0	2.3949	Hogging	219.92E-6	
2.5627	331.91E-6	63482.0	-	0 (Negligible)	1	0.0	2.3949	Hogging	219.92E-6	
2.5627	331.91E-6	Max Settlement	-	63482.0	(Negligible)	1	0.0	2.3949	Hogging	219.92E-6
		Max Tensile			2	2.3949	23.421	Sagging	219.92E-6	
2.0556	0.0022494	-	54252.0	(Negligible)						
		Strain			1	0.0	2.3949	Hogging	219.92E-6	
		Min Radius of								
2.5627	331.91E-6	63482.0	-	0 (Negligible)						
		Curvature (Hogging)								
		Min Radius of			2	2.3949	23.421	Sagging	219.92E-6	
2.0556	0.0022494	-	54252.0	(Negligible)						
		Curvature (Sagging)								
47-43		Max Slope			1	0.0	9.5390	Hogging	105.86E-6	
2.1817	0.0030887	51569.0	-	0 (Negligible)	1	0.0	9.5390	Hogging	105.86E-6	
2.1817	0.0030887	Max Settlement	-	51569.0	(Negligible)	1	0.0	9.5390	Hogging	105.86E-6
		Max Tensile			1	0.0	9.5390	Hogging	105.86E-6	
2.1817	0.0030887	-	51569.0	(Negligible)						
		Strain			1	0.0	9.5390	Hogging	105.86E-6	
		Min Radius of								
2.1817	0.0030887	51569.0	-	0 (Negligible)						
		Curvature (Hogging)								
		Min Radius of			-	-	-	-	-	
		-	-	-						
		Curvature (Sagging)								
44-39		Max Slope			1	0.0	2.9493	Hogging	69.050E-6	
1.1292	117.12E-6	293450.0	-	0 (Negligible)	1	0.0	2.9493	Hogging	69.050E-6	
1.1292	117.12E-6	Max Settlement	-	293450.0	(Negligible)	1	0.0	2.9493	Hogging	69.050E-6
		Max Tensile			1	0.0	2.9493	Hogging	69.050E-6	
1.1292	117.12E-6	-	293450.0	(Negligible)						
		Strain			1	0.0	2.9493	Hogging	69.050E-6	
		Min Radius of								
1.1292	117.12E-6	293450.0	-	0 (Negligible)						
		Curvature (Hogging)								
		Min Radius of			-	-	-	-	-	
		-	-	-						
		Curvature (Sagging)								
46-45		Max Slope			1	0.0	9.5199	Hogging	19.784E-6	
0.62257	483.98E-6	348610.0	-	0 (Negligible)						

			Max Settlement		1	0.0	9.5199	Hogging	19.784E-6
0.62257	483.98E-6		348610.	- 0 (Negligible)					
			Max Tensile		1	0.0	9.5199	Hogging	19.784E-6
0.62257	483.98E-6		348610.	- 0 (Negligible)					
			Strain						
			Min Radius of		1	0.0	9.5199	Hogging	19.784E-6
0.62257	483.98E-6		348610.	- 0 (Negligible)					
			Curvature (Hogging)						
			Min Radius of		-	-	-	-	-
			Curvature (Sagging)						
a-12			Max Slope		1	0.0	4.4594	Hogging	0.0010695
6.6520	0.022865		933.34	- 0 (Negligible)					
			Max Settlement		1	0.0	4.4594	Hogging	0.0010695
6.6520	0.022865		933.34	- 0 (Negligible)					
			Max Tensile		1	0.0	4.4594	Hogging	0.0010695
6.6520	0.022865		933.34	- 0 (Negligible)					
			Strain						
			Min Radius of		1	0.0	4.4594	Hogging	0.0010695
6.6520	0.022865		933.34	- 0 (Negligible)					
			Curvature (Hogging)						
			Min Radius of		-	-	-	-	-
			Curvature (Sagging)						
12-11			Max Slope		1	0.0	6.6990	Hogging	0.0016092
7.9952	0.050036		889.65	- 1 (Very Slight)					
			Max Settlement		1	0.0	6.6990	Hogging	0.0016092
7.9952	0.050036		889.65	- 1 (Very Slight)					
			Max Tensile		1	0.0	6.6990	Hogging	0.0016092
7.9952	0.050036		889.65	- 1 (Very Slight)					
			Strain						
			Min Radius of		1	0.0	6.6990	Hogging	0.0016092
7.9952	0.050036		889.65	- 1 (Very Slight)					
			Curvature (Hogging)						
			Min Radius of		-	-	-	-	-
			Curvature (Sagging)						
11-f			Max Slope		1	0.0	4.4697	Hogging	0.0021934
8.0279	0.029948		407.68	- 0 (Negligible)					
			Max Settlement		1	0.0	4.4697	Hogging	0.0021934
8.0279	0.029948		407.68	- 0 (Negligible)					
			Max Tensile		1	0.0	4.4697	Hogging	0.0021934
8.0279	0.029948		407.68	- 0 (Negligible)					
			Strain						
			Min Radius of		1	0.0	4.4697	Hogging	0.0021934
8.0279	0.029948		407.68	- 0 (Negligible)					
			Curvature (Hogging)						
			Min Radius of		-	-	-	-	-
			Curvature (Sagging)						
ag			Max Slope		1	0.0	11.050	Sagging	0.0014136
9.6480	0.016362		- 1181.0 0	(Negligible)					
			Max Settlement		1	0.0	11.050	Sagging	0.0014136
9.6480	0.016362		- 1181.0 0	(Negligible)					
			Max Tensile		1	0.0	11.050	Sagging	0.0014136
9.6480	0.016362		- 1181.0 0	(Negligible)					
			Strain						
			Min Radius of		-	-	-	-	-
			Curvature (Hogging)						
			Min Radius of		1	0.0	11.050	Sagging	0.0014136
9.6480	0.016362		- 1181.0 0	(Negligible)					
			Curvature (Sagging)						
gb			Max Slope		3	4.2183	11.399	Hogging	0.0028692
13.308	0.062295		984.79	- 1 (Very Slight)					
			Max Settlement		3	4.2183	11.399	Hogging	0.0028692
13.308	0.062295		984.79	- 1 (Very Slight)					

13.308	0.062295	Max Tensile Strain	984.79	- 1 (Very Slight)	3	4.2183	11.399	Hogging	0.0028692
13.308	0.062295	Min Radius of Curvature (Hogging)	984.79	- 1 (Very Slight)	3	4.2183	11.399	Hogging	0.0028692
12.423	0.0020128	Min Radius of Curvature (Sagging)	-	11024.0 (Negligible)	2	2.5587	4.2183	Sagging	630.74E-6
bc		Max Slope			1	0.0	5.5590	Hogging	0.0018029
9.8232	0.048246	Max Settlement	1291.9	- 0 (Negligible)	1	0.0	5.5590	Hogging	0.0018029
9.8232	0.048246	Max Tensile Strain	1291.9	- 0 (Negligible)	1	0.0	5.5590	Hogging	0.0018029
9.8232	0.048246	Min Radius of Curvature (Hogging)	1291.9	- 0 (Negligible)	1	0.0	5.5590	Hogging	0.0018029
-	-	Min Radius of Curvature (Sagging)	-	-	-	-	-	-	-
cd		Max Slope			1	0.0	1.7483	Sagging	739.57E-6
9.3377	0.0	Max Settlement	-	- 0 (Negligible)	1	0.0	1.7483	Sagging	739.57E-6
9.3377	0.0	Max Tensile Strain	-	- 0 (Negligible)	1	0.0	1.7483	Sagging	739.57E-6
9.3377	0.0	Min Radius of Curvature (Hogging)	-	-	-	-	-	-	-
-	-	Min Radius of Curvature (Sagging)	-	-	-	-	-	-	-
eh		Max Slope			3	4.5880	9.7590	Hogging	0.0010754
11.502	0.028246	Max Settlement	1785.6	- 0 (Negligible)	3	4.5880	9.7590	Hogging	0.0010754
11.502	0.028246	Max Tensile Strain	1785.6	- 0 (Negligible)	3	4.5880	9.7590	Hogging	0.0010754
11.502	0.028246	Min Radius of Curvature (Hogging)	1785.6	- 0 (Negligible)	3	4.5880	9.7590	Hogging	0.0010754
10.625	0.0096269	Min Radius of Curvature (Sagging)	-	8629.1 0 (Negligible)	2	2.9086	4.5880	Sagging	0.0010507
hf		Max Slope			1	0.0	10.879	Sagging	0.0010284
9.2873	0.015843	Max Settlement	-	1707.6 0 (Negligible)	1	0.0	10.879	Sagging	0.0010284
9.2873	0.015843	Max Tensile Strain	-	1707.6 0 (Negligible)	1	0.0	10.879	Sagging	0.0010284
9.2873	0.015843	Min Radius of Curvature (Hogging)	-	-	-	-	-	-	-
-	-	Min Radius of Curvature (Sagging)	-	-	-	-	-	-	-
9.2873	0.015843	Min Radius of Curvature (Sagging)	-	1707.6 0 (Negligible)	1	0.0	10.879	Sagging	0.0010284
de		All settlements are less than the Settlement Trough Limit Sensitivity.							
		All settlements are less than the Settlement Trough Limit Sensitivity.							
		All settlements are less than the Settlement Trough Limit Sensitivity.							
		All settlements are less than the Settlement Trough Limit Sensitivity.							
		All settlements are less than the Settlement Trough Limit Sensitivity.							

Specific Building Damage Results - All Combined Segments

Structure: 21-20 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]	[%]	[%]	[%]	
No structures have segments combined.							

Structure: 19-20 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]	[%]	[%]	[%]	
No structures have segments combined.							

Structure: 19-18 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]	[%]	[%]	[%]	
No structures have segments combined.							

Structure: 18-13 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]	[%]	[%]	[%]	
No structures have segments combined.							

Structure: 21-a | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]	[%]	[%]	[%]	
No structures have segments combined.							

Structure: f-50 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]	[%]	[%]	[%]	
No structures have segments combined.							

Structure: 14-15 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: 15-16 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: 16-17 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: 17-g | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: h-49 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: 49-36 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: 36-48 | Sub-structure:

Vertical Offset from Line for	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
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Vertical Movement Calculations
 [m] [m] [m] [%] [%] [%]
 No structures have segments combined.

Structure: 48-47 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 47-51 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 50-46 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 46-47 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 24-25 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 25-26 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 26-27 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: 27-28 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: 28-29 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: 27-32 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: 33-31 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: 31-34 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: 34-35 | Sub-structure:

Vertical	Combined	Start	Length	Curvature	Deflection	Average	Max	Damage Category
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Offset from Line for Vertical Movement Calculations	Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 35-41 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 41-40 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 40-39 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 39-38 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 38-25 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 20-22 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

[m] [m] [m] [%] [%] [%]
No structures have segments combined.

Structure: 22-b | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]	[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: e-45 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]	[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 18-31 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]	[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 23-24 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]	[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: b-27 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]	[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 42-37 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]	[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 47-43 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: 44-39 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: 46-45 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: a-12 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: 12-11 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: 11-f | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: ag | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Movement Calculations

[m] [m] [m] [%] [%] [%]
No structures have segments combined.

Structure: gb | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
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[m] [m] [m] [%] [%] [%]
No structures have segments combined.

Structure: bc | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
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[m] [m] [m] [%] [%] [%]
No structures have segments combined.

Structure: cd | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
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[m] [m] [m] [%] [%] [%]
No structures have segments combined.

Structure: eh | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
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[m] [m] [m] [%] [%] [%]
No structures have segments combined.

Structure: hf | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
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[m] [m] [m] [%] [%] [%]
No structures have segments combined.

Structure: de | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
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[m] [m] [m] [%] [%] [%]
No structures have segments combined.

METHOD 1 (1m SOFT CLAY)

DEMOLITION

Analysis Options

Analysis: Boussinesq
 Global Poisson's ratio: 0.50
 Maximum allowable ratio between values of E: 1.5
 Horizontal rigid boundary level: -45.40 [m OD]
 Displacements at area centroids calculated.

Soil Profiles Soil Profile 1

Layer	Level at top [mOD]	Number of intermediate displacement levels	Youngs Modulus		Poissons ratio	Non-linear curve
			Top [kN/m ²]	Btm [kN/m ²]		
1	0.0	8	10000.	10000.	0.20000	None
2	-4.2000	2	10800.	10800.	0.50000	None
3	-5.2000	2	30000.	30000.	0.50000	None
4	-6.2500	4	24000.	24000.	0.20000	None
5	-8.3500	1	30000.	30000.	0.50000	None
6	-9.0000	61	20000.	94160.	0.50000	None
7	-39.600	11	300000.	300000.	0.20000	None

Soil Zones

Zone	Name	X coordinates		Y coordinates		Profile
		min [m]	max [m]	min [m]	max [m]	
1	demo	0.0	110.00	0.0	110.00	Soil Profile 1

Load Data

Load ref.	Name	Shape Polygon	Orientation of Plane	Centre of load (Global)			Angle of Tangential local x from	Width x or Radius	Length
				Number (local z)	Normal (local x)	Z (local y)			
1	basement A	Polygonal	Horizontal	N/A	N/A	-0.60000	N/A	N/A	
N/A	(66,58.3)	(66,53.2)	10.000	2	-10.000		N/A	N/A	
	(59.8,51.7)	(55,51.6)							
	(55,58.4)								
2	vault A	Polygonal	Horizontal	N/A	N/A	-3.1300	N/A	N/A	
N/A	(55,58.4)	(59.8,58.4)	10.000	1	-20.000		N/A	N/A	
	(59.8,51.6)	(55,51.6)							
3	vault B	Polygonal	Horizontal	N/A	N/A	-3.1300	N/A	N/A	
N/A	(44.3,58.4)	(44.3,51.6)	10.000	1	-20.000		N/A	N/A	
	(39.6,51.7)	(39.6,58.4)							
4	basement B	Polygonal	Horizontal	N/A	N/A	-3.1300	N/A	N/A	
N/A	(55,58.4)	(55,51.6)	10.000	1	-10.000		N/A	N/A	
	(39.6,51.7)	(39.6,58.4)							

Displacement Data

intrvl Ref. across	No. of intrvl	Direction Name of Extrusion	Line/Line for extrusion		No. of
			Show First point Calculate	Second point Detailed	

extrusion/line	Depth	Extrusion extrusion	X [m]	Y [m]	Z(level) results [m]	X [m]	Y [m]	Z(level) [m]	
[m]									
1	Grid	Grid 1	Global X	30.000	35.000	0.0	N/A	80.000	0.0
99	70.000	99	Yes	Yes					
2	Line	21-20	N/A	55.960	70.700	0.0	44.210	70.720	0.0
11	N/A	N/A	Yes	Yes					
3	Line	19-20	N/A	59.140	66.790	0.0	55.960	70.700	0.0
5	N/A	N/A	Yes	Yes					
4	Line	19-18	N/A	59.140	66.790	0.0	59.170	64.780	0.0
2	N/A	N/A	Yes	Yes					
5	Line	18-13	N/A	59.170	64.780	0.0	44.210	64.800	0.0
14	N/A	N/A	Yes	Yes					
6	Line	21-a	N/A	44.210	70.720	0.0	44.060	58.900	0.0
34	N/A	N/A	Yes	Yes					
7	Line	f-50	N/A	44.100	51.600	0.0	44.160	36.710	0.0
15	N/A	N/A	Yes	Yes					
8	Line	14-15	N/A	55.000	64.760	0.0	55.000	62.620	0.0
2	N/A	N/A	Yes	Yes					
9	Line	15-16	N/A	55.000	62.620	0.0	56.230	61.460	0.0
1	N/A	N/A	Yes	Yes					
10	Line	16-17	N/A	56.230	61.460	0.0	56.220	59.560	0.0
1	N/A	N/A	Yes	Yes					
11	Line	17-g	N/A	56.220	59.560	0.0	55.100	58.400	0.0
1	N/A	N/A	Yes	Yes					
12	Line	h-49	N/A	54.980	51.600	0.0	56.500	50.100	0.0
2	N/A	N/A	Yes	Yes					
13	Line	49-36	N/A	56.500	50.100	0.0	56.500	47.710	0.0
2	N/A	N/A	Yes	Yes					
14	Line	36-48	N/A	56.500	47.710	0.0	54.960	46.000	0.0
2	N/A	N/A	Yes	Yes					
15	Line	48-47	N/A	54.960	46.000	0.0	54.960	44.830	0.0
1	N/A	N/A	Yes	Yes					
16	Line	47-51	N/A	54.960	44.830	0.0	44.210	44.830	0.0
10	N/A	N/A	Yes	Yes					
17	Line	50-46	N/A	44.160	36.710	0.0	54.960	36.710	0.0
10	N/A	N/A	Yes	Yes					
18	Line	46-47	N/A	54.960	36.710	0.0	54.960	44.830	0.0
8	N/A	N/A	Yes	Yes					
19	Line	24-25	N/A	78.820	63.100	0.0	88.080	63.070	0.0
9	N/A	N/A	Yes	Yes					
20	Line	25-26	N/A	88.080	63.070	0.0	88.000	57.750	0.0
5	N/A	N/A	Yes	Yes					
21	Line	26-27	N/A	88.000	57.750	0.0	76.730	57.900	0.0
11	N/A	N/A	Yes	Yes					
22	Line	27-28	N/A	76.730	57.900	0.0	76.710	61.070	0.0
3	N/A	N/A	Yes	Yes					
23	Line	28-29	N/A	76.710	61.070	0.0	78.820	63.100	0.0
2	N/A	N/A	Yes	Yes					
24	Line	27-32	N/A	76.730	57.900	0.0	76.750	52.750	0.0
5	N/A	N/A	Yes	Yes					
25	Line	33-31	N/A	87.930	52.750	0.0	70.250	52.750	0.0
17	N/A	N/A	Yes	Yes					
26	Line	31-34	N/A	70.250	52.750	0.0	70.180	49.380	0.0
3	N/A	N/A	Yes	Yes					
27	Line	34-35	N/A	70.180	49.380	0.0	71.510	49.370	0.0
1	N/A	N/A	Yes	Yes					
28	Line	35-41	N/A	71.510	49.370	0.0	71.480	45.770	0.0
3	N/A	N/A	Yes	Yes					
29	Line	41-40	N/A	71.480	45.770	0.0	67.410	45.770	0.0
4	N/A	N/A	Yes	Yes					
30	Line	40-39	N/A	67.410	45.770	0.0	67.390	41.870	0.0
3	N/A	N/A	Yes	Yes					
31	Line	39-38	N/A	67.390	41.870	0.0	88.000	41.700	0.0
20	N/A	N/A	Yes	Yes					
32	Line	38-25	N/A	88.000	41.700	0.0	88.080	63.070	0.0
21	N/A	N/A	Yes	Yes					
33	Line	20-22	N/A	55.960	70.700	0.0	66.130	70.690	0.0
10	N/A	N/A	Yes	Yes					
34	Line	22-b	N/A	66.130	70.690	0.0	66.300	58.900	0.0
17	N/A	N/A	Yes	Yes					
35	Line	e-45	N/A	64.740	51.600	0.0	64.480	36.840	0.0
15	N/A	N/A	Yes	Yes					
36	Line	18-31	N/A	59.170	64.780	0.0	66.000	64.740	0.0
6	N/A	N/A	Yes	Yes					

37	Line	23-24	N/A	66.000	63.140	0.0	78.820	63.100	0.0
12	N/A	N/A	Yes	Yes					
38	Line	b-27	N/A	66.100	58.460	0.0	76.730	57.900	0.0
10	N/A	N/A	Yes	Yes					
39	Line	42-37	N/A	64.540	46.730	0.0	87.960	46.450	0.0
23	N/A	N/A	Yes	Yes					
40	Line	47-43	N/A	54.960	44.830	0.0	64.500	44.830	0.0
9	N/A	N/A	Yes	Yes					
41	Line	44-39	N/A	64.440	41.910	0.0	67.390	41.870	0.0
2	N/A	N/A	Yes	Yes					
42	Line	46-45	N/A	54.960	36.710	0.0	64.480	36.840	0.0
9	N/A	N/A	Yes	Yes					
43	Line	a-12	N/A	44.060	58.900	0.0	39.630	58.380	0.0
4	N/A	N/A	Yes	Yes					
44	Line	12-11	N/A	39.630	58.380	0.0	39.630	51.680	0.0
6	N/A	N/A	Yes	Yes					
45	Line	11-f	N/A	39.630	51.680	0.0	44.100	51.600	0.0
8	N/A	N/A	Yes	Yes					
46	Line	ag	N/A	44.060	58.900	0.0	55.100	58.400	0.0
11	N/A	N/A	Yes	Yes					
47	Line	gb	N/A	55.100	58.400	0.0	66.500	58.460	0.0
20	N/A	N/A	Yes	Yes					
48	Line	bc	N/A	66.500	58.460	0.0	66.500	52.900	0.0
20	N/A	N/A	Yes	Yes					
49	Line	cd	N/A	66.500	52.900	0.0	65.000	52.000	0.0
1	N/A	N/A	Yes	Yes					
50	Line	eh	N/A	64.740	51.600	0.0	54.980	51.600	0.0
9	N/A	N/A	Yes	Yes					
51	Line	hf	N/A	54.980	51.600	0.0	44.100	51.600	0.0
10	N/A	N/A	Yes	Yes					
52	Line	de	N/A	65.000	52.000	0.0	64.740	51.600	0.0
4	N/A	N/A	Yes	Yes					

Problem Type

Problem Type : Tunnelling and Embedded Wall Excavations

Displacement Data

Type of intervals across extrusion/line	Name of Extrusion	Direction No. of intervals of extrusion along	Direction of Calculate Surface	Point/Line/Line for extrusion type	No.																																	
				<table border="1"> <thead> <tr> <th colspan="3">extrusion</th> <th colspan="3">tunnels</th> </tr> <tr> <th colspan="3"></th> <th colspan="3">First point</th> <th colspan="3">Second point</th> </tr> <tr> <th>X</th> <th>Y</th> <th>Z(level)</th> <th>X</th> <th>Y</th> <th>Z(level)</th> <th>X</th> <th>Y</th> <th>Z(level)</th> </tr> <tr> <th>[m]</th> <th>[m]</th> <th>[m]</th> <th>[m]</th> <th>[m]</th> <th>[m]</th> <th>[m]</th> <th>[m]</th> <th>[m]</th> </tr> </thead> </table>	extrusion			tunnels						First point			Second point			X	Y	Z(level)	X	Y	Z(level)	X	Y	Z(level)	[m]	[m]	[m]	[m]	[m]	[m]	[m]	[m]	[m]	
extrusion			tunnels																																			
			First point			Second point																																
X	Y	Z(level)	X	Y	Z(level)	X	Y	Z(level)																														
[m]	[m]	[m]	[m]	[m]	[m]	[m]	[m]	[m]																														
Grid	Grid 1	Global	X	30.00000	35.00000	0.00000	-	80.00000	0.00000																													
99	70.00000	99	Yes	Surface																																		
Line	21-20	-	-	55.96000	70.70000	0.00000	44.21000	70.72000	0.00000																													
11	-	-	Yes	Surface																																		
Line	19-20	-	-	59.14000	66.79000	0.00000	55.96000	70.70000	0.00000																													
5	-	-	Yes	Surface																																		
Line	19-18	-	-	59.14000	66.79000	0.00000	59.17000	64.78000	0.00000																													
2	-	-	Yes	Surface																																		
Line	18-13	-	-	59.17000	64.78000	0.00000	44.21000	64.80000	0.00000																													
14	-	-	Yes	Surface																																		
Line	21-a	-	-	44.21000	70.72000	0.00000	44.06000	58.90000	0.00000																													
34	-	-	Yes	Surface																																		
Line	f-50	-	-	44.10000	51.60000	0.00000	44.16000	36.71000	0.00000																													
15	-	-	Yes	Surface																																		
Line	14-15	-	-	55.00000	64.76000	0.00000	55.00000	62.62000	0.00000																													
2	-	-	Yes	Surface																																		
Line	15-16	-	-	55.00000	62.62000	0.00000	56.23000	61.46000	0.00000																													
1	-	-	Yes	Surface																																		
Line	16-17	-	-	56.23000	61.46000	0.00000	56.22000	59.56000	0.00000																													
1	-	-	Yes	Surface																																		

Line 17-g	-	-	56.22000	59.56000	0.00000	55.10000	58.40000	0.00000
1	-	Yes	Surface					
Line h-49	-	-	54.98000	51.60000	0.00000	56.50000	50.10000	0.00000
2	-	Yes	Surface					
Line 49-36	-	-	56.50000	50.10000	0.00000	56.50000	47.71000	0.00000
2	-	Yes	Surface					
Line 36-48	-	-	56.50000	47.71000	0.00000	54.96000	46.00000	0.00000
2	-	Yes	Surface					
Line 48-47	-	-	54.96000	46.00000	0.00000	54.96000	44.83000	0.00000
1	-	Yes	Surface					
Line 47-51	-	-	54.96000	44.83000	0.00000	44.21000	44.83000	0.00000
10	-	Yes	Surface					
Line 50-46	-	-	44.16000	36.71000	0.00000	54.96000	36.71000	0.00000
10	-	Yes	Surface					
Line 46-47	-	-	54.96000	36.71000	0.00000	54.96000	44.83000	0.00000
8	-	Yes	Surface					
Line 24-25	-	-	78.82000	63.10000	0.00000	88.08000	63.07000	0.00000
9	-	Yes	Surface					
Line 25-26	-	-	88.08000	63.07000	0.00000	88.00000	57.75000	0.00000
5	-	Yes	Surface					
Line 26-27	-	-	88.00000	57.75000	0.00000	76.73000	57.90000	0.00000
11	-	Yes	Surface					
Line 27-28	-	-	76.73000	57.90000	0.00000	76.71000	61.07000	0.00000
3	-	Yes	Surface					
Line 28-29	-	-	76.71000	61.07000	0.00000	78.82000	63.10000	0.00000
2	-	Yes	Surface					
Line 27-32	-	-	76.73000	57.90000	0.00000	76.75000	52.75000	0.00000
5	-	Yes	Surface					
Line 33-31	-	-	87.93000	52.75000	0.00000	70.25000	52.75000	0.00000
17	-	Yes	Surface					
Line 31-34	-	-	70.25000	52.75000	0.00000	70.18000	49.38000	0.00000
3	-	Yes	Surface					
Line 34-35	-	-	70.18000	49.38000	0.00000	71.51000	49.37000	0.00000
1	-	Yes	Surface					
Line 35-41	-	-	71.51000	49.37000	0.00000	71.48000	45.77000	0.00000
3	-	Yes	Surface					
Line 41-40	-	-	71.48000	45.77000	0.00000	67.41000	45.77000	0.00000
4	-	Yes	Surface					
Line 40-39	-	-	67.41000	45.77000	0.00000	67.39000	41.87000	0.00000
3	-	Yes	Surface					
Line 39-38	-	-	67.39000	41.87000	0.00000	88.00000	41.70000	0.00000
20	-	Yes	Surface					
Line 38-25	-	-	88.00000	41.70000	0.00000	88.08000	63.07000	0.00000
21	-	Yes	Surface					
Line 20-22	-	-	55.96000	70.70000	0.00000	66.13000	70.69000	0.00000
10	-	Yes	Surface					
Line 22-b	-	-	66.13000	70.69000	0.00000	66.30000	58.90000	0.00000
17	-	Yes	Surface					
Line e-45	-	-	64.74000	51.60000	0.00000	64.48000	36.84000	0.00000
15	-	Yes	Surface					
Line 18-31	-	-	59.17000	64.78000	0.00000	66.00000	64.74000	0.00000
6	-	Yes	Surface					
Line 23-24	-	-	66.00000	63.14000	0.00000	78.82000	63.10000	0.00000
12	-	Yes	Surface					
Line b-27	-	-	66.10000	58.46000	0.00000	76.73000	57.90000	0.00000
10	-	Yes	Surface					
Line 42-37	-	-	64.54000	46.73000	0.00000	87.96000	46.45000	0.00000
23	-	Yes	Surface					
Line 47-43	-	-	54.96000	44.83000	0.00000	64.50000	44.83000	0.00000
9	-	Yes	Surface					
Line 44-39	-	-	64.44000	41.91000	0.00000	67.39000	41.87000	0.00000
2	-	Yes	Surface					
Line 46-45	-	-	54.96000	36.71000	0.00000	64.48000	36.84000	0.00000
9	-	Yes	Surface					
Line a-12	-	-	44.06000	58.90000	0.00000	39.63000	58.38000	0.00000
4	-	Yes	Surface					
Line 12-11	-	-	39.63000	58.38000	0.00000	39.63000	51.68000	0.00000
6	-	Yes	Surface					
Line 11-f	-	-	39.63000	51.68000	0.00000	44.10000	51.60000	0.00000
8	-	Yes	Surface					
Line ag	-	-	44.06000	58.90000	0.00000	55.10000	58.40000	0.00000
11	-	Yes	Surface					
Line gb	-	-	55.10000	58.40000	0.00000	66.50000	58.46000	0.00000
20	-	Yes	Surface					
Line bc	-	-	66.50000	58.46000	0.00000	66.50000	52.90000	0.00000
20	-	Yes	Surface					

Line	cd	-	-	66.50000	52.90000	0.00000	65.00000	52.00000	0.00000
1	-	-	Yes	Surface					
Line	eh	-	-	64.74000	51.60000	0.00000	54.98000	51.60000	0.00000
9	-	-	Yes	Surface					
Line	hf	-	-	54.98000	51.60000	0.00000	44.10000	51.60000	0.00000
10	-	-	Yes	Surface					
Line	de	-	-	65.00000	52.00000	0.00000	64.74000	51.60000	0.00000
4	-	-	Yes	Surface					

Vertical Ground Movement Curves

Curve Name: No vertical ground movement

Coordinates: [Distance from wall / wall depth or max. excavation depth (x), Depth / wall depth or max. excavation depth (y), Settlement / wall depth or max. excavation depth (z) (%)]

[0.000,0.000,0.000] [1.000,0.000,0.000] [0.000,1.000,0.000] [1.000,1.000,0.000]

Curve Fitting Method: Polynomial

x Order: 1

y Order: 0

Polynomial: z = 0.0x + 0.0

Coeff. of Determination: -2147483648.E+2147483647

Curve Name: Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11 (b))

Coordinates: [Distance from wall / wall depth or max. excavation depth (x), Depth / wall depth or max. excavation depth (y), Settlement / wall depth or max. excavation depth (z) (%)]

[0.000,0.000,0.039] [0.100,0.000,0.049] [0.200,0.000,0.056] [0.300,0.000,0.062] [0.400,0.000,0.067] [0.500,0.000,0.070] [0.600,0.000,0.072] [0.700,0.000,0.073] [0.800,0.000,0.073] [0.900,0.000,0.072] [1.000,0.000,0.070] [1.100,0.000,0.068] [1.200,0.000,0.065] [1.300,0.000,0.061] [1.400,0.000,0.058] [1.500,0.000,0.054] [1.600,0.000,0.050] [1.700,0.000,0.046] [1.800,0.000,0.042] [1.900,0.000,0.038] [2.000,0.000,0.034] [2.100,0.000,0.030] [2.200,0.000,0.027] [2.300,0.000,0.023] [2.400,0.000,0.020] [2.500,0.000,0.017] [2.600,0.000,0.014] [2.700,0.000,0.012] [2.800,0.000,0.010] [2.900,0.000,0.008] [3.000,0.000,0.007] [3.100,0.000,0.005] [3.200,0.000,0.004] [3.300,0.000,0.004] [3.400,0.000,0.003] [3.500,0.000,0.002] [3.600,0.000,0.002] [3.700,0.000,0.002] [3.800,0.000,0.001] [3.900,0.000,0.001] [4.000,0.000,0.000]

Curve Fitting Method: Polynomial

x Order: 4

y Order: 0

Polynomial: z = -2.6455E-3x⁴ + 2.8495E-2x³ - 1.0051E-1x² + 1.0569E-1x + 3.8990E-2

Coeff. of Determination: 9.9991E-1

Horizontal Ground Movement Curves

Curve Name: No horizontal ground movement

Coordinates: [Distance from wall / wall depth or max. excavation depth (x), Depth / wall depth or max. excavation depth (y), Horizontal movement / wall depth or max. excavation depth (z) (%)]

[0.000,0.000,0.000] [1.000,0.000,0.000] [0.000,1.000,0.000] [1.000,1.000,0.000]

Curve Fitting Method: Polynomial

x Order: 0

y Order: 0

Polynomial: z = 0.0

Coeff. of Determination: -2147483648.E+2147483647

Curve Name: Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11 (a))

Coordinates: [Distance from wall / wall depth or max. excavation depth (x), Depth / wall depth or max. excavation depth (y), Horizontal movement / wall depth or max. excavation depth (z) (%)]

[0.000,0.000,0.150] [4.000,0.000,0.000]

Curve Fitting Method: Polynomial

x Order: 1
y Order: 0
Polynomial: z = -3.75E-2x + 1.50E-1
Coeff. of 1.00
Determination:

Polygonal Excavations

Excavation Name: Excavation 1
Surface level [m]: 0.0
Contribution: Positive
Enabled: No
Surface movement curves which are selected are applied between surface and [m]: -10.000

Corner	x	y	Base Level	Stiffened	Previous Side	Next Side
	[m]	[m]	[m]		d p1 p2*	d p1 p2*
					[m] [%] [%]	[m] [%] [%]
1	66.020	58.310	-1.0700	No	- - -	- - -
2	66.000	53.200	-1.0700	No	- - -	- - -
3	59.820	51.680	-1.0700	No	- - -	- - -
4	39.630	51.680	-1.0700	No	- - -	- - -
5	39.630	58.380	-1.0700	No	- - -	- - -

Side	Corner 1		Corner 2		Ground Movement Curve	
	x	y	x	y	Vertical	Horizontal
	[m]	[m]	[m]	[m]		
1	66.020	58.310	66.000	53.200	Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(b))	Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(a))
2	66.000	53.200	59.820	51.680	Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(b))	Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(a))
3	59.820	51.680	39.630	51.680	Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(b))	Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(a))
4	39.630	51.680	39.630	58.380	Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(b))	Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(a))
5	39.630	58.380	66.020	58.310	Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(b))	Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(a))

Excavation Name: Excavation 2
Surface level [m]: 0.0
Contribution: Positive
Enabled: No
Surface movement curves which are selected are applied between surface and [m]: -5.0000

Corner	x	y	Base Level	Stiffened	Previous Side	Next Side
	[m]	[m]	[m]		d p1 p2*	d p1 p2*
					[m] [%] [%]	[m] [%] [%]
1	59.820	58.310	-3.6000	No	- - -	- - -
2	66.020	58.310	-3.6000	No	- - -	- - -
3	66.000	53.200	-3.6000	No	- - -	- - -
4	59.820	51.680	-3.6000	No	- - -	- - -

Side	Corner 1		Corner 2		Ground Movement Curve	
	x [m]	y [m]	x [m]	y [m]	Vertical	Horizontal
1 of high stiff clay 2.11(a))	59.820	58.310	66.020	58.310	Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(b))	Excavation in front stiffness wall in (CIRIA 580 Fig.
2 of high stiff clay 2.11(a))	66.020	58.310	66.000	53.200	Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(b))	Excavation in front stiffness wall in (CIRIA 580 Fig.
3 of high stiff clay 2.11(a))	66.000	53.200	59.820	51.680	Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(b))	Excavation in front stiffness wall in (CIRIA 580 Fig.
4 movement 2.11(a))	59.820	51.680	59.820	58.310	No vertical ground movement	No horizontal ground movement

Excavation Name: **Excavation 3**
Surface level [m]: 0.0
Contribution: Negative
Enabled: No
Surface movement curves which are selected are applied between surface and [m]: -5.0000

Corner	x [m]	y [m]	Base Level [m]	Stiffened	Previous Side			Next Side		
					d [m]	p1 [%]	p2* [%]	d [m]	p1 [%]	p2* [%]
1	59.820	58.310	-1.0700	No	-	-	-	-	-	-
2	66.020	58.310	-1.0700	No	-	-	-	-	-	-
3	66.000	53.200	-1.0700	No	-	-	-	-	-	-
4	59.820	51.680	-1.0700	No	-	-	-	-	-	-

Side	Corner 1		Corner 2		Ground Movement Curve	
	x [m]	y [m]	x [m]	y [m]	Vertical	Horizontal
1 of high stiff clay 2.11(a))	59.820	58.310	66.020	58.310	Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(b))	Excavation in front stiffness wall in (CIRIA 580 Fig.
2 of high stiff clay 2.11(a))	66.020	58.310	66.000	53.200	Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(b))	Excavation in front stiffness wall in (CIRIA 580 Fig.
3 of high stiff clay 2.11(a))	66.000	53.200	59.820	51.680	Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(b))	Excavation in front stiffness wall in (CIRIA 580 Fig.
4 movement 2.11(a))	59.820	51.680	59.820	58.310	No vertical ground movement	No horizontal ground movement

Damage Category Strains

Name	0 (Negligible)	1 (Very Slight)	2 (Slight)	3 (Moderate)
	to	to	to	to
Burland Strain Limits	1 (Very Slight)	2 (Slight)	3 (Moderate)	4 (Severe)
	0.0	500.00E-6	750.00E-6	0.0015000

Specific Structures - Geometry

Structure Name	Sub-Structure	Displacement	Start	End	Vertical	Vertical
Damage Category	Strains	Poisson's	Distance	Distance	Offsets from	Displacement
Ratio	Name	E/G	Along	Along	Line for	Limit
		Line	Line	Line	Vertical	Sensitivity
			Line	Line	Movement	
					Calculations	
			[m]	[m]	[m]	[mm]
	21-20	21-20	0.00000	11.74902	0.0	0.10000
Burland	Strain Limits	0.20000 2.6000				
	19-20	19-20	0.00000	5.03889	0.0	0.10000
Burland	Strain Limits	0.20000 2.6000				
	19-18	19-18	0.00000	2.00922	0.0	0.10000
Burland	Strain Limits	0.20000 2.6000				
	18-13	18-13	0.00000	14.95901	0.0	0.10000
Burland	Strain Limits	0.20000 2.6000				
	21-a	21-a	0.00000	11.81995	0.0	0.10000
Burland	Strain Limits	0.20000 2.6000				
	f-50	f-50	0.00000	14.88912	0.0	0.10000
Burland	Strain Limits	0.20000 2.6000				
	14-15	14-15	0.00000	2.13900	0.0	0.10000
Burland	Strain Limits	0.20000 2.6000				
	15-16	15-16	0.00000	1.68971	0.0	0.10000
Burland	Strain Limits	0.20000 2.6000				
	16-17	16-17	0.00000	1.89903	0.0	0.10000
Burland	Strain Limits	0.20000 2.6000				
	17-g	17-g	0.00000	1.61145	0.0	0.10000
Burland	Strain Limits	0.20000 2.6000				
	h-49	h-49	0.00000	2.13451	0.0	0.10000
Burland	Strain Limits	0.20000 2.6000				
	49-36	49-36	0.00000	2.38900	0.0	0.10000
Burland	Strain Limits	0.20000 2.6000				
	36-48	36-48	0.00000	2.30024	0.0	0.10000
Burland	Strain Limits	0.20000 2.6000				
	48-47	48-47	0.00000	1.16900	0.0	0.10000
Burland	Strain Limits	0.20000 2.6000				
	47-51	47-51	0.00000	10.74900	0.0	0.10000
Burland	Strain Limits	0.20000 2.6000				
	50-46	50-46	0.00000	10.79900	0.0	0.10000
Burland	Strain Limits	0.20000 2.6000				
	46-47	46-47	0.00000	8.11900	0.0	0.10000
Burland	Strain Limits	0.20000 2.6000				
	24-25	24-25	0.00000	9.25905	0.0	0.10000
Burland	Strain Limits	0.20000 2.6000				
	25-26	25-26	0.00000	5.31960	0.0	0.10000
Burland	Strain Limits	0.20000 2.6000				
	26-27	26-27	0.00000	11.27000	0.0	0.10000
Burland	Strain Limits	0.20000 2.6000				
	27-28	27-28	0.00000	3.16906	0.0	0.10000
Burland	Strain Limits	0.20000 2.6000				
	28-29	28-29	0.00000	2.92697	0.0	0.10000
Burland	Strain Limits	0.20000 2.6000				
	27-32	27-32	0.00000	5.14904	0.0	0.10000
Burland	Strain Limits	0.20000 2.6000				
	33-31	33-31	0.00000	17.67900	0.0	0.10000
Burland	Strain Limits	0.20000 2.6000				
	31-34	31-34	0.00000	3.36973	0.0	0.10000
Burland	Strain Limits	0.20000 2.6000				
	34-35	34-35	0.00000	1.32904	0.0	0.10000
Burland	Strain Limits	0.20000 2.6000				
	35-41	35-41	0.00000	3.59912	0.0	0.10000
Burland	Strain Limits	0.20000 2.6000				
	41-40	41-40	0.00000	4.06900	0.0	0.10000
Burland	Strain Limits	0.20000 2.6000				
	40-39	40-39	0.00000	3.89905	0.0	0.10000
Burland	Strain Limits	0.20000 2.6000				
	39-38	39-38	0.00000	20.60970	0.0	0.10000
Burland	Strain Limits	0.20000 2.6000				
	38-25	38-25	0.00000	21.36915	0.0	0.10000
Burland	Strain Limits	0.20000 2.6000				
	20-22	20-22	0.00000	10.16900	0.0	0.10000
Burland	Strain Limits	0.20000 2.6000				
	22-b	22-b	0.00000	11.79023	0.0	0.10000
Burland	Strain Limits	0.20000 2.6000				

e-45	e-45	0.00000	14.76129	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
18-31	18-31	0.00000	6.82912	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
23-24	23-24	0.00000	12.81906	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
b-27	b-27	0.00000	10.64374	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
42-37	42-37	0.00000	23.42067	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
47-43	47-43	0.00000	9.53900	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
44-39	44-39	0.00000	2.94927	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
46-45	46-45	0.00000	9.51989	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
a-12	a-12	0.00000	4.45941	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
12-11	12-11	0.00000	6.69900	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
11-f	11-f	0.00000	4.46972	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
ag	ag	0.00000	11.05032	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
gb	gb	0.00000	11.39916	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
bc	bc	0.00000	5.55900	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
cd	cd	0.00000	1.74829	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
eh	eh	0.00000	9.75900	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
hf	hf	0.00000	10.87900	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
de	de	0.00000	0.47607	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				

Specific Structures - Bending Parameters

Structure Name	Sub-Structure	Height	Default	Hogging			
Sagging	Name	Properties		2nd Moment	Distance	Distance	2nd Moment
Distance	Distance			of Area	of Bending	of N.A.	of Area
of Bending	of N.A.			(per unit	Strain	from Edge	(per unit
Strain	from Edge			width)	from N.A.	of Beam in	width)
from N.A.	of Beam in					Tension	
Tension							
		[m]		[m ³]	[m]	[m]	[m ³]
21-20		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
19-20		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
19-18		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
18-13		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
21-a		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
f-50		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
14-15		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
15-16		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
16-17		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
17-g		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						

h-49		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
49-36		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
36-48		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
48-47		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
47-51		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
50-46		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
46-47		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
24-25		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
25-26		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
26-27		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
27-28		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
28-29		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
27-32		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
33-31		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
31-34		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
34-35		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
35-41		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
41-40		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
40-39		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
39-38		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
38-25		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
20-22		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						
22-b		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						
e-45		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						
18-31		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						
23-24		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						
b-27		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						
42-37		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						
47-43		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						
44-39		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						
46-45		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						
a-12		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						
12-11		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						
11-f		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						
ag		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
gb		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						
bc		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						
cd		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						

eh			3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000							
hf			13.0000	Yes	732.33	13.0000	13.0000	183.08
6.5000	6.5000							
de			3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000							

Building Segment Combinations

Structure Name	Sub-Structure Name	Vertical Offset from Line for Vertical Movement Calculations	Segment Start	Length	Curvature	Combined Segment
		[m]	[m]	[m]		

No structures have segments combined.

Utility Strain Calculation Options

Neglect beneficial contribution of axial strains : No

Specific Building Damage Results - Horizontal Displacements

Structure: 21-20 | Sub-structure:

Dist.	Coordinates			Displacements		Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
	x	y	z	x	y		
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	55.96000	70.70000	0.00000	0.0	0.0	0.0	0.0 d
1.0682	54.89182	70.70182	0.00000	0.0	0.0	0.0	0.0 d
2.1364	53.82364	70.70364	0.00000	0.0	0.0	0.0	0.0 d
3.2046	52.75545	70.70545	0.00000	0.0	0.0	0.0	0.0 d
4.2727	51.68727	70.70727	0.00000	0.0	0.0	0.0	0.0 d
5.3409	50.61909	70.70909	0.00000	0.0	0.0	0.0	0.0 d
6.4091	49.55091	70.71091	0.00000	0.0	0.0	0.0	0.0 d
7.4773	48.48273	70.71273	0.00000	0.0	0.0	0.0	0.0 d
8.5455	47.41455	70.71455	0.00000	0.0	0.0	0.0	0.0 d
9.6137	46.34636	70.71636	0.00000	0.0	0.0	0.0	0.0 d
10.682	45.27818	70.71818	0.00000	0.0	0.0	0.0	0.0 d
11.750	44.21000	70.72000	0.00000	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: 19-20 | Sub-structure:

Dist.	Coordinates			Displacements		Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
	x	y	z	x	y		
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	59.14000	66.79000	0.00000	0.0	0.0	0.0	0.0 d
1.0080	58.50400	67.57200	0.00000	0.0	0.0	0.0	0.0 d
2.0160	57.86800	68.35400	0.00000	0.0	0.0	0.0	0.0 d
3.0239	57.23200	69.13600	0.00000	0.0	0.0	0.0	0.0 d
4.0319	56.59600	69.91800	0.00000	0.0	0.0	0.0	0.0 d
5.0399	55.96000	70.70000	0.00000	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: 19-18 | Sub-structure:

Dist.	Coordinates			Displacements		Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
	x	y	z	x	y		
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]

0.0	59.14000	66.79000	0.00000	0.0	0.0	0.0	0.0	0.0 d
1.0051	59.15500	65.78500	0.00000	0.0	0.0	0.0	0.0	0.0 d
2.0102	59.17000	64.78000	0.00000	0.0	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: 18-13 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	59.17000	64.78000	0.00000	0.0	0.0	0.0	0.0	0.0 d
1.0686	58.10143	64.78143	0.00000	0.0	0.0	0.0	0.0	0.0 d
2.1371	57.03286	64.78286	0.00000	0.0	0.0	0.0	0.0	0.0 d
3.2057	55.96429	64.78429	0.00000	0.0	0.0	0.0	0.0	0.0 d
4.2743	54.89571	64.78571	0.00000	0.0	0.0	0.0	0.0	0.0 d
5.3429	53.82714	64.78714	0.00000	0.0	0.0	0.0	0.0	0.0 d
6.4114	52.75857	64.78857	0.00000	0.0	0.0	0.0	0.0	0.0 d
7.4800	51.69000	64.79000	0.00000	0.0	0.0	0.0	0.0	0.0 d
8.5486	50.62143	64.79143	0.00000	0.0	0.0	0.0	0.0	0.0 d
9.6172	49.55286	64.79286	0.00000	0.0	0.0	0.0	0.0	0.0 d
10.686	48.48429	64.79429	0.00000	0.0	0.0	0.0	0.0	0.0 d
11.754	47.41571	64.79571	0.00000	0.0	0.0	0.0	0.0	0.0 d
12.823	46.34714	64.79714	0.00000	0.0	0.0	0.0	0.0	0.0 d
13.891	45.27857	64.79857	0.00000	0.0	0.0	0.0	0.0	0.0 d
14.960	44.21000	64.80000	0.00000	0.0	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: 21-a | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	44.21000	70.72000	0.00000	0.0	0.0	0.0	0.0	0.0 d
0.34768	44.20559	70.37235	0.00000	0.0	0.0	0.0	0.0	0.0 d
0.69535	44.20118	70.02471	0.00000	0.0	0.0	0.0	0.0	0.0 d
1.0430	44.19676	69.67706	0.00000	0.0	0.0	0.0	0.0	0.0 d
1.3907	44.19235	69.32941	0.00000	0.0	0.0	0.0	0.0	0.0 d
1.7384	44.18794	68.98176	0.00000	0.0	0.0	0.0	0.0	0.0 d
2.0861	44.18353	68.63412	0.00000	0.0	0.0	0.0	0.0	0.0 d
2.4337	44.17912	68.28647	0.00000	0.0	0.0	0.0	0.0	0.0 d
2.7814	44.17471	67.93882	0.00000	0.0	0.0	0.0	0.0	0.0 d
3.1291	44.17029	67.59118	0.00000	0.0	0.0	0.0	0.0	0.0 d
3.4768	44.16588	67.24353	0.00000	0.0	0.0	0.0	0.0	0.0 d
3.8244	44.16147	66.89588	0.00000	0.0	0.0	0.0	0.0	0.0 d
4.1721	44.15706	66.54824	0.00000	0.0	0.0	0.0	0.0	0.0 d
4.5198	44.15265	66.20059	0.00000	0.0	0.0	0.0	0.0	0.0 d
4.8675	44.14824	65.85294	0.00000	0.0	0.0	0.0	0.0	0.0 d
5.2151	44.14382	65.50529	0.00000	0.0	0.0	0.0	0.0	0.0 d
5.5628	44.13941	65.15765	0.00000	0.0	0.0	0.0	0.0	0.0 d
5.9105	44.13500	64.81000	0.00000	0.0	0.0	0.0	0.0	0.0 d
6.2582	44.13059	64.46235	0.00000	0.0	0.0	0.0	0.0	0.0 d
6.6058	44.12618	64.11471	0.00000	0.0	0.0	0.0	0.0	0.0 d
6.9535	44.12176	63.76706	0.00000	0.0	0.0	0.0	0.0	0.0 d
7.3012	44.11735	63.41941	0.00000	0.0	0.0	0.0	0.0	0.0 d
7.6489	44.11294	63.07176	0.00000	0.0	0.0	0.0	0.0	0.0 d
7.9965	44.10853	62.72412	0.00000	0.0	0.0	0.0	0.0	0.0 d
8.3442	44.10412	62.37647	0.00000	0.0	0.0	0.0	0.0	0.0 d
8.6919	44.09971	62.02882	0.00000	0.0	0.0	0.0	0.0	0.0 d
9.0396	44.09529	61.68118	0.00000	0.0	0.0	0.0	0.0	0.0 d
9.3872	44.09088	61.33353	0.00000	0.0	0.0	0.0	0.0	0.0 d
9.7349	44.08647	60.98588	0.00000	0.0	0.0	0.0	0.0	0.0 d
10.083	44.08206	60.63824	0.00000	0.0	0.0	0.0	0.0	0.0 d
10.430	44.07765	60.29059	0.00000	0.0	0.0	0.0	0.0	0.0 d
10.778	44.07324	59.94294	0.00000	0.0	0.0	0.0	0.0	0.0 d
11.126	44.06882	59.59529	0.00000	0.0	0.0	0.0	0.0	0.0 d
11.473	44.06441	59.24765	0.00000	0.0	0.0	0.0	0.0	0.0 d
11.821	44.06000	58.90000	0.00000	0.0	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: f-50 | Sub-structure:

Dist.	Coordinates			Displacements		Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	x	y	z	x	y			
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	44.10000	51.60000	0.00000	0.0	0.0	0.0	0.0	d
0.99267	44.10400	50.60733	0.00000	0.0	0.0	0.0	0.0	d
1.9853	44.10800	49.61467	0.00000	0.0	0.0	0.0	0.0	d
2.9780	44.11200	48.62200	0.00000	0.0	0.0	0.0	0.0	d
3.9707	44.11600	47.62933	0.00000	0.0	0.0	0.0	0.0	d
4.9634	44.12000	46.63667	0.00000	0.0	0.0	0.0	0.0	d
5.9560	44.12400	45.64400	0.00000	0.0	0.0	0.0	0.0	d
6.9487	44.12800	44.65133	0.00000	0.0	0.0	0.0	0.0	d
7.9414	44.13200	43.65867	0.00000	0.0	0.0	0.0	0.0	d
8.9341	44.13600	42.66600	0.00000	0.0	0.0	0.0	0.0	d
9.9267	44.14000	41.67333	0.00000	0.0	0.0	0.0	0.0	d
10.919	44.14400	40.68067	0.00000	0.0	0.0	0.0	0.0	d
11.912	44.14800	39.68800	0.00000	0.0	0.0	0.0	0.0	d
12.905	44.15200	38.69533	0.00000	0.0	0.0	0.0	0.0	d
13.897	44.15600	37.70267	0.00000	0.0	0.0	0.0	0.0	d
14.890	44.16000	36.71000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 14-15 | Sub-structure:

Dist.	Coordinates			Displacements		Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	x	y	z	x	y			
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	55.00000	64.76000	0.00000	0.0	0.0	0.0	0.0	d
1.0700	55.00000	63.69000	0.00000	0.0	0.0	0.0	0.0	d
2.1400	55.00000	62.62000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 15-16 | Sub-structure:

Dist.	Coordinates			Displacements		Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	x	y	z	x	y			
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	55.00000	62.62000	0.00000	0.0	0.0	0.0	0.0	d
1.6907	56.23000	61.46000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 16-17 | Sub-structure:

Dist.	Coordinates			Displacements		Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	x	y	z	x	y			
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	56.23000	61.46000	0.00000	0.0	0.0	0.0	0.0	d
1.9000	56.22000	59.56000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 17-g | Sub-structure:

Dist.	Coordinates			Displacements		Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	x	y	z	x	y			
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	56.22000	59.56000	0.00000	0.0	0.0	0.0	0.0	d

1.6125 55.10000 58.40000 0.00000 0.0 0.0 0.0 0.0 d
d - Displacements include imported displacements.

Structure: h-49 | Sub-structure:

Dist.	Coordinates			Displacements		Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
	x	y	z	x	y		
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
	0.0	54.98000	51.60000	0.00000	0.0	0.0	0.0 d
	1.0678	55.74000	50.85000	0.00000	0.0	0.0	0.0 d
	2.1355	56.50000	50.10000	0.00000	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: 49-36 | Sub-structure:

Dist.	Coordinates			Displacements		Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
	x	y	z	x	y		
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
	0.0	56.50000	50.10000	0.00000	0.0	0.0	0.0 d
	1.1950	56.50000	48.90500	0.00000	0.0	0.0	0.0 d
	2.3900	56.50000	47.71000	0.00000	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: 36-48 | Sub-structure:

Dist.	Coordinates			Displacements		Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
	x	y	z	x	y		
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
	0.0	56.50000	47.71000	0.00000	0.0	0.0	0.0 d
	1.1506	55.73000	46.85500	0.00000	0.0	0.0	0.0 d
	2.3012	54.96000	46.00000	0.00000	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: 48-47 | Sub-structure:

Dist.	Coordinates			Displacements		Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
	x	y	z	x	y		
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
	0.0	54.96000	46.00000	0.00000	0.0	0.0	0.0 d
	1.1700	54.96000	44.83000	0.00000	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: 47-51 | Sub-structure:

Dist.	Coordinates			Displacements		Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
	x	y	z	x	y		
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
	0.0	54.96000	44.83000	0.00000	0.0	0.0	0.0 d
	1.0750	53.88500	44.83000	0.00000	0.0	0.0	0.0 d
	2.1500	52.81000	44.83000	0.00000	0.0	0.0	0.0 d
	3.2250	51.73500	44.83000	0.00000	0.0	0.0	0.0 d
	4.3000	50.66000	44.83000	0.00000	0.0	0.0	0.0 d
	5.3750	49.58500	44.83000	0.00000	0.0	0.0	0.0 d
	6.4500	48.51000	44.83000	0.00000	0.0	0.0	0.0 d
	7.5250	47.43500	44.83000	0.00000	0.0	0.0	0.0 d
	8.6000	46.36000	44.83000	0.00000	0.0	0.0	0.0 d
	9.6750	45.28500	44.83000	0.00000	0.0	0.0	0.0 d

10.750 44.21000 44.83000 0.00000 0.0 0.0 0.0 0.0 d
 d - Displacements include imported displacements.

Structure: 50-46 | Sub-structure:

Dist.	Coordinates			Displacements		Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
	x	y	z	x	y		
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	44.16000	36.71000	0.00000	0.0	0.0	0.0	0.0 d
1.0800	45.24000	36.71000	0.00000	0.0	0.0	0.0	0.0 d
2.1600	46.32000	36.71000	0.00000	0.0	0.0	0.0	0.0 d
3.2400	47.40000	36.71000	0.00000	0.0	0.0	0.0	0.0 d
4.3200	48.48000	36.71000	0.00000	0.0	0.0	0.0	0.0 d
5.4000	49.56000	36.71000	0.00000	0.0	0.0	0.0	0.0 d
6.4800	50.64000	36.71000	0.00000	0.0	0.0	0.0	0.0 d
7.5600	51.72000	36.71000	0.00000	0.0	0.0	0.0	0.0 d
8.6400	52.80000	36.71000	0.00000	0.0	0.0	0.0	0.0 d
9.7200	53.88000	36.71000	0.00000	0.0	0.0	0.0	0.0 d
10.800	54.96000	36.71000	0.00000	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: 46-47 | Sub-structure:

Dist.	Coordinates			Displacements		Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
	x	y	z	x	y		
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	54.96000	36.71000	0.00000	0.0	0.0	0.0	0.0 d
1.0150	54.96000	37.72500	0.00000	0.0	0.0	0.0	0.0 d
2.0300	54.96000	38.74000	0.00000	0.0	0.0	0.0	0.0 d
3.0450	54.96000	39.75500	0.00000	0.0	0.0	0.0	0.0 d
4.0600	54.96000	40.77000	0.00000	0.0	0.0	0.0	0.0 d
5.0750	54.96000	41.78500	0.00000	0.0	0.0	0.0	0.0 d
6.0900	54.96000	42.80000	0.00000	0.0	0.0	0.0	0.0 d
7.1050	54.96000	43.81500	0.00000	0.0	0.0	0.0	0.0 d
8.1200	54.96000	44.83000	0.00000	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: 24-25 | Sub-structure:

Dist.	Coordinates			Displacements		Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
	x	y	z	x	y		
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	78.82000	63.10000	0.00000	0.0	0.0	0.0	0.0 d
1.0289	79.84889	63.09667	0.00000	0.0	0.0	0.0	0.0 d
2.0578	80.87778	63.09333	0.00000	0.0	0.0	0.0	0.0 d
3.0867	81.90667	63.09000	0.00000	0.0	0.0	0.0	0.0 d
4.1156	82.93556	63.08667	0.00000	0.0	0.0	0.0	0.0 d
5.1445	83.96444	63.08333	0.00000	0.0	0.0	0.0	0.0 d
6.1734	84.99333	63.08000	0.00000	0.0	0.0	0.0	0.0 d
7.2023	86.02222	63.07667	0.00000	0.0	0.0	0.0	0.0 d
8.2312	87.05111	63.07333	0.00000	0.0	0.0	0.0	0.0 d
9.2600	88.08000	63.07000	0.00000	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: 25-26 | Sub-structure:

Dist.	Coordinates			Displacements		Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
	x	y	z	x	y		
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	88.08000	63.07000	0.00000	0.0	0.0	0.0	0.0 d
1.0641	88.06400	62.00600	0.00000	0.0	0.0	0.0	0.0 d

2.1282	88.04800	60.94200	0.00000	0.0	0.0	0.0	0.0	0.0	d
3.1924	88.03200	59.87800	0.00000	0.0	0.0	0.0	0.0	0.0	d
4.2565	88.01600	58.81400	0.00000	0.0	0.0	0.0	0.0	0.0	d
5.3206	88.00000	57.75000	0.00000	0.0	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 26-27 | Sub-structure:

Dist.	Coordinates			Displacements					
	x	y	z	x	y	Horizontal displacement along the Line		Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]		[mm]	
0.0	88.00000	57.75000	0.00000	0.0	0.0	0.0	0.0	0.0	d
1.0246	86.97545	57.76364	0.00000	0.0	0.0	0.0	0.0	0.0	d
2.0493	85.95091	57.77727	0.00000	0.0	0.0	0.0	0.0	0.0	d
3.0739	84.92636	57.79091	0.00000	0.0	0.0	0.0	0.0	0.0	d
4.0985	83.90182	57.80455	0.00000	0.0	0.0	0.0	0.0	0.0	d
5.1232	82.87727	57.81818	0.00000	0.0	0.0	0.0	0.0	0.0	d
6.1478	81.85273	57.83182	0.00000	0.0	0.0	0.0	0.0	0.0	d
7.1725	80.82818	57.84545	0.00000	0.0	0.0	0.0	0.0	0.0	d
8.1971	79.80364	57.85909	0.00000	0.0	0.0	0.0	0.0	0.0	d
9.2217	78.77909	57.87273	0.00000	0.0	0.0	0.0	0.0	0.0	d
10.246	77.75455	57.88636	0.00000	0.0	0.0	0.0	0.0	0.0	d
11.271	76.73000	57.90000	0.00000	0.0	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 27-28 | Sub-structure:

Dist.	Coordinates			Displacements					
	x	y	z	x	y	Horizontal displacement along the Line		Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]		[mm]	
0.0	76.73000	57.90000	0.00000	0.0	0.0	0.0	0.0	0.0	d
1.0567	76.72333	58.95667	0.00000	0.0	0.0	0.0	0.0	0.0	d
2.1134	76.71667	60.01333	0.00000	0.0	0.0	0.0	0.0	0.0	d
3.1701	76.71000	61.07000	0.00000	0.0	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 28-29 | Sub-structure:

Dist.	Coordinates			Displacements					
	x	y	z	x	y	Horizontal displacement along the Line		Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]		[mm]	
0.0	76.71000	61.07000	0.00000	0.0	0.0	0.0	0.0	0.0	d
1.4640	77.76500	62.08500	0.00000	0.0	0.0	0.0	0.0	0.0	d
2.9280	78.82000	63.10000	0.00000	0.0	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 27-32 | Sub-structure:

Dist.	Coordinates			Displacements					
	x	y	z	x	y	Horizontal displacement along the Line		Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]		[mm]	
0.0	76.73000	57.90000	0.00000	0.0	0.0	0.0	0.0	0.0	d
1.0300	76.73400	56.87000	0.00000	0.0	0.0	0.0	0.0	0.0	d
2.0600	76.73800	55.84000	0.00000	0.0	0.0	0.0	0.0	0.0	d
3.0900	76.74200	54.81000	0.00000	0.0	0.0	0.0	0.0	0.0	d
4.1200	76.74600	53.78000	0.00000	0.0	0.0	0.0	0.0	0.0	d
5.1500	76.75000	52.75000	0.00000	0.0	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 33-31 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	87.93000	52.75000	0.00000	0.0	0.0	0.0	0.0	d
1.0400	86.89000	52.75000	0.00000	0.0	0.0	0.0	0.0	d
2.0800	85.85000	52.75000	0.00000	0.0	0.0	0.0	0.0	d
3.1200	84.81000	52.75000	0.00000	0.0	0.0	0.0	0.0	d
4.1600	83.77000	52.75000	0.00000	0.0	0.0	0.0	0.0	d
5.2000	82.73000	52.75000	0.00000	0.0	0.0	0.0	0.0	d
6.2400	81.69000	52.75000	0.00000	0.0	0.0	0.0	0.0	d
7.2800	80.65000	52.75000	0.00000	0.0	0.0	0.0	0.0	d
8.3200	79.61000	52.75000	0.00000	0.0	0.0	0.0	0.0	d
9.3600	78.57000	52.75000	0.00000	0.0	0.0	0.0	0.0	d
10.4000	77.53000	52.75000	0.00000	0.0	0.0	0.0	0.0	d
11.4400	76.49000	52.75000	0.00000	0.0	0.0	0.0	0.0	d
12.4800	75.45000	52.75000	0.00000	0.0	0.0	0.0	0.0	d
13.5200	74.41000	52.75000	0.00000	0.0	0.0	0.0	0.0	d
14.5600	73.37000	52.75000	0.00000	0.0	0.0	0.0	0.0	d
15.6000	72.33000	52.75000	0.00000	0.0	0.0	0.0	0.0	d
16.6400	71.29000	52.75000	0.00000	0.0	0.0	0.0	0.0	d
17.6800	70.25000	52.75000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 31-34 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	70.25000	52.75000	0.00000	0.0	0.0	0.0	0.0	d
1.1236	70.22667	51.62667	0.00000	0.0	0.0	0.0	0.0	d
2.2472	70.20333	50.50333	0.00000	0.0	0.0	0.0	0.0	d
3.3707	70.18000	49.38000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 34-35 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	70.18000	49.38000	0.00000	0.0	0.0	0.0	0.0	d
1.3300	71.51000	49.37000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 35-41 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	71.51000	49.37000	0.00000	0.0	0.0	0.0	0.0	d
1.2000	71.50000	48.17000	0.00000	0.0	0.0	0.0	0.0	d
2.4001	71.49000	46.97000	0.00000	0.0	0.0	0.0	0.0	d
3.6001	71.48000	45.77000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 41-40 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the	Horizontal displacement perpendicular	

	[m]	[m]	[m]	[m]	[mm]	[mm]	Line [mm]	to Line [mm]	
	0.0	71.48000	45.77000	0.00000	0.0	0.0	0.0	0.0	0.0 d
1.0175	70.46250	45.77000	0.00000	0.0	0.0	0.0	0.0	0.0	0.0 d
2.0350	69.44500	45.77000	0.00000	0.0	0.0	0.0	0.0	0.0	0.0 d
3.0525	68.42750	45.77000	0.00000	0.0	0.0	0.0	0.0	0.0	0.0 d
4.0700	67.41000	45.77000	0.00000	0.0	0.0	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: 40-39 | Sub-structure:

Dist.	Coordinates					Displacements		
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
	0.0	67.41000	45.77000	0.00000	0.0	0.0	0.0	0.0 d
1.3000	67.40333	44.47000	0.00000	0.0	0.0	0.0	0.0	0.0 d
2.6000	67.39667	43.17000	0.00000	0.0	0.0	0.0	0.0	0.0 d
3.9001	67.39000	41.87000	0.00000	0.0	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: 39-38 | Sub-structure:

Dist.	Coordinates					Displacements		
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
	0.0	67.39000	41.87000	0.00000	0.0	0.0	0.0	0.0 d
1.0305	68.42050	41.86150	0.00000	0.0	0.0	0.0	0.0	0.0 d
2.0611	69.45100	41.85300	0.00000	0.0	0.0	0.0	0.0	0.0 d
3.0916	70.48150	41.84450	0.00000	0.0	0.0	0.0	0.0	0.0 d
4.1221	71.51200	41.83600	0.00000	0.0	0.0	0.0	0.0	0.0 d
5.1527	72.54250	41.82750	0.00000	0.0	0.0	0.0	0.0	0.0 d
6.1832	73.57300	41.81900	0.00000	0.0	0.0	0.0	0.0	0.0 d
7.2137	74.60350	41.81050	0.00000	0.0	0.0	0.0	0.0	0.0 d
8.2443	75.63400	41.80200	0.00000	0.0	0.0	0.0	0.0	0.0 d
9.2748	76.66450	41.79350	0.00000	0.0	0.0	0.0	0.0	0.0 d
10.305	77.69500	41.78500	0.00000	0.0	0.0	0.0	0.0	0.0 d
11.336	78.72550	41.77650	0.00000	0.0	0.0	0.0	0.0	0.0 d
12.366	79.75600	41.76800	0.00000	0.0	0.0	0.0	0.0	0.0 d
13.397	80.78650	41.75950	0.00000	0.0	0.0	0.0	0.0	0.0 d
14.427	81.81700	41.75100	0.00000	0.0	0.0	0.0	0.0	0.0 d
15.458	82.84750	41.74250	0.00000	0.0	0.0	0.0	0.0	0.0 d
16.489	83.87800	41.73400	0.00000	0.0	0.0	0.0	0.0	0.0 d
17.519	84.90850	41.72550	0.00000	0.0	0.0	0.0	0.0	0.0 d
18.550	85.93900	41.71700	0.00000	0.0	0.0	0.0	0.0	0.0 d
19.580	86.96950	41.70850	0.00000	0.0	0.0	0.0	0.0	0.0 d
20.611	88.00000	41.70000	0.00000	0.0	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: 38-25 | Sub-structure:

Dist.	Coordinates					Displacements		
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
	0.0	88.00000	41.70000	0.00000	0.0	0.0	0.0	0.0 d
1.0176	88.00381	42.71762	0.00000	0.0	0.0	0.0	0.0	0.0 d
2.0353	88.00762	43.73524	0.00000	0.0	0.0	0.0	0.0	0.0 d
3.0529	88.01143	44.75286	0.00000	0.0	0.0	0.0	0.0	0.0 d
4.0705	88.01524	45.77048	0.00000	0.0	0.0	0.0	0.0	0.0 d
5.0881	88.01905	46.78810	0.00000	0.0	0.0	0.0	0.0	0.0 d
6.1058	88.02286	47.80571	0.00000	0.0	0.0	0.0	0.0	0.0 d
7.1234	88.02667	48.82333	0.00000	0.0	0.0	0.0	0.0	0.0 d
8.1410	88.03048	49.84095	0.00000	0.0	0.0	0.0	0.0	0.0 d
9.1586	88.03429	50.85857	0.00000	0.0	0.0	0.0	0.0	0.0 d
10.176	88.03810	51.87619	0.00000	0.0	0.0	0.0	0.0	0.0 d
11.194	88.04190	52.89381	0.00000	0.0	0.0	0.0	0.0	0.0 d

12.212	88.04571	53.91143	0.00000	0.0	0.0	0.0	0.0	0.0	d
13.229	88.04952	54.92905	0.00000	0.0	0.0	0.0	0.0	0.0	d
14.247	88.05333	55.94667	0.00000	0.0	0.0	0.0	0.0	0.0	d
15.264	88.05714	56.96429	0.00000	0.0	0.0	0.0	0.0	0.0	d
16.282	88.06095	57.98190	0.00000	0.0	0.0	0.0	0.0	0.0	d
17.300	88.06476	58.99952	0.00000	0.0	0.0	0.0	0.0	0.0	d
18.317	88.06857	60.01714	0.00000	0.0	0.0	0.0	0.0	0.0	d
19.335	88.07238	61.03476	0.00000	0.0	0.0	0.0	0.0	0.0	d
20.353	88.07619	62.05238	0.00000	0.0	0.0	0.0	0.0	0.0	d
21.370	88.08000	63.07000	0.00000	0.0	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 20-22 | Sub-structure:

Dist.	Coordinates			Displacements		Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	x	y	z	x	y			
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
	0.0	55.96000	70.70000	0.00000	0.0	0.0	0.0	d
1.0170	56.97700	70.69900	0.00000	0.0	0.0	0.0	0.0	d
2.0340	57.99400	70.69800	0.00000	0.0	0.0	0.0	0.0	d
3.0510	59.01100	70.69700	0.00000	0.0	0.0	0.0	0.0	d
4.0680	60.02800	70.69600	0.00000	0.0	0.0	0.0	0.0	d
5.0850	61.04500	70.69500	0.00000	0.0	0.0	0.0	0.0	d
6.1020	62.06200	70.69400	0.00000	0.0	0.0	0.0	0.0	d
7.1190	63.07900	70.69300	0.00000	0.0	0.0	0.0	0.0	d
8.1360	64.09600	70.69200	0.00000	0.0	0.0	0.0	0.0	d
9.1530	65.11300	70.69100	0.00000	0.0	0.0	0.0	0.0	d
10.170	66.13000	70.69000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 22-b | Sub-structure:

Dist.	Coordinates			Displacements		Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	x	y	z	x	y			
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
	0.0	66.13000	70.69000	0.00000	0.0	0.0	0.0	d
0.69360	66.14000	69.99647	0.00000	0.0	0.0	0.0	0.0	d
1.3872	66.15000	69.30294	0.00000	0.0	0.0	0.0	0.0	d
2.0808	66.16000	68.60941	0.00000	0.0	0.0	0.0	0.0	d
2.7744	66.17000	67.91588	0.00000	0.0	0.0	0.0	0.0	d
3.4680	66.18000	67.22235	0.00000	0.0	0.0	0.0	0.0	d
4.1616	66.19000	66.52882	0.00000	0.0	0.0	0.0	0.0	d
4.8552	66.20000	65.83529	0.00000	0.0	0.0	0.0	0.0	d
5.5488	66.21000	65.14176	0.00000	0.0	0.0	0.0	0.0	d
6.2424	66.22000	64.44824	0.00000	0.0	0.0	0.0	0.0	d
6.9360	66.23000	63.75471	0.00000	0.0	0.0	0.0	0.0	d
7.6296	66.24000	63.06118	0.00000	0.0	0.0	0.0	0.0	d
8.3232	66.25000	62.36765	0.00000	0.0	0.0	0.0	0.0	d
9.0168	66.26000	61.67412	0.00000	0.0	0.0	0.0	0.0	d
9.7104	66.27000	60.98059	0.00000	0.0	0.0	0.0	0.0	d
10.404	66.28000	60.28706	0.00000	0.0	0.0	0.0	0.0	d
11.098	66.29000	59.59353	0.00000	0.0	0.0	0.0	0.0	d
11.791	66.30000	58.90000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: e-45 | Sub-structure:

Dist.	Coordinates			Displacements		Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	x	y	z	x	y			
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
	0.0	64.74000	51.60000	0.00000	0.0	0.0	0.0	d
0.98415	64.72267	50.61600	0.00000	0.0	0.0	0.0	0.0	d
1.9683	64.70533	49.63200	0.00000	0.0	0.0	0.0	0.0	d
2.9525	64.68800	48.64800	0.00000	0.0	0.0	0.0	0.0	d
3.9366	64.67067	47.66400	0.00000	0.0	0.0	0.0	0.0	d

4.9208	64.65333	46.68000	0.00000	0.0	0.0	0.0	0.0	d
5.9049	64.63600	45.69600	0.00000	0.0	0.0	0.0	0.0	d
6.8891	64.61867	44.71200	0.00000	0.0	0.0	0.0	0.0	d
7.8732	64.60133	43.72800	0.00000	0.0	0.0	0.0	0.0	d
8.8574	64.58400	42.74400	0.00000	0.0	0.0	0.0	0.0	d
9.8415	64.56667	41.76000	0.00000	0.0	0.0	0.0	0.0	d
10.826	64.54933	40.77600	0.00000	0.0	0.0	0.0	0.0	d
11.810	64.53200	39.79200	0.00000	0.0	0.0	0.0	0.0	d
12.794	64.51467	38.80800	0.00000	0.0	0.0	0.0	0.0	d
13.778	64.49733	37.82400	0.00000	0.0	0.0	0.0	0.0	d
14.762	64.48000	36.84000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 18-31 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
	0.0	59.17000	64.78000	0.00000	0.0	0.0	0.0	d
1.1384	60.30833	64.77333	0.00000	0.0	0.0	0.0	0.0	d
2.2767	61.44667	64.76667	0.00000	0.0	0.0	0.0	0.0	d
3.4151	62.58500	64.76000	0.00000	0.0	0.0	0.0	0.0	d
4.5534	63.72333	64.75333	0.00000	0.0	0.0	0.0	0.0	d
5.6918	64.86167	64.74667	0.00000	0.0	0.0	0.0	0.0	d
6.8301	66.00000	64.74000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 23-24 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
	0.0	66.00000	63.14000	0.00000	0.0	0.0	0.0	d
1.0683	67.06833	63.13667	0.00000	0.0	0.0	0.0	0.0	d
2.1367	68.13667	63.13333	0.00000	0.0	0.0	0.0	0.0	d
3.2050	69.20500	63.13000	0.00000	0.0	0.0	0.0	0.0	d
4.2734	70.27333	63.12667	0.00000	0.0	0.0	0.0	0.0	d
5.3417	71.34167	63.12333	0.00000	0.0	0.0	0.0	0.0	d
6.4100	72.41000	63.12000	0.00000	0.0	0.0	0.0	0.0	d
7.4784	73.47833	63.11667	0.00000	0.0	0.0	0.0	0.0	d
8.5467	74.54667	63.11333	0.00000	0.0	0.0	0.0	0.0	d
9.6150	75.61500	63.11000	0.00000	0.0	0.0	0.0	0.0	d
10.683	76.68333	63.10667	0.00000	0.0	0.0	0.0	0.0	d
11.752	77.75167	63.10333	0.00000	0.0	0.0	0.0	0.0	d
12.820	78.82000	63.10000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: b-27 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
	0.0	66.10000	58.46000	0.00000	0.0	0.0	0.0	d
1.0645	67.16300	58.40400	0.00000	0.0	0.0	0.0	0.0	d
2.1289	68.22600	58.34800	0.00000	0.0	0.0	0.0	0.0	d
3.1934	69.28900	58.29200	0.00000	0.0	0.0	0.0	0.0	d
4.2579	70.35200	58.23600	0.00000	0.0	0.0	0.0	0.0	d
5.3224	71.41500	58.18000	0.00000	0.0	0.0	0.0	0.0	d
6.3868	72.47800	58.12400	0.00000	0.0	0.0	0.0	0.0	d
7.4513	73.54100	58.06800	0.00000	0.0	0.0	0.0	0.0	d
8.5158	74.60400	58.01200	0.00000	0.0	0.0	0.0	0.0	d
9.5803	75.66700	57.95600	0.00000	0.0	0.0	0.0	0.0	d
10.645	76.73000	57.90000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 42-37 | Sub-structure:

Dist.	Coordinates			Displacements			
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	64.54000	46.73000	0.00000	0.0	0.0	0.0	0.0 d
1.0183	65.55826	46.71783	0.00000	0.0	0.0	0.0	0.0 d
2.0367	66.57652	46.70565	0.00000	0.0	0.0	0.0	0.0 d
3.0550	67.59478	46.69348	0.00000	0.0	0.0	0.0	0.0 d
4.0733	68.61304	46.68130	0.00000	0.0	0.0	0.0	0.0 d
5.0917	69.63130	46.66913	0.00000	0.0	0.0	0.0	0.0 d
6.1100	70.64957	46.65696	0.00000	0.0	0.0	0.0	0.0 d
7.1283	71.66783	46.64478	0.00000	0.0	0.0	0.0	0.0 d
8.1467	72.68609	46.63261	0.00000	0.0	0.0	0.0	0.0 d
9.1650	73.70435	46.62043	0.00000	0.0	0.0	0.0	0.0 d
10.183	74.72261	46.60826	0.00000	0.0	0.0	0.0	0.0 d
11.202	75.74087	46.59609	0.00000	0.0	0.0	0.0	0.0 d
12.220	76.75913	46.58391	0.00000	0.0	0.0	0.0	0.0 d
13.238	77.77739	46.57174	0.00000	0.0	0.0	0.0	0.0 d
14.257	78.79565	46.55957	0.00000	0.0	0.0	0.0	0.0 d
15.275	79.81391	46.54739	0.00000	0.0	0.0	0.0	0.0 d
16.293	80.83217	46.53522	0.00000	0.0	0.0	0.0	0.0 d
17.312	81.85043	46.52304	0.00000	0.0	0.0	0.0	0.0 d
18.330	82.86870	46.51087	0.00000	0.0	0.0	0.0	0.0 d
19.348	83.88696	46.49870	0.00000	0.0	0.0	0.0	0.0 d
20.367	84.90522	46.48652	0.00000	0.0	0.0	0.0	0.0 d
21.385	85.92348	46.47435	0.00000	0.0	0.0	0.0	0.0 d
22.403	86.94174	46.46217	0.00000	0.0	0.0	0.0	0.0 d
23.422	87.96000	46.45000	0.00000	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: 47-43 | Sub-structure:

Dist.	Coordinates			Displacements			
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	54.96000	44.83000	0.00000	0.0	0.0	0.0	0.0 d
1.0600	56.02000	44.83000	0.00000	0.0	0.0	0.0	0.0 d
2.1200	57.08000	44.83000	0.00000	0.0	0.0	0.0	0.0 d
3.1800	58.14000	44.83000	0.00000	0.0	0.0	0.0	0.0 d
4.2400	59.20000	44.83000	0.00000	0.0	0.0	0.0	0.0 d
5.3000	60.26000	44.83000	0.00000	0.0	0.0	0.0	0.0 d
6.3600	61.32000	44.83000	0.00000	0.0	0.0	0.0	0.0 d
7.4200	62.38000	44.83000	0.00000	0.0	0.0	0.0	0.0 d
8.4800	63.44000	44.83000	0.00000	0.0	0.0	0.0	0.0 d
9.5400	64.50000	44.83000	0.00000	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: 44-39 | Sub-structure:

Dist.	Coordinates			Displacements			
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	64.44000	41.91000	0.00000	0.0	0.0	0.0	0.0 d
1.4751	65.91500	41.89000	0.00000	0.0	0.0	0.0	0.0 d
2.9503	67.39000	41.87000	0.00000	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: 46-45 | Sub-structure:

Dist.	Coordinates			Displacements			
	x	y	z	x	y	Horizontal displacement along the	Horizontal displacement perpendicular

[m]	[m]	[m]	[m]	[mm]	[mm]	Line [mm]	to Line [mm]
0.0	54.96000	36.71000	0.00000	0.0	0.0	0.0	0.0 d
1.0579	56.01778	36.72444	0.00000	0.0	0.0	0.0	0.0 d
2.1158	57.07556	36.73889	0.00000	0.0	0.0	0.0	0.0 d
3.1736	58.13333	36.75333	0.00000	0.0	0.0	0.0	0.0 d
4.2315	59.19111	36.76778	0.00000	0.0	0.0	0.0	0.0 d
5.2894	60.24889	36.78222	0.00000	0.0	0.0	0.0	0.0 d
6.3473	61.30667	36.79667	0.00000	0.0	0.0	0.0	0.0 d
7.4051	62.36444	36.81111	0.00000	0.0	0.0	0.0	0.0 d
8.4630	63.42222	36.82556	0.00000	0.0	0.0	0.0	0.0 d
9.5209	64.48000	36.84000	0.00000	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: a-12 | Sub-structure:

Dist.	Coordinates			Displacements			
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	44.06000	58.90000	0.00000	0.0	0.0	0.0	0.0 d
1.1151	42.95250	58.77000	0.00000	0.0	0.0	0.0	0.0 d
2.2302	41.84500	58.64000	0.00000	0.0	0.0	0.0	0.0 d
3.3453	40.73750	58.51000	0.00000	0.0	0.0	0.0	0.0 d
4.4604	39.63000	58.38000	0.00000	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: 12-11 | Sub-structure:

Dist.	Coordinates			Displacements			
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	39.63000	58.38000	0.00000	0.0	0.0	0.0	0.0 d
1.1167	39.63000	57.26333	0.00000	0.0	0.0	0.0	0.0 d
2.2333	39.63000	56.14667	0.00000	0.0	0.0	0.0	0.0 d
3.3500	39.63000	55.03000	0.00000	0.0	0.0	0.0	0.0 d
4.4667	39.63000	53.91333	0.00000	0.0	0.0	0.0	0.0 d
5.5833	39.63000	52.79667	0.00000	0.0	0.0	0.0	0.0 d
6.7000	39.63000	51.68000	0.00000	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: 11-f | Sub-structure:

Dist.	Coordinates			Displacements			
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	39.63000	51.68000	0.00000	0.0	0.0	0.0	0.0 d
0.55884	40.18875	51.67000	0.00000	0.0	0.0	0.0	0.0 d
1.1177	40.74750	51.66000	0.00000	0.0	0.0	0.0	0.0 d
1.6765	41.30625	51.65000	0.00000	0.0	0.0	0.0	0.0 d
2.2354	41.86500	51.64000	0.00000	0.0	0.0	0.0	0.0 d
2.7942	42.42375	51.63000	0.00000	0.0	0.0	0.0	0.0 d
3.3530	42.98250	51.62000	0.00000	0.0	0.0	0.0	0.0 d
3.9119	43.54125	51.61000	0.00000	0.0	0.0	0.0	0.0 d
4.4707	44.10000	51.60000	0.00000	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: ag | Sub-structure:

Dist.	Coordinates			Displacements			
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]

0.0	44.06000	58.90000	0.00000	0.0	0.0	0.0	0.0	0.0	d
1.0047	45.06364	58.85455	0.00000	0.0	0.0	0.0	0.0	0.0	d
2.0093	46.06727	58.80909	0.00000	0.0	0.0	0.0	0.0	0.0	d
3.0140	47.07091	58.76364	0.00000	0.0	0.0	0.0	0.0	0.0	d
4.0187	48.07455	58.71818	0.00000	0.0	0.0	0.0	0.0	0.0	d
5.0233	49.07818	58.67273	0.00000	0.0	0.0	0.0	0.0	0.0	d
6.0280	50.08182	58.62727	0.00000	0.0	0.0	0.0	0.0	0.0	d
7.0327	51.08545	58.58182	0.00000	0.0	0.0	0.0	0.0	0.0	d
8.0373	52.08909	58.53636	0.00000	0.0	0.0	0.0	0.0	0.0	d
9.0420	53.09273	58.49091	0.00000	0.0	0.0	0.0	0.0	0.0	d
10.047	54.09636	58.44545	0.00000	0.0	0.0	0.0	0.0	0.0	d
11.051	55.10000	58.40000	0.00000	0.0	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: gb | Sub-structure:

Dist.	Coordinates			Displacements		Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	x	y	z	x	y			
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	55.10000	58.40000	0.00000	0.0	0.0	0.0	0.0	0.0 d
0.57001	55.67000	58.40300	0.00000	0.0	0.0	0.0	0.0	0.0 d
1.1400	56.24000	58.40600	0.00000	0.0	0.0	0.0	0.0	0.0 d
1.7100	56.81000	58.40900	0.00000	0.0	0.0	0.0	0.0	0.0 d
2.2800	57.38000	58.41200	0.00000	0.0	0.0	0.0	0.0	0.0 d
2.8500	57.95000	58.41500	0.00000	0.0	0.0	0.0	0.0	0.0 d
3.4200	58.52000	58.41800	0.00000	0.0	0.0	0.0	0.0	0.0 d
3.9901	59.09000	58.42100	0.00000	0.0	0.0	0.0	0.0	0.0 d
4.5601	59.66000	58.42400	0.00000	0.0	0.0	0.0	0.0	0.0 d
5.1301	60.23000	58.42700	0.00000	0.0	0.0	0.0	0.0	0.0 d
5.7001	60.80000	58.43000	0.00000	0.0	0.0	0.0	0.0	0.0 d
6.2701	61.37000	58.43300	0.00000	0.0	0.0	0.0	0.0	0.0 d
6.8401	61.94000	58.43600	0.00000	0.0	0.0	0.0	0.0	0.0 d
7.4101	62.51000	58.43900	0.00000	0.0	0.0	0.0	0.0	0.0 d
7.9801	63.08000	58.44200	0.00000	0.0	0.0	0.0	0.0	0.0 d
8.5501	63.65000	58.44500	0.00000	0.0	0.0	0.0	0.0	0.0 d
9.1201	64.22000	58.44800	0.00000	0.0	0.0	0.0	0.0	0.0 d
9.6901	64.79000	58.45100	0.00000	0.0	0.0	0.0	0.0	0.0 d
10.260	65.36000	58.45400	0.00000	0.0	0.0	0.0	0.0	0.0 d
10.830	65.93000	58.45700	0.00000	0.0	0.0	0.0	0.0	0.0 d
11.400	66.50000	58.46000	0.00000	0.0	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: bc | Sub-structure:

Dist.	Coordinates			Displacements		Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	x	y	z	x	y			
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	66.50000	58.46000	0.00000	0.0	0.0	0.0	0.0	0.0 d
0.27800	66.50000	58.18200	0.00000	0.0	0.0	0.0	0.0	0.0 d
0.55600	66.50000	57.90400	0.00000	0.0	0.0	0.0	0.0	0.0 d
0.83400	66.50000	57.62600	0.00000	0.0	0.0	0.0	0.0	0.0 d
1.1120	66.50000	57.34800	0.00000	0.0	0.0	0.0	0.0	0.0 d
1.3900	66.50000	57.07000	0.00000	0.0	0.0	0.0	0.0	0.0 d
1.6680	66.50000	56.79200	0.00000	0.0	0.0	0.0	0.0	0.0 d
1.9460	66.50000	56.51400	0.00000	0.0	0.0	0.0	0.0	0.0 d
2.2240	66.50000	56.23600	0.00000	0.0	0.0	0.0	0.0	0.0 d
2.5020	66.50000	55.95800	0.00000	0.0	0.0	0.0	0.0	0.0 d
2.7800	66.50000	55.68000	0.00000	0.0	0.0	0.0	0.0	0.0 d
3.0580	66.50000	55.40200	0.00000	0.0	0.0	0.0	0.0	0.0 d
3.3360	66.50000	55.12400	0.00000	0.0	0.0	0.0	0.0	0.0 d
3.6140	66.50000	54.84600	0.00000	0.0	0.0	0.0	0.0	0.0 d
3.8920	66.50000	54.56800	0.00000	0.0	0.0	0.0	0.0	0.0 d
4.1700	66.50000	54.29000	0.00000	0.0	0.0	0.0	0.0	0.0 d
4.4480	66.50000	54.01200	0.00000	0.0	0.0	0.0	0.0	0.0 d
4.7260	66.50000	53.73400	0.00000	0.0	0.0	0.0	0.0	0.0 d
5.0040	66.50000	53.45600	0.00000	0.0	0.0	0.0	0.0	0.0 d
5.2820	66.50000	53.17800	0.00000	0.0	0.0	0.0	0.0	0.0 d
5.5600	66.50000	52.90000	0.00000	0.0	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: cd | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	66.50000	52.90000	0.00000	0.0	0.0	0.0	0.0	d
1.7493	65.00000	52.00000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: eh | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	64.74000	51.60000	0.00000	0.0	0.0	0.0	0.0	d
1.0844	63.65556	51.60000	0.00000	0.0	0.0	0.0	0.0	d
2.1689	62.57111	51.60000	0.00000	0.0	0.0	0.0	0.0	d
3.2533	61.48667	51.60000	0.00000	0.0	0.0	0.0	0.0	d
4.3378	60.40222	51.60000	0.00000	0.0	0.0	0.0	0.0	d
5.4222	59.31778	51.60000	0.00000	0.0	0.0	0.0	0.0	d
6.5067	58.23333	51.60000	0.00000	0.0	0.0	0.0	0.0	d
7.5911	57.14889	51.60000	0.00000	0.0	0.0	0.0	0.0	d
8.6756	56.06444	51.60000	0.00000	0.0	0.0	0.0	0.0	d
9.7600	54.98000	51.60000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: hf | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	54.98000	51.60000	0.00000	0.0	0.0	0.0	0.0	d
1.0880	53.89200	51.60000	0.00000	0.0	0.0	0.0	0.0	d
2.1760	52.80400	51.60000	0.00000	0.0	0.0	0.0	0.0	d
3.2640	51.71600	51.60000	0.00000	0.0	0.0	0.0	0.0	d
4.3520	50.62800	51.60000	0.00000	0.0	0.0	0.0	0.0	d
5.4400	49.54000	51.60000	0.00000	0.0	0.0	0.0	0.0	d
6.5280	48.45200	51.60000	0.00000	0.0	0.0	0.0	0.0	d
7.6160	47.36400	51.60000	0.00000	0.0	0.0	0.0	0.0	d
8.7040	46.27600	51.60000	0.00000	0.0	0.0	0.0	0.0	d
9.7920	45.18800	51.60000	0.00000	0.0	0.0	0.0	0.0	d
10.880	44.10000	51.60000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: de | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	65.00000	52.00000	0.00000	0.0	0.0	0.0	0.0	d
0.11927	64.93500	51.90000	0.00000	0.0	0.0	0.0	0.0	d
0.23854	64.87000	51.80000	0.00000	0.0	0.0	0.0	0.0	d
0.35781	64.80500	51.70000	0.00000	0.0	0.0	0.0	0.0	d
0.47707	64.74000	51.60000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Specific Building Damage Results - Vertical Displacements

Structure: 21-20 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	55.96000	70.70000	0.00000	-0.094618	d
1.0682	54.89182	70.70182	0.00000	-0.096108	d
2.1364	53.82364	70.70364	0.00000	-0.096704	d
3.2046	52.75545	70.70545	0.00000	-0.096521	d
4.2727	51.68727	70.70727	0.00000	-0.095675	d
5.3409	50.61909	70.70909	0.00000	-0.094265	d
6.4091	49.55091	70.71091	0.00000	-0.092362	d
7.4773	48.48273	70.71273	0.00000	-0.089998	d
8.5455	47.41455	70.71455	0.00000	-0.087165	d
9.6137	46.34636	70.71636	0.00000	-0.083824	d
10.682	45.27818	70.71818	0.00000	-0.079918	d
11.750	44.21000	70.72000	0.00000	-0.075387	d

d - Displacements include imported displacements.

Structure: 19-20 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	59.14000	66.79000	0.00000	-0.25420	d
1.0080	58.50400	67.57200	0.00000	-0.21256	d
2.0160	57.86800	68.35400	0.00000	-0.17640	d
3.0239	57.23200	69.13600	0.00000	-0.14508	d
4.0319	56.59600	69.91800	0.00000	-0.11801	d
5.0399	55.96000	70.70000	0.00000	-0.094618	d

d - Displacements include imported displacements.

Structure: 19-18 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	59.14000	66.79000	0.00000	-0.25420	d
1.0051	59.15500	65.78500	0.00000	-0.33011	d
2.0102	59.17000	64.78000	0.00000	-0.42894	d

d - Displacements include imported displacements.

Structure: 18-13 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	59.17000	64.78000	0.00000	-0.42894	d
1.0686	58.10143	64.78143	0.00000	-0.44640	d
2.1371	57.03286	64.78286	0.00000	-0.45665	d
3.2057	55.96429	64.78429	0.00000	-0.45995	d
4.2743	54.89571	64.78571	0.00000	-0.45739	d
5.3429	53.82714	64.78714	0.00000	-0.45068	d
6.4114	52.75857	64.78857	0.00000	-0.44175	d
7.4800	51.69000	64.79000	0.00000	-0.43228	d
8.5486	50.62143	64.79143	0.00000	-0.42352	d
9.6172	49.55286	64.79286	0.00000	-0.41612	d
10.686	48.48429	64.79429	0.00000	-0.41018	d
11.754	47.41571	64.79571	0.00000	-0.40526	d
12.823	46.34714	64.79714	0.00000	-0.40040	d
13.891	45.27857	64.79857	0.00000	-0.39421	d
14.960	44.21000	64.80000	0.00000	-0.38502	d

d - Displacements include imported displacements.

Structure: 21-a | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]
Vertical Offset 1				
0.0	44.21000	70.72000	0.00000	-0.075387 d
0.34768	44.20559	70.37235	0.00000	-0.084426 d
0.69535	44.20118	70.02471	0.00000	-0.094151 d
1.0430	44.19676	69.67706	0.00000	-0.10462 d
1.3907	44.19235	69.32941	0.00000	-0.11590 d
1.7384	44.18794	68.98176	0.00000	-0.12807 d
2.0861	44.18353	68.63412	0.00000	-0.14119 d
2.4337	44.17912	68.28647	0.00000	-0.15536 d
2.7814	44.17471	67.93882	0.00000	-0.17069 d
3.1291	44.17029	67.59118	0.00000	-0.18726 d
3.4768	44.16588	67.24353	0.00000	-0.20522 d
3.8244	44.16147	66.89588	0.00000	-0.22469 d
4.1721	44.15706	66.54824	0.00000	-0.24582 d
4.5198	44.15265	66.20059	0.00000	-0.26879 d
4.8675	44.14824	65.85294	0.00000	-0.29379 d
5.2151	44.14382	65.50529	0.00000	-0.32103 d
5.5628	44.13941	65.15765	0.00000	-0.35076 d
5.9105	44.13500	64.81000	0.00000	-0.38325 d
6.2582	44.13059	64.46235	0.00000	-0.41880 d
6.6058	44.12618	64.11471	0.00000	-0.45778 d
6.9535	44.12176	63.76706	0.00000	-0.50058 d
7.3012	44.11735	63.41941	0.00000	-0.54766 d
7.6489	44.11294	63.07176	0.00000	-0.59956 d
7.9965	44.10853	62.72412	0.00000	-0.65690 d
8.3442	44.10412	62.37647	0.00000	-0.72042 d
8.6919	44.09971	62.02882	0.00000	-0.79104 d
9.0396	44.09529	61.68118	0.00000	-0.86990 d
9.3872	44.09088	61.33353	0.00000	-0.95856 d
9.7349	44.08647	60.98588	0.00000	-1.0592 d
10.083	44.08206	60.63824	0.00000	-1.1751 d
10.430	44.07765	60.29059	0.00000	-1.3115 d
10.778	44.07324	59.94294	0.00000	-1.4775 d
11.126	44.06882	59.59529	0.00000	-1.6895 d
11.473	44.06441	59.24765	0.00000	-1.9790 d
11.821	44.06000	58.90000	0.00000	-2.4133 d

d - Displacements include imported displacements.

Structure: f-50 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]
Vertical Offset 1				
0.0	44.10000	51.60000	0.00000	-3.6067 d
0.99267	44.10400	50.60733	0.00000	-1.8127 d
1.9853	44.10800	49.61467	0.00000	-1.2570 d
2.9780	44.11200	48.62200	0.00000	-0.93731 d
3.9707	44.11600	47.62933	0.00000	-0.71487 d
4.9634	44.12000	46.63667	0.00000	-0.55060 d
5.9560	44.12400	45.64400	0.00000	-0.42630 d
6.9487	44.12800	44.65133	0.00000	-0.33080 d
7.9414	44.13200	43.65867	0.00000	-0.25650 d
8.9341	44.13600	42.66600	0.00000	-0.19807 d
9.9267	44.14000	41.67333	0.00000	-0.15168 d
10.919	44.14400	40.68067	0.00000	-0.11453 d
11.912	44.14800	39.68800	0.00000	-0.084590 d
12.905	44.15200	38.69533	0.00000	-0.060321 d
13.897	44.15600	37.70267	0.00000	-0.040570 d
14.890	44.16000	36.71000	0.00000	-0.024449 d

d - Displacements include imported displacements.

Structure: 14-15 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0 55.00000 64.76000 0.00000 -0.46079 d
1.0700 55.00000 63.69000 0.00000 -0.60342 d
2.1400 55.00000 62.62000 0.00000 -0.79607 d
d - Displacements include imported displacements.

Structure: 15-16 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0 55.00000 62.62000 0.00000 -0.79607 d
1.6907 56.23000 61.46000 0.00000 -1.1407 d
d - Displacements include imported displacements.

Structure: 16-17 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0 56.23000 61.46000 0.00000 -1.1407 d
1.9000 56.22000 59.56000 0.00000 -2.2688 d
d - Displacements include imported displacements.

Structure: 17-g | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0 56.22000 59.56000 0.00000 -2.2688 d
1.6125 55.10000 58.40000 0.00000 -4.1299 d
d - Displacements include imported displacements.

Structure: h-49 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0 54.98000 51.60000 0.00000 -3.8808 d
1.0678 55.74000 50.85000 0.00000 -2.6461 d
2.1355 56.50000 50.10000 0.00000 -1.9479 d
d - Displacements include imported displacements.

Structure: 49-36 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0 56.50000 50.10000 0.00000 -1.9479 d
1.1950 56.50000 48.90500 0.00000 -1.2605 d
2.3900 56.50000 47.71000 0.00000 -0.87637 d
d - Displacements include imported displacements.

Structure: 36-48 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0 56.50000 47.71000 0.00000 -0.87637 d

1.1506 55.73000 46.85500 0.00000 -0.68866 d
2.3012 54.96000 46.00000 0.00000 -0.54707 d
d - Displacements include imported displacements.

Structure: 48-47 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0 54.96000 46.00000 0.00000 -0.54707 d
1.1700 54.96000 44.83000 0.00000 -0.40734 d
d - Displacements include imported displacements.

Structure: 47-51 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0 54.96000 44.83000 0.00000 -0.40734 d
1.0750 53.88500 44.83000 0.00000 -0.40392 d
2.1500 52.81000 44.83000 0.00000 -0.39794 d
3.2250 51.73500 44.83000 0.00000 -0.39089 d
4.3000 50.66000 44.83000 0.00000 -0.38391 d
5.3750 49.58500 44.83000 0.00000 -0.37766 d
6.4500 48.51000 44.83000 0.00000 -0.37230 d
7.5250 47.43500 44.83000 0.00000 -0.36751 d
8.6000 46.36000 44.83000 0.00000 -0.36251 d
9.6750 45.28500 44.83000 0.00000 -0.35616 d
10.750 44.21000 44.83000 0.00000 -0.34709 d
d - Displacements include imported displacements.

Structure: 50-46 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0 44.16000 36.71000 0.00000 -0.024449 d
1.0800 45.24000 36.71000 0.00000 -0.027160 d
2.1600 46.32000 36.71000 0.00000 -0.029516 d
3.2400 47.40000 36.71000 0.00000 -0.031517 d
4.3200 48.48000 36.71000 0.00000 -0.033168 d
5.4000 49.56000 36.71000 0.00000 -0.034466 d
6.4800 50.64000 36.71000 0.00000 -0.035404 d
7.5600 51.72000 36.71000 0.00000 -0.035961 d
8.6400 52.80000 36.71000 0.00000 -0.036110 d
9.7200 53.88000 36.71000 0.00000 -0.035818 d
10.800 54.96000 36.71000 0.00000 -0.035048 d
d - Displacements include imported displacements.

Structure: 46-47 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0 54.96000 36.71000 0.00000 -0.035048 d
1.0150 54.96000 37.72500 0.00000 -0.054156 d
2.0300 54.96000 38.74000 0.00000 -0.077696 d
3.0450 54.96000 39.75500 0.00000 -0.10678 d
4.0600 54.96000 40.77000 0.00000 -0.14285 d
5.0750 54.96000 41.78500 0.00000 -0.18783 d
6.0900 54.96000 42.80000 0.00000 -0.24431 d
7.1050 54.96000 43.81500 0.00000 -0.31583 d
8.1200 54.96000 44.83000 0.00000 -0.40734 d
d - Displacements include imported displacements.

Structure: 24-25 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	78.82000	63.10000	0.00000	0.0098279	d
1.0289	79.84889	63.09667	0.00000	0.015860	d
2.0578	80.87778	63.09333	0.00000	0.020698	d
3.0867	81.90667	63.09000	0.00000	0.024543	d
4.1156	82.93556	63.08667	0.00000	0.027564	d
5.1445	83.96444	63.08333	0.00000	0.029901	d
6.1734	84.99333	63.08000	0.00000	0.031668	d
7.2023	86.02222	63.07667	0.00000	0.032962	d
8.2312	87.05111	63.07333	0.00000	0.033864	d
9.2600	88.08000	63.07000	0.00000	0.034440	d

d - Displacements include imported displacements.

Structure: 25-26 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	88.08000	63.07000	0.00000	0.034440	d
1.0641	88.06400	62.00600	0.00000	0.034255	d
2.1282	88.04800	60.94200	0.00000	0.034075	d
3.1924	88.03200	59.87800	0.00000	0.033909	d
4.2565	88.01600	58.81400	0.00000	0.033763	d
5.3206	88.00000	57.75000	0.00000	0.033647	d

d - Displacements include imported displacements.

Structure: 26-27 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	88.00000	57.75000	0.00000	0.033647	d
1.0246	86.97545	57.76364	0.00000	0.032673	d
2.0493	85.95091	57.77727	0.00000	0.031266	d
3.0739	84.92636	57.79091	0.00000	0.029329	d
4.0985	83.90182	57.80455	0.00000	0.026741	d
5.1232	82.87727	57.81818	0.00000	0.023354	d
6.1478	81.85273	57.83182	0.00000	0.018980	d
7.1725	80.82818	57.84545	0.00000	0.013385	d
8.1971	79.80364	57.85909	0.00000	0.0062683	d
9.2217	78.77909	57.87273	0.00000	-0.0027543	d
10.246	77.75455	57.88636	0.00000	-0.014184	d
11.271	76.73000	57.90000	0.00000	-0.028681	d

d - Displacements include imported displacements.

Structure: 27-28 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	76.73000	57.90000	0.00000	-0.028681	d
1.0567	76.72333	58.95667	0.00000	-0.025544	d
2.1134	76.71667	60.01333	0.00000	-0.021613	d
3.1701	76.71000	61.07000	0.00000	-0.017094	d

d - Displacements include imported displacements.

Structure: 28-29 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z

[m] [m] [m] [m] [mm]

Vertical Offset 1

0.0 76.71000 61.07000 0.00000 -0.017094 d
1.4640 77.76500 62.08500 0.00000 -0.0016065 d
2.9280 78.82000 63.10000 0.00000 0.0098279 d
d - Displacements include imported displacements.

Structure: 27-32 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0 76.73000 57.90000 0.00000 -0.028681 d
1.0300 76.73400 56.87000 0.00000 -0.030845 d
2.0600 76.73800 55.84000 0.00000 -0.031962 d
3.0900 76.74200 54.81000 0.00000 -0.031967 d
4.1200 76.74600 53.78000 0.00000 -0.030862 d
5.1500 76.75000 52.75000 0.00000 -0.028718 d
d - Displacements include imported displacements.

Structure: 33-31 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0 87.93000 52.75000 0.00000 0.033609 d
1.0400 86.89000 52.75000 0.00000 0.032588 d
2.0800 85.85000 52.75000 0.00000 0.031110 d
3.1200 84.81000 52.75000 0.00000 0.029072 d
4.1600 83.77000 52.75000 0.00000 0.026344 d
5.2000 82.73000 52.75000 0.00000 0.022765 d
6.2400 81.69000 52.75000 0.00000 0.018131 d
7.2800 80.65000 52.75000 0.00000 0.012186 d
8.3200 79.61000 52.75000 0.00000 0.0045986 d
9.3600 78.57000 52.75000 0.00000 -0.0050573 d
10.400 77.53000 52.75000 0.00000 -0.017341 d
11.440 76.49000 52.75000 0.00000 -0.032997 d
12.480 75.45000 52.75000 0.00000 -0.053034 d
13.520 74.41000 52.75000 0.00000 -0.078848 d
14.560 73.37000 52.75000 0.00000 -0.11244 d
15.600 72.33000 52.75000 0.00000 -0.15681 d
16.640 71.29000 52.75000 0.00000 -0.21668 d
17.680 70.25000 52.75000 0.00000 -0.30010 d
d - Displacements include imported displacements.

Structure: 31-34 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0 70.25000 52.75000 0.00000 -0.30010 d
1.1236 70.22667 51.62667 0.00000 -0.26842 d
2.2472 70.20333 50.50333 0.00000 -0.23243 d
3.3707 70.18000 49.38000 0.00000 -0.19626 d
d - Displacements include imported displacements.

Structure: 34-35 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0 70.18000 49.38000 0.00000 -0.19626 d
1.3300 71.51000 49.37000 0.00000 -0.13663 d
d - Displacements include imported displacements.

Structure: 35-41 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	71.51000	49.37000	0.00000	-0.13663	d
1.2000	71.50000	48.17000	0.00000	-0.11238	d
2.4001	71.49000	46.97000	0.00000	-0.089707	d
3.6001	71.48000	45.77000	0.00000	-0.069186	d

d - Displacements include imported displacements.

Structure: 41-40 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	71.48000	45.77000	0.00000	-0.069186	d
1.0175	70.46250	45.77000	0.00000	-0.090851	d
2.0350	69.44500	45.77000	0.00000	-0.11580	d
3.0525	68.42750	45.77000	0.00000	-0.14414	d
4.0700	67.41000	45.77000	0.00000	-0.17579	d

d - Displacements include imported displacements.

Structure: 40-39 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	67.41000	45.77000	0.00000	-0.17579	d
1.3000	67.40333	44.47000	0.00000	-0.12952	d
2.6000	67.39667	43.17000	0.00000	-0.092870	d
3.9001	67.39000	41.87000	0.00000	-0.063741	d

d - Displacements include imported displacements.

Structure: 39-38 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	67.39000	41.87000	0.00000	-0.063741	d
1.0305	68.42050	41.86150	0.00000	-0.050658	d
2.0611	69.45100	41.85300	0.00000	-0.038538	d
3.0916	70.48150	41.84450	0.00000	-0.027476	d
4.1221	71.51200	41.83600	0.00000	-0.017516	d
5.1527	72.54250	41.82750	0.00000	-0.0086585	d
6.1832	73.57300	41.81900	0.00000	-873.27E-6	d
7.2137	74.60350	41.81050	0.00000	0.0058950	d
8.2443	75.63400	41.80200	0.00000	0.011717	d
9.2748	76.66450	41.79350	0.00000	0.016673	d
10.305	77.69500	41.78500	0.00000	0.020845	d
11.336	78.72550	41.77650	0.00000	0.024317	d
12.366	79.75600	41.76800	0.00000	0.027168	d
13.397	80.78650	41.75950	0.00000	0.029472	d
14.427	81.81700	41.75100	0.00000	0.031298	d
15.458	82.84750	41.74250	0.00000	0.032708	d
16.489	83.87800	41.73400	0.00000	0.033759	d
17.519	84.90850	41.72550	0.00000	0.034500	d
18.550	85.93900	41.71700	0.00000	0.034976	d
19.580	86.96950	41.70850	0.00000	0.035227	d
20.611	88.00000	41.70000	0.00000	0.035285	d

d - Displacements include imported displacements.

Structure: 38-25 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	88.00000	41.70000	0.00000	0.035285	d
1.0176	88.00381	42.71762	0.00000	0.035192	d
2.0353	88.00762	43.73524	0.00000	0.035069	d
3.0529	88.01143	44.75286	0.00000	0.034923	d
4.0705	88.01524	45.77048	0.00000	0.034759	d
5.0881	88.01905	46.78810	0.00000	0.034583	d
6.1058	88.02286	47.80571	0.00000	0.034403	d
7.1234	88.02667	48.82333	0.00000	0.034226	d
8.1410	88.03048	49.84095	0.00000	0.034059	d
9.1586	88.03429	50.85857	0.00000	0.033909	d
10.176	88.03810	51.87619	0.00000	0.033782	d
11.194	88.04190	52.89381	0.00000	0.033683	d
12.212	88.04571	53.91143	0.00000	0.033618	d
13.229	88.04952	54.92905	0.00000	0.033588	d
14.247	88.05333	55.94667	0.00000	0.033594	d
15.264	88.05714	56.96429	0.00000	0.033636	d
16.282	88.06095	57.98190	0.00000	0.033712	d
17.300	88.06476	58.99952	0.00000	0.033819	d
18.317	88.06857	60.01714	0.00000	0.033951	d
19.335	88.07238	61.03476	0.00000	0.034104	d
20.353	88.07619	62.05238	0.00000	0.034269	d
21.370	88.08000	63.07000	0.00000	0.034440	d

d - Displacements include imported displacements.

Structure: 20-22 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	55.96000	70.70000	0.00000	-0.094618	d
1.0170	56.97700	70.69900	0.00000	-0.092263	d
2.0340	57.99400	70.69800	0.00000	-0.088966	d
3.0510	59.01100	70.69700	0.00000	-0.084723	d
4.0680	60.02800	70.69600	0.00000	-0.079571	d
5.0850	61.04500	70.69500	0.00000	-0.073593	d
6.1020	62.06200	70.69400	0.00000	-0.066910	d
7.1190	63.07900	70.69300	0.00000	-0.059669	d
8.1360	64.09600	70.69200	0.00000	-0.052034	d
9.1530	65.11300	70.69100	0.00000	-0.044178	d
10.170	66.13000	70.69000	0.00000	-0.036268	d

d - Displacements include imported displacements.

Structure: 22-b | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	66.13000	70.69000	0.00000	-0.036268	d
0.69360	66.14000	69.99647	0.00000	-0.047913	d
1.3872	66.15000	69.30294	0.00000	-0.061186	d
2.0808	66.16000	68.60941	0.00000	-0.076324	d
2.7744	66.17000	67.91588	0.00000	-0.093607	d
3.4680	66.18000	67.22235	0.00000	-0.11337	d
4.1616	66.19000	66.52882	0.00000	-0.13601	d
4.8552	66.20000	65.83529	0.00000	-0.16203	d
5.5488	66.21000	65.14176	0.00000	-0.19203	d
6.2424	66.22000	64.44824	0.00000	-0.22681	d
6.9360	66.23000	63.75471	0.00000	-0.26744	d
7.6296	66.24000	63.06118	0.00000	-0.31542	d
8.3232	66.25000	62.36765	0.00000	-0.37293	d
9.0168	66.26000	61.67412	0.00000	-0.44337	d
9.7104	66.27000	60.98059	0.00000	-0.53209	d
10.404	66.28000	60.28706	0.00000	-0.64792	d
11.098	66.29000	59.59353	0.00000	-0.80590	d
11.791	66.30000	58.90000	0.00000	-1.0332	d

d - Displacements include imported displacements.

Structure: e-45 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	64.74000	51.60000	0.00000	-1.4500 d
0.98415	64.72267	50.61600	0.00000	-0.98315 d
1.9683	64.70533	49.63200	0.00000	-0.72328 d
2.9525	64.68800	48.64800	0.00000	-0.55445 d
3.9366	64.67067	47.66400	0.00000	-0.43389 d
4.9208	64.65333	46.68000	0.00000	-0.34263 d
5.9049	64.63600	45.69600	0.00000	-0.27113 d
6.8891	64.61867	44.71200	0.00000	-0.21398 d
7.8732	64.60133	43.72800	0.00000	-0.16776 d
8.8574	64.58400	42.74400	0.00000	-0.13009 d
9.8415	64.56667	41.76000	0.00000	-0.099223 d
10.826	64.54933	40.77600	0.00000	-0.073836 d
11.810	64.53200	39.79200	0.00000	-0.052897 d
12.794	64.51467	38.80800	0.00000	-0.035593 d
13.778	64.49733	37.82400	0.00000	-0.021277 d
14.762	64.48000	36.84000	0.00000	-0.0094300 d

d - Displacements include imported displacements.

Structure: 18-31 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	59.17000	64.78000	0.00000	-0.42894 d
1.1384	60.30833	64.77333	0.00000	-0.40365 d
2.2767	61.44667	64.76667	0.00000	-0.37220 d
3.4151	62.58500	64.76000	0.00000	-0.33634 d
4.5534	63.72333	64.75333	0.00000	-0.29779 d
5.6918	64.86167	64.74667	0.00000	-0.25815 d
6.8301	66.00000	64.74000	0.00000	-0.21889 d

d - Displacements include imported displacements.

Structure: 23-24 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	66.00000	63.14000	0.00000	-0.32239 d
1.0683	67.06833	63.13667	0.00000	-0.26669 d
2.1367	68.13667	63.13333	0.00000	-0.21596 d
3.2050	69.20500	63.13000	0.00000	-0.17135 d
4.2734	70.27333	63.12667	0.00000	-0.13315 d
5.3417	71.34167	63.12333	0.00000	-0.10102 d
6.4100	72.41000	63.12000	0.00000	-0.074325 d
7.4784	73.47833	63.11667	0.00000	-0.052325 d
8.5467	74.54667	63.11333	0.00000	-0.034295 d
9.6150	75.61500	63.11000	0.00000	-0.019586 d
10.683	76.68333	63.10667	0.00000	-0.0076342 d
11.752	77.75167	63.10333	0.00000	0.0020377 d
12.820	78.82000	63.10000	0.00000	0.0098279 d

d - Displacements include imported displacements.

Structure: b-27 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	66.10000	58.46000	0.00000	-1.3687 d
-----	----------	----------	---------	-----------

1.0645	67.16300	58.40400	0.00000	-0.84317	d
2.1289	68.22600	58.34800	0.00000	-0.56237	d
3.1934	69.28900	58.29200	0.00000	-0.39215	d
4.2579	70.35200	58.23600	0.00000	-0.28041	d
5.3224	71.41500	58.18000	0.00000	-0.20267	d
6.3868	72.47800	58.12400	0.00000	-0.14630	d
7.4513	73.54100	58.06800	0.00000	-0.10428	d
8.5158	74.60400	58.01200	0.00000	-0.072341	d
9.5803	75.66700	57.95600	0.00000	-0.047763	d
10.645	76.73000	57.90000	0.00000	-0.028681	d

d - Displacements include imported displacements.

Structure: 42-37 | Sub-structure:

Dist.	Coordinates			Displacements	
	x	y	z	z	
[m]	[m]	[m]	[m]	[mm]	

Vertical Offset 1

0.0	64.54000	46.73000	0.00000	-0.35254	d
1.0183	65.55826	46.71783	0.00000	-0.30101	d
2.0367	66.57652	46.70565	0.00000	-0.25282	d
3.0550	67.59478	46.69348	0.00000	-0.20876	d
4.0733	68.61304	46.68130	0.00000	-0.16937	d
5.0917	69.63130	46.66913	0.00000	-0.13486	d
6.1100	70.64957	46.65696	0.00000	-0.10510	d
7.1283	71.66783	46.64478	0.00000	-0.079770	d
8.1467	72.68609	46.63261	0.00000	-0.058407	d
9.1650	73.70435	46.62043	0.00000	-0.040522	d
10.183	74.72261	46.60826	0.00000	-0.025636	d
11.202	75.74087	46.59609	0.00000	-0.013307	d
12.220	76.75913	46.58391	0.00000	-0.0031431	d
13.238	77.77739	46.57174	0.00000	0.0051959	d
14.257	78.79565	46.55957	0.00000	0.012002	d
15.275	79.81391	46.54739	0.00000	0.017522	d
16.293	80.83217	46.53522	0.00000	0.021966	d
17.312	81.85043	46.52304	0.00000	0.025508	d
18.330	82.86870	46.51087	0.00000	0.028297	d
19.348	83.88696	46.49870	0.00000	0.030455	d
20.367	84.90522	46.48652	0.00000	0.032086	d
21.385	85.92348	46.47435	0.00000	0.033278	d
22.403	86.94174	46.46217	0.00000	0.034102	d
23.422	87.96000	46.45000	0.00000	0.034621	d

d - Displacements include imported displacements.

Structure: 47-43 | Sub-structure:

Dist.	Coordinates			Displacements	
	x	y	z	z	
[m]	[m]	[m]	[m]	[mm]	

Vertical Offset 1

0.0	54.96000	44.83000	0.00000	-0.40734	d
1.0600	56.02000	44.83000	0.00000	-0.40663	d
2.1200	57.08000	44.83000	0.00000	-0.40057	d
3.1800	58.14000	44.83000	0.00000	-0.38839	d
4.2400	59.20000	44.83000	0.00000	-0.37011	d
5.3000	60.26000	44.83000	0.00000	-0.34644	d
6.3600	61.32000	44.83000	0.00000	-0.31860	d
7.4200	62.38000	44.83000	0.00000	-0.28802	d
8.4800	63.44000	44.83000	0.00000	-0.25605	d
9.5400	64.50000	44.83000	0.00000	-0.22385	d

d - Displacements include imported displacements.

Structure: 44-39 | Sub-structure:

Dist.	Coordinates			Displacements	
	x	y	z	z	
[m]	[m]	[m]	[m]	[mm]	

Vertical Offset 1

0.0	64.44000	41.91000	0.00000	-0.10539	d
1.4751	65.91500	41.89000	0.00000	-0.084025	d
2.9503	67.39000	41.87000	0.00000	-0.063741	d

d - Displacements include imported displacements.

Structure: 46-45 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	54.96000	36.71000	0.00000	-0.035048	d
1.0579	56.01778	36.72444	0.00000	-0.034046	d
2.1158	57.07556	36.73889	0.00000	-0.032532	d
3.1736	58.13333	36.75333	0.00000	-0.030500	d
4.2315	59.19111	36.76778	0.00000	-0.027962	d
5.2894	60.24889	36.78222	0.00000	-0.024950	d
6.3473	61.30667	36.79667	0.00000	-0.021517	d
7.4051	62.36444	36.81111	0.00000	-0.017730	d
8.4630	63.42222	36.82556	0.00000	-0.013672	d
9.5209	64.48000	36.84000	0.00000	-0.0094300	d

d - Displacements include imported displacements.

Structure: a-12 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	44.06000	58.90000	0.00000	-2.4133	d
1.1151	42.95250	58.77000	0.00000	-2.8989	d
2.2302	41.84500	58.64000	0.00000	-3.2332	d
3.3453	40.73750	58.51000	0.00000	-3.4233	d
4.4604	39.63000	58.38000	0.00000	-2.6362	d

d - Displacements include imported displacements.

Structure: 12-11 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	39.63000	58.38000	0.00000	-2.6362	d
1.1167	39.63000	57.26333	0.00000	-3.9549	d
2.2333	39.63000	56.14667	0.00000	-4.3047	d
3.3500	39.63000	55.03000	0.00000	-4.4098	d
4.4667	39.63000	53.91333	0.00000	-4.3418	d
5.5833	39.63000	52.79667	0.00000	-4.0284	d
6.7000	39.63000	51.68000	0.00000	-2.7160	d

d - Displacements include imported displacements.

Structure: 11-f | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	39.63000	51.68000	0.00000	-2.7160	d
0.55884	40.18875	51.67000	0.00000	-3.6550	d
1.1177	40.74750	51.66000	0.00000	-4.0082	d
1.6765	41.30625	51.65000	0.00000	-4.1736	d
2.2354	41.86500	51.64000	0.00000	-4.2436	d
2.7942	42.42375	51.63000	0.00000	-4.2458	d
3.3530	42.98250	51.62000	0.00000	-4.1788	d
3.9119	43.54125	51.61000	0.00000	-4.0092	d
4.4707	44.10000	51.60000	0.00000	-3.6067	d

d - Displacements include imported displacements.

Structure: ag | Sub-structure:

Dist.	Coordinates			Displacements
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	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	44.06000	58.90000	0.00000	-2.4133 d
1.0047	45.06364	58.85455	0.00000	-2.1372 d
2.0093	46.06727	58.80909	0.00000	-2.0034 d
3.0140	47.07091	58.76364	0.00000	-1.9567 d
4.0187	48.07455	58.71818	0.00000	-1.9551 d
5.0233	49.07818	58.67273	0.00000	-1.9889 d
6.0280	50.08182	58.62727	0.00000	-2.0579 d
7.0327	51.08545	58.58182	0.00000	-2.1676 d
8.0373	52.08909	58.53636	0.00000	-2.3321 d
9.0420	53.09273	58.49091	0.00000	-2.5839 d
10.047	54.09636	58.44545	0.00000	-3.0160 d
11.051	55.10000	58.40000	0.00000	-4.1299 d

d - Displacements include imported displacements.

Structure: gb | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	55.10000	58.40000	0.00000	-4.1299 d
0.57001	55.67000	58.40300	0.00000	-4.6759 d
1.1400	56.24000	58.40600	0.00000	-4.9165 d
1.7100	56.81000	58.40900	0.00000	-5.0236 d
2.2800	57.38000	58.41200	0.00000	-5.0479 d
2.8500	57.95000	58.41500	0.00000	-5.0062 d
3.4200	58.52000	58.41800	0.00000	-4.8955 d
3.9901	59.09000	58.42100	0.00000	-4.6836 d
4.5601	59.66000	58.42400	0.00000	-4.2523 d
5.1301	60.23000	58.42700	0.00000	-3.5994 d
5.7001	60.80000	58.43000	0.00000	-3.2614 d
6.2701	61.37000	58.43300	0.00000	-3.0490 d
6.8401	61.94000	58.43600	0.00000	-2.8842 d
7.4101	62.51000	58.43900	0.00000	-2.7377 d
7.9801	63.08000	58.44200	0.00000	-2.5957 d
8.5501	63.65000	58.44500	0.00000	-2.4481 d
9.1201	64.22000	58.44800	0.00000	-2.2843 d
9.6901	64.79000	58.45100	0.00000	-2.0898 d
10.260	65.36000	58.45400	0.00000	-1.8409 d
10.830	65.93000	58.45700	0.00000	-1.4937 d
11.400	66.50000	58.46000	0.00000	-1.1189 d

d - Displacements include imported displacements.

Structure: bc | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	66.50000	58.46000	0.00000	-1.1189 d
0.27800	66.50000	58.18200	0.00000	-1.2286 d
0.55600	66.50000	57.90400	0.00000	-1.3317 d
0.83400	66.50000	57.62600	0.00000	-1.4214 d
1.1120	66.50000	57.34800	0.00000	-1.4967 d
1.3900	66.50000	57.07000	0.00000	-1.5587 d
1.6680	66.50000	56.79200	0.00000	-1.6087 d
1.9460	66.50000	56.51400	0.00000	-1.6480 d
2.2240	66.50000	56.23600	0.00000	-1.6778 d
2.5020	66.50000	55.95800	0.00000	-1.6986 d
2.7800	66.50000	55.68000	0.00000	-1.7112 d
3.0580	66.50000	55.40200	0.00000	-1.7158 d
3.3360	66.50000	55.12400	0.00000	-1.7125 d
3.6140	66.50000	54.84600	0.00000	-1.7013 d
3.8920	66.50000	54.56800	0.00000	-1.6820 d
4.1700	66.50000	54.29000	0.00000	-1.6540 d
4.4480	66.50000	54.01200	0.00000	-1.6167 d
4.7260	66.50000	53.73400	0.00000	-1.5692 d
5.0040	66.50000	53.45600	0.00000	-1.5104 d
5.2820	66.50000	53.17800	0.00000	-1.4390 d

5.5600 66.50000 52.90000 0.00000 -1.3540 d
d - Displacements include imported displacements.

Structure: cd | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0 66.50000 52.90000 0.00000 -1.3540 d
1.7493 65.00000 52.00000 0.00000 -1.6905 d
d - Displacements include imported displacements.

Structure: eh | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0 64.74000 51.60000 0.00000 -1.4500 d
1.0844 63.65556 51.60000 0.00000 -1.7188 d
2.1689 62.57111 51.60000 0.00000 -1.9701 d
3.2533 61.48667 51.60000 0.00000 -2.2755 d
4.3378 60.40222 51.60000 0.00000 -2.8531 d
5.4222 59.31778 51.60000 0.00000 -4.4733 d
6.5067 58.23333 51.60000 0.00000 -4.9793 d
7.5911 57.14889 51.60000 0.00000 -5.0266 d
8.6756 56.06444 51.60000 0.00000 -4.7765 d
9.7600 54.98000 51.60000 0.00000 -3.8808 d
d - Displacements include imported displacements.

Structure: hf | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0 54.98000 51.60000 0.00000 -3.8808 d
1.0880 53.89200 51.60000 0.00000 -2.9850 d
2.1760 52.80400 51.60000 0.00000 -2.6491 d
3.2640 51.71600 51.60000 0.00000 -2.4772 d
4.3520 50.62800 51.60000 0.00000 -2.3849 d
5.4400 49.54000 51.60000 0.00000 -2.3436 d
6.5280 48.45200 51.60000 0.00000 -2.3429 d
7.6160 47.36400 51.60000 0.00000 -2.3828 d
8.7040 46.27600 51.60000 0.00000 -2.4773 d
9.7920 45.18800 51.60000 0.00000 -2.7032 d
10.880 44.10000 51.60000 0.00000 -3.6067 d
d - Displacements include imported displacements.

Structure: de | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0 65.00000 52.00000 0.00000 -1.6905 d
0.11927 64.93500 51.90000 0.00000 -1.6213 d
0.23854 64.87000 51.80000 0.00000 -1.5588 d
0.35781 64.80500 51.70000 0.00000 -1.5020 d
0.47707 64.74000 51.60000 0.00000 -1.4500 d
d - Displacements include imported displacements.

Specific Building Damage Results - All Segments

Structure: 21-20 | Sub-structure:

Vertical Offset **Segment** **Start Length Curvature Deflection Average** **Max** **Max**
Gradient Max Gradient **Min** **Damage** **Ratio** **Horizontal** **Tensile** **of**
from Line for **of Vertical** **Radius of** **Category** **Strain** **Strain**
of Vertical **Horizontal Displacement Curvature**
Vertical **Movement**
Horizontal Displacement Curvature
Movement **Curve**
Displacement **Calculations**
Curve

[m] [m] [m] [m] [%] [%] [%]
 [m] 0.0 All settlements are less than the Settlement Trough Limit Sensitivity.
 Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 19-20 | Sub-structure:

Vertical Offset **Segment** **Start Length Curvature Deflection Average** **Max** **Max**
Gradient Max Gradient **Min** **Damage** **Ratio** **Horizontal** **Tensile** **of**
from Line for **of Vertical** **Radius of** **Category** **Strain** **Strain**
of Vertical **Horizontal Displacement Curvature**
Vertical **Movement**
Horizontal Displacement Curvature
Movement **Curve**
Displacement **Calculations**
Curve

[m] [m] [m] [m] [%] [%] [%]
 [m] 0.0 1 0.0 4.0319 Sagging 239.67E-6 0.0 233.92E-6
 0.0 -41.307E-6 180440. 0

(Negligible)
 Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 19-18 | Sub-structure:

Vertical Offset **Segment** **Start Length Curvature Deflection Average** **Max** **Max**
Gradient Max Gradient **Min** **Damage** **Ratio** **Horizontal** **Tensile** **of**
from Line for **of Vertical** **Radius of** **Category** **Strain** **Strain**
of Vertical **Horizontal Displacement Curvature**
Vertical **Movement**
Horizontal Displacement Curvature
Movement **Curve**
Displacement **Calculations**
Curve

[m] [m] [m] [m] [%] [%] [%]
 [m] 0.0 1 0.0 2.0092 Sagging 564.64E-6 0.0 561.23E-6
 0.0 98.332E-6 44053. 0

(Negligible)
 Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 18-13 | Sub-structure:

Vertical Offset **Segment** **Start Length Curvature Deflection Average** **Max** **Max**
Gradient Max Gradient **Min** **Damage** **Ratio** **Horizontal** **Tensile** **of**
from Line for **of Vertical** **Radius of** **Category** **Strain** **Strain**
of **of Vertical** **Radius of** **Category** **Strain** **Strain**
Vertical **Horizontal Displacement Curvature**
Horizontal Displacement Curvature
Movement **Curve**
Displacement **Calculations**
Curve

[m] [m] [m] [m] [%] [%] [%]
 [m] 0.0 1 0.0 6.9858 Hogging 392.23E-6 0.0 385.13E-6
 0.0 16.335E-6 157200. 0

(Negligible)

0.0 -8.8578E-6 861170. 2 6.9858 4.7139 Sagging 66.854E-6 0.0 64.695E-6
0

(Negligible)

0.0 -8.6009E-6 334340. 3 11.700 3.2593 Hogging 75.587E-6 0.0 75.281E-6
0

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 21-a | Sub-structure:

Vertical Offset Gradient Max from Line for of Vertical Vertical Horizontal Displacement Movement Displacement Calculations Curve	Segment Max Gradient Radius of Vertical Displacement Curve	Start Min Category	Length Damage	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max
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[m]	[m]	[m]	[m]	[%]	[%]	[%]		
[m]	0.0	1	1.0430	10.777	Sagging	0.0088242	0.0	0.0095682
0.0	0.0012493	746.69	0					

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: f-50 | Sub-structure:

Vertical Offset Gradient Max from Line for of Vertical Vertical Horizontal Displacement Movement Displacement Calculations Curve	Segment Max Gradient Radius of Vertical Displacement Curve	Start Min Category	Length Damage	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max	Max
---	---	--------------------------	------------------	-----------	---------------------	---------------------------------	--------------------------	-----	-----

[m]	[m]	[m]	[m]	[%]	[%]	[%]			
[m]	0.0	1	0.0	10.919	Sagging	0.015724	0.0	0.017207	
0.0	-0.0018073	661.81	0						

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 14-15 | Sub-structure:

Vertical Offset Gradient Max from Line for of Vertical Vertical Horizontal Displacement Movement Displacement Calculations Curve	Segment Max Gradient Radius of Vertical Displacement Curve	Start Min Category	Length Damage	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max	Max
---	---	--------------------------	------------------	-----------	---------------------	---------------------------------	--------------------------	-----	-----

[m]	[m]	[m]	[m]	[%]	[%]	[%]			
[m]	0.0	1	0.0	2.1390	Sagging	0.0011572	0.0	0.0011492	
0.0	180.04E-6	22883.	0						

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 15-16 | Sub-structure:

Vertical Offset Gradient Max from Line for of Vertical Vertical Horizontal Displacement Movement Displacement Calculations Curve	Segment Max Gradient Radius of Vertical Displacement Curve	Start Min Category	Length Damage	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max	Max
---	---	--------------------------	------------------	-----------	---------------------	---------------------------------	--------------------------	-----	-----

from Line for of Vertical Horizontal Displacement Movement Displacement Calculations	Radius of Vertical Displacement Curve	Category	Start	Length	Curvature	Deflection	Average	Max	Max
			Damage			Ratio	Horizontal	Tensile	of
							Strain	Strain	Curve
[m]	[m]		[m]	[m]		[%]	[%]	[%]	Curve
0.0	0.0	1	0.0	1.6897	None	0.0	0.0	0.0	
0.0	203.82E-6	-		0					

(Negligible)
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 16-17 | Sub-structure:

Vertical Offset Gradient Max from Line for of Vertical Horizontal Displacement Movement Displacement Calculations	Segment Max Gradient Radius of Vertical Displacement Curve	Segment Min Category	Start	Length	Curvature	Deflection	Average	Max	Max
			Damage			Ratio	Horizontal	Tensile	of
							Strain	Strain	Curve
[m]	[m]		[m]	[m]		[%]	[%]	[%]	Curve
0.0	0.0	1	0.0	1.8990	None	0.0	0.0	0.0	
0.0	593.76E-6	-		0					

(Negligible)
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 17-g | Sub-structure:

Vertical Offset Gradient Max from Line for of Vertical Horizontal Displacement Movement Displacement Calculations	Segment Max Gradient Radius of Vertical Displacement Curve	Segment Min Category	Start	Length	Curvature	Deflection	Average	Max	Max
			Damage			Ratio	Horizontal	Tensile	of
							Strain	Strain	Curve
[m]	[m]		[m]	[m]		[%]	[%]	[%]	Curve
0.0	0.0	1	0.0	1.6115	None	0.0	0.0	0.0	
0.0	0.0011542	-		0					

(Negligible)
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: h-49 | Sub-structure:

Vertical Offset Gradient Max from Line for of Vertical Horizontal Displacement Movement Displacement Calculations	Segment Max Gradient Radius of Vertical Displacement Curve	Segment Min Category	Start	Length	Curvature	Deflection	Average	Max	Max
			Damage			Ratio	Horizontal	Tensile	of
							Strain	Strain	Curve
[m]	[m]		[m]	[m]		[%]	[%]	[%]	Curve
0.0	0.0	1	0.0	2.1345	Sagging	0.012438	0.0	0.012353	
0.0	-0.0011563	2124.4		0					

(Negligible)
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 49-36 | Sub-structure:

Vertical Offset Segment Start Length Curvature Deflection Average Max Max
 Gradient Max Gradient Min Damage Ratio Horizontal Tensile of
 from Line for of Vertical Radius of Category Strain Strain
 of Vertical Vertical Horizontal Displacement Curvature
 Movement Displacement Curve
 Calculations
 Curve

[m] [m] [m] [m] [%] [%] [%]
 [m] 0.0 1 0.0 2.3890 Sagging 0.0062832 0.0 0.0062293
 0.0 -575.22E-6 4706.7 0

(Negligible)
 Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 36-48 | Sub-structure:

Vertical Offset Segment Start Length Curvature Deflection Average Max Max
 Gradient Max Gradient Min Damage Ratio Horizontal Tensile of
 from Line for of Vertical Radius of Category Strain Strain
 of Vertical Vertical Horizontal Displacement Curvature
 Movement Displacement Curve
 Calculations
 Curve

[m] [m] [m] [m] [%] [%] [%]
 [m] 0.0 1 0.0 2.3002 Sagging 992.37E-6 0.0 984.44E-6
 0.0 -163.14E-6 28694. 0

(Negligible)
 Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 48-47 | Sub-structure:

Vertical Offset Segment Start Length Curvature Deflection Average Max Max
 Gradient Max Gradient Min Damage Ratio Horizontal Tensile of
 from Line for of Vertical Radius of Category Strain Strain
 of Vertical Vertical Horizontal Displacement Curvature
 Movement Displacement Curve
 Calculations
 Curve

[m] [m] [m] [m] [%] [%] [%]
 [m] 0.0 1 0.0 1.1690 None 0.0 0.0 0.0
 0.0 -119.43E-6 - 0

(Negligible)
 Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 47-51 | Sub-structure:

Vertical Offset Segment Start Length Curvature Deflection Average Max Max
 Gradient Max Gradient Min Damage Ratio Horizontal Tensile of
 from Line for of Vertical Radius of Category Strain Strain
 of Vertical Vertical Horizontal Displacement Curvature
 Movement Displacement Curve
 Calculations
 Curve

[m] [m] [m] [m] [%] [%] [%]
 [m] 0.0 1 0.0 3.3085 Hogging 63.266E-6 0.0 62.978E-6
 0.0 -6.5583E-6 393290. 0

(Negligible)
 0.0 -6.4954E-6 1.4980E+6 2 3.3085 3.7899 Sagging 33.621E-6 0.0 32.938E-6
 0

(Negligible)
 0.0 -8.4414E-6 377270. 3 7.0984 3.6506 Hogging 68.325E-6 0.0 67.985E-6
 0

(Negligible)
 Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 50-46 | Sub-structure:

Vertical Offset Gradient Max from Line for of Vertical Vertical Horizontal Movement Displacement Calculations Curve	Segment Max Gradient Radius of Vertical Displacement Curve	Start Min Damage	Length Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of
[m]	[m]	[m]	[m]	[%]	[%]	[%]	
0.0	All settlements are less than the Settlement Trough Limit Sensitivity.						
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.							

Structure: 46-47 | Sub-structure:

Vertical Offset Gradient Max from Line for of Vertical Vertical Horizontal Movement Displacement Calculations Curve	Segment Max Gradient Radius of Vertical Displacement Curve	Start Min Damage	Length Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max
[m]	[m]	[m]	[m]	[%]	[%]	[%]	
0.0	All settlements are less than the Settlement Trough Limit Sensitivity.						
0.0	90.155E-6	48507.	1 3.0450 5.0740	Sagging	841.67E-6	0.0	809.99E-6
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.							

(Negligible)
 Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 24-25 | Sub-structure:

Vertical Offset Gradient Max from Line for of Vertical Vertical Horizontal Movement Displacement Calculations Curve	Segment Max Gradient Radius of Vertical Displacement Curve	Start Min Damage	Length Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of
[m]	[m]	[m]	[m]	[%]	[%]	[%]	
0.0	All settlements are less than the Settlement Trough Limit Sensitivity.						
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.							

Structure: 25-26 | Sub-structure:

Vertical Offset Gradient Max from Line for of Vertical Vertical Horizontal Movement Displacement Calculations Curve	Segment Max Gradient Radius of Vertical Displacement Curve	Start Min Damage	Length Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of
[m]	[m]	[m]	[m]	[%]	[%]	[%]	
0.0	All settlements are less than the Settlement Trough Limit Sensitivity.						
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.							

Vertical Strain Strain
Horizontal Displacement Curvature
Movement
Displacement Curve
Calculations
Curve

[m] [m] [m] [%] [%] [%]
[m]

0.0 All settlements are less than the Settlement Trough Limit Sensitivity.
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 26-27 | Sub-structure:

Vertical Offset Segment Start Length Curvature Deflection Average Max Max
Gradient Max Gradient Min Damage Ratio Horizontal Tensile of
from Line for of Vertical Radius of Category Strain Strain
of Vertical Vertical
Horizontal Displacement Curvature
Movement
Displacement Curve
Calculations
Curve

[m] [m] [m] [%] [%] [%]
[m]

0.0 All settlements are less than the Settlement Trough Limit Sensitivity.
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 27-28 | Sub-structure:

Vertical Offset Segment Start Length Curvature Deflection Average Max Max
Gradient Max Gradient Min Damage Ratio Horizontal Tensile of
from Line for of Vertical Radius of Category Strain Strain
of Vertical Vertical
Horizontal Displacement Curvature
Movement
Displacement Curve
Calculations
Curve

[m] [m] [m] [%] [%] [%]
[m]

0.0 All settlements are less than the Settlement Trough Limit Sensitivity.
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 28-29 | Sub-structure:

Vertical Offset Segment Start Length Curvature Deflection Average Max Max
Gradient Max Gradient Min Damage Ratio Horizontal Tensile of
from Line for of Vertical Radius of Category Strain Strain
of Vertical Vertical
Horizontal Displacement Curvature
Movement
Displacement Curve
Calculations
Curve

[m] [m] [m] [%] [%] [%]
[m]

0.0 All settlements are less than the Settlement Trough Limit Sensitivity.
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 27-32 | Sub-structure:

Vertical Offset Segment Start Length Curvature Deflection Average Max Max
Gradient Max Gradient Min Damage Ratio Horizontal Tensile of
from Line for of Vertical Radius of Category Strain Strain
of Vertical Vertical
Horizontal Displacement Curvature
Movement
Displacement Curve

Calculations

Curve

[m]	[m]	[m]	[m]	[%]	[%]	[%]
[m]						
0.0						

All settlements are less than the Settlement Trough Limit Sensitivity.
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 33-31 | Sub-structure:

Vertical Offset	Segment	Start	Length	Curvature	Deflection	Average	Max	Max
Gradient Max Gradient	Min	Damage						
from Line for	of Vertical	Radius of	Category		Ratio	Horizontal	Tensile	
of	Vertical	Radius of	Category			Strain	Strain	
[m]		[m]	[m]	[m]	[%]	[%]	[%]	
0.0		1 14.560	3.1190	Sagging	668.59E-6	0.0	658.86E-6	
0.0	80.211E-6	42286.	0					

(Negligible)
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 31-34 | Sub-structure:

Vertical Offset	Segment	Start	Length	Curvature	Deflection	Average	Max	Max
Gradient Max Gradient	Min	Damage						
from Line for	of Vertical	Radius of	Category		Ratio	Horizontal	Tensile	
of	Vertical	Radius of	Category			Strain	Strain	
[m]		[m]	[m]	[m]	[%]	[%]	[%]	
0.0		1 0.0	2.9105	Hogging	91.792E-6	0.0	91.517E-6	
0.0	-32.194E-6	236550.	0					
		2 2.9105	0.45920	Hogging	0.0	0.0	0.0	
0.0	-32.194E-6	1.4989E+6	0					

(Negligible)
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 34-35 | Sub-structure:

Vertical Offset	Segment	Start	Length	Curvature	Deflection	Average	Max	Max
Gradient Max Gradient	Min	Damage						
from Line for	of Vertical	Radius of	Category		Ratio	Horizontal	Tensile	of
of	Vertical	Radius of	Category			Strain	Strain	
[m]		[m]	[m]	[m]	[%]	[%]	[%]	
0.0		1 0.0	1.3290	Sagging	0.0	0.0	0.0	
0.0	-44.829E-6	-	0					

(Negligible)
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 35-41 | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Vertical Horizontal Displacement Movement Displacement Calculations	Segment Min Radius of Category	Start Damage	Length [m]	Curvature [m]	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of Curve
[m]			[m]	[m]	[%]	[%]	[%]	
0.0	1	0.0	1.2000	None	0.0	0.0	0.0	
0.0	-20.213E-6	834010.		0				

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 41-40 | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Vertical Horizontal Displacement Movement Displacement Calculations Curve	Segment Min Radius of Category	Start Damage	Length [m]	Curvature [m]	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of Curve
[m]			[m]	[m]	[%]	[%]	[%]	
0.0	1	2.0350	2.0340	Sagging	80.714E-6	0.0	80.216E-6	
0.0	31.110E-6	309560.		0				

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 40-39 | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Vertical Horizontal Displacement Movement Displacement Calculations	Segment Min Radius of Category	Start Damage	Length [m]	Curvature [m]	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of Curve
[m]			[m]	[m]	[%]	[%]	[%]	
0.0	1	0.0	1.3000	None	0.0	0.0	0.0	
0.0	-35.595E-6	166510.		0				

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 39-38 | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Vertical Horizontal Displacement Movement Displacement Calculations Curve	Segment Min Radius of Category	Start Damage	Length [m]	Curvature [m]	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of Curve
[m]			[m]	[m]	[%]	[%]	[%]	
0.0								

All settlements are less than the Settlement Trough Limit Sensitivity.
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 38-25 | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Vertical Horizontal Displacement Movement Displacement Calculations Curve	Segment Min Radius of Category	Start Damage	Length [m]	Curvature [m]	Deflection Ratio [%]	Average Horizontal Strain [%]	Max Tensile Strain [%]	Max of
0.0								

All settlements are less than the Settlement Trough Limit Sensitivity.
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 20-22 | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Vertical Horizontal Displacement Movement Displacement Calculations Curve	Segment Min Radius of Category	Start Damage	Length [m]	Curvature [m]	Deflection Ratio [%]	Average Horizontal Strain [%]	Max Tensile Strain [%]	Max of
0.0								

All settlements are less than the Settlement Trough Limit Sensitivity.
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 22-b | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of of Vertical Vertical Horizontal Displacement Movement Displacement Calculations Curve	Segment Min Radius of Category	Start Damage	Length [m]	Curvature [m]	Deflection Ratio [%]	Average Horizontal Strain [%]	Max Tensile Strain [%]	Max
0.0								
0.0	327.66E-6	6319.5	1	3.4680	8.3222	Sagging	0.0034011	0.0 0.0048821

(Negligible)
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: e-45 | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Vertical Horizontal Displacement Movement Displacement Calculations Curve	Segment Min Radius of Category	Start Damage	Length [m]	Curvature [m]	Deflection Ratio [%]	Average Horizontal Strain [%]	Max Tensile Strain [%]	Max of
0.0								
0.0	-474.35E-6	4105.1	1	0.0	8.8574	Sagging	0.0051434	0.0 0.0072215

(Negligible)
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 18-31 | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Radius of Vertical Horizontal Displacement Curvature Movement Displacement Curve Calculations Curve	Segment Min	Start Damage	Length [m]	Curvature [m]	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max
--	----------------	-----------------	---------------	------------------	---------------------	---------------------------------	--------------------------	-----

[m]			[m]	[m]	[%]	[%]	[%]	
0.0		1	0.0	5.6836	Hogging	202.78E-6	0.0	240.22E-6
0.0	-34.821E-6	196820.		0				
(Negligible)								
0.0	-34.821E-6	1.7471E+6	2	5.6836	1.1455	Sagging	0.0	0.0
				0				

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 23-24 | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Radius of Vertical Horizontal Displacement Curvature Movement Displacement Curve Calculations Curve	Segment Min	Start Damage	Length [m]	Curvature [m]	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max
--	----------------	-----------------	---------------	------------------	---------------------	---------------------------------	--------------------------	-----

[m]			[m]	[m]	[%]	[%]	[%]	
0.0		1	0.0	5.3417	Sagging	340.89E-6	0.0	515.09E-6
0.0	-52.137E-6	182780.		0				

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: b-27 | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Radius of Vertical Horizontal Displacement Curvature Movement Displacement Curve Calculations Curve	Segment Min	Start Damage	Length [m]	Curvature [m]	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max
--	----------------	-----------------	---------------	------------------	---------------------	---------------------------------	--------------------------	-----

[m]			[m]	[m]	[%]	[%]	[%]	
0.0		1	0.0	7.4513	Sagging	0.0059655	0.0	0.0088292
0.0	-493.66E-6	4072.7		0				

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 42-37 | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Radius of Vertical Horizontal Displacement Curvature	Segment Min	Start Damage	Length [m]	Curvature [m]	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max
---	----------------	-----------------	---------------	------------------	---------------------	---------------------------------	--------------------------	-----

**Movement
Displacement Curve
Calculations
Curve**

[m]	[m]	[m]	[m]	[%]	[%]	[%]
0.0	1	0.0	6.1100	Sagging	327.33E-6	0.0 497.00E-6
0.0	-50.594E-6	216290.	0			

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 47-43 | Sub-structure:

Vertical Offset Gradient Max from Line for of Vertical Vertical Horizontal Displacement Movement Displacement Calculations Curve	Segment Min Radius of	Start Damage Category	Length [m]	Curvature Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max
[m]			[m]	[m]	[%]	[%]	[%]
0.0	1	0.0	9.4472	Hogging	463.41E-6	0.0 686.25E-6	
0.0	-30.386E-6	189540.	0				

(Negligible)

0.0	2	9.4472	0.091759	None	0.0	0.0	0.0
0.0	-30.386E-6	22.485E+6	0				

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 44-39 | Sub-structure:

Vertical Offset Gradient Max from Line for of Vertical Vertical Horizontal Displacement Movement Displacement Calculations Curve	Segment Min Radius of	Start Damage Category	Length [m]	Curvature Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max
[m]			[m]	[m]	[%]	[%]	[%]
0.0	1	0.0	0.0	None	0.0	0.0	0.0
0.0	-14.483E-6	2.0135E+6	0				

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 46-45 | Sub-structure:

Vertical Offset Gradient Max from Line for of Vertical Vertical Horizontal Displacement Movement Displacement Calculations Curve	Segment Min Radius of	Start Damage Category	Length [m]	Curvature Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max
[m]			[m]	[m]	[%]	[%]	[%]

0.0 All settlements are less than the Settlement Trough Limit Sensitivity.
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: a-12 | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Vertical Horizontal Displacement Movement Displacement Calculations	Segment Min Category	Start Length Damage	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of Curve
[m]		[m]	[m]	[%]	[%]	[%]	
0.0	1	0.0	4.4594	Hogging	0.018855	0.0	0.018885
0.0	-705.88E-6	1048.5	0				

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 12-11 | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Vertical Horizontal Displacement Movement Displacement Calculations	Segment Min Category	Start Length Damage	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of Curve
[m]		[m]	[m]	[%]	[%]	[%]	
0.0	1	0.0	6.6990	Hogging	0.025835	0.0	0.033628
0.0	0.0011810	1049.9	0				

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 11-f | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Vertical Horizontal Displacement Movement Displacement Calculations	Segment Min Category	Start Length Damage	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of Curve
[m]		[m]	[m]	[%]	[%]	[%]	
0.0	1	0.0	4.4697	Hogging	0.025117	0.0	0.025200
0.0	0.0016803	455.67	0				

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: ag | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Vertical Horizontal Displacement Movement Displacement Calculations	Segment Min Category	Start Length Damage	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of Curve
[m]		[m]	[m]	[%]	[%]	[%]	
0.0	1	0.0	11.050	Sagging	0.012103	0.0	0.013354
0.0	0.0011087	1249.8	0				

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: gb | Sub-structure:

Vertical Offset	Segment	Start	Length	Curvature	Deflection	Average	Max	Max
Gradient Max Gradient	Min	Damage			Ratio	Horizontal	Tensile	
from Line for	Radius of	Category				Strain	Strain	
of Vertical	Vertical							
of Vertical	Displacement	Curvature						
Vertical	Movement							
Horizontal	Displacement	Curve						
Calculations								
Curve								

[m]	[m]	[m]	[m]		[%]	[%]	[%]		
[m]	0.0		1	0.0	4.7848	Hogging	0.020518	0.0	0.021644
0.0	-0.0011454	932.71		0					
	(Negligible)								
0.0	-0.0011454	2121.6	2	4.7848	2.9012	Sagging	0.010830	0.0	0.012996
				0					
	(Negligible)								
0.0	-657.54E-6	4691.4	3	7.6860	3.7131	Hogging	0.0069132	0.0	0.0062950
				0					

(Negligible)
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: bc | Sub-structure:

Vertical Offset	Segment	Start	Length	Curvature	Deflection	Average	Max	Max
Gradient Max Gradient	Min	Damage			Ratio	Horizontal	Tensile	
from Line for	Radius of	Category				Strain	Strain	
of Vertical	Vertical							
of Vertical	Displacement	Curvature						
Vertical	Movement							
Horizontal	Displacement	Curve						
Calculations								
Curve								

[m]	[m]	[m]	[m]		[%]	[%]	[%]		
[m]	0.0		1	0.0	5.5590	Hogging	0.0085349	0.0	0.0099708
0.0	394.31E-6	5566.1		0					
	(Negligible)								

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: cd | Sub-structure:

Vertical Offset	Segment	Start	Length	Curvature	Deflection	Average	Max	Max
Gradient Max Gradient	Min	Damage			Ratio	Horizontal	Tensile	
from Line for	Radius of	Category				Strain	Strain	
of Vertical	Vertical							
of Vertical	Displacement	Curvature						
Vertical	Movement							
Horizontal	Displacement	Curve						
Calculations								
Curve								

[m]	[m]	[m]	[m]		[%]	[%]	[%]		
[m]	0.0		1	0.0	1.7483	Sagging	0.0	0.0	0.0
0.0	192.32E-6	-		0					
	(Negligible)								

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: eh | Sub-structure:

Vertical Offset	Segment	Start	Length	Curvature	Deflection	Average	Max	Max
Gradient Max Gradient	Min	Damage						

from Line for
of Vertical Radius of Category
Vertical
Horizontal Displacement Curvature
Movement
Displacement Curve
Calculations
Curve

[m]	[m]	[m]	[m]	[m]	[m]	Ratio	Horizontal Strain	Tensile Strain	of	
0.0	0.0	247.92E-6	33127.	1	0.0	1.0738	Sagging	0.0	0.0	0.0
(Negligible)										
0.0	0.0014940		2870.5	2	1.0738	3.7309	Sagging	0.013725	0.0	0.018804
(Negligible)										
0.0	0.0014940		1604.6	3	4.8046	4.9544	Hogging	0.026537	0.0	0.028694

(Negligible)
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: hf | Sub-structure:

Vertical Offset Segment Start Length Curvature Deflection Average Max Max
Gradient Max Gradient Min Damage Ratio Horizontal Tensile of
from Line for of Vertical Radius of Category Strain Strain
of Vertical Radius of Category
Horizontal Displacement Curvature
Movement
Displacement Curve
Calculations
Curve

[m]	[m]	[m]	[m]	[m]	[m]	Ratio	Horizontal Strain	Tensile Strain	of	
0.0	0.0	830.50E-6	1453.2	1	0.0	10.879	Sagging	0.012860	0.0	0.014036

(Negligible)
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: de | Sub-structure:

Vertical Offset Segment Start Length Curvature Deflection Average Max Max
Gradient Max Gradient Min Damage Ratio Horizontal Tensile of
of of Vertical Radius of Category Strain Strain
of Vertical Radius of Category
Horizontal Displacement Curvature
Movement
Displacement Curve
Calculations
Curve

[m]	[m]	[m]	[m]	[m]	[m]	Ratio	Horizontal Strain	Tensile Strain	of	
0.0	0.0	-579.87E-6	2046.7	1	0.0	0.47607	Sagging	0.0023744	0.0	0.0023592

(Negligible)
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Specific Building Damage Results - Critical Values for All Segments within Each Sub-Structure

Structure: 21-20 | Sub-structure:

Vertical Deflection Average Max Max Max Max Gradient Max Gradient Min
Min Damage Category Ratio Horizontal Slope Settlement Tensile of of Vertical Radius
Offset from Ratio Horizontal Slope Settlement Tensile of of Vertical Radius
of Radius of

Line for Curvature Curvature Strain Strain Horizontal Displacement
 Vertical Displacement Curve
 (Hogging) (Sagging)
 Movement
 Calculations
 [m] [%] [%] [mm] [%] [m]
 [m]

Structure: 19-20 | Sub-structure:

Vertical Deflection Average Max Slope Max Max Max Gradient Max Gradient
 Min Min Damage Category
 Offset from Ratio Horizontal Settlement Tensile of of Vertical
 Radius of Radius of
 Line for Strain Strain Horizontal Displacement
 Curvature Curvature
 Vertical Displacement Curve
 (Hogging) (Sagging)
 Movement
 Calculations
 [m] [%] [%] [mm] [%]
 [m] [m]
 0.0 239.67E-6 0.0 -41.307E-6 0.25420 233.92E-6 0.0 -41.307E-6
 - 180440.0 (Negligible)

Structure: 19-18 | Sub-structure:

Vertical Deflection Average Max Slope Max Max Max Gradient Max Gradient
 Min Min Damage Category
 Offset from Ratio Horizontal Settlement Tensile of of Vertical
 Radius of Radius of
 Line for Strain Strain Horizontal Displacement
 Curvature Curvature
 Vertical Displacement Curve
 (Hogging) (Sagging)
 Movement
 Calculations
 [m] [%] [%] [mm] [%]
 [m] [m]
 0.0 564.64E-6 0.0 98.332E-6 0.42884 561.23E-6 0.0 98.332E-6
 - 44053.0 (Negligible)

Structure: 18-13 | Sub-structure:

Vertical Deflection Average Max Slope Max Max Max Gradient Max Gradient
 Min Min Damage Category
 Offset from Ratio Horizontal Settlement Tensile of of Vertical
 Radius of Radius of
 Line for Strain Strain Horizontal Displacement
 Curvature Curvature
 Vertical Displacement Curve
 (Hogging) (Sagging)
 Movement
 Calculations
 [m] [%] [%] [mm] [%]
 [m] [m]
 0.0 392.23E-6 0.0 16.335E-6 0.45985 385.13E-6 0.0 16.335E-6
 157200. 861170.0 (Negligible)

Structure: 21-a | Sub-structure:

Vertical Deflection Average Max Slope Max Max Max Gradient Max Gradient
 Min Min Damage Category
 Offset from Ratio Horizontal Settlement Tensile of of Vertical
 Radius of Radius of
 Line for Strain Strain Horizontal Displacement
 Curvature Curvature
 Vertical Displacement Curve
 (Hogging) (Sagging)
 Movement
 Calculations
 [m] [%] [%] [mm] [%]
 [m] [m]

[m]	[m]	[%]	[%]		[mm]	[%]			
0.0		0.0088242		0.0	0.0012493	2.4121	0.0095682	0.0	0.0012493
-	746.69	0	(Negligible)						

Structure: f-50 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve		
[m]	[m]	[%]	[%]	[mm]	[%]				
0.0		0.015724		0.0	-0.0018073	3.6067	0.017207	0.0	-0.0018073
-	661.81	0	(Negligible)						

Structure: 14-15 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve		
[m]	[m]	[%]	[%]	[mm]	[%]				
0.0		0.0011572		0.0	180.04E-6	0.79589	0.0011492	0.0	180.04E-6
-	22883.0	0	(Negligible)						

Structure: 15-16 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve		
[m]	[m]	[%]	[%]	[mm]	[%]				
0.0		0.0		0.0	203.82E-6	1.1405	0.0	0.0	203.82E-6
-	0	0	(Negligible)						

Structure: 16-17 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve		
[m]	[m]	[%]	[%]	[mm]	[%]				
0.0		0.0		0.0	593.76E-6	2.2682	0.0	0.0	593.76E-6
-	0	0	(Negligible)						

Structure: 17-g | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0	0.0	0.0	0.0	0.0011542	4.1287	0.0	0.0011542
- 0 (Negligible)							

Structure: h-49 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0	2124.4	0.012438	0.0	-0.0011563	3.8808	0.012353	-0.0011563
- 0 (Negligible)							

Structure: 49-36 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0	4706.7	0.0062832	0.0	-575.22E-6	1.9479	0.0062293	-575.22E-6
- 0 (Negligible)							

Structure: 36-48 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0	28694.0	992.37E-6	0.0	-163.14E-6	0.87637	984.44E-6	-163.14E-6
- 0 (Negligible)							

Structure: 48-47 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
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Offset from Radius of Curvature Vertical (Hogging) Movement Calculations	Ratio of Radius of Curvature (Sagging)	Horizontal Strain	Average Damage Category	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve	Min Radius of Curvature
[m]	[m]	[%]	[%]		[mm]	[%]			[m]
0.0	0.0	0.0	0.0	-119.43E-6	0.54707	0.0	0.0	-119.43E-6	
- 0 (Negligible)									

Structure: 47-51 | Sub-structure:

Vertical Min Offset from Radius of Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve	Min Radius of Curvature	
[m]	[m]	[%]	[%]	[mm]	[%]			[m]	
0.0	0.0	68.325E-6	0.0	-8.4414E-6	0.40734	67.985E-6	0.0	-8.4414E-6	
377270. 1.4980E+6 0 (Negligible)									

Structure: 50-46 | Sub-structure:

Vertical Min Offset from Radius of Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve	Min Radius of Curvature	
[m]	[m]	[%]	[%]	[mm]	[%]			[m]	
0.0	0.0	841.67E-6	0.0	90.155E-6	0.40725	809.99E-6	0.0	90.155E-6	
- 48507. 0 (Negligible)									

Structure: 46-47 | Sub-structure:

Vertical Min Offset from Radius of Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve	Min Radius of Curvature	
[m]	[m]	[%]	[%]	[mm]	[%]			[m]	
0.0	0.0	841.67E-6	0.0	90.155E-6	0.40725	809.99E-6	0.0	90.155E-6	
- 48507. 0 (Negligible)									

Structure: 24-25 | Sub-structure:

Vertical Min Offset from Radius of Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve	Min Radius of Curvature	
[m]	[m]	[%]	[%]	[mm]	[%]			[m]	
0.0	0.0	841.67E-6	0.0	90.155E-6	0.40725	809.99E-6	0.0	90.155E-6	
- 48507. 0 (Negligible)									

Calculations
 [m] [%] [%] [mm] [%] [m]

Structure: 25-26 | Sub-structure:

Vertical Deflection Average Max Max Max Max Gradient Max Gradient Min
 Min Damage Category
 Offset from Ratio Horizontal Slope Settlement Tensile of of Vertical Radius
 of Radius of
 Line for Strain Strain Horizontal Displacement
 Curvature Curvature
 Vertical
 (Hogging) (Sagging) Displacement Curve
 Movement
 Calculations
 [m] [%] [%] [mm] [%] [m]

Structure: 26-27 | Sub-structure:

Vertical Deflection Average Max Max Max Max Gradient Max Gradient Min
 Min Damage Category
 Offset from Ratio Horizontal Slope Settlement Tensile of of Vertical Radius
 of Radius of
 Line for Strain Strain Horizontal Displacement
 Curvature Curvature
 Vertical
 (Hogging) (Sagging) Displacement Curve
 Movement
 Calculations
 [m] [%] [%] [mm] [%] [m]

Structure: 27-28 | Sub-structure:

Vertical Deflection Average Max Max Max Max Gradient Max Gradient Min
 Min Damage Category
 Offset from Ratio Horizontal Slope Settlement Tensile of of Vertical Radius
 of Radius of
 Line for Strain Strain Horizontal Displacement
 Curvature Curvature
 Vertical
 (Hogging) (Sagging) Displacement Curve
 Movement
 Calculations
 [m] [%] [%] [mm] [%] [m]

Structure: 28-29 | Sub-structure:

Vertical Deflection Average Max Max Max Max Gradient Max Gradient Min
 Min Damage Category
 Offset from Ratio Horizontal Slope Settlement Tensile of of Vertical Radius
 of Radius of
 Line for Strain Strain Horizontal Displacement
 Curvature Curvature
 Vertical
 (Hogging) (Sagging) Displacement Curve
 Movement
 Calculations
 [m] [%] [%] [mm] [%] [m]

Structure: 27-32 | Sub-structure:

Vertical Deflection Average Max Max Max Max Gradient Max Gradient Min
 Min Damage Category
 Offset from Ratio Horizontal Slope Settlement Tensile of of Vertical Radius
 of Radius of
 Line for Strain Strain Horizontal Displacement
 Curvature Curvature

Vertical (Hogging) (Sagging) Displacement Curve
 Movement Curve
 Calculations
 [m] [%] [%] [mm] [%] [m]
 [m]

Structure: 33-31 | Sub-structure:

Vertical Deflection Average Max Slope Max Max Max Gradient Max Gradient
 Min Min Damage Category Settlement Tensile of of Vertical
 Offset from Ratio Horizontal Strain Strain Horizontal Displacement
 Radius of Radius of Curvature Curvature Displacement Curve
 Line for Strain Horizontal Displacement
 Curvature Curvature Displacement Curve
 Vertical (Hogging) (Sagging)
 Movement Curve
 Calculations
 [m] [%] [%] [mm] [%] [m]
 [m] [m]
 0.0 668.59E-6 0.0 80.211E-6 0.30002 658.86E-6 0.0 80.211E-6
 - 42286.0 (Negligible)

Structure: 31-34 | Sub-structure:

Vertical Deflection Average Max Slope Max Max Max Gradient Max Gradient
 Min Min Damage Category Settlement Tensile of of Vertical
 Offset from Ratio Horizontal Strain Strain Horizontal Displacement
 Radius of Radius of Curvature Curvature Displacement Curve
 Line for Strain Horizontal Displacement
 Curvature Curvature Displacement Curve
 Vertical (Hogging) (Sagging)
 Movement Curve
 Calculations
 [m] [%] [%] [mm] [%] [m]
 [m] [m]
 0.0 91.792E-6 0.0 -32.194E-6 0.30010 91.517E-6 0.0 -32.194E-6
 236550. - 0 (Negligible)

Structure: 34-35 | Sub-structure:

Vertical Deflection Average Max Slope Max Max Max Gradient Max Gradient
 Min Min Damage Category Settlement Tensile of of Vertical
 Offset from Ratio Horizontal Strain Strain Horizontal Displacement
 Radius of Radius of Curvature Curvature Displacement Curve
 Line for Strain Horizontal Displacement
 Curvature Curvature Displacement Curve
 Vertical (Hogging) (Sagging)
 Movement Curve
 Calculations
 [m] [%] [%] [mm] [%] [m]
 [m] [m]
 0.0 0.0 0.0 -44.829E-6 0.19626 0.0 0.0 -44.829E-6
 - 0 (Negligible)

Structure: 35-41 | Sub-structure:

Vertical Deflection Average Max Slope Max Max Max Gradient Max Gradient
 Min Min Damage Category Settlement Tensile of of Vertical
 Offset from Ratio Horizontal Strain Strain Horizontal Displacement
 Radius of Radius of Curvature Curvature Displacement Curve
 Line for Strain Horizontal Displacement
 Curvature Curvature Displacement Curve
 Vertical (Hogging) (Sagging)
 Movement Curve
 Calculations
 [m] [%] [%] [mm] [%] [m]
 [m] [m]

Calculations

[m]	[m]	[%]	[%]		[mm]	[%]		
0.0	0.0	340.89E-6	0.0	-52.137E-6	0.32239	515.09E-6	0.0	-52.137E-6
-	182780.0	(Negligible)						

Structure: b-27 | Sub-structure:

Vertical	Deflection	Average	Max Slope	Max	Max	Max Gradient	Max Gradient
Min	Min	Damage	Category	Settlement	Tensile	of	of Vertical
Offset from	Ratio	Horizontal				Horizontal	Displacement
Radius of	Radius of	Strain			Strain	Displacement	Curve
Line for	Curvature						
Curvature	Curvature						
Vertical	Vertical						
(Hogging)	(Sagging)						
Movement							
Calculations							

[m]	[m]	[%]	[%]		[mm]	[%]		
0.0	0.0	0.0059655	0.0	-493.66E-6	1.3687	0.0088292	0.0	-493.66E-6
-	4072.7	0 (Negligible)						

Structure: 42-37 | Sub-structure:

Vertical	Deflection	Average	Max Slope	Max	Max	Max Gradient	Max Gradient
Min	Min	Damage	Category	Settlement	Tensile	of	of Vertical
Offset from	Ratio	Horizontal				Horizontal	Displacement
Radius of	Radius of	Strain			Strain	Displacement	Curve
Line for	Curvature						
Curvature	Curvature						
Vertical	Vertical						
(Hogging)	(Sagging)						
Movement							
Calculations							

[m]	[m]	[%]	[%]		[mm]	[%]		
0.0	0.0	327.33E-6	0.0	-50.594E-6	0.35254	497.00E-6	0.0	-50.594E-6
-	216290.0	(Negligible)						

Structure: 47-43 | Sub-structure:

Vertical	Deflection	Average	Max Slope	Max	Max	Max Gradient	Max Gradient
Min	Min	Damage	Category	Settlement	Tensile	of	of Vertical
Offset from	Ratio	Horizontal				Horizontal	Displacement
Radius of	Radius of	Strain			Strain	Displacement	Curve
Line for	Curvature						
Curvature	Curvature						
Vertical	Vertical						
(Hogging)	(Sagging)						
Movement							
Calculations							

[m]	[m]	[%]	[%]		[mm]	[%]		
0.0	0.0	463.41E-6	0.0	-30.386E-6	0.40734	686.25E-6	0.0	-30.386E-6
-	189540.0	- 0 (Negligible)						

Structure: 44-39 | Sub-structure:

Vertical	Deflection	Average	Max Slope	Max	Max	Max Gradient	Max Gradient
Min	Min	Damage	Category	Settlement	Tensile	of	of Vertical
Offset from	Ratio	Horizontal				Horizontal	Displacement
Radius of	Radius of	Strain			Strain	Displacement	Curve
Line for	Curvature						
Curvature	Curvature						
Vertical	Vertical						
(Hogging)	(Sagging)						
Movement							
Calculations							

[m]	[m]	[%]	[%]		[mm]	[%]		
0.0	0.0	0.0	0.0	-14.483E-6	0.10539	0.0	0.0	-14.483E-6
-	-	0 (Negligible)						

Structure: 46-45 | Sub-structure:

Vertical Min Offset of Radius of Line for Curvature (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve	Min Radius
[m]	[%]	[%]		[mm]	[%]			[m]
[m]								

Structure: a-12 | Sub-structure:

Vertical Min Offset of Radius of Line for Curvature (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve	Min Radius
[m]	[%]	[%]		[mm]	[%]			[m]
[m]								
0.0	0.018855	0.0	-705.88E-6	3.4213	0.018885	0.0	-705.88E-6	
1048.5	- 0 (Negligible)							

Structure: 12-11 | Sub-structure:

Vertical Min Offset of Radius of Line for Curvature (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve	Min Radius
[m]	[%]	[%]		[mm]	[%]			[m]
[m]								
0.0	0.025835	0.0	0.0011810	4.4078	0.033628	0.0	0.0011810	
1049.9	- 0 (Negligible)							

Structure: 11-f | Sub-structure:

Vertical Min Offset of Radius of Line for Curvature (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve	Min Radius
[m]	[%]	[%]		[mm]	[%]			[m]
[m]								
0.0	0.025117	0.0	0.0016803	4.2456	0.025200	0.0	0.0016803	
455.67	- 0 (Negligible)							

Structure: ag | Sub-structure:

Vertical Min Offset of Radius of Line for Curvature (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve	Min Radius
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Offset from Radius of Curvature Vertical (Hogging) Movement Calculations	Ratio of Radius of Curvature	Horizontal Strain	Average Damage Category	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]		[mm]	[%]		
0.0	0.012103	0.0	0.0011087	4.1288	0.013354	0.0	0.0011087	
- 1249.8	0 (Negligible)							

Structure: gb | Sub-structure:

Vertical Min Offset from Radius of Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]		[mm]	[%]	
0.0	0.020518	0.0	-0.0011454	5.0475	0.021644	0.0	-0.0011454
932.71	2121.6	0 (Negligible)					

Structure: bc | Sub-structure:

Vertical Min Offset from Radius of Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]		[mm]	[%]	
0.0	0.0085349	0.0	394.31E-6	1.7154	0.0099708	0.0	394.31E-6
5566.1	- 0 (Negligible)						

Structure: cd | Sub-structure:

Vertical Min Offset from Radius of Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]		[mm]	[%]	
0.0	0.0	0.0	192.32E-6	1.6903	0.0	0.0	192.32E-6
-	- 0 (Negligible)						

Structure: eh | Sub-structure:

Vertical Min Offset from Radius of Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]		[mm]	[%]	
0.0	0.0	0.0	192.32E-6	1.6903	0.0	0.0	192.32E-6
-	- 0 (Negligible)						

Vertical (Hogging) (Sagging) Displacement Curve
 Movement Curve
 Calculations
 [m] [%] [%] [mm] [%]
 [m] [m]
 0.0 0.026537 0.0 0.0014940 5.0251 0.028694 0.0 0.0014940
 1604.6 2870.5 0 (Negligible)

Structure: hf | Sub-structure:

Vertical Deflection Average Max Slope Max Max Max Gradient Max Gradient
 Min Min Damage Category
 Offset from Ratio Horizontal Settlement Tensile of of Vertical
 Radius of Radius of Strain Strain Horizontal Displacement
 Line for Strain Strain Horizontal Displacement
 Curvature Curvature
 Vertical Displacement Curve
 (Hogging) (Sagging)
 Movement Curve
 Calculations
 [m] [%] [%] [mm] [%]
 [m] [m]
 0.0 0.012860 0.0 830.50E-6 3.8808 0.014036 0.0 830.50E-6
 - 1453.2 0 (Negligible)

Structure: de | Sub-structure:

Vertical Deflection Average Max Slope Max Max Max Gradient Max Gradient
 Min Min Damage Category
 Offset from Ratio Horizontal Settlement Tensile of of Vertical
 Radius of Radius of Strain Strain Horizontal Displacement
 Line for Strain Strain Horizontal Displacement
 Curvature Curvature
 Vertical Displacement Curve
 (Hogging) (Sagging)
 Movement Curve
 Calculations
 [m] [%] [%] [mm] [%]
 [m] [m]
 0.0 0.0023744 0.0 -579.87E-6 1.6905 0.0023592 0.0 -579.87E-6
 - 2046.7 0 (Negligible)

Specific Building Damage Results - Critical Segments within Each Structure

Structure Name	Parameter	Critical	Critical Start	End	Curvature	Max Slope
Max	Max	Min	Min	Damage Category		
Settlement	Tensile	Radius of	Radius of	Sub-Structure	Segment	
Strain	Curvature	Curvature				
(Hogging)	(Sagging)					
[mm]	[%]	[m]	[m]	[m]	[m]	[m]
21-20		All settlements are less than the Settlement Trough Limit Sensitivity.				
		All settlements are less than the Settlement Trough Limit Sensitivity.				
		All settlements are less than the Settlement Trough Limit Sensitivity.				
		All settlements are less than the Settlement Trough Limit Sensitivity.				
		All settlements are less than the Settlement Trough Limit Sensitivity.				
19-20		Max Slope	1	0.0	4.0319	Sagging 41.307E-6
0.25420	233.92E-6	- 180440.0 (Negligible)				
		Max Settlement	1	0.0	4.0319	Sagging 41.307E-6
0.25420	233.92E-6	- 180440.0 (Negligible)				
		Max Tensile	1	0.0	4.0319	Sagging 41.307E-6
0.25420	233.92E-6	- 180440.0 (Negligible)				
		Strain				
		Min Radius of	-	-	-	-
-	-	-	-	-	-	-
		Curvature (Hogging)				
		Min Radius of	1	0.0	4.0319	Sagging 41.307E-6
0.25420	233.92E-6	- 180440.0 (Negligible)				

			Curvature (Sagging)							
19-18			Max Slope	1	0.0	2.0092	Sagging	98.332E-6		
0.42884	561.23E-6	-	44053. 0 (Negligible)							
			Max Settlement	1	0.0	2.0092	Sagging	98.332E-6		
0.42884	561.23E-6	-	44053. 0 (Negligible)							
			Max Tensile	1	0.0	2.0092	Sagging	98.332E-6		
0.42884	561.23E-6	-	44053. 0 (Negligible)							
			Strain							
-	-	-	Min Radius of	-	-	-	-	-		
			Curvature (Hogging)							
0.42884	561.23E-6	-	44053. 0 (Negligible)	1	0.0	2.0092	Sagging	98.332E-6		
			Min Radius of							
			Curvature (Sagging)							
18-13			Max Slope	1	0.0	6.9858	Hogging	16.335E-6		
0.45985	385.13E-6	157200.	- 0 (Negligible)							
			Max Settlement	1	0.0	6.9858	Hogging	16.335E-6		
0.45985	385.13E-6	157200.	- 0 (Negligible)							
			Max Tensile	1	0.0	6.9858	Hogging	16.335E-6		
0.45985	385.13E-6	157200.	- 0 (Negligible)							
			Strain							
			Min Radius of	1	0.0	6.9858	Hogging	16.335E-6		
0.45985	385.13E-6	157200.	- 0 (Negligible)							
			Curvature (Hogging)							
0.43666	64.695E-6	-	861170. 0 (Negligible)	2	6.9858	11.700	Sagging	8.8578E-6		
			Min Radius of							
			Curvature (Sagging)							
21-a			Max Slope	1	1.0430	11.820	Sagging	0.0012493		
2.4121	0.0095682	-	746.69 0 (Negligible)							
			Max Settlement	1	1.0430	11.820	Sagging	0.0012493		
2.4121	0.0095682	-	746.69 0 (Negligible)							
			Max Tensile	1	1.0430	11.820	Sagging	0.0012493		
2.4121	0.0095682	-	746.69 0 (Negligible)							
			Strain							
			Min Radius of	-	-	-	-	-		
-	-	-								
			Curvature (Hogging)							
2.4121	0.0095682	-	746.69 0 (Negligible)	1	1.0430	11.820	Sagging	0.0012493		
			Min Radius of							
			Curvature (Sagging)							
f-50			Max Slope	1	0.0	10.919	Sagging	0.0018073		
3.6067	0.017207	-	661.81 0 (Negligible)							
			Max Settlement	1	0.0	10.919	Sagging	0.0018073		
3.6067	0.017207	-	661.81 0 (Negligible)							
			Max Tensile	1	0.0	10.919	Sagging	0.0018073		
3.6067	0.017207	-	661.81 0 (Negligible)							
			Strain							
			Min Radius of	-	-	-	-	-		
-	-	-								
			Curvature (Hogging)							
3.6067	0.017207	-	661.81 0 (Negligible)	1	0.0	10.919	Sagging	0.0018073		
			Min Radius of							
			Curvature (Sagging)							
14-15			Max Slope	1	0.0	2.1390	Sagging	180.04E-6		
0.79589	0.0011492	-	22883. 0 (Negligible)							
			Max Settlement	1	0.0	2.1390	Sagging	180.04E-6		
0.79589	0.0011492	-	22883. 0 (Negligible)							
			Max Tensile	1	0.0	2.1390	Sagging	180.04E-6		
0.79589	0.0011492	-	22883. 0 (Negligible)							
			Strain							
			Min Radius of	-	-	-	-	-		
-	-	-								
			Curvature (Hogging)							
0.79589	0.0011492	-	22883. 0 (Negligible)	1	0.0	2.1390	Sagging	180.04E-6		
			Min Radius of							
			Curvature (Sagging)							

15-16		Max Slope			1	0.0	1.6897	Sagging	203.82E-6
1.1405	0.0	-	- 0 (Negligible)		1	0.0	1.6897	Sagging	203.82E-6
1.1405	0.0	Max Settlement	- 0 (Negligible)		1	0.0	1.6897	Sagging	203.82E-6
1.1405	0.0	Max Tensile	- 0 (Negligible)		1	0.0	1.6897	Sagging	203.82E-6
		Strain			-	-	- -		-
		Min Radius of			-	-	- -		-
		Curvature (Hogging)			-	-	- -		-
		Min Radius of			-	-	- -		-
		Curvature (Sagging)			-	-	- -		-
16-17		Max Slope			1	0.0	1.8990	Sagging	593.76E-6
2.2682	0.0	-	- 0 (Negligible)		1	0.0	1.8990	Sagging	593.76E-6
2.2682	0.0	Max Settlement	- 0 (Negligible)		1	0.0	1.8990	Sagging	593.76E-6
2.2682	0.0	Max Tensile	- 0 (Negligible)		1	0.0	1.8990	Sagging	593.76E-6
		Strain			-	-	- -		-
		Min Radius of			-	-	- -		-
		Curvature (Hogging)			-	-	- -		-
		Min Radius of			-	-	- -		-
		Curvature (Sagging)			-	-	- -		-
17-g		Max Slope			1	0.0	1.6115	Sagging	0.0011542
4.1287	0.0	-	- 0 (Negligible)		1	0.0	1.6115	Sagging	0.0011542
4.1287	0.0	Max Settlement	- 0 (Negligible)		1	0.0	1.6115	Sagging	0.0011542
4.1287	0.0	Max Tensile	- 0 (Negligible)		1	0.0	1.6115	Sagging	0.0011542
		Strain			-	-	- -		-
		Min Radius of			-	-	- -		-
		Curvature (Hogging)			-	-	- -		-
		Min Radius of			-	-	- -		-
		Curvature (Sagging)			-	-	- -		-
h-49		Max Slope			1	0.0	2.1345	Sagging	0.0011563
3.8808	0.012353	-	2124.4 0 (Negligible)		1	0.0	2.1345	Sagging	0.0011563
3.8808	0.012353	Max Settlement	- 2124.4 0 (Negligible)		1	0.0	2.1345	Sagging	0.0011563
3.8808	0.012353	Max Tensile	- 2124.4 0 (Negligible)		1	0.0	2.1345	Sagging	0.0011563
		Strain			-	-	- -		-
		Min Radius of			-	-	- -		-
		Curvature (Hogging)			-	-	- -		-
		Min Radius of			-	-	- -		-
3.8808	0.012353	-	2124.4 0 (Negligible)		1	0.0	2.1345	Sagging	0.0011563
		Curvature (Sagging)			-	-	- -		-
49-36		Max Slope			1	0.0	2.3890	Sagging	575.22E-6
1.9479	0.0062293	-	4706.7 0 (Negligible)		1	0.0	2.3890	Sagging	575.22E-6
1.9479	0.0062293	Max Settlement	- 4706.7 0 (Negligible)		1	0.0	2.3890	Sagging	575.22E-6
1.9479	0.0062293	Max Tensile	- 4706.7 0 (Negligible)		1	0.0	2.3890	Sagging	575.22E-6
		Strain			-	-	- -		-
		Min Radius of			-	-	- -		-
		Curvature (Hogging)			-	-	- -		-
		Min Radius of			-	-	- -		-
1.9479	0.0062293	-	4706.7 0 (Negligible)		1	0.0	2.3890	Sagging	575.22E-6
		Curvature (Sagging)			-	-	- -		-
36-48		Max Slope			1	0.0	2.3002	Sagging	163.14E-6
0.87637	984.44E-6	-	28694. 0 (Negligible)		1	0.0	2.3002	Sagging	163.14E-6

		Max Settlement			1	0.0	2.3002	Sagging	163.14E-6
0.87637	984.44E-6	-	28694. 0 (Negligible)						
		Max Tensile			1	0.0	2.3002	Sagging	163.14E-6
0.87637	984.44E-6	-	28694. 0 (Negligible)						
		Strain			-	-	-	-	-
-	-	Min Radius of							
		Curvature (Hogging)							
		Min Radius of			1	0.0	2.3002	Sagging	163.14E-6
0.87637	984.44E-6	-	28694. 0 (Negligible)						
		Curvature (Sagging)							
48-47		Max Slope			1	0.0	1.1690	Sagging	119.43E-6
0.54707	0.0	-	- 0 (Negligible)						
		Max Settlement			1	0.0	1.1690	Sagging	119.43E-6
0.54707	0.0	-	- 0 (Negligible)						
		Max Tensile			1	0.0	1.1690	Sagging	119.43E-6
0.54707	0.0	-	- 0 (Negligible)						
		Strain			-	-	-	-	-
-	-	Min Radius of							
		Curvature (Hogging)							
-	-	Min Radius of							
		Curvature (Sagging)							
47-51		Max Slope			3	7.0984	10.749	Hogging	8.4414E-6
0.36941	67.985E-6	377270.	- 0 (Negligible)						
		Max Settlement			1	0.0	3.3085	Hogging	6.5583E-6
0.40734	62.978E-6	393290.	- 0 (Negligible)						
		Max Tensile			3	7.0984	10.749	Hogging	8.4414E-6
0.36941	67.985E-6	377270.	- 0 (Negligible)						
		Strain							
		Min Radius of			3	7.0984	10.749	Hogging	8.4414E-6
0.36941	67.985E-6	377270.	- 0 (Negligible)						
		Curvature (Hogging)							
		Min Radius of			2	3.3085	7.0984	Sagging	6.4954E-6
0.39035	32.938E-6	-	1.4980E+6 0 (Negligible)						
		Curvature (Sagging)							
50-46		All settlements are less than the Settlement Trough Limit Sensitivity.							
		All settlements are less than the Settlement Trough Limit Sensitivity.							
		All settlements are less than the Settlement Trough Limit Sensitivity.							
		All settlements are less than the Settlement Trough Limit Sensitivity.							
		All settlements are less than the Settlement Trough Limit Sensitivity.							
46-47		Max Slope			1	3.0450	8.1190	Sagging	90.155E-6
0.40725	809.99E-6	-	48507. 0 (Negligible)						
		Max Settlement			1	3.0450	8.1190	Sagging	90.155E-6
0.40725	809.99E-6	-	48507. 0 (Negligible)						
		Max Tensile			1	3.0450	8.1190	Sagging	90.155E-6
0.40725	809.99E-6	-	48507. 0 (Negligible)						
		Strain							
-	-	Min Radius of			-	-	-	-	-
		Curvature (Hogging)							
		Min Radius of			1	3.0450	8.1190	Sagging	90.155E-6
0.40725	809.99E-6	-	48507. 0 (Negligible)						
		Curvature (Sagging)							
24-25		All settlements are less than the Settlement Trough Limit Sensitivity.							
		All settlements are less than the Settlement Trough Limit Sensitivity.							
		All settlements are less than the Settlement Trough Limit Sensitivity.							
		All settlements are less than the Settlement Trough Limit Sensitivity.							
		All settlements are less than the Settlement Trough Limit Sensitivity.							
25-26		All settlements are less than the Settlement Trough Limit Sensitivity.							
		All settlements are less than the Settlement Trough Limit Sensitivity.							
		All settlements are less than the Settlement Trough Limit Sensitivity.							
		All settlements are less than the Settlement Trough Limit Sensitivity.							
		All settlements are less than the Settlement Trough Limit Sensitivity.							
26-27		All settlements are less than the Settlement Trough Limit Sensitivity.							
		All settlements are less than the Settlement Trough Limit Sensitivity.							
		All settlements are less than the Settlement Trough Limit Sensitivity.							
		All settlements are less than the Settlement Trough Limit Sensitivity.							

				All settlements are less than the Settlement Trough Limit Sensitivity.					
27-28				All settlements are less than the Settlement Trough Limit Sensitivity.					
				All settlements are less than the Settlement Trough Limit Sensitivity.					
				All settlements are less than the Settlement Trough Limit Sensitivity.					
				All settlements are less than the Settlement Trough Limit Sensitivity.					
28-29				All settlements are less than the Settlement Trough Limit Sensitivity.					
				All settlements are less than the Settlement Trough Limit Sensitivity.					
				All settlements are less than the Settlement Trough Limit Sensitivity.					
				All settlements are less than the Settlement Trough Limit Sensitivity.					
27-32				All settlements are less than the Settlement Trough Limit Sensitivity.					
				All settlements are less than the Settlement Trough Limit Sensitivity.					
				All settlements are less than the Settlement Trough Limit Sensitivity.					
				All settlements are less than the Settlement Trough Limit Sensitivity.					
33-31				All settlements are less than the Settlement Trough Limit Sensitivity.					
				Max Slope	1	14.560	17.679	Sagging	80.211E-6
0.30002	658.86E-6	-	42286.0	(Negligible)					
				Max Settlement	1	14.560	17.679	Sagging	80.211E-6
0.30002	658.86E-6	-	42286.0	(Negligible)					
				Max Tensile	1	14.560	17.679	Sagging	80.211E-6
0.30002	658.86E-6	-	42286.0	(Negligible)					
				Strain					
				Min Radius of	-	-	-	-	-
-	-	-	-						
				Curvature (Hogging)					
				Min Radius of	1	14.560	17.679	Sagging	80.211E-6
0.30002	658.86E-6	-	42286.0	(Negligible)					
				Curvature (Sagging)					
31-34				Max Slope	1	0.0	2.9105	Hogging	32.194E-6
0.30010	91.517E-6	236550.	- 0	(Negligible)					
				Max Settlement	1	0.0	2.9105	Hogging	32.194E-6
0.30010	91.517E-6	236550.	- 0	(Negligible)					
				Max Tensile	1	0.0	2.9105	Hogging	32.194E-6
0.30010	91.517E-6	236550.	- 0	(Negligible)					
				Strain					
				Min Radius of	1	0.0	2.9105	Hogging	32.194E-6
0.30010	91.517E-6	236550.	- 0	(Negligible)					
				Curvature (Hogging)					
				Min Radius of	-	-	-	-	-
-	-	-	-						
				Curvature (Sagging)					
34-35				Max Slope	1	0.0	1.3290	Sagging	44.829E-6
0.19626	0.0	-	- 0	(Negligible)					
				Max Settlement	1	0.0	1.3290	Sagging	44.829E-6
0.19626	0.0	-	- 0	(Negligible)					
				Max Tensile	1	0.0	1.3290	Sagging	44.829E-6
0.19626	0.0	-	- 0	(Negligible)					
				Strain					
				Min Radius of	-	-	-	-	-
-	-	-	-						
				Curvature (Hogging)					
				Min Radius of	-	-	-	-	-
-	-	-	-						
				Curvature (Sagging)					
35-41				Max Slope	1	0.0	1.2000	Sagging	20.213E-6
0.13663	0.0	-	834010.0	(Negligible)					
				Max Settlement	1	0.0	1.2000	Sagging	20.213E-6
0.13663	0.0	-	834010.0	(Negligible)					
				Max Tensile	1	0.0	1.2000	Sagging	20.213E-6
0.13663	0.0	-	834010.0	(Negligible)					
				Strain					
				Min Radius of	-	-	-	-	-
-	-	-	-						
				Curvature (Hogging)					
				Min Radius of	-	-	-	-	-
-	-	-	-						
				Curvature (Sagging)					

41-40	Max Slope			1	2.0350	4.0690	Sagging	31.110E-6
0.17576	80.216E-6	-	309560.0 (Negligible)					
	Max Settlement			1	2.0350	4.0690	Sagging	31.110E-6
0.17576	80.216E-6	-	309560.0 (Negligible)					
	Max Tensile			1	2.0350	4.0690	Sagging	31.110E-6
0.17576	80.216E-6	-	309560.0 (Negligible)					
	Strain			-	-	-	-	-
-	Min Radius of	-	-					
	Curvature (Hogging)							
	Min Radius of			1	2.0350	4.0690	Sagging	31.110E-6
0.17576	80.216E-6	-	309560.0 (Negligible)					
	Curvature (Sagging)							
40-39	Max Slope			1	0.0	1.3000	Sagging	35.595E-6
0.17579	0.0	-	166510.0 (Negligible)					
	Max Settlement			1	0.0	1.3000	Sagging	35.595E-6
0.17579	0.0	-	166510.0 (Negligible)					
	Max Tensile			1	0.0	1.3000	Sagging	35.595E-6
0.17579	0.0	-	166510.0 (Negligible)					
	Strain			-	-	-	-	-
-	Min Radius of	-	-					
	Curvature (Hogging)							
-	Min Radius of	-	-					
	Curvature (Sagging)							
39-38	All settlements are less than the Settlement Trough Limit Sensitivity.							
	All settlements are less than the Settlement Trough Limit Sensitivity.							
	All settlements are less than the Settlement Trough Limit Sensitivity.							
	All settlements are less than the Settlement Trough Limit Sensitivity.							
38-25	All settlements are less than the Settlement Trough Limit Sensitivity.							
	All settlements are less than the Settlement Trough Limit Sensitivity.							
	All settlements are less than the Settlement Trough Limit Sensitivity.							
	All settlements are less than the Settlement Trough Limit Sensitivity.							
20-22	All settlements are less than the Settlement Trough Limit Sensitivity.							
	All settlements are less than the Settlement Trough Limit Sensitivity.							
	All settlements are less than the Settlement Trough Limit Sensitivity.							
	All settlements are less than the Settlement Trough Limit Sensitivity.							
22-b	Max Slope			1	3.4680	11.790	Sagging	327.66E-6
1.0328	0.0048821	-	6319.5 0 (Negligible)					
	Max Settlement			1	3.4680	11.790	Sagging	327.66E-6
1.0328	0.0048821	-	6319.5 0 (Negligible)					
	Max Tensile			1	3.4680	11.790	Sagging	327.66E-6
1.0328	0.0048821	-	6319.5 0 (Negligible)					
	Strain			-	-	-	-	-
-	Min Radius of	-	-					
	Curvature (Hogging)							
	Min Radius of			1	3.4680	11.790	Sagging	327.66E-6
1.0328	0.0048821	-	6319.5 0 (Negligible)					
	Curvature (Sagging)							
e-45	Max Slope			1	0.0	8.8574	Sagging	474.35E-6
1.4500	0.0072215	-	4105.1 0 (Negligible)					
	Max Settlement			1	0.0	8.8574	Sagging	474.35E-6
1.4500	0.0072215	-	4105.1 0 (Negligible)					
	Max Tensile			1	0.0	8.8574	Sagging	474.35E-6
1.4500	0.0072215	-	4105.1 0 (Negligible)					
	Strain			-	-	-	-	-
-	Min Radius of	-	-					
	Curvature (Hogging)							
	Min Radius of			1	0.0	8.8574	Sagging	474.35E-6
1.4500	0.0072215	-	4105.1 0 (Negligible)					
	Curvature (Sagging)							
18-31	Max Slope			1	0.0	5.6836	Hogging	34.821E-6
0.42894	240.22E-6	196820.	- 0 (Negligible)					

			Max Settlement		1	0.0	5.6836	Hogging	34.821E-6
0.42894	240.22E-6	196820.	- 0 (Negligible)		1	0.0	5.6836	Hogging	34.821E-6
			Max Tensile						
0.42894	240.22E-6	196820.	- 0 (Negligible)		1	0.0	5.6836	Hogging	34.821E-6
			Strain						
			Min Radius of		1	0.0	5.6836	Hogging	34.821E-6
0.42894	240.22E-6	196820.	- 0 (Negligible)		1	0.0	5.6836	Hogging	34.821E-6
			Curvature (Hogging)						
			Min Radius of		2	5.6836	6.8291	Sagging	34.821E-6
0.25844	0.0	- 1.7471E+6	0 (Negligible)						
			Curvature (Sagging)						
			Max Slope		1	0.0	5.3417	Sagging	52.137E-6
23-24									
0.32239	515.09E-6	- 182780.0	0 (Negligible)		1	0.0	5.3417	Sagging	52.137E-6
			Max Settlement						
0.32239	515.09E-6	- 182780.0	0 (Negligible)		1	0.0	5.3417	Sagging	52.137E-6
			Max Tensile						
0.32239	515.09E-6	- 182780.0	0 (Negligible)		1	0.0	5.3417	Sagging	52.137E-6
			Strain						
			Min Radius of		-	-	-	-	-
-	-	-	-						
			Curvature (Hogging)						
			Min Radius of		1	0.0	5.3417	Sagging	52.137E-6
0.32239	515.09E-6	- 182780.0	0 (Negligible)		1	0.0	5.3417	Sagging	52.137E-6
			Curvature (Sagging)						
			Max Slope		1	0.0	7.4513	Sagging	493.66E-6
b-27									
1.3687	0.0088292	- 4072.7	0 (Negligible)		1	0.0	7.4513	Sagging	493.66E-6
			Max Settlement						
1.3687	0.0088292	- 4072.7	0 (Negligible)		1	0.0	7.4513	Sagging	493.66E-6
			Max Tensile						
1.3687	0.0088292	- 4072.7	0 (Negligible)		1	0.0	7.4513	Sagging	493.66E-6
			Strain						
			Min Radius of		-	-	-	-	-
-	-	-	-						
			Curvature (Hogging)						
			Min Radius of		1	0.0	7.4513	Sagging	493.66E-6
1.3687	0.0088292	- 4072.7	0 (Negligible)		1	0.0	7.4513	Sagging	493.66E-6
			Curvature (Sagging)						
			Max Slope		1	0.0	6.1100	Sagging	50.594E-6
42-37									
0.35254	497.00E-6	- 216290.0	0 (Negligible)		1	0.0	6.1100	Sagging	50.594E-6
			Max Settlement						
0.35254	497.00E-6	- 216290.0	0 (Negligible)		1	0.0	6.1100	Sagging	50.594E-6
			Max Tensile						
0.35254	497.00E-6	- 216290.0	0 (Negligible)		1	0.0	6.1100	Sagging	50.594E-6
			Strain						
			Min Radius of		-	-	-	-	-
-	-	-	-						
			Curvature (Hogging)						
			Min Radius of		1	0.0	6.1100	Sagging	50.594E-6
0.35254	497.00E-6	- 216290.0	0 (Negligible)		1	0.0	6.1100	Sagging	50.594E-6
			Curvature (Sagging)						
			Max Slope		1	0.0	9.4472	Hogging	30.386E-6
47-43									
0.40734	686.25E-6	189540.	- 0 (Negligible)		1	0.0	9.4472	Hogging	30.386E-6
			Max Settlement						
0.40734	686.25E-6	189540.	- 0 (Negligible)		1	0.0	9.4472	Hogging	30.386E-6
			Max Tensile						
0.40734	686.25E-6	189540.	- 0 (Negligible)		1	0.0	9.4472	Hogging	30.386E-6
			Strain						
			Min Radius of		1	0.0	9.4472	Hogging	30.386E-6
0.40734	686.25E-6	189540.	- 0 (Negligible)		1	0.0	9.4472	Hogging	30.386E-6
			Curvature (Hogging)						
			Min Radius of		-	-	-	-	-
-	-	-	-						
			Curvature (Sagging)						
			Max Slope		1	0.0	0.0	Sagging	14.483E-6
44-39									
0.10539	0.0	- 2.0135E+6	0 (Negligible)		1	0.0	0.0	Sagging	14.483E-6
			Max Settlement						
0.10539	0.0	- 2.0135E+6	0 (Negligible)		1	0.0	0.0	Sagging	14.483E-6

0.10539		Max Tensile		1	0.0	0.0	Sagging	14.483E-6
	0.0	- 2.0135E+6	0 (Negligible)					
		Strain						
		Min Radius of		-	-	-	-	-
		Curvature						
		(Hogging)						
		Min Radius of		-	-	-	-	-
		Curvature						
		(Sagging)						
46-45		All settlements are less than the Settlement Trough Limit Sensitivity.						
		All settlements are less than the Settlement Trough Limit Sensitivity.						
		All settlements are less than the Settlement Trough Limit Sensitivity.						
		All settlements are less than the Settlement Trough Limit Sensitivity.						
		All settlements are less than the Settlement Trough Limit Sensitivity.						
a-12		Max Slope		1	0.0	4.4594	Hogging	705.88E-6
3.4213	0.018885	1048.5	- 0 (Negligible)					
		Max Settlement		1	0.0	4.4594	Hogging	705.88E-6
3.4213	0.018885	1048.5	- 0 (Negligible)					
		Max Tensile		1	0.0	4.4594	Hogging	705.88E-6
3.4213	0.018885	1048.5	- 0 (Negligible)					
		Strain						
		Min Radius of		1	0.0	4.4594	Hogging	705.88E-6
3.4213	0.018885	1048.5	- 0 (Negligible)					
		Curvature						
		(Hogging)						
		Min Radius of		-	-	-	-	-
		Curvature						
		(Sagging)						
12-11		Max Slope		1	0.0	6.6990	Hogging	0.0011810
4.4078	0.033628	1049.9	- 0 (Negligible)					
		Max Settlement		1	0.0	6.6990	Hogging	0.0011810
4.4078	0.033628	1049.9	- 0 (Negligible)					
		Max Tensile		1	0.0	6.6990	Hogging	0.0011810
4.4078	0.033628	1049.9	- 0 (Negligible)					
		Strain						
		Min Radius of		1	0.0	6.6990	Hogging	0.0011810
4.4078	0.033628	1049.9	- 0 (Negligible)					
		Curvature						
		(Hogging)						
		Min Radius of		-	-	-	-	-
		Curvature						
		(Sagging)						
11-f		Max Slope		1	0.0	4.4697	Hogging	0.0016803
4.2456	0.025200	455.67	- 0 (Negligible)					
		Max Settlement		1	0.0	4.4697	Hogging	0.0016803
4.2456	0.025200	455.67	- 0 (Negligible)					
		Max Tensile		1	0.0	4.4697	Hogging	0.0016803
4.2456	0.025200	455.67	- 0 (Negligible)					
		Strain						
		Min Radius of		1	0.0	4.4697	Hogging	0.0016803
4.2456	0.025200	455.67	- 0 (Negligible)					
		Curvature						
		(Hogging)						
		Min Radius of		-	-	-	-	-
		Curvature						
		(Sagging)						
ag		Max Slope		1	0.0	11.050	Sagging	0.0011087
4.1288	0.013354	- 1249.8	0 (Negligible)					
		Max Settlement		1	0.0	11.050	Sagging	0.0011087
4.1288	0.013354	- 1249.8	0 (Negligible)					
		Max Tensile		1	0.0	11.050	Sagging	0.0011087
4.1288	0.013354	- 1249.8	0 (Negligible)					
		Strain						
		Min Radius of		-	-	-	-	-
		Curvature						
		(Hogging)						
		Min Radius of		1	0.0	11.050	Sagging	0.0011087
4.1288	0.013354	- 1249.8	0 (Negligible)					
		Curvature						
		(Sagging)						

gb		Max Slope			1	0.0	4.7848	Hogging	0.0011454
5.0475	0.021644	932.71	- 0 (Negligible)						
		Max Settlement			1	0.0	4.7848	Hogging	0.0011454
5.0475	0.021644	932.71	- 0 (Negligible)						
		Max Tensile			1	0.0	4.7848	Hogging	0.0011454
5.0475	0.021644	932.71	- 0 (Negligible)						
		Strain							
		Min Radius of			1	0.0	4.7848	Hogging	0.0011454
5.0475	0.021644	932.71	- 0 (Negligible)						
		Curvature (Hogging)							
		Min Radius of			2	4.7848	7.6860	Sagging	0.0011454
3.9948	0.012996	-	2121.6 0 (Negligible)						
		Curvature (Sagging)							
bc		Max Slope			1	0.0	5.5590	Hogging	394.31E-6
1.7154	0.0099708	5566.1	- 0 (Negligible)						
		Max Settlement			1	0.0	5.5590	Hogging	394.31E-6
1.7154	0.0099708	5566.1	- 0 (Negligible)						
		Max Tensile			1	0.0	5.5590	Hogging	394.31E-6
1.7154	0.0099708	5566.1	- 0 (Negligible)						
		Strain							
		Min Radius of			1	0.0	5.5590	Hogging	394.31E-6
1.7154	0.0099708	5566.1	- 0 (Negligible)						
		Curvature (Hogging)							
		Min Radius of			-	-	-	-	-
-	-	-	-						
		Curvature (Sagging)							
cd		Max Slope			1	0.0	1.7483	Sagging	192.32E-6
1.6903	0.0	-	- 0 (Negligible)						
		Max Settlement			1	0.0	1.7483	Sagging	192.32E-6
1.6903	0.0	-	- 0 (Negligible)						
		Max Tensile			1	0.0	1.7483	Sagging	192.32E-6
1.6903	0.0	-	- 0 (Negligible)						
		Strain							
		Min Radius of			-	-	-	-	-
-	-	-	-						
		Curvature (Hogging)							
		Min Radius of			-	-	-	-	-
-	-	-	-						
		Curvature (Sagging)							
eh		Max Slope			2	1.0738	4.8046	Sagging	0.0014940
3.5506	0.018804	-	2870.5 0 (Negligible)						
		Max Settlement			3	4.8046	9.7590	Hogging	0.0014940
5.0251	0.028694	1604.6	- 0 (Negligible)						
		Max Tensile			3	4.8046	9.7590	Hogging	0.0014940
5.0251	0.028694	1604.6	- 0 (Negligible)						
		Strain							
		Min Radius of			3	4.8046	9.7590	Hogging	0.0014940
5.0251	0.028694	1604.6	- 0 (Negligible)						
		Curvature (Hogging)							
		Min Radius of			2	1.0738	4.8046	Sagging	0.0014940
3.5506	0.018804	-	2870.5 0 (Negligible)						
		Curvature (Sagging)							
hf		Max Slope			1	0.0	10.879	Sagging	830.50E-6
3.8808	0.014036	-	1453.2 0 (Negligible)						
		Max Settlement			1	0.0	10.879	Sagging	830.50E-6
3.8808	0.014036	-	1453.2 0 (Negligible)						
		Max Tensile			1	0.0	10.879	Sagging	830.50E-6
3.8808	0.014036	-	1453.2 0 (Negligible)						
		Strain							
		Min Radius of			-	-	-	-	-
-	-	-	-						
		Curvature (Hogging)							
		Min Radius of			1	0.0	10.879	Sagging	830.50E-6
3.8808	0.014036	-	1453.2 0 (Negligible)						
		Curvature (Sagging)							
de		Max Slope			1	0.0	0.47607	Sagging	579.87E-6
1.6905	0.0023592	-	2046.7 0 (Negligible)						

		Max Settlement			1	0.0	0.47607	Sagging	579.87E-6
1.6905	0.0023592	-	2046.7	0 (Negligible)					
		Max Tensile			1	0.0	0.47607	Sagging	579.87E-6
1.6905	0.0023592	-	2046.7	0 (Negligible)					
		Strain			-	-	-	-	-
-	-	Min Radius of							
		Curvature							
		(Hogging)							
		Min Radius of			1	0.0	0.47607	Sagging	579.87E-6
1.6905	0.0023592	-	2046.7	0 (Negligible)					
		Curvature							
		(Sagging)							

Specific Building Damage Results - All Combined Segments

Structure: 21-20 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: 19-20 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: 19-18 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: 18-13 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: 21-a | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: f-50 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 14-15 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 15-16 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 16-17 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 17-g | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: h-49 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 49-36 | Sub-structure:

Vertical	Combined	Start	Length	Curvature	Deflection	Average	Max	Damage Category
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Offset from Line for Vertical Movement Calculations	Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 36-48 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 48-47 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 47-51 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 50-46 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 46-47 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 24-25 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

[m] [m] [m] [%] [%] [%]
No structures have segments combined.

Structure: 25-26 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]	[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 26-27 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]	[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 27-28 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]	[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 28-29 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]	[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 27-32 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]	[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 33-31 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]	[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 31-34 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: 34-35 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: 35-41 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: 41-40 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: 40-39 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: 39-38 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: 38-25 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

**Movement
Calculations**

[m] [m] [m] [%] [%] [%]
No structures have segments combined.

Structure: 20-22 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
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[m] [m] [m] [%] [%] [%]
No structures have segments combined.

Structure: 22-b | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
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[m] [m] [m] [%] [%] [%]
No structures have segments combined.

Structure: e-45 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
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[m] [m] [m] [%] [%] [%]
No structures have segments combined.

Structure: 18-31 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
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[m] [m] [m] [%] [%] [%]
No structures have segments combined.

Structure: 23-24 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
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[m] [m] [m] [%] [%] [%]
No structures have segments combined.

Structure: b-27 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
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[m] [m] [m] [%] [%] [%]
No structures have segments combined.

Structure: 42-37 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: 47-43 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: 44-39 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: 46-45 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: a-12 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: 12-11 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: 11-f | Sub-structure:

Vertical Offset from	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
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Line for Vertical Movement Calculations	Strain	Strain
[m] [m] [m]	[%]	[%]

No structures have segments combined.

Structure: ag | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]	[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: gb | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]	[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: bc | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]	[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: cd | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]	[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: eh | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]	[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: hf | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]	[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: de | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]	[%]	[%]	[%]	
No structures have segments combined.							

DEMOLITION + EXCAVATION

Problem Type

Problem Type : Tunnelling and Embedded Wall Excavations

Displacement Data

Type of intervals across extrusion/line	Name Extrusion depth	Direction No. of of intervals extrusion along	Calculate Surface of type for	Point/Line/Line for extrusion Surface type for	No.			
			extrusion	tunnels				
			First point	Second point				
			X [m]	Y [m]	Z(level) [m]			
			X [m]	Y [m]	Z(level) [m]			
Grid	Grid 1	Global X	30.00000	35.00000	0.00000	-	80.00000	0.00000
99	70.00000	99 Yes	Surface					
Line	21-20	-	55.96000	70.70000	0.00000	44.21000	70.72000	0.00000
11	-	Yes	Surface					
Line	19-20	-	59.14000	66.79000	0.00000	55.96000	70.70000	0.00000
5	-	Yes	Surface					
Line	19-18	-	59.14000	66.79000	0.00000	59.17000	64.78000	0.00000
2	-	Yes	Surface					
Line	18-13	-	59.17000	64.78000	0.00000	44.21000	64.80000	0.00000
14	-	Yes	Surface					
Line	21-a	-	44.21000	70.72000	0.00000	44.06000	58.90000	0.00000
34	-	Yes	Surface					
Line	f-50	-	44.10000	51.60000	0.00000	44.16000	36.71000	0.00000
15	-	Yes	Surface					
Line	14-15	-	55.00000	64.76000	0.00000	55.00000	62.62000	0.00000
2	-	Yes	Surface					
Line	15-16	-	55.00000	62.62000	0.00000	56.23000	61.46000	0.00000
1	-	Yes	Surface					
Line	16-17	-	56.23000	61.46000	0.00000	56.22000	59.56000	0.00000
1	-	Yes	Surface					
Line	17-g	-	56.22000	59.56000	0.00000	55.10000	58.40000	0.00000
1	-	Yes	Surface					
Line	h-49	-	54.98000	51.60000	0.00000	56.50000	50.10000	0.00000
2	-	Yes	Surface					
Line	49-36	-	56.50000	50.10000	0.00000	56.50000	47.71000	0.00000
2	-	Yes	Surface					
Line	36-48	-	56.50000	47.71000	0.00000	54.96000	46.00000	0.00000
2	-	Yes	Surface					

Line	48-47	-	-	54.96000	46.00000	0.00000	54.96000	44.83000	0.00000
1	-	-	Yes	Surface					
Line	47-51	-	-	54.96000	44.83000	0.00000	44.21000	44.83000	0.00000
10	-	-	Yes	Surface					
Line	50-46	-	-	44.16000	36.71000	0.00000	54.96000	36.71000	0.00000
10	-	-	Yes	Surface					
Line	46-47	-	-	54.96000	36.71000	0.00000	54.96000	44.83000	0.00000
8	-	-	Yes	Surface					
Line	24-25	-	-	78.82000	63.10000	0.00000	88.08000	63.07000	0.00000
9	-	-	Yes	Surface					
Line	25-26	-	-	88.08000	63.07000	0.00000	88.00000	57.75000	0.00000
5	-	-	Yes	Surface					
Line	26-27	-	-	88.00000	57.75000	0.00000	76.73000	57.90000	0.00000
11	-	-	Yes	Surface					
Line	27-28	-	-	76.73000	57.90000	0.00000	76.71000	61.07000	0.00000
3	-	-	Yes	Surface					
Line	28-29	-	-	76.71000	61.07000	0.00000	78.82000	63.10000	0.00000
2	-	-	Yes	Surface					
Line	27-32	-	-	76.73000	57.90000	0.00000	76.75000	52.75000	0.00000
5	-	-	Yes	Surface					
Line	33-31	-	-	87.93000	52.75000	0.00000	70.25000	52.75000	0.00000
17	-	-	Yes	Surface					
Line	31-34	-	-	70.25000	52.75000	0.00000	70.18000	49.38000	0.00000
3	-	-	Yes	Surface					
Line	34-35	-	-	70.18000	49.38000	0.00000	71.51000	49.37000	0.00000
1	-	-	Yes	Surface					
Line	35-41	-	-	71.51000	49.37000	0.00000	71.48000	45.77000	0.00000
3	-	-	Yes	Surface					
Line	41-40	-	-	71.48000	45.77000	0.00000	67.41000	45.77000	0.00000
4	-	-	Yes	Surface					
Line	40-39	-	-	67.41000	45.77000	0.00000	67.39000	41.87000	0.00000
3	-	-	Yes	Surface					
Line	39-38	-	-	67.39000	41.87000	0.00000	88.00000	41.70000	0.00000
20	-	-	Yes	Surface					
Line	38-25	-	-	88.00000	41.70000	0.00000	88.08000	63.07000	0.00000
21	-	-	Yes	Surface					
Line	20-22	-	-	55.96000	70.70000	0.00000	66.13000	70.69000	0.00000
10	-	-	Yes	Surface					
Line	22-b	-	-	66.13000	70.69000	0.00000	66.30000	58.90000	0.00000
17	-	-	Yes	Surface					
Line	e-45	-	-	64.74000	51.60000	0.00000	64.48000	36.84000	0.00000
15	-	-	Yes	Surface					
Line	18-31	-	-	59.17000	64.78000	0.00000	66.00000	64.74000	0.00000
6	-	-	Yes	Surface					
Line	23-24	-	-	66.00000	63.14000	0.00000	78.82000	63.10000	0.00000
12	-	-	Yes	Surface					
Line	b-27	-	-	66.10000	58.46000	0.00000	76.73000	57.90000	0.00000
10	-	-	Yes	Surface					
Line	42-37	-	-	64.54000	46.73000	0.00000	87.96000	46.45000	0.00000
23	-	-	Yes	Surface					
Line	47-43	-	-	54.96000	44.83000	0.00000	64.50000	44.83000	0.00000
9	-	-	Yes	Surface					
Line	44-39	-	-	64.44000	41.91000	0.00000	67.39000	41.87000	0.00000
2	-	-	Yes	Surface					
Line	46-45	-	-	54.96000	36.71000	0.00000	64.48000	36.84000	0.00000
9	-	-	Yes	Surface					
Line	a-12	-	-	44.06000	58.90000	0.00000	39.63000	58.38000	0.00000
4	-	-	Yes	Surface					
Line	12-11	-	-	39.63000	58.38000	0.00000	39.63000	51.68000	0.00000
6	-	-	Yes	Surface					
Line	11-f	-	-	39.63000	51.68000	0.00000	44.10000	51.60000	0.00000
8	-	-	Yes	Surface					
Line	ag	-	-	44.06000	58.90000	0.00000	55.10000	58.40000	0.00000
11	-	-	Yes	Surface					
Line	gb	-	-	55.10000	58.40000	0.00000	66.50000	58.46000	0.00000
20	-	-	Yes	Surface					
Line	bc	-	-	66.50000	58.46000	0.00000	66.50000	52.90000	0.00000
20	-	-	Yes	Surface					
Line	cd	-	-	66.50000	52.90000	0.00000	65.00000	52.00000	0.00000
1	-	-	Yes	Surface					
Line	eh	-	-	64.74000	51.60000	0.00000	54.98000	51.60000	0.00000
9	-	-	Yes	Surface					
Line	hf	-	-	54.98000	51.60000	0.00000	44.10000	51.60000	0.00000
10	-	-	Yes	Surface					
Line	de	-	-	65.00000	52.00000	0.00000	64.74000	51.60000	0.00000
4	-	-	Yes	Surface					

Vertical Ground Movement Curves

Curve Name: No vertical ground movement
Coordinates: [Distance from wall / wall depth or max. excavation depth (x), Depth / wall depth or max. excavation depth (y), Settlement / wall depth or max. excavation depth (z) (%)]
[0.000,0.000,0.000] [1.000,0.000,0.000] [0.000,1.000,0.000] [1.000,1.000,0.000]
Curve Fitting Method: Polynomial
x Order: 1
y Order: 0
Polynomial: $z = 0.0x + 0.0$
Coeff. of Determination: -2147483648.E+2147483647

Curve Name: Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11 (b))
Coordinates: [Distance from wall / wall depth or max. excavation depth (x), Depth / wall depth or max. excavation depth (y), Settlement / wall depth or max. excavation depth (z) (%)]
[0.000,0.000,0.039] [0.100,0.000,0.049] [0.200,0.000,0.056] [0.300,0.000,0.062] [0.400,0.000,0.067] [0.500,0.000,0.070] [0.600,0.000,0.072] [0.700,0.000,0.073] [0.800,0.000,0.073] [0.900,0.000,0.072] [1.000,0.000,0.070] [1.100,0.000,0.068] [1.200,0.000,0.065] [1.300,0.000,0.061] [1.400,0.000,0.058] [1.500,0.000,0.054] [1.600,0.000,0.050] [1.700,0.000,0.046] [1.800,0.000,0.042] [1.900,0.000,0.038] [2.000,0.000,0.034] [2.100,0.000,0.030] [2.200,0.000,0.027] [2.300,0.000,0.023] [2.400,0.000,0.020] [2.500,0.000,0.017] [2.600,0.000,0.014] [2.700,0.000,0.012] [2.800,0.000,0.010] [2.900,0.000,0.008] [3.000,0.000,0.007] [3.100,0.000,0.005] [3.200,0.000,0.004] [3.300,0.000,0.004] [3.400,0.000,0.003] [3.500,0.000,0.002] [3.600,0.000,0.002] [3.700,0.000,0.002] [3.800,0.000,0.001] [3.900,0.000,0.001] [4.000,0.000,0.000]
Curve Fitting Method: Polynomial
x Order: 4
y Order: 0
Polynomial: $z = -2.6455E-3x^4 + 2.8495E-2x^3 - 1.0051E-1x^2 + 1.0569E-1x + 3.8990E-2$
Coeff. of Determination: 9.9991E-1

Horizontal Ground Movement Curves

Curve Name: No horizontal ground movement
Coordinates: [Distance from wall / wall depth or max. excavation depth (x), Depth / wall depth or max. excavation depth (y), Horizontal movement / wall depth or max. excavation depth (z) (%)]
[0.000,0.000,0.000] [1.000,0.000,0.000] [0.000,1.000,0.000] [1.000,1.000,0.000]
Curve Fitting Method: Polynomial
x Order: 0
y Order: 0
Polynomial: $z = 0.0$
Coeff. of Determination: -2147483648.E+2147483647

Curve Name: Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11 (a))
Coordinates: [Distance from wall / wall depth or max. excavation depth (x), Depth / wall depth or max. excavation depth (y), Horizontal movement / wall depth or max. excavation depth (z) (%)]
[0.000,0.000,0.150] [4.000,0.000,0.000]
Curve Fitting Method: Polynomial
x Order: 1
y Order: 0
Polynomial: $z = -3.75E-2x + 1.50E-1$
Coeff. of Determination: 1.00

Polygonal Excavations

Excavation Name: Excavation 1
 Surface level [m]: 0.0
 Contribution: Positive
 Enabled: Yes
 Surface movement curves which are selected are applied between surface and [m]: -10.000

Corner	x	y	Base Level	Stiffened	Previous d	Side p1	Side p2*	Next Side d	Next Side p1	Next Side p2*
	[m]	[m]	[m]		[m]	[%]	[%]	[m]	[%]	[%]
1	66.020	58.310	-1.0700	No	-	-	-	-	-	-
2	66.000	53.200	-1.0700	No	-	-	-	-	-	-
3	59.820	51.680	-1.0700	No	-	-	-	-	-	-
4	39.630	51.680	-1.0700	No	-	-	-	-	-	-
5	39.630	58.380	-1.0700	No	-	-	-	-	-	-

Side	Corner 1		Corner 2		Ground Movement Curve	
	x	y	x	y	Vertical	Horizontal
	[m]	[m]	[m]	[m]		
1	66.020	58.310	66.000	53.200	Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(b))	Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(b))
2.11(a)						
2	66.000	53.200	59.820	51.680	Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(b))	Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(b))
2.11(a)						
3	59.820	51.680	39.630	51.680	Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(b))	Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(b))
2.11(a)						
4	39.630	51.680	39.630	58.380	Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(b))	Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(b))
2.11(a)						
5	39.630	58.380	66.020	58.310	Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(b))	Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(b))
2.11(a)						

Excavation Name: Excavation 2
 Surface level [m]: 0.0
 Contribution: Positive
 Enabled: Yes
 Surface movement curves which are selected are applied between surface and [m]: -5.0000

Corner	x	y	Base Level	Stiffened	Previous d	Side p1	Side p2*	Next Side d	Next Side p1	Next Side p2*
	[m]	[m]	[m]		[m]	[%]	[%]	[m]	[%]	[%]
1	59.820	58.310	-3.6000	No	-	-	-	-	-	-
2	66.020	58.310	-3.6000	No	-	-	-	-	-	-
3	66.000	53.200	-3.6000	No	-	-	-	-	-	-
4	59.820	51.680	-3.6000	No	-	-	-	-	-	-

Side	Corner 1		Corner 2		Ground Movement Curve	
	x	y	x	y	Vertical	Horizontal
	[m]	[m]	[m]	[m]		
1	59.820	58.310	66.020	58.310	Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(b))	Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(b))
2.11(a)						

2	66.020	58.310	66.000	53.200	Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(b))	Excavation in front stiffness wall in (CIRIA 580 Fig.
3	66.000	53.200	59.820	51.680	Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(b))	Excavation in front stiffness wall in (CIRIA 580 Fig.
4	59.820	51.680	59.820	58.310	No vertical ground movement	No horizontal ground movement

Excavation Name: Excavation 3
Surface level [m]: 0.0
Contribution: Negative
Enabled: Yes
Surface movement curves which are selected are applied between surface and [m]: -5.0000

Corner	x	y	Base Level	Stiffened	Previous d	Side p1	Side p2*	Next Side d	Next Side p1	Next Side p2*
	[m]	[m]	[m]		[m]	[%]	[%]	[m]	[%]	[%]
1	59.820	58.310	-1.0700	No	-	-	-	-	-	-
2	66.020	58.310	-1.0700	No	-	-	-	-	-	-
3	66.000	53.200	-1.0700	No	-	-	-	-	-	-
4	59.820	51.680	-1.0700	No	-	-	-	-	-	-

Side	Corner 1		Corner 2		Ground Movement Curve	
	x	y	x	y	Vertical	Horizontal
	[m]	[m]	[m]	[m]		
1	59.820	58.310	66.020	58.310	Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(b))	Excavation in front stiffness wall in (CIRIA 580 Fig.
2	66.020	58.310	66.000	53.200	Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(b))	Excavation in front stiffness wall in (CIRIA 580 Fig.
3	66.000	53.200	59.820	51.680	Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(b))	Excavation in front stiffness wall in (CIRIA 580 Fig.
4	59.820	51.680	59.820	58.310	No vertical ground movement	No horizontal ground movement

Damage Category Strains

Name	0 (Negligible) to 1 (Very Slight)	1 (Very Slight) to 2 (Slight)	2 (Slight) to 3 (Moderate)	3 (Moderate) to 4 (Severe)
Burland Strain Limits	0.0	500.00E-6	750.00E-6	0.0015000

Specific Structures - Geometry

Structure Name	Sub-Structure Damage Category	Displacement Poisson's E/G	Start Distance	End Distance	Vertical Offsets from Line for Vertical Movement Calculations	Vertical Displacement Limit Sensitivity
Ratio	Name	Line	Along Line	Along Line	[m]	[mm]

21-20	21-20	0.00000	11.74902	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
19-20	19-20	0.00000	5.03889	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
19-18	19-18	0.00000	2.00922	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
18-13	18-13	0.00000	14.95901	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
21-a	21-a	0.00000	11.81995	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
f-50	f-50	0.00000	14.88912	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
14-15	14-15	0.00000	2.13900	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
15-16	15-16	0.00000	1.68971	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
16-17	16-17	0.00000	1.89903	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
17-g	17-g	0.00000	1.61145	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
h-49	h-49	0.00000	2.13451	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
49-36	49-36	0.00000	2.38900	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
36-48	36-48	0.00000	2.30024	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
48-47	48-47	0.00000	1.16900	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
47-51	47-51	0.00000	10.74900	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
50-46	50-46	0.00000	10.79900	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
46-47	46-47	0.00000	8.11900	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
24-25	24-25	0.00000	9.25905	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
25-26	25-26	0.00000	5.31960	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
26-27	26-27	0.00000	11.27000	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
27-28	27-28	0.00000	3.16906	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
28-29	28-29	0.00000	2.92697	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
27-32	27-32	0.00000	5.14904	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
33-31	33-31	0.00000	17.67900	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
31-34	31-34	0.00000	3.36973	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
34-35	34-35	0.00000	1.32904	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
35-41	35-41	0.00000	3.59912	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
41-40	41-40	0.00000	4.06900	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
40-39	40-39	0.00000	3.89905	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
39-38	39-38	0.00000	20.60970	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
38-25	38-25	0.00000	21.36915	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
20-22	20-22	0.00000	10.16900	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
22-b	22-b	0.00000	11.79023	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
e-45	e-45	0.00000	14.76129	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
18-31	18-31	0.00000	6.82912	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
23-24	23-24	0.00000	12.81906	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
b-27	b-27	0.00000	10.64374	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
42-37	42-37	0.00000	23.42067	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				

47-43	47-43	0.00000	9.53900	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
44-39	44-39	0.00000	2.94927	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
46-45	46-45	0.00000	9.51989	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
a-12	a-12	0.00000	4.45941	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
12-11	12-11	0.00000	6.69900	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
11-f	11-f	0.00000	4.46972	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
ag	ag	0.00000	11.05032	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
gb	gb	0.00000	11.39916	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
bc	bc	0.00000	5.55900	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
cd	cd	0.00000	1.74829	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
eh	eh	0.00000	9.75900	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
hf	hf	0.00000	10.87900	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
de	de	0.00000	0.47607	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				

Specific Structures - Bending Parameters

Structure Name	Sub-Structure	Height	Default	Hogging			
Sagging	Name	Properties		2nd Moment	Distance	Distance	2nd Moment
Distance	Distance			of Area	of Bending	of N.A.	of Area
of Bending	of N.A.			(per unit	Strain	from Edge	(per unit
Strain	from Edge			width)	from N.A.	of Beam in	width)
from N.A.	of Beam in					Tension	
Tension							
		[m]		[m ³]	[m]	[m]	[m ³]
21-20		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
19-20		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
19-18		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
18-13		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
21-a		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
f-50		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
14-15		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
15-16		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
16-17		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
17-g		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
h-49		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
49-36		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
36-48		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
48-47		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
47-51		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						

50-46		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
46-47		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
24-25		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
25-26		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
26-27		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
27-28		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
28-29		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
27-32		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
33-31		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
31-34		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
34-35		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
35-41		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
41-40		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
40-39		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
39-38		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
38-25		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
20-22		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						
22-b		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						
e-45		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						
18-31		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						
23-24		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						
b-27		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						
42-37		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						
47-43		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						
44-39		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						
46-45		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						
a-12		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						
12-11		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						
11-f		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						
ag		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
gb		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						
bc		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						
cd		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						
eh		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						
hf		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
de		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						

Building Segment Combinations

Structure Name	Sub-Structure Name	Vertical Offset from Line for Vertical Movement Calculations	Segment Start	Length	Curvature	Combined Segment
		[m]	[m]	[m]		

No structures have segments combined.

Utility Strain Calculation Options

Neglect beneficial contribution of axial strains : No

Specific Building Damage Results - Horizontal Displacements

Structure: 21-20 | Sub-structure:

Dist.	Coordinates			Displacements			
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	55.96000	70.70000	0.00000	0.12817	-0.41142	-0.12887	0.41120 d
1.0682	54.89182	70.70182	0.00000	0.11194	-0.28146	-0.11242	0.28127 d
2.1364	53.82364	70.70364	0.00000	0.073605	-0.15213	-0.073864	0.15201 d
3.2046	52.75545	70.70545	0.00000	0.016518	-0.028982	-0.016567	0.028954 d
4.2727	51.68727	70.70727	0.00000	0.0	0.0	0.0	0.0 d
5.3409	50.61909	70.70909	0.00000	0.0	0.0	0.0	0.0 d
6.4091	49.55091	70.71091	0.00000	0.0	0.0	0.0	0.0 d
7.4773	48.48273	70.71273	0.00000	0.0	0.0	0.0	0.0 d
8.5455	47.41455	70.71455	0.00000	0.0	0.0	0.0	0.0 d
9.6137	46.34636	70.71636	0.00000	0.0	0.0	0.0	0.0 d
10.682	45.27818	70.71818	0.00000	0.0	0.0	0.0	0.0 d
11.750	44.21000	70.72000	0.00000	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: 19-20 | Sub-structure:

Dist.	Coordinates			Displacements			
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	59.14000	66.79000	0.00000	0.16764	-2.0905	-1.7276	1.1890 d
1.0080	58.50400	67.57200	0.00000	0.24222	-1.7048	-1.4754	0.88772 d
2.0160	57.86800	68.35400	0.00000	0.26175	-1.3468	-1.2100	0.64673 d
3.0239	57.23200	69.13600	0.00000	0.24244	-1.0142	-0.93977	0.45181 d
4.0319	56.59600	69.91800	0.00000	0.19537	-0.70344	-0.66901	0.29228 d
5.0399	55.96000	70.70000	0.00000	0.12817	-0.41142	-0.40005	0.16015 d

d - Displacements include imported displacements.

Structure: 19-18 | Sub-structure:

Dist.	Coordinates			Displacements			
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	59.14000	66.79000	0.00000	0.16764	-2.0905	2.0928	0.13642 d
1.0051	59.15500	65.78500	0.00000	0.21619	-2.4301	2.4331	0.17990 d
2.0102	59.17000	64.78000	0.00000	0.27717	-2.7589	2.7627	0.23596 d

d - Displacements include imported displacements.

Structure: 18-13 | Sub-structure:

Dist.	Coordinates			Displacements	
	x	y	z	x	y
[m]	[m]	[m]	[mm]	[mm]	[mm]

								displacement	displacement
								along the	perpendicular
								Line	to Line
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]
0.0	59.17000	64.78000	0.00000	0.27717	-2.7589	-0.28085		2.7585	d
1.0686	58.10143	64.78143	0.00000	0.61900	-2.3309	-0.62211		2.3301	d
2.1371	57.03286	64.78286	0.00000	0.80818	-1.8769	-0.81069		1.8758	d
3.2057	55.96429	64.78429	0.00000	0.86676	-1.4554	-0.86870		1.4542	d
4.2743	54.89571	64.78571	0.00000	0.83344	-1.0960	-0.83491		1.0949	d
5.3429	53.82714	64.78714	0.00000	0.74509	-0.80530	-0.74617		0.80430	d
6.4114	52.75857	64.78857	0.00000	0.62906	-0.57714	-0.62983		0.57629	d
7.4800	51.69000	64.79000	0.00000	0.50296	-0.40088	-0.50349		0.40021	d
8.5486	50.62143	64.79143	0.00000	0.37701	-0.26565	-0.37737		0.26514	d
9.6172	49.55286	64.79286	0.00000	0.25664	-0.16205	-0.25686		0.16171	d
10.686	48.48429	64.79429	0.00000	0.14436	-0.082578	-0.14447		0.082384	d
11.754	47.41571	64.79571	0.00000	0.041021	-0.021448	-0.041050		0.021393	d
12.823	46.34714	64.79714	0.00000	0.0	0.0	0.0		0.0	d
13.891	45.27857	64.79857	0.00000	0.0	0.0	0.0		0.0	d
14.960	44.21000	64.80000	0.00000	0.0	0.0	0.0		0.0	d

d - Displacements include imported displacements.

Structure: 21-a | Sub-structure:

Dist.	Coordinates			Displacements					
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line		
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]		
0.0	44.21000	70.72000	0.00000	0.0	0.0	0.0	0.0	0.0	d
0.34768	44.20559	70.37235	0.00000	0.0	0.0	0.0	0.0	0.0	d
0.69535	44.20118	70.02471	0.00000	0.0	0.0	0.0	0.0	0.0	d
1.0430	44.19676	69.67706	0.00000	0.0	0.0	0.0	0.0	0.0	d
1.3907	44.19235	69.32941	0.00000	0.0	0.0	0.0	0.0	0.0	d
1.7384	44.18794	68.98176	0.00000	0.0	0.0	0.0	0.0	0.0	d
2.0861	44.18353	68.63412	0.00000	0.0	0.0	0.0	0.0	0.0	d
2.4337	44.17912	68.28647	0.00000	0.0	0.0	0.0	0.0	0.0	d
2.7814	44.17471	67.93882	0.00000	0.0	0.0	0.0	0.0	0.0	d
3.1291	44.17029	67.59118	0.00000	0.0	0.0	0.0	0.0	0.0	d
3.4768	44.16588	67.24353	0.00000	0.0	0.0	0.0	0.0	0.0	d
3.8244	44.16147	66.89588	0.00000	0.0	0.0	0.0	0.0	0.0	d
4.1721	44.15706	66.54824	0.00000	0.0	0.0	0.0	0.0	0.0	d
4.5198	44.15265	66.20059	0.00000	0.0	0.0	0.0	0.0	0.0	d
4.8675	44.14824	65.85294	0.00000	0.0	0.0	0.0	0.0	0.0	d
5.2151	44.14382	65.50529	0.00000	0.0	0.0	0.0	0.0	0.0	d
5.5628	44.13941	65.15765	0.00000	0.0	0.0	0.0	0.0	0.0	d
5.9105	44.13500	64.81000	0.00000	0.0	0.0	0.0	0.0	0.0	d
6.2582	44.13059	64.46235	0.00000	0.0	0.0	0.0	0.0	0.0	d
6.6058	44.12618	64.11471	0.00000	0.0	0.0	0.0	0.0	0.0	d
6.9535	44.12176	63.76706	0.00000	0.0	0.0	0.0	0.0	0.0	d
7.3012	44.11735	63.41941	0.00000	0.0	0.0	0.0	0.0	0.0	d
7.6489	44.11294	63.07176	0.00000	0.0	0.0	0.0	0.0	0.0	d
7.9965	44.10853	62.72412	0.00000	0.0	0.0	0.0	0.0	0.0	d
8.3442	44.10412	62.37647	0.00000	-270.23E-6	-0.10188	0.10187		0.0010226	d
8.6919	44.09971	62.02882	0.00000	-616.05E-6	-0.23225	0.23224		0.0023311	d
9.0396	44.09529	61.68118	0.00000	-961.86E-6	-0.36262	0.36260		0.0036396	d
9.3872	44.09088	61.33353	0.00000	-0.0013077	-0.49299	0.49297		0.0049482	d
9.7349	44.08647	60.98588	0.00000	-0.0016535	-0.62336	0.62333		0.0062567	d
10.083	44.08206	60.63824	0.00000	-0.0019993	-0.75373	0.75370		0.0075652	d
10.430	44.07765	60.29059	0.00000	-0.0023451	-0.88410	0.88406		0.0088738	d
10.778	44.07324	59.94294	0.00000	-0.0026909	-1.0145	1.0144		0.010182	d
11.126	44.06882	59.59529	0.00000	-0.0030367	-1.1448	1.1448		0.011491	d
11.473	44.06441	59.24765	0.00000	-0.0033825	-1.2752	1.2752		0.012799	d
11.821	44.06000	58.90000	0.00000	-0.0037284	-1.4056	1.4055		0.014108	d

d - Displacements include imported displacements.

Structure: f-50 | Sub-structure:

Dist.	Coordinates			Displacements					
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line		
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]		
0.0	44.10000	51.60000	0.00000	0.0	1.5750	-1.5750		0.0063465	d

0.99267	44.10400	50.60733	0.00000	0.0	1.2028	-1.2027	0.0048465	d
1.9853	44.10800	49.61467	0.00000	0.0	0.83050	-0.83049	0.0033465	d
2.9780	44.11200	48.62200	0.00000	0.0	0.45825	-0.45825	0.0018465	d
3.9707	44.11600	47.62933	0.00000	0.0	0.086000	-0.085999	346.54E-6	d
4.9634	44.12000	46.63667	0.00000	0.0	0.0	0.0	0.0	d
5.9560	44.12400	45.64400	0.00000	0.0	0.0	0.0	0.0	d
6.9487	44.12800	44.65133	0.00000	0.0	0.0	0.0	0.0	d
7.9414	44.13200	43.65867	0.00000	0.0	0.0	0.0	0.0	d
8.9341	44.13600	42.66600	0.00000	0.0	0.0	0.0	0.0	d
9.9267	44.14000	41.67333	0.00000	0.0	0.0	0.0	0.0	d
10.919	44.14400	40.68067	0.00000	0.0	0.0	0.0	0.0	d
11.912	44.14800	39.68800	0.00000	0.0	0.0	0.0	0.0	d
12.905	44.15200	38.69533	0.00000	0.0	0.0	0.0	0.0	d
13.897	44.15600	37.70267	0.00000	0.0	0.0	0.0	0.0	d
14.890	44.16000	36.71000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 14-15 | Sub-structure:

Dist.	Coordinates			Displacements		Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	x	y	z	x	y			
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	55.00000	64.76000	0.00000	0.84279	-1.1278	1.1278	0.84279	d
1.0700	55.00000	63.69000	0.00000	0.96061	-1.0722	1.0722	0.96061	d
2.1400	55.00000	62.62000	0.00000	1.0302	-0.92116	0.92116	1.0302	d

d - Displacements include imported displacements.

Structure: 15-16 | Sub-structure:

Dist.	Coordinates			Displacements		Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	x	y	z	x	y			
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	55.00000	62.62000	0.00000	1.0302	-0.92116	1.3815	0.036647	d
1.6907	56.23000	61.46000	0.00000	1.2426	-1.5248	1.9502	-0.25675	d

d - Displacements include imported displacements.

Structure: 16-17 | Sub-structure:

Dist.	Coordinates			Displacements		Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	x	y	z	x	y			
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	56.23000	61.46000	0.00000	1.2426	-1.5248	1.5183	1.2507	d
1.9000	56.22000	59.56000	0.00000	0.75970	-1.4108	1.4068	0.76712	d

d - Displacements include imported displacements.

Structure: 17-g | Sub-structure:

Dist.	Coordinates			Displacements		Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	x	y	z	x	y			
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	56.22000	59.56000	0.00000	0.75970	-1.4108	0.48727	1.5265	d
1.6125	55.10000	58.40000	0.00000	0.039851	-1.5829	1.1111	1.1282	d

d - Displacements include imported displacements.

Structure: h-49 | Sub-structure:

Dist.	Coordinates			Displacements		Horizontal displacement along the	Horizontal displacement perpendicular	
	x	y	z	x	y			

[m]	[m]	[m]	[m]	[mm]	[mm]	Line [mm]	to Line [mm]
0.0	54.98000	51.60000	0.00000	0.032693	1.5755	-1.0834	1.1444 d
1.0678	55.74000	50.85000	0.00000	0.41190	1.3775	-0.67442	1.2698 d
2.1355	56.50000	50.10000	0.00000	0.84003	1.4123	-0.39408	1.5953 d

d - Displacements include imported displacements.

Structure: 49-36 | Sub-structure:

Dist.	Coordinates			Displacements			
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	56.50000	50.10000	0.00000	0.84003	1.4123	-1.4123	0.84003 d
1.1950	56.50000	48.90500	0.00000	1.1136	1.4952	-1.4952	1.1136 d
2.3900	56.50000	47.71000	0.00000	1.0708	1.3967	-1.3967	1.0708 d

d - Displacements include imported displacements.

Structure: 36-48 | Sub-structure:

Dist.	Coordinates			Displacements			
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	56.50000	47.71000	0.00000	1.0708	1.3967	-1.7545	-0.13899 d
1.1506	55.73000	46.85500	0.00000	0.93757	1.1061	-1.4493	-0.043491 d
2.3012	54.96000	46.00000	0.00000	0.80409	0.93976	-1.2364	-0.031390 d

d - Displacements include imported displacements.

Structure: 48-47 | Sub-structure:

Dist.	Coordinates			Displacements			
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	54.96000	46.00000	0.00000	0.80409	0.93976	-0.93976	0.80409 d
1.1700	54.96000	44.83000	0.00000	0.68541	0.96606	-0.96606	0.68541 d

d - Displacements include imported displacements.

Structure: 47-51 | Sub-structure:

Dist.	Coordinates			Displacements			
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	54.96000	44.83000	0.00000	0.68541	0.96606	-0.68541	-0.96606 d
1.0750	53.88500	44.83000	0.00000	0.61968	0.71522	-0.61968	-0.71522 d
2.1500	52.81000	44.83000	0.00000	0.52678	0.51476	-0.52678	-0.51476 d
3.2250	51.73500	44.83000	0.00000	0.42213	0.35765	-0.42213	-0.35765 d
4.3000	50.66000	44.83000	0.00000	0.31522	0.23573	-0.31522	-0.23573 d
5.3750	49.58500	44.83000	0.00000	0.21143	0.14150	-0.21143	-0.14150 d
6.4500	48.51000	44.83000	0.00000	0.11350	0.068740	-0.11350	-0.068740 d
7.5250	47.43500	44.83000	0.00000	0.022589	0.012493	-0.022589	-0.012493 d
8.6000	46.36000	44.83000	0.00000	0.0	0.0	0.0	0.0 d
9.6750	45.28500	44.83000	0.00000	0.0	0.0	0.0	0.0 d
10.750	44.21000	44.83000	0.00000	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: 50-46 | Sub-structure:

Dist.	Coordinates			Displacements	
	x	y	z	x	y
[m]	[m]	[m]	[m]	[mm]	[mm]
0.0	54.96000	44.83000	0.00000	0.68541	0.96606
1.0750	53.88500	44.83000	0.00000	0.61968	0.71522
2.1500	52.81000	44.83000	0.00000	0.52678	0.51476
3.2250	51.73500	44.83000	0.00000	0.42213	0.35765
4.3000	50.66000	44.83000	0.00000	0.31522	0.23573
5.3750	49.58500	44.83000	0.00000	0.21143	0.14150
6.4500	48.51000	44.83000	0.00000	0.11350	0.068740
7.5250	47.43500	44.83000	0.00000	0.022589	0.012493
8.6000	46.36000	44.83000	0.00000	0.0	0.0
9.6750	45.28500	44.83000	0.00000	0.0	0.0
10.750	44.21000	44.83000	0.00000	0.0	0.0

d - Displacements include imported displacements.

	[m]	[m]	[m]	[m]	[mm]	[mm]	Line [mm]	to Line [mm]	
	0.0	44.16000	36.71000	0.00000	0.0	0.0	0.0	0.0	0.0 d
1.0800	45.24000	36.71000	0.00000	0.00000	0.0	0.0	0.0	0.0	0.0 d
2.1600	46.32000	36.71000	0.00000	0.00000	0.0	0.0	0.0	0.0	0.0 d
3.2400	47.40000	36.71000	0.00000	0.00000	0.0	0.0	0.0	0.0	0.0 d
4.3200	48.48000	36.71000	0.00000	0.00000	0.0	0.0	0.0	0.0	0.0 d
5.4000	49.56000	36.71000	0.00000	0.00000	0.0	0.0	0.0	0.0	0.0 d
6.4800	50.64000	36.71000	0.00000	0.00000	0.0	0.0	0.0	0.0	0.0 d
7.5600	51.72000	36.71000	0.00000	0.00000	0.0	0.0	0.0	0.0	0.0 d
8.6400	52.80000	36.71000	0.00000	0.00000	0.0	0.0	0.0	0.0	0.0 d
9.7200	53.88000	36.71000	0.00000	0.00000	0.0	0.0	0.0	0.0	0.0 d
10.8000	54.96000	36.71000	0.00000	0.00000	0.0	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: 46-47 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
	0.0	54.96000	36.71000	0.00000	0.0	0.0	0.0	0.0 d
1.0150	54.96000	37.72500	0.00000	0.0	0.0	0.0	0.0	0.0 d
2.0300	54.96000	38.74000	0.00000	0.050906	0.13554	0.13554	-0.050906	d
3.0450	54.96000	39.75500	0.00000	0.14079	0.34546	0.34546	-0.14079	d
4.0600	54.96000	40.77000	0.00000	0.23826	0.53485	0.53485	-0.23826	d
5.0750	54.96000	41.78500	0.00000	0.34320	0.69876	0.69876	-0.34320	d
6.0900	54.96000	42.80000	0.00000	0.45473	0.83086	0.83086	-0.45473	d
7.1050	54.96000	43.81500	0.00000	0.57047	0.92320	0.92320	-0.57047	d
8.1200	54.96000	44.83000	0.00000	0.68541	0.96606	0.96606	-0.68541	d

d - Displacements include imported displacements.

Structure: 24-25 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
	0.0	78.82000	63.10000	0.00000	-0.25748	-0.096352	-0.25716	-0.097186 d
1.0289	79.84889	63.09667	0.00000	0.0	0.0	0.0	0.0	0.0 d
2.0578	80.87778	63.09333	0.00000	0.0	0.0	0.0	0.0	0.0 d
3.0867	81.90667	63.09000	0.00000	0.0	0.0	0.0	0.0	0.0 d
4.1156	82.93556	63.08667	0.00000	0.0	0.0	0.0	0.0	0.0 d
5.1445	83.96444	63.08333	0.00000	0.0	0.0	0.0	0.0	0.0 d
6.1734	84.99333	63.08000	0.00000	0.0	0.0	0.0	0.0	0.0 d
7.2023	86.02222	63.07667	0.00000	0.0	0.0	0.0	0.0	0.0 d
8.2312	87.05111	63.07333	0.00000	0.0	0.0	0.0	0.0	0.0 d
9.2600	88.08000	63.07000	0.00000	0.0	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: 25-26 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
	0.0	88.08000	63.07000	0.00000	0.0	0.0	0.0	0.0 d
1.0641	88.06400	62.00600	0.00000	0.0	0.0	0.0	0.0	0.0 d
2.1282	88.04800	60.94200	0.00000	0.0	0.0	0.0	0.0	0.0 d
3.1924	88.03200	59.87800	0.00000	0.0	0.0	0.0	0.0	0.0 d
4.2565	88.01600	58.81400	0.00000	0.0	0.0	0.0	0.0	0.0 d
5.3206	88.00000	57.75000	0.00000	0.0	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: 26-27 | Sub-structure:

Dist.	Coordinates			Displacements				
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	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
	0.0	88.00000	57.75000	0.00000	0.0	0.0	0.0	0.0 d
1.0246	86.97545	57.76364	0.00000	0.0	0.0	0.0	0.0	0.0 d
2.0493	85.95091	57.77727	0.00000	0.0	0.0	0.0	0.0	0.0 d
3.0739	84.92636	57.79091	0.00000	0.0	0.0	0.0	0.0	0.0 d
4.0985	83.90182	57.80455	0.00000	0.0	0.0	0.0	0.0	0.0 d
5.1232	82.87727	57.81818	0.00000	0.0	0.0	0.0	0.0	0.0 d
6.1478	81.85273	57.83182	0.00000	0.0	0.0	0.0	0.0	0.0 d
7.1725	80.82818	57.84545	0.00000	0.0	0.0	0.0	0.0	0.0 d
8.1971	79.80364	57.85909	0.00000	-0.23051	902.20E-6	0.23050	0.0021657	d
9.2217	78.77909	57.87273	0.00000	-0.61473	0.0024060	0.61471	0.0057754	d
10.246	77.75455	57.88636	0.00000	-0.99895	0.0039098	0.99891	0.0093851	d
11.271	76.73000	57.90000	0.00000	-1.3832	0.0054136	1.3831	0.012995	d

d - Displacements include imported displacements.

Structure: 27-28 | Sub-structure:

Dist.	Coordinates			Displacements		Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	x	y	z	x	y	[mm]	[mm]	
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
	0.0	76.73000	57.90000	0.00000	-1.3832	0.0054136	0.014140	1.3831 d
1.0567	76.72333	58.95667	0.00000	-1.3764	-0.083160	-0.074474	1.3769	d
2.1134	76.71667	60.01333	0.00000	-1.3216	-0.21044	-0.20210	1.3229	d
3.1701	76.71000	61.07000	0.00000	-1.2198	-0.31493	-0.30723	1.2218	d

d - Displacements include imported displacements.

Structure: 28-29 | Sub-structure:

Dist.	Coordinates			Displacements		Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	x	y	z	x	y	[mm]	[mm]	
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
	0.0	76.71000	61.07000	0.00000	-1.2198	-0.31493	-1.0974	0.61875 d
1.4640	77.76500	62.08500	0.00000	-0.73660	-0.23675	-0.69497	0.34008	d
2.9280	78.82000	63.10000	0.00000	-0.25748	-0.096352	-0.25235	0.10908	d

d - Displacements include imported displacements.

Structure: 27-32 | Sub-structure:

Dist.	Coordinates			Displacements		Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	x	y	z	x	y	[mm]	[mm]	
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
	0.0	76.73000	57.90000	0.00000	-1.3832	0.0054136	-0.010785	-1.3831 d
1.0300	76.73400	56.87000	0.00000	-1.3802	0.0054018	-0.010762	-1.3801	d
2.0600	76.73800	55.84000	0.00000	-1.3771	0.0053900	-0.010738	-1.3771	d
3.0900	76.74200	54.81000	0.00000	-1.3741	0.0053782	-0.010715	-1.3741	d
4.1200	76.74600	53.78000	0.00000	-1.3711	0.0053664	-0.010691	-1.3711	d
5.1500	76.75000	52.75000	0.00000	-1.3640	0.057099	-0.062395	-1.3638	d

d - Displacements include imported displacements.

Structure: 33-31 | Sub-structure:

Dist.	Coordinates			Displacements		Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	x	y	z	x	y	[mm]	[mm]	
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
	0.0	87.93000	52.75000	0.00000	0.0	0.0	0.0	0.0 d
1.0400	86.89000	52.75000	0.00000	0.0	0.0	0.0	0.0	0.0 d
2.0800	85.85000	52.75000	0.00000	0.0	0.0	0.0	0.0	0.0 d

3.1200	84.81000	52.75000	0.00000	0.0	0.0	0.0	0.0	0.0	d
4.1600	83.77000	52.75000	0.00000	0.0	0.0	0.0	0.0	0.0	d
5.2000	82.73000	52.75000	0.00000	0.0	0.0	0.0	0.0	0.0	d
6.2400	81.69000	52.75000	0.00000	0.0	0.0	0.0	0.0	0.0	d
7.2800	80.65000	52.75000	0.00000	0.0	0.0	0.0	0.0	0.0	d
8.3200	79.61000	52.75000	0.00000	-0.29330	0.0096977	0.29330	-0.0096977	d	
9.3600	78.57000	52.75000	0.00000	-0.68279	0.024444	0.68279	-0.024444	d	
10.400	77.53000	52.75000	0.00000	-1.0721	0.041844	1.0721	-0.041844	d	
11.440	76.49000	52.75000	0.00000	-1.4613	0.062686	1.4613	-0.062686	d	
12.480	75.45000	52.75000	0.00000	-1.8501	0.088102	1.8501	-0.088102	d	
13.520	74.41000	52.75000	0.00000	-2.2385	0.11978	2.2385	-0.11978	d	
14.560	73.37000	52.75000	0.00000	-2.6262	0.16035	2.6262	-0.16035	d	
15.600	72.33000	52.75000	0.00000	-3.0127	0.21417	3.0127	-0.21417	d	
16.640	71.29000	52.75000	0.00000	-3.3968	0.28895	3.3968	-0.28895	d	
17.680	70.25000	52.75000	0.00000	-3.7762	0.39984	3.7762	-0.39984	d	

Structure: 31-34 | Sub-structure:

Dist.	Coordinates			Displacements					
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line		
	[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
	0.0	70.25000	52.75000	0.00000	-3.7762	0.39984	-0.32133	-3.7837	d
1.1236	70.22667	51.62667	0.00000	-3.4758	1.2938	-1.2214	-3.5019	d	
2.2472	70.20333	50.50333	0.00000	-2.9688	1.9046	-1.8426	-3.0077	d	
3.3707	70.18000	49.38000	0.00000	-2.4187	2.2104	-2.1597	-2.4641	d	

Structure: 34-35 | Sub-structure:

Dist.	Coordinates			Displacements					
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line		
	[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
	0.0	70.18000	49.38000	0.00000	-2.4187	2.2104	-2.4352	2.1921	d
1.3300	71.51000	49.37000	0.00000	-2.3678	1.6458	-2.3801	1.6280	d	

Structure: 35-41 | Sub-structure:

Dist.	Coordinates			Displacements					
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line		
	[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
	0.0	71.51000	49.37000	0.00000	-2.3678	1.6458	-1.6261	-2.3814	d
1.2000	71.50000	48.17000	0.00000	-1.9223	1.7581	-1.7420	-1.9369	d	
2.4001	71.49000	46.97000	0.00000	-1.5114	1.7152	-1.7025	-1.5257	d	
3.6001	71.48000	45.77000	0.00000	-1.1503	1.5596	-1.5499	-1.1632	d	

Structure: 41-40 | Sub-structure:

Dist.	Coordinates			Displacements					
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line		
	[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
	0.0	71.48000	45.77000	0.00000	-1.1503	1.5596	1.1503	-1.5596	d
1.0175	70.46250	45.77000	0.00000	-1.1069	1.8430	1.1069	-1.8430	d	
2.0350	69.44500	45.77000	0.00000	-0.97961	2.1128	0.97961	-2.1128	d	
3.0525	68.42750	45.77000	0.00000	-0.76672	2.3467	0.76672	-2.3467	d	
4.0700	67.41000	45.77000	0.00000	-0.61336	2.4938	0.61336	-2.4938	d	

Structure: 40-39 | Sub-structure:

Dist.	Coordinates			Displacements			
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	67.41000	45.77000	0.00000	-0.61336	2.4938	-2.4906	-0.62614 d
1.3000	67.40333	44.47000	0.00000	-0.50044	2.0347	-2.0321	-0.51086 d
2.6000	67.39667	43.17000	0.00000	-0.38752	1.5756	-1.5735	-0.39559 d
3.9001	67.39000	41.87000	0.00000	-0.27459	1.1164	-1.1150	-0.28032 d

d - Displacements include imported displacements.

Structure: 39-38 | Sub-structure:

Dist.	Coordinates			Displacements			
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	67.39000	41.87000	0.00000	-0.27459	1.1164	-0.28379	1.1141 d
1.0305	68.42050	41.86150	0.00000	-0.25181	1.0238	-0.26025	1.0217 d
2.0611	69.45100	41.85300	0.00000	-0.27713	0.91122	-0.28464	0.90891 d
3.0916	70.48150	41.84450	0.00000	-0.30178	0.76467	-0.30808	0.76215 d
4.1221	71.51200	41.83600	0.00000	-0.28963	0.59713	-0.29455	0.59472 d
5.1527	72.54250	41.82750	0.00000	-0.23933	0.41602	-0.24275	0.41403 d
6.1832	73.57300	41.81900	0.00000	-0.15159	0.22781	-0.15346	0.22655 d
7.2137	74.60350	41.81050	0.00000	-0.028529	0.037767	-0.028839	0.037530 d
8.2443	75.63400	41.80200	0.00000	0.0	0.0	0.0	0.0 d
9.2748	76.66450	41.79350	0.00000	0.0	0.0	0.0	0.0 d
10.305	77.69500	41.78500	0.00000	0.0	0.0	0.0	0.0 d
11.336	78.72550	41.77650	0.00000	0.0	0.0	0.0	0.0 d
12.366	79.75600	41.76800	0.00000	0.0	0.0	0.0	0.0 d
13.397	80.78650	41.75950	0.00000	0.0	0.0	0.0	0.0 d
14.427	81.81700	41.75100	0.00000	0.0	0.0	0.0	0.0 d
15.458	82.84750	41.74250	0.00000	0.0	0.0	0.0	0.0 d
16.489	83.87800	41.73400	0.00000	0.0	0.0	0.0	0.0 d
17.519	84.90850	41.72550	0.00000	0.0	0.0	0.0	0.0 d
18.550	85.93900	41.71700	0.00000	0.0	0.0	0.0	0.0 d
19.580	86.96950	41.70850	0.00000	0.0	0.0	0.0	0.0 d
20.611	88.00000	41.70000	0.00000	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: 38-25 | Sub-structure:

Dist.	Coordinates			Displacements			
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	88.00000	41.70000	0.00000	0.0	0.0	0.0	0.0 d
1.0176	88.00381	42.71762	0.00000	0.0	0.0	0.0	0.0 d
2.0353	88.00762	43.73524	0.00000	0.0	0.0	0.0	0.0 d
3.0529	88.01143	44.75286	0.00000	0.0	0.0	0.0	0.0 d
4.0705	88.01524	45.77048	0.00000	0.0	0.0	0.0	0.0 d
5.0881	88.01905	46.78810	0.00000	0.0	0.0	0.0	0.0 d
6.1058	88.02286	47.80571	0.00000	0.0	0.0	0.0	0.0 d
7.1234	88.02667	48.82333	0.00000	0.0	0.0	0.0	0.0 d
8.1410	88.03048	49.84095	0.00000	0.0	0.0	0.0	0.0 d
9.1586	88.03429	50.85857	0.00000	0.0	0.0	0.0	0.0 d
10.176	88.03810	51.87619	0.00000	0.0	0.0	0.0	0.0 d
11.194	88.04190	52.89381	0.00000	0.0	0.0	0.0	0.0 d
12.212	88.04571	53.91143	0.00000	0.0	0.0	0.0	0.0 d
13.229	88.04952	54.92905	0.00000	0.0	0.0	0.0	0.0 d
14.247	88.05333	55.94667	0.00000	0.0	0.0	0.0	0.0 d
15.264	88.05714	56.96429	0.00000	0.0	0.0	0.0	0.0 d
16.282	88.06095	57.98190	0.00000	0.0	0.0	0.0	0.0 d
17.300	88.06476	58.99952	0.00000	0.0	0.0	0.0	0.0 d
18.317	88.06857	60.01714	0.00000	0.0	0.0	0.0	0.0 d
19.335	88.07238	61.03476	0.00000	0.0	0.0	0.0	0.0 d
20.353	88.07619	62.05238	0.00000	0.0	0.0	0.0	0.0 d
21.370	88.08000	63.07000	0.00000	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: 20-22 | Sub-structure:

Dist.	Coordinates			Displacements			
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	55.96000	70.70000	0.00000	0.12817	-0.41142	0.12858	-0.41129 d
1.0170	56.97700	70.69900	0.00000	0.12132	-0.52867	0.12184	-0.52855 d
2.0340	57.99400	70.69800	0.00000	0.093137	-0.63186	0.093758	-0.63177 d
3.0510	59.01100	70.69700	0.00000	0.046536	-0.71253	0.047236	-0.71248 d
4.0680	60.02800	70.69600	0.00000	0.0	-0.75525	742.63E-6	-0.75525 d
5.0850	61.04500	70.69500	0.00000	0.0	-0.75563	742.99E-6	-0.75562 d
6.1020	62.06200	70.69400	0.00000	0.0	-0.75600	743.36E-6	-0.75600 d
7.1190	63.07900	70.69300	0.00000	0.0	-0.75638	743.73E-6	-0.75637 d
8.1360	64.09600	70.69200	0.00000	0.0	-0.75675	744.10E-6	-0.75675 d
9.1530	65.11300	70.69100	0.00000	0.0	-0.75713	744.47E-6	-0.75712 d
10.170	66.13000	70.69000	0.00000	-0.0067287	-0.75729	-0.0059841	-0.75729 d

d - Displacements include imported displacements.

Structure: 22-b | Sub-structure:

Dist.	Coordinates			Displacements			
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	66.13000	70.69000	0.00000	-0.0067287	-0.75729	0.75711	-0.017646 d
0.69360	66.14000	69.99647	0.00000	-0.010446	-1.0173	1.0170	-0.025111 d
1.3872	66.15000	69.30294	0.00000	-0.015105	-1.2773	1.2769	-0.033518 d
2.0808	66.16000	68.60941	0.00000	-0.020895	-1.5372	1.5368	-0.043056 d
2.7744	66.17000	67.91588	0.00000	-0.028063	-1.7971	1.7965	-0.053970 d
3.4680	66.18000	67.22235	0.00000	-0.036928	-2.0570	2.0563	-0.066581 d
4.1616	66.19000	66.52882	0.00000	-0.047921	-2.3168	2.3159	-0.081318 d
4.8552	66.20000	65.83529	0.00000	-0.061627	-2.5765	2.5753	-0.098767 d
5.5488	66.21000	65.14176	0.00000	-0.078873	-2.8360	2.8346	-0.11975 d
6.2424	66.22000	64.44824	0.00000	-0.10085	-3.0953	3.0935	-0.14547 d
6.9360	66.23000	63.75471	0.00000	-0.12937	-3.3542	3.3520	-0.17772 d
7.6296	66.24000	63.06118	0.00000	-0.16728	-3.6125	3.6097	-0.21934 d
8.3232	66.25000	62.36765	0.00000	-0.21935	-3.8697	3.8662	-0.27512 d
9.0168	66.26000	61.67412	0.00000	-0.29427	-4.1248	4.1201	-0.35370 d
9.7104	66.27000	60.98059	0.00000	-0.40956	-4.3750	4.3687	-0.47259 d
10.404	66.28000	60.28706	0.00000	-0.60658	-4.6125	4.6033	-0.67302 d
11.098	66.29000	59.59353	0.00000	-1.0104	-4.8030	4.7880	-1.0795 d
11.791	66.30000	58.90000	0.00000	-2.2102	-4.6572	4.6249	-2.2771 d

d - Displacements include imported displacements.

Structure: e-45 | Sub-structure:

Dist.	Coordinates			Displacements			
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	64.74000	51.60000	0.00000	-1.1775	4.7875	-4.7661	-1.2617 d
0.98415	64.72267	50.61600	0.00000	-1.0923	4.4411	-4.4212	-1.1704 d
1.9683	64.70533	49.63200	0.00000	-1.0071	4.0946	-4.0763	-1.0791 d
2.9525	64.68800	48.64800	0.00000	-0.92189	3.7482	-3.7314	-0.98776 d
3.9366	64.67067	47.66400	0.00000	-0.83668	3.4018	-3.3865	-0.89646 d
4.9208	64.65333	46.68000	0.00000	-0.75147	3.0553	-3.0416	-0.80516 d
5.9049	64.63600	45.69600	0.00000	-0.66626	2.7089	-2.6967	-0.71387 d
6.8891	64.61867	44.71200	0.00000	-0.58105	2.3624	-2.3518	-0.62257 d
7.8732	64.60133	43.72800	0.00000	-0.49584	2.0160	-2.0069	-0.53127 d
8.8574	64.58400	42.74400	0.00000	-0.41063	1.6695	-1.6620	-0.43997 d
9.8415	64.56667	41.76000	0.00000	-0.32542	1.3231	-1.3172	-0.34867 d
10.826	64.54933	40.77600	0.00000	-0.24021	0.97665	-0.97227	-0.25738 d
11.810	64.53200	39.79200	0.00000	-0.15500	0.63021	-0.62738	-0.16608 d
12.794	64.51467	38.80800	0.00000	-0.069793	0.28377	-0.28249	-0.074780 d
13.778	64.49733	37.82400	0.00000	0.0	0.0	0.0	0.0 d

14.762 64.48000 36.84000 0.00000 0.0 0.0 0.0 0.0 d
d - Displacements include imported displacements.

Structure: 18-31 | Sub-structure:

Dist.	Coordinates			Displacements			
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	59.17000	64.78000	0.00000	0.27717	-2.7589	0.29332	-2.7572 d
1.1384	60.30833	64.77333	0.00000	0.0	-2.9762	0.017430	-2.9762 d
2.2767	61.44667	64.76667	0.00000	0.0	-2.9788	0.017445	-2.9787 d
3.4151	62.58500	64.76000	0.00000	0.0	-2.9813	0.017459	-2.9812 d
4.5534	63.72333	64.75333	0.00000	0.0	-2.9838	0.017474	-2.9837 d
5.6918	64.86167	64.74667	0.00000	0.0	-2.9862	0.017489	-2.9862 d
6.8301	66.00000	64.74000	0.00000	0.0	-2.9888	0.017503	-2.9887 d

d - Displacements include imported displacements.

Structure: 23-24 | Sub-structure:

Dist.	Coordinates			Displacements			
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	66.00000	63.14000	0.00000	0.0	-3.5888	0.011197	-3.5887 d
1.0683	67.06833	63.13667	0.00000	-0.75301	-3.4670	-0.74219	-3.4693 d
2.1367	68.13667	63.13333	0.00000	-1.3762	-3.1361	-1.3664	-3.1403 d
3.2050	69.20500	63.13000	0.00000	-1.7826	-2.6978	-1.7742	-2.7033 d
4.2734	70.27333	63.12667	0.00000	-1.9793	-2.2415	-1.9723	-2.2476 d
5.3417	71.34167	63.12333	0.00000	-2.0092	-1.8173	-2.0036	-1.8236 d
6.4100	72.41000	63.12000	0.00000	-1.9181	-1.4438	-1.9136	-1.4498 d
7.4784	73.47833	63.11667	0.00000	-1.7422	-1.1228	-1.7386	-1.1282 d
8.5467	74.54667	63.11333	0.00000	-1.5073	-0.84913	-1.5047	-0.85383 d
9.6150	75.61500	63.11000	0.00000	-1.2313	-0.61596	-1.2294	-0.61980 d
10.683	76.68333	63.10667	0.00000	-0.92594	-0.41652	-0.92464	-0.41940 d
11.752	77.75167	63.10333	0.00000	-0.59947	-0.24493	-0.59870	-0.24680 d
12.820	78.82000	63.10000	0.00000	-0.25748	-0.096352	-0.25717	-0.097155 d

d - Displacements include imported displacements.

Structure: b-27 | Sub-structure:

Dist.	Coordinates			Displacements			
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	66.10000	58.46000	0.00000	-2.5112	-4.7085	-2.2600	-4.8340 d
1.0645	67.16300	58.40400	0.00000	-4.9532	-0.40735	-4.9249	-0.66737 d
2.1289	68.22600	58.34800	0.00000	-4.5719	-0.078755	-4.5615	-0.31917 d
3.1934	69.28900	58.29200	0.00000	-4.1741	0.016337	-4.1692	-0.20328 d
4.2579	70.35200	58.23600	0.00000	-3.7754	0.014776	-3.7709	-0.18386 d
5.3224	71.41500	58.18000	0.00000	-3.3767	0.013216	-3.3727	-0.16444 d
6.3868	72.47800	58.12400	0.00000	-2.9780	0.011655	-2.9745	-0.14503 d
7.4513	73.54100	58.06800	0.00000	-2.5793	0.010095	-2.5762	-0.12561 d
8.5158	74.60400	58.01200	0.00000	-2.1806	0.0085345	-2.1780	-0.10619 d
9.5803	75.66700	57.95600	0.00000	-1.7819	0.0069740	-1.7798	-0.086776 d
10.645	76.73000	57.90000	0.00000	-1.3832	0.0054136	-1.3815	-0.067360 d

d - Displacements include imported displacements.

Structure: 42-37 | Sub-structure:

Dist.	Coordinates			Displacements			
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	64.54000	46.73000	0.00000	-0.75824	3.0829	-0.79504	3.0736 d

1.0183	65.55826	46.71783	0.00000	-0.73540	2.9900	-0.77109	2.9810	d
2.0367	66.57652	46.70565	0.00000	-0.71256	2.8971	-0.74714	2.8884	d
3.0550	67.59478	46.69348	0.00000	-0.68972	2.8043	-0.72320	2.7958	d
4.0733	68.61304	46.68130	0.00000	-1.0293	2.5678	-1.0599	2.5553	d
5.0917	69.63130	46.66913	0.00000	-1.2624	2.2704	-1.2895	2.2552	d
6.1100	70.64957	46.65696	0.00000	-1.3844	1.9482	-1.4076	1.9315	d
7.1283	71.66783	46.64478	0.00000	-1.4064	1.6266	-1.4258	1.6097	d
8.1467	72.68609	46.63261	0.00000	-1.3451	1.3213	-1.3608	1.3051	d
9.1650	73.70435	46.62043	0.00000	-1.2172	1.0395	-1.2296	1.0249	d
10.183	74.72261	46.60826	0.00000	-1.0372	0.78381	-1.0465	0.77136	d
11.202	75.74087	46.59609	0.00000	-0.81681	0.55377	-0.82338	0.54396	d
12.220	76.75913	46.58391	0.00000	-0.56522	0.34757	-0.56933	0.34079	d
13.238	77.77739	46.57174	0.00000	-0.28939	0.16287	-0.29132	0.15940	d
14.257	78.79565	46.55957	0.00000	0.0	0.0	0.0	0.0	d
15.275	79.81391	46.54739	0.00000	0.0	0.0	0.0	0.0	d
16.293	80.83217	46.53522	0.00000	0.0	0.0	0.0	0.0	d
17.312	81.85043	46.52304	0.00000	0.0	0.0	0.0	0.0	d
18.330	82.86870	46.51087	0.00000	0.0	0.0	0.0	0.0	d
19.348	83.88696	46.49870	0.00000	0.0	0.0	0.0	0.0	d
20.367	84.90522	46.48652	0.00000	0.0	0.0	0.0	0.0	d
21.385	85.92348	46.47435	0.00000	0.0	0.0	0.0	0.0	d
22.403	86.94174	46.46217	0.00000	0.0	0.0	0.0	0.0	d
23.422	87.96000	46.45000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 47-43 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	54.96000	44.83000	0.00000	0.68541	0.96606	0.68541	0.96606	d
1.0600	56.02000	44.83000	0.00000	0.70166	1.2648	0.70166	1.2648	d
2.1200	57.08000	44.83000	0.00000	0.64246	1.6062	0.64246	1.6062	d
3.1800	58.14000	44.83000	0.00000	0.48181	1.9645	0.48181	1.9645	d
4.2400	59.20000	44.83000	0.00000	0.20776	2.2954	0.20776	2.2954	d
5.3000	60.26000	44.83000	0.00000	-0.16345	2.5446	-0.16345	2.5446	d
6.3600	61.32000	44.83000	0.00000	-0.58424	2.6680	-0.58424	2.6680	d
7.4200	62.38000	44.83000	0.00000	-0.63920	2.5989	-0.63920	2.5989	d
8.4800	63.44000	44.83000	0.00000	-0.61653	2.5067	-0.61653	2.5067	d
9.5400	64.50000	44.83000	0.00000	-0.59385	2.4145	-0.59385	2.4145	d

d - Displacements include imported displacements.

Structure: 44-39 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	64.44000	41.91000	0.00000	-0.34118	1.3872	-0.35995	1.3824	d
1.4751	65.91500	41.89000	0.00000	-0.30789	1.2518	-0.32483	1.2475	d
2.9503	67.39000	41.87000	0.00000	-0.27459	1.1164	-0.28971	1.1126	d

d - Displacements include imported displacements.

Structure: 46-45 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	54.96000	36.71000	0.00000	0.0	0.0	0.0	0.0	d
1.0579	56.01778	36.72444	0.00000	0.0	0.0	0.0	0.0	d
2.1158	57.07556	36.73889	0.00000	0.0	0.0	0.0	0.0	d
3.1736	58.13333	36.75333	0.00000	0.0	0.0	0.0	0.0	d
4.2315	59.19111	36.76778	0.00000	0.0	0.0	0.0	0.0	d
5.2894	60.24889	36.78222	0.00000	0.0	0.0	0.0	0.0	d
6.3473	61.30667	36.79667	0.00000	0.0	0.0	0.0	0.0	d
7.4051	62.36444	36.81111	0.00000	0.0	0.0	0.0	0.0	d

8.4630 63.42222 36.82556 0.00000 0.0 0.0 0.0 0.0 d
 9.5209 64.48000 36.84000 0.00000 0.0 0.0 0.0 0.0 d
 d - Displacements include imported displacements.

Structure: a-12 | Sub-structure:

Dist.	Coordinates			Displacements			
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	44.06000	58.90000	0.00000	-0.0037284	-1.4056	0.16757	1.3956 d
1.1151	42.95250	58.77000	0.00000	-0.0038606	-1.4554	0.17351	1.4451 d
2.2302	41.84500	58.64000	0.00000	-0.0039928	-1.5053	0.17945	1.4946 d
3.3453	40.73750	58.51000	0.00000	-0.0041250	-1.5551	0.18540	1.5441 d
4.4604	39.63000	58.38000	0.00000	-0.0042573	-1.6050	0.19134	1.5936 d

d - Displacements include imported displacements.

Structure: 12-11 | Sub-structure:

Dist.	Coordinates			Displacements			
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	39.63000	58.38000	0.00000	-0.0042573	-1.6050	1.6050	-0.0042573 d
1.1167	39.63000	57.26333	0.00000	1.6050	0.0	0.0	1.6050 d
2.2333	39.63000	56.14667	0.00000	1.6050	0.0	0.0	1.6050 d
3.3500	39.63000	55.03000	0.00000	1.6050	0.0	0.0	1.6050 d
4.4667	39.63000	53.91333	0.00000	1.6050	0.0	0.0	1.6050 d
5.5833	39.63000	52.79667	0.00000	1.6050	0.0	0.0	1.6050 d
6.7000	39.63000	51.68000	0.00000	1.6050	0.0	0.0	1.6050 d

d - Displacements include imported displacements.

Structure: 11-f | Sub-structure:

Dist.	Coordinates			Displacements			
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	39.63000	51.68000	0.00000	1.6050	0.0	1.6047	0.028720 d
0.55884	40.18875	51.67000	0.00000	0.0	1.6013	-0.028653	1.6010 d
1.1177	40.74750	51.66000	0.00000	0.0	1.5975	-0.028586	1.5972 d
1.6765	41.30625	51.65000	0.00000	0.0	1.5938	-0.028519	1.5935 d
2.2354	41.86500	51.64000	0.00000	0.0	1.5900	-0.028452	1.5897 d
2.7942	42.42375	51.63000	0.00000	0.0	1.5863	-0.028385	1.5860 d
3.3530	42.98250	51.62000	0.00000	0.0	1.5825	-0.028318	1.5822 d
3.9119	43.54125	51.61000	0.00000	0.0	1.5788	-0.028251	1.5785 d
4.4707	44.10000	51.60000	0.00000	0.0	1.5750	-0.028183	1.5747 d

d - Displacements include imported displacements.

Structure: ag | Sub-structure:

Dist.	Coordinates			Displacements			
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	44.06000	58.90000	0.00000	-0.0037284	-1.4056	0.059869	-1.4043 d
1.0047	45.06364	58.85455	0.00000	-0.0037709	-1.4216	0.060553	-1.4204 d
2.0093	46.06727	58.80909	0.00000	0.0017098	-1.4379	0.066763	-1.4363 d
3.0140	47.07091	58.76364	0.00000	0.010084	-1.4542	0.075868	-1.4523 d
4.0187	48.07455	58.71818	0.00000	0.018044	-1.4705	0.084558	-1.4682 d
5.0233	49.07818	58.67273	0.00000	0.025472	-1.4868	0.092715	-1.4841 d
6.0280	50.08182	58.62727	0.00000	0.032204	-1.5031	0.10017	-1.5001 d
7.0327	51.08545	58.58182	0.00000	0.037999	-1.5192	0.10670	-1.5160 d
8.0373	52.08909	58.53636	0.00000	0.042493	-1.5353	0.11191	-1.5318 d
9.0420	53.09273	58.49091	0.00000	0.045102	-1.5513	0.11524	-1.5477 d

10.047 54.09636 58.44545 0.00000 0.044834 -1.5672 0.11569 -1.5636 d
 11.051 55.10000 58.40000 0.00000 0.039851 -1.5829 0.11143 -1.5795 d
 d - Displacements include imported displacements.

Structure: gb | Sub-structure:

Dist.	Coordinates			Displacements			
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	55.10000	58.40000	0.00000	0.039851	-1.5829	0.031519	-1.5831 d
0.57001	55.67000	58.40300	0.00000	0.049926	-1.5816	0.041601	-1.5819 d
1.1400	56.24000	58.40600	0.00000	0.060559	-1.5805	0.052241	-1.5808 d
1.7100	56.81000	58.40900	0.00000	0.075208	-1.5796	0.066893	-1.5800 d
2.2800	57.38000	58.41200	0.00000	0.096670	-1.5796	0.088355	-1.5800 d
2.8500	57.95000	58.41500	0.00000	0.13113	-1.5812	0.12280	-1.5819 d
3.4200	58.52000	58.41800	0.00000	0.19539	-1.5885	0.18703	-1.5895 d
3.9901	59.09000	58.42100	0.00000	0.35626	-1.6251	0.34770	-1.6269 d
4.5601	59.66000	58.42400	0.00000	1.2139	-2.4365	1.2011	-2.4428 d
5.1301	60.23000	58.42700	0.00000	-0.0041562	-5.3619	-0.032376	-5.3618 d
5.7001	60.80000	58.43000	0.00000	-0.0041517	-5.3602	-0.032363	-5.3601 d
6.2701	61.37000	58.43300	0.00000	-0.0041472	-5.3585	-0.032349	-5.3584 d
6.8401	61.94000	58.43600	0.00000	-0.0041427	-5.3568	-0.032336	-5.3567 d
7.4101	62.51000	58.43900	0.00000	-0.0041382	-5.3551	-0.032323	-5.3550 d
7.9801	63.08000	58.44200	0.00000	-0.0041337	-5.3534	-0.032309	-5.3533 d
8.5501	63.65000	58.44500	0.00000	-0.0041292	-5.3517	-0.032296	-5.3516 d
9.1201	64.22000	58.44800	0.00000	-0.0041248	-5.3500	-0.032282	-5.3499 d
9.6901	64.79000	58.45100	0.00000	-0.0041203	-5.3483	-0.032269	-5.3482 d
10.260	65.36000	58.45400	0.00000	-0.0041158	-5.3467	-0.032256	-5.3466 d
10.830	65.93000	58.45700	0.00000	-0.0041113	-5.3450	-0.032242	-5.3449 d
11.400	66.50000	58.46000	0.00000	-4.9742	-1.5544	-4.9823	-1.5282 d

d - Displacements include imported displacements.

Structure: bc | Sub-structure:

Dist.	Coordinates			Displacements			
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	66.50000	58.46000	0.00000	-4.9742	-1.5544	1.5544	-4.9742 d
0.27800	66.50000	58.18200	0.00000	-5.2198	0.020430	-0.020430	-5.2198 d
0.55600	66.50000	57.90400	0.00000	-5.2194	0.020428	-0.020428	-5.2194 d
0.83400	66.50000	57.62600	0.00000	-5.2190	0.020426	-0.020426	-5.2190 d
1.1120	66.50000	57.34800	0.00000	-5.2185	0.020425	-0.020425	-5.2185 d
1.3900	66.50000	57.07000	0.00000	-5.2181	0.020423	-0.020423	-5.2181 d
1.6680	66.50000	56.79200	0.00000	-5.2177	0.020422	-0.020422	-5.2177 d
1.9460	66.50000	56.51400	0.00000	-5.2173	0.020420	-0.020420	-5.2173 d
2.2240	66.50000	56.23600	0.00000	-5.2169	0.020418	-0.020418	-5.2169 d
2.5020	66.50000	55.95800	0.00000	-5.2165	0.020417	-0.020417	-5.2165 d
2.7800	66.50000	55.68000	0.00000	-5.2161	0.020415	-0.020415	-5.2161 d
3.0580	66.50000	55.40200	0.00000	-5.2157	0.020414	-0.020414	-5.2157 d
3.3360	66.50000	55.12400	0.00000	-5.2153	0.020412	-0.020412	-5.2153 d
3.6140	66.50000	54.84600	0.00000	-5.2149	0.020410	-0.020410	-5.2149 d
3.8920	66.50000	54.56800	0.00000	-5.2145	0.020409	-0.020409	-5.2145 d
4.1700	66.50000	54.29000	0.00000	-5.2141	0.020407	-0.020407	-5.2141 d
4.4480	66.50000	54.01200	0.00000	-5.2137	0.020406	-0.020406	-5.2137 d
4.7260	66.50000	53.73400	0.00000	-5.2132	0.020404	-0.020404	-5.2132 d
5.0040	66.50000	53.45600	0.00000	-5.2128	0.020402	-0.020402	-5.2128 d
5.2820	66.50000	53.17800	0.00000	-5.2073	0.22912	-0.22912	-5.2073 d
5.5600	66.50000	52.90000	0.00000	-4.4430	2.6658	-2.6658	-4.4430 d

d - Displacements include imported displacements.

Structure: cd | Sub-structure:

Dist.	Coordinates			Displacements			
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]

0.0	66.50000	52.90000	0.00000	-4.4430	2.6658	2.4383	-4.5718	d
1.7493	65.00000	52.00000	0.00000	-1.2067	4.9064	-1.4895	-4.8280	d

d - Displacements include imported displacements.

Structure: eh | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	64.74000	51.60000	0.00000	-1.1775	4.7875	1.1775	-4.7875	d
1.0844	63.65556	51.60000	0.00000	-1.2007	4.8818	1.2007	-4.8818	d
2.1689	62.57111	51.60000	0.00000	-1.2239	4.9762	1.2239	-4.9762	d
3.2533	61.48667	51.60000	0.00000	-1.2471	5.0705	1.2471	-5.0705	d
4.3378	60.40222	51.60000	0.00000	-1.2703	5.1648	1.2703	-5.1648	d
5.4222	59.31778	51.60000	0.00000	0.32672	1.6270	-0.32672	-1.6270	d
6.5067	58.23333	51.60000	0.00000	0.10538	1.5803	-0.10538	-1.5803	d
7.5911	57.14889	51.60000	0.00000	0.062681	1.5769	-0.062681	-1.5769	d
8.6756	56.06444	51.60000	0.00000	0.044598	1.5760	-0.044598	-1.5760	d
9.7600	54.98000	51.60000	0.00000	0.032693	1.5755	-0.032693	-1.5755	d

d - Displacements include imported displacements.

Structure: hf | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	54.98000	51.60000	0.00000	0.032693	1.5755	-0.032693	-1.5755	d
1.0880	53.89200	51.60000	0.00000	0.023657	1.5753	-0.023657	-1.5753	d
2.1760	52.80400	51.60000	0.00000	0.017422	1.5752	-0.017422	-1.5752	d
3.2640	51.71600	51.60000	0.00000	0.012861	1.5751	-0.012861	-1.5751	d
4.3520	50.62800	51.60000	0.00000	0.0093794	1.5751	-0.0093794	-1.5751	d
5.4400	49.54000	51.60000	0.00000	0.0066347	1.5751	-0.0066347	-1.5751	d
6.5280	48.45200	51.60000	0.00000	0.0044153	1.5750	-0.0044153	-1.5750	d
7.6160	47.36400	51.60000	0.00000	0.0025836	1.5750	-0.0025836	-1.5750	d
8.7040	46.27600	51.60000	0.00000	0.0010461	1.5750	-0.0010461	-1.5750	d
9.7920	45.18800	51.60000	0.00000	0.0	1.5750	0.0	-1.5750	d
10.880	44.10000	51.60000	0.00000	0.0	1.5750	0.0	-1.5750	d

d - Displacements include imported displacements.

Structure: de | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	65.00000	52.00000	0.00000	-1.2067	4.9064	-3.4560	-3.6857	d
0.11927	64.93500	51.90000	0.00000	-1.1994	4.8767	-3.4351	-3.6634	d
0.23854	64.87000	51.80000	0.00000	-1.1921	4.8469	-3.4142	-3.6411	d
0.35781	64.80500	51.70000	0.00000	-1.1848	4.8172	-3.3933	-3.6187	d
0.47707	64.74000	51.60000	0.00000	-1.1775	4.7875	-3.3723	-3.5964	d

d - Displacements include imported displacements.

Specific Building Damage Results - Vertical Displacements

Structure: 21-20 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	55.96000	70.70000	0.00000	-0.035904	d
1.0682	54.89182	70.70182	0.00000	-0.051083	d

2.1364	53.82364	70.70364	0.00000	-0.067189	d
3.2046	52.75545	70.70545	0.00000	-0.087862	d
4.2727	51.68727	70.70727	0.00000	-0.095675	d
5.3409	50.61909	70.70909	0.00000	-0.094265	d
6.4091	49.55091	70.71091	0.00000	-0.092362	d
7.4773	48.48273	70.71273	0.00000	-0.089998	d
8.5455	47.41455	70.71455	0.00000	-0.087165	d
9.6137	46.34636	70.71636	0.00000	-0.083824	d
10.682	45.27818	70.71818	0.00000	-0.079918	d
11.750	44.21000	70.72000	0.00000	-0.075387	d

d - Displacements include imported displacements.

Structure: 19-20 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	59.14000	66.79000	0.00000	0.46416	d
1.0080	58.50400	67.57200	0.00000	0.25715	d
2.0160	57.86800	68.35400	0.00000	0.11073	d
3.0239	57.23200	69.13600	0.00000	0.021380	d
4.0319	56.59600	69.91800	0.00000	-0.021485	d
5.0399	55.96000	70.70000	0.00000	-0.035904	d

d - Displacements include imported displacements.

Structure: 19-18 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	59.14000	66.79000	0.00000	0.46416	d
1.0051	59.15500	65.78500	0.00000	0.71374	d
2.0102	59.17000	64.78000	0.00000	0.97827	d

d - Displacements include imported displacements.

Structure: 18-13 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	59.17000	64.78000	0.00000	0.97827	d
1.0686	58.10143	64.78143	0.00000	0.74261	d
2.1371	57.03286	64.78286	0.00000	0.49449	d
3.2057	55.96429	64.78429	0.00000	0.26042	d
4.2743	54.89571	64.78571	0.00000	0.057921	d
5.3429	53.82714	64.78714	0.00000	-0.10416	d
6.4114	52.75857	64.78857	0.00000	-0.22390	d
7.4800	51.69000	64.79000	0.00000	-0.30441	d
8.5486	50.62143	64.79143	0.00000	-0.35227	d
9.6172	49.55286	64.79286	0.00000	-0.37636	d
10.686	48.48429	64.79429	0.00000	-0.38715	d
11.754	47.41571	64.79571	0.00000	-0.39614	d
12.823	46.34714	64.79714	0.00000	-0.40040	d
13.891	45.27857	64.79857	0.00000	-0.39421	d
14.960	44.21000	64.80000	0.00000	-0.38502	d

d - Displacements include imported displacements.

Structure: 21-a | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	44.21000	70.72000	0.00000	-0.075387	d
0.34768	44.20559	70.37235	0.00000	-0.084426	d
0.69535	44.20118	70.02471	0.00000	-0.094151	d

1.0430	44.19676	69.67706	0.00000	-0.10462	d
1.3907	44.19235	69.32941	0.00000	-0.11590	d
1.7384	44.18794	68.98176	0.00000	-0.12807	d
2.0861	44.18353	68.63412	0.00000	-0.14119	d
2.4337	44.17912	68.28647	0.00000	-0.15536	d
2.7814	44.17471	67.93882	0.00000	-0.17069	d
3.1291	44.17029	67.59118	0.00000	-0.18726	d
3.4768	44.16588	67.24353	0.00000	-0.20522	d
3.8244	44.16147	66.89588	0.00000	-0.22469	d
4.1721	44.15706	66.54824	0.00000	-0.24582	d
4.5198	44.15265	66.20059	0.00000	-0.26879	d
4.8675	44.14824	65.85294	0.00000	-0.29379	d
5.2151	44.14382	65.50529	0.00000	-0.32103	d
5.5628	44.13941	65.15765	0.00000	-0.35076	d
5.9105	44.13500	64.81000	0.00000	-0.38325	d
6.2582	44.13059	64.46235	0.00000	-0.41880	d
6.6058	44.12618	64.11471	0.00000	-0.45778	d
6.9535	44.12176	63.76706	0.00000	-0.50058	d
7.3012	44.11735	63.41941	0.00000	-0.54766	d
7.6489	44.11294	63.07176	0.00000	-0.59956	d
7.9965	44.10853	62.72412	0.00000	-0.65690	d
8.3442	44.10412	62.37647	0.00000	-0.70452	d
8.6919	44.09971	62.02882	0.00000	-0.76092	d
9.0396	44.09529	61.68118	0.00000	-0.81226	d
9.3872	44.09088	61.33353	0.00000	-0.84690	d
9.7349	44.08647	60.98588	0.00000	-0.86141	d
10.083	44.08206	60.63824	0.00000	-0.86101	d
10.430	44.07765	60.29059	0.00000	-0.86052	d
10.778	44.07324	59.94294	0.00000	-0.88609	d
11.126	44.06882	59.59529	0.00000	-0.97880	d
11.473	44.06441	59.24765	0.00000	-1.2024	d
11.821	44.06000	58.90000	0.00000	-1.6640	d

d - Displacements include imported displacements.

Structure: f-50 | Sub-structure:

Dist.	Coordinates			Displacements	
	x	y	z	z	
[m]	[m]	[m]	[m]	[mm]	
Vertical Offset 1					
0.0	44.10000	51.60000	0.00000	-3.1109	d
0.99267	44.10400	50.60733	0.00000	-1.0640	d
1.9853	44.10800	49.61467	0.00000	-0.86395	d
2.9780	44.11200	48.62200	0.00000	-0.84309	d
3.9707	44.11600	47.62933	0.00000	-0.70071	d
4.9634	44.12000	46.63667	0.00000	-0.55060	d
5.9560	44.12400	45.64400	0.00000	-0.42630	d
6.9487	44.12800	44.65133	0.00000	-0.33080	d
7.9414	44.13200	43.65867	0.00000	-0.25650	d
8.9341	44.13600	42.66600	0.00000	-0.19807	d
9.9267	44.14000	41.67333	0.00000	-0.15168	d
10.919	44.14400	40.68067	0.00000	-0.11453	d
11.912	44.14800	39.68800	0.00000	-0.084590	d
12.905	44.15200	38.69533	0.00000	-0.060321	d
13.897	44.15600	37.70267	0.00000	-0.040570	d
14.890	44.16000	36.71000	0.00000	-0.024449	d

d - Displacements include imported displacements.

Structure: 14-15 | Sub-structure:

Dist.	Coordinates			Displacements	
	x	y	z	z	
[m]	[m]	[m]	[m]	[mm]	
Vertical Offset 1					
0.0	55.00000	64.76000	0.00000	0.076157	d
1.0700	55.00000	63.69000	0.00000	0.046072	d
2.1400	55.00000	62.62000	0.00000	-0.091003	d

d - Displacements include imported displacements.

Structure: 15-16 | Sub-structure:

Dist.	Coordinates	Displacements
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	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	55.00000	62.62000	0.00000	-0.091003	d
1.6907	56.23000	61.46000	0.00000	-0.056346	d

d - Displacements include imported displacements.

Structure: 16-17 | Sub-structure:

Dist.	Coordinates			Displacements	
	x	y	z	z	
[m]	[m]	[m]	[m]	[mm]	

Vertical Offset 1

0.0	56.23000	61.46000	0.00000	-0.056346	d
1.9000	56.22000	59.56000	0.00000	-1.0359	d

d - Displacements include imported displacements.

Structure: 17-g | Sub-structure:

Dist.	Coordinates			Displacements	
	x	y	z	z	
[m]	[m]	[m]	[m]	[mm]	

Vertical Offset 1

0.0	56.22000	59.56000	0.00000	-1.0359	d
1.6125	55.10000	58.40000	0.00000	-3.6249	d

d - Displacements include imported displacements.

Structure: h-49 | Sub-structure:

Dist.	Coordinates			Displacements	
	x	y	z	z	
[m]	[m]	[m]	[m]	[mm]	

Vertical Offset 1

0.0	54.98000	51.60000	0.00000	-3.3652	d
1.0678	55.74000	50.85000	0.00000	-1.6040	d
2.1355	56.50000	50.10000	0.00000	-0.75170	d

d - Displacements include imported displacements.

Structure: 49-36 | Sub-structure:

Dist.	Coordinates			Displacements	
	x	y	z	z	
[m]	[m]	[m]	[m]	[mm]	

Vertical Offset 1

0.0	56.50000	50.10000	0.00000	-0.75170	d
1.1950	56.50000	48.90500	0.00000	-0.20956	d
2.3900	56.50000	47.71000	0.00000	0.12387	d

d - Displacements include imported displacements.

Structure: 36-48 | Sub-structure:

Dist.	Coordinates			Displacements	
	x	y	z	z	
[m]	[m]	[m]	[m]	[mm]	

Vertical Offset 1

0.0	56.50000	47.71000	0.00000	0.12387	d
1.1506	55.73000	46.85500	0.00000	0.065814	d
2.3012	54.96000	46.00000	0.00000	-0.014877	d

d - Displacements include imported displacements.

Structure: 48-47 | Sub-structure:

Dist.	Coordinates			Displacements	
	x	y	z	z	
[m]	[m]	[m]	[m]	[mm]	

Vertical Offset 1

0.0 54.96000 46.00000 0.00000 -0.014877 d
1.1700 54.96000 44.83000 0.00000 0.0092885 d
d - Displacements include imported displacements.

Structure: 47-51 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0 54.96000 44.83000 0.00000 0.0092885 d
1.0750 53.88500 44.83000 0.00000 -0.12368 d
2.1500 52.81000 44.83000 0.00000 -0.22191 d
3.2250 51.73500 44.83000 0.00000 -0.28750 d
4.3000 50.66000 44.83000 0.00000 -0.32586 d
5.3750 49.58500 44.83000 0.00000 -0.34466 d
6.4500 48.51000 44.83000 0.00000 -0.35320 d
7.5250 47.43500 44.83000 0.00000 -0.36179 d
8.6000 46.36000 44.83000 0.00000 -0.36251 d
9.6750 45.28500 44.83000 0.00000 -0.35616 d
10.750 44.21000 44.83000 0.00000 -0.34709 d
d - Displacements include imported displacements.

Structure: 50-46 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0 44.16000 36.71000 0.00000 -0.024449 d
1.0800 45.24000 36.71000 0.00000 -0.027160 d
2.1600 46.32000 36.71000 0.00000 -0.029516 d
3.2400 47.40000 36.71000 0.00000 -0.031517 d
4.3200 48.48000 36.71000 0.00000 -0.033168 d
5.4000 49.56000 36.71000 0.00000 -0.034466 d
6.4800 50.64000 36.71000 0.00000 -0.035404 d
7.5600 51.72000 36.71000 0.00000 -0.035961 d
8.6400 52.80000 36.71000 0.00000 -0.036110 d
9.7200 53.88000 36.71000 0.00000 -0.035818 d
10.800 54.96000 36.71000 0.00000 -0.035048 d
d - Displacements include imported displacements.

Structure: 46-47 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0 54.96000 36.71000 0.00000 -0.035048 d
1.0150 54.96000 37.72500 0.00000 -0.054156 d
2.0300 54.96000 38.74000 0.00000 -0.051758 d
3.0450 54.96000 39.75500 0.00000 -0.056793 d
4.0600 54.96000 40.77000 0.00000 -0.064439 d
5.0750 54.96000 41.78500 0.00000 -0.059769 d
6.0900 54.96000 42.80000 0.00000 -0.039272 d
7.1050 54.96000 43.81500 0.00000 -0.010372 d
8.1200 54.96000 44.83000 0.00000 0.0092885 d
d - Displacements include imported displacements.

Structure: 24-25 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0 78.82000 63.10000 0.00000 0.055786 d
1.0289 79.84889 63.09667 0.00000 0.015860 d

2.0578 80.87778 63.09333 0.00000 0.020698 d
3.0867 81.90667 63.09000 0.00000 0.024543 d
4.1156 82.93556 63.08667 0.00000 0.027564 d
5.1445 83.96444 63.08333 0.00000 0.029901 d
6.1734 84.99333 63.08000 0.00000 0.031668 d
7.2023 86.02222 63.07667 0.00000 0.032962 d
8.2312 87.05111 63.07333 0.00000 0.033864 d
9.2600 88.08000 63.07000 0.00000 0.034440 d
d - Displacements include imported displacements.

Structure: 25-26 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1
0.0 88.08000 63.07000 0.00000 0.034440 d
1.0641 88.06400 62.00600 0.00000 0.034255 d
2.1282 88.04800 60.94200 0.00000 0.034075 d
3.1924 88.03200 59.87800 0.00000 0.033909 d
4.2565 88.01600 58.81400 0.00000 0.033763 d
5.3206 88.00000 57.75000 0.00000 0.033647 d
d - Displacements include imported displacements.

Structure: 26-27 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1
0.0 88.00000 57.75000 0.00000 0.033647 d
1.0246 86.97545 57.76364 0.00000 0.032673 d
2.0493 85.95091 57.77727 0.00000 0.031266 d
3.0739 84.92636 57.79091 0.00000 0.029329 d
4.0985 83.90182 57.80455 0.00000 0.026741 d
5.1232 82.87727 57.81818 0.00000 0.023354 d
6.1478 81.85273 57.83182 0.00000 0.018980 d
7.1725 80.82818 57.84545 0.00000 0.013385 d
8.1971 79.80364 57.85909 0.00000 0.046846 d
9.2217 78.77909 57.87273 0.00000 0.078357 d
10.246 77.75455 57.88636 0.00000 0.12412 d
11.271 76.73000 57.90000 0.00000 0.22087 d
d - Displacements include imported displacements.

Structure: 27-28 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1
0.0 76.73000 57.90000 0.00000 0.22087 d
1.0567 76.72333 58.95667 0.00000 0.22239 d
2.1134 76.71667 60.01333 0.00000 0.21127 d
3.1701 76.71000 61.07000 0.00000 0.18918 d
d - Displacements include imported displacements.

Structure: 28-29 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1
0.0 76.71000 61.07000 0.00000 0.18918 d
1.4640 77.76500 62.08500 0.00000 0.098673 d
2.9280 78.82000 63.10000 0.00000 0.055786 d
d - Displacements include imported displacements.

Structure: 27-32 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	76.73000	57.90000	0.00000	0.22087	d
1.0300	76.73400	56.87000	0.00000	0.21756	d
2.0600	76.73800	55.84000	0.00000	0.21530	d
3.0900	76.74200	54.81000	0.00000	0.21415	d
4.1200	76.74600	53.78000	0.00000	0.21412	d
5.1500	76.75000	52.75000	0.00000	0.21405	d

d - Displacements include imported displacements.

Structure: 33-31 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	87.93000	52.75000	0.00000	0.033609	d
1.0400	86.89000	52.75000	0.00000	0.032588	d
2.0800	85.85000	52.75000	0.00000	0.031110	d
3.1200	84.81000	52.75000	0.00000	0.029072	d
4.1600	83.77000	52.75000	0.00000	0.026344	d
5.2000	82.73000	52.75000	0.00000	0.022765	d
6.2400	81.69000	52.75000	0.00000	0.018131	d
7.2800	80.65000	52.75000	0.00000	0.012186	d
8.3200	79.61000	52.75000	0.00000	0.052689	d
9.3600	78.57000	52.75000	0.00000	0.083758	d
10.400	77.53000	52.75000	0.00000	0.13729	d
11.440	76.49000	52.75000	0.00000	0.24863	d
12.480	75.45000	52.75000	0.00000	0.43698	d
13.520	74.41000	52.75000	0.00000	0.70523	d
14.560	73.37000	52.75000	0.00000	1.0398	d
15.600	72.33000	52.75000	0.00000	1.4103	d
16.640	71.29000	52.75000	0.00000	1.7688	d
17.680	70.25000	52.75000	0.00000	2.0484	d

d - Displacements include imported displacements.

Structure: 31-34 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	70.25000	52.75000	0.00000	2.0484	d
1.1236	70.22667	51.62667	0.00000	2.0057	d
2.2472	70.20333	50.50333	0.00000	1.8724	d
3.3707	70.18000	49.38000	0.00000	1.6495	d

d - Displacements include imported displacements.

Structure: 34-35 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	70.18000	49.38000	0.00000	1.6495	d
1.3300	71.51000	49.37000	0.00000	1.2818	d

d - Displacements include imported displacements.

Structure: 35-41 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	71.51000	49.37000	0.00000	1.2818	d
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1.2000 71.50000 48.17000 0.00000 1.0134 d
 2.4001 71.49000 46.97000 0.00000 0.73293 d
 3.6001 71.48000 45.77000 0.00000 0.47830 d
 d - Displacements include imported displacements.

Structure: 41-40 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1
 0.0 71.48000 45.77000 0.00000 0.47830 d
 1.0175 70.46250 45.77000 0.00000 0.61647 d
 2.0350 69.44500 45.77000 0.00000 0.74490 d
 3.0525 68.42750 45.77000 0.00000 0.84703 d
 4.0700 67.41000 45.77000 0.00000 0.91280 d
 d - Displacements include imported displacements.

Structure: 40-39 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1
 0.0 67.41000 45.77000 0.00000 0.91280 d
 1.3000 67.40333 44.47000 0.00000 0.53434 d
 2.6000 67.39667 43.17000 0.00000 0.26382 d
 3.9001 67.39000 41.87000 0.00000 0.11020 d
 d - Displacements include imported displacements.

Structure: 39-38 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1
 0.0 67.39000 41.87000 0.00000 0.11020 d
 1.0305 68.42050 41.86150 0.00000 0.099657 d
 2.0611 69.45100 41.85300 0.00000 0.090570 d
 3.0916 70.48150 41.84450 0.00000 0.079695 d
 4.1221 71.51200 41.83600 0.00000 0.069026 d
 5.1527 72.54250 41.82750 0.00000 0.058705 d
 6.1832 73.57300 41.81900 0.00000 0.044935 d
 7.2137 74.60350 41.81050 0.00000 0.018359 d
 8.2443 75.63400 41.80200 0.00000 0.011717 d
 9.2748 76.66450 41.79350 0.00000 0.016673 d
 10.305 77.69500 41.78500 0.00000 0.020845 d
 11.336 78.72550 41.77650 0.00000 0.024317 d
 12.366 79.75600 41.76800 0.00000 0.027168 d
 13.397 80.78650 41.75950 0.00000 0.029472 d
 14.427 81.81700 41.75100 0.00000 0.031298 d
 15.458 82.84750 41.74250 0.00000 0.032708 d
 16.489 83.87800 41.73400 0.00000 0.033759 d
 17.519 84.90850 41.72550 0.00000 0.034500 d
 18.550 85.93900 41.71700 0.00000 0.034976 d
 19.580 86.96950 41.70850 0.00000 0.035227 d
 20.611 88.00000 41.70000 0.00000 0.035285 d
 d - Displacements include imported displacements.

Structure: 38-25 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1
 0.0 88.00000 41.70000 0.00000 0.035285 d
 1.0176 88.00381 42.71762 0.00000 0.035192 d
 2.0353 88.00762 43.73524 0.00000 0.035069 d
 3.0529 88.01143 44.75286 0.00000 0.034923 d

4.0705	88.01524	45.77048	0.00000	0.034759	d
5.0881	88.01905	46.78810	0.00000	0.034583	d
6.1058	88.02286	47.80571	0.00000	0.034403	d
7.1234	88.02667	48.82333	0.00000	0.034226	d
8.1410	88.03048	49.84095	0.00000	0.034059	d
9.1586	88.03429	50.85857	0.00000	0.033909	d
10.176	88.03810	51.87619	0.00000	0.033782	d
11.194	88.04190	52.89381	0.00000	0.033683	d
12.212	88.04571	53.91143	0.00000	0.033618	d
13.229	88.04952	54.92905	0.00000	0.033588	d
14.247	88.05333	55.94667	0.00000	0.033594	d
15.264	88.05714	56.96429	0.00000	0.033636	d
16.282	88.06095	57.98190	0.00000	0.033712	d
17.300	88.06476	58.99952	0.00000	0.033819	d
18.317	88.06857	60.01714	0.00000	0.033951	d
19.335	88.07238	61.03476	0.00000	0.034104	d
20.353	88.07619	62.05238	0.00000	0.034269	d
21.370	88.08000	63.07000	0.00000	0.034440	d

d - Displacements include imported displacements.

Structure: 20-22 | Sub-structure:

Dist.	Coordinates			Displacements	
	x	y	z	z	
[m]	[m]	[m]	[m]	[mm]	
Vertical Offset 1					
0.0	55.96000	70.70000	0.00000	-0.035904	d
1.0170	56.97700	70.69900	0.00000	-0.021062	d
2.0340	57.99400	70.69800	0.00000	-0.0061381	d
3.0510	59.01100	70.69700	0.00000	0.0077242	d
4.0680	60.02800	70.69600	0.00000	0.018227	d
5.0850	61.04500	70.69500	0.00000	0.024255	d
6.1020	62.06200	70.69400	0.00000	0.030987	d
7.1190	63.07900	70.69300	0.00000	0.038278	d
8.1360	64.09600	70.69200	0.00000	0.045963	d
9.1530	65.11300	70.69100	0.00000	0.053869	d
10.170	66.13000	70.69000	0.00000	0.061804	d

d - Displacements include imported displacements.

Structure: 22-b | Sub-structure:

Dist.	Coordinates			Displacements	
	x	y	z	z	
[m]	[m]	[m]	[m]	[mm]	
Vertical Offset 1					
0.0	66.13000	70.69000	0.00000	0.061804	d
0.69360	66.14000	69.99647	0.00000	0.094249	d
1.3872	66.15000	69.30294	0.00000	0.15078	d
2.0808	66.16000	68.60941	0.00000	0.23861	d
2.7744	66.17000	67.91588	0.00000	0.36180	d
3.4680	66.18000	67.22235	0.00000	0.52116	d
4.1616	66.19000	66.52882	0.00000	0.71433	d
4.8552	66.20000	65.83529	0.00000	0.93568	d
5.5488	66.21000	65.14176	0.00000	1.1763	d
6.2424	66.22000	64.44824	0.00000	1.4241	d
6.9360	66.23000	63.75471	0.00000	1.6634	d
7.6296	66.24000	63.06118	0.00000	1.8750	d
8.3232	66.25000	62.36765	0.00000	2.0361	d
9.0168	66.26000	61.67412	0.00000	2.1194	d
9.7104	66.27000	60.98059	0.00000	2.0928	d
10.404	66.28000	60.28706	0.00000	1.9185	d
11.098	66.29000	59.59353	0.00000	1.5517	d
11.791	66.30000	58.90000	0.00000	0.94767	d

d - Displacements include imported displacements.

Structure: e-45 | Sub-structure:

Dist.	Coordinates			Displacements	
	x	y	z	z	
[m]	[m]	[m]	[m]	[mm]	
Vertical Offset 1					

0.0	64.74000	51.60000	0.00000	0.88141	d
0.98415	64.72267	50.61600	0.00000	1.6158	d
1.9683	64.70533	49.63200	0.00000	1.8702	d
2.9525	64.68800	48.64800	0.00000	1.8427	d
3.9366	64.67067	47.66400	0.00000	1.6471	d
4.9208	64.65333	46.68000	0.00000	1.3623	d
5.9049	64.63600	45.69600	0.00000	1.0465	d
6.8891	64.61867	44.71200	0.00000	0.74284	d
7.8732	64.60133	43.72800	0.00000	0.48114	d
8.8574	64.58400	42.74400	0.00000	0.27907	d
9.8415	64.56667	41.76000	0.00000	0.14254	d
10.826	64.54933	40.77600	0.00000	0.065883	d
11.810	64.53200	39.79200	0.00000	0.031980	d
12.794	64.51467	38.80800	0.00000	0.012357	d
13.778	64.49733	37.82400	0.00000	-0.021277	d
14.762	64.48000	36.84000	0.00000	-0.0094300	d

d - Displacements include imported displacements.

Structure: 18-31 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	59.17000	64.78000	0.00000	0.97827	d
1.1384	60.30833	64.77333	0.00000	1.1154	d
2.2767	61.44667	64.76667	0.00000	1.1496	d
3.4151	62.58500	64.76000	0.00000	1.1882	d
4.5534	63.72333	64.75333	0.00000	1.2294	d
5.6918	64.86167	64.74667	0.00000	1.2718	d
6.8301	66.00000	64.74000	0.00000	1.3138	d

d - Displacements include imported displacements.

Structure: 23-24 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	66.00000	63.14000	0.00000	1.8420	d
1.0683	67.06833	63.13667	0.00000	1.8583	d
2.1367	68.13667	63.13333	0.00000	1.7856	d
3.2050	69.20500	63.13000	0.00000	1.6281	d
4.2734	70.27333	63.12667	0.00000	1.4013	d
5.3417	71.34167	63.12333	0.00000	1.1319	d
6.4100	72.41000	63.12000	0.00000	0.85234	d
7.4784	73.47833	63.11667	0.00000	0.59391	d
8.5467	74.54667	63.11333	0.00000	0.38103	d
9.6150	75.61500	63.11000	0.00000	0.22752	d
10.683	76.68333	63.10667	0.00000	0.13410	d
11.752	77.75167	63.10333	0.00000	0.086756	d
12.820	78.82000	63.10000	0.00000	0.055786	d

d - Displacements include imported displacements.

Structure: b-27 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	66.10000	58.46000	0.00000	0.20671	d
1.0645	67.16300	58.40400	0.00000	1.4376	d
2.1289	68.22600	58.34800	0.00000	2.0369	d
3.1934	69.28900	58.29200	0.00000	2.1864	d
4.2579	70.35200	58.23600	0.00000	2.0502	d
5.3224	71.41500	58.18000	0.00000	1.7491	d
6.3868	72.47800	58.12400	0.00000	1.3747	d
7.4513	73.54100	58.06800	0.00000	0.99552	d
8.5158	74.60400	58.01200	0.00000	0.66018	d
9.5803	75.66700	57.95600	0.00000	0.39820	d
10.645	76.73000	57.90000	0.00000	0.22087	d

d - Displacements include imported displacements.

Structure: 42-37 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	64.54000	46.73000	0.00000	1.3832 d
1.0183	65.55826	46.71783	0.00000	1.3304 d
2.0367	66.57652	46.70565	0.00000	1.2741 d
3.0550	67.59478	46.69348	0.00000	1.2143 d
4.0733	68.61304	46.68130	0.00000	1.1237 d
5.0917	69.63130	46.66913	0.00000	0.98358 d
6.1100	70.64957	46.65696	0.00000	0.81150 d
7.1283	71.66783	46.64478	0.00000	0.62796 d
8.1467	72.68609	46.63261	0.00000	0.45343 d
9.1650	73.70435	46.62043	0.00000	0.30507 d
10.183	74.72261	46.60826	0.00000	0.19391 d
11.202	75.74087	46.59609	0.00000	0.12253 d
12.220	76.75913	46.58391	0.00000	0.083384 d
13.238	77.77739	46.57174	0.00000	0.057548 d
14.257	78.79565	46.55957	0.00000	0.012002 d
15.275	79.81391	46.54739	0.00000	0.017522 d
16.293	80.83217	46.53522	0.00000	0.021966 d
17.312	81.85043	46.52304	0.00000	0.025508 d
18.330	82.86870	46.51087	0.00000	0.028297 d
19.348	83.88696	46.49870	0.00000	0.030455 d
20.367	84.90522	46.48652	0.00000	0.032086 d
21.385	85.92348	46.47435	0.00000	0.033278 d
22.403	86.94174	46.46217	0.00000	0.034102 d
23.422	87.96000	46.45000	0.00000	0.034621 d

d - Displacements include imported displacements.

Structure: 47-43 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	54.96000	44.83000	0.00000	0.0092885 d
1.0600	56.02000	44.83000	0.00000	0.17198 d
2.1200	57.08000	44.83000	0.00000	0.35788 d
3.1800	58.14000	44.83000	0.00000	0.55216 d
4.2400	59.20000	44.83000	0.00000	0.73366 d
5.3000	60.26000	44.83000	0.00000	0.87748 d
6.3600	61.32000	44.83000	0.00000	0.96032 d
7.4200	62.38000	44.83000	0.00000	0.91069 d
8.4800	63.44000	44.83000	0.00000	0.84583 d
9.5400	64.50000	44.83000	0.00000	0.78433 d

d - Displacements include imported displacements.

Structure: 44-39 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	64.44000	41.91000	0.00000	0.16205 d
1.4751	65.91500	41.89000	0.00000	0.13183 d
2.9503	67.39000	41.87000	0.00000	0.11020 d

d - Displacements include imported displacements.

Structure: 46-45 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	54.96000	36.71000	0.00000	-0.035048	d
1.0579	56.01778	36.72444	0.00000	-0.034046	d
2.1158	57.07556	36.73889	0.00000	-0.032532	d
3.1736	58.13333	36.75333	0.00000	-0.030500	d
4.2315	59.19111	36.76778	0.00000	-0.027962	d
5.2894	60.24889	36.78222	0.00000	-0.024950	d
6.3473	61.30667	36.79667	0.00000	-0.021517	d
7.4051	62.36444	36.81111	0.00000	-0.017730	d
8.4630	63.42222	36.82556	0.00000	-0.013672	d
9.5209	64.48000	36.84000	0.00000	-0.0094300	d

d - Displacements include imported displacements.

Structure: a-12 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	44.06000	58.90000	0.00000	-1.6640	d
1.1151	42.95250	58.77000	0.00000	-2.1943	d
2.2302	41.84500	58.64000	0.00000	-2.5969	d
3.3453	40.73750	58.51000	0.00000	-2.8816	d
4.4604	39.63000	58.38000	0.00000	-2.2190	d

d - Displacements include imported displacements.

Structure: 12-11 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	39.63000	58.38000	0.00000	-2.2190	d
1.1167	39.63000	57.26333	0.00000	-3.5377	d
2.2333	39.63000	56.14667	0.00000	-3.8875	d
3.3500	39.63000	55.03000	0.00000	-3.9926	d
4.4667	39.63000	53.91333	0.00000	-3.9246	d
5.5833	39.63000	52.79667	0.00000	-3.6112	d
6.7000	39.63000	51.68000	0.00000	-2.2988	d

d - Displacements include imported displacements.

Structure: 11-f | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	39.63000	51.68000	0.00000	-2.2988	d
0.55884	40.18875	51.67000	0.00000	-3.2273	d
1.1177	40.74750	51.66000	0.00000	-3.5702	d
1.6765	41.30625	51.65000	0.00000	-3.7255	d
2.2354	41.86500	51.64000	0.00000	-3.7856	d
2.7942	42.42375	51.63000	0.00000	-3.7781	d
3.3530	42.98250	51.62000	0.00000	-3.7015	d
3.9119	43.54125	51.61000	0.00000	-3.5225	d
4.4707	44.10000	51.60000	0.00000	-3.1109	d

d - Displacements include imported displacements.

Structure: ag | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	44.06000	58.90000	0.00000	-1.6640	d
1.0047	45.06364	58.85455	0.00000	-1.3999	d
2.0093	46.06727	58.80909	0.00000	-1.2794	d
3.0140	47.07091	58.76364	0.00000	-1.2484	d
4.0187	48.07455	58.71818	0.00000	-1.2645	d
5.0233	49.07818	58.67273	0.00000	-1.3176	d

6.0280 50.08182 58.62727 0.00000 -1.4072 d
7.0327 51.08545 58.58182 0.00000 -1.5390 d
8.0373 52.08909 58.53636 0.00000 -1.7277 d
9.0420 53.09273 58.49091 0.00000 -2.0070 d
10.047 54.09636 58.44545 0.00000 -2.4715 d
11.051 55.10000 58.40000 0.00000 -3.6249 d
d - Displacements include imported displacements.

Structure: gb | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	55.10000	58.40000	0.00000	-3.6249 d
0.57001	55.67000	58.40300	0.00000	-4.1595 d
1.1400	56.24000	58.40600	0.00000	-4.3873 d
1.7100	56.81000	58.40900	0.00000	-4.4803 d
2.2800	57.38000	58.41200	0.00000	-4.4899 d
2.8500	57.95000	58.41500	0.00000	-4.4331 d
3.4200	58.52000	58.41800	0.00000	-4.3043 d
3.9901	59.09000	58.42100	0.00000	-4.0552 d
4.5601	59.66000	58.42400	0.00000	-3.3429 d
5.1301	60.23000	58.42700	0.00000	-2.0891 d
5.7001	60.80000	58.43000	0.00000	-1.7468 d
6.2701	61.37000	58.43300	0.00000	-1.5300 d
6.8401	61.94000	58.43600	0.00000	-1.3608 d
7.4101	62.51000	58.43900	0.00000	-1.2101 d
7.9801	63.08000	58.44200	0.00000	-1.0638 d
8.5501	63.65000	58.44500	0.00000	-0.91196 d
9.1201	64.22000	58.44800	0.00000	-0.74390 d
9.6901	64.79000	58.45100	0.00000	-0.54530 d
10.260	65.36000	58.45400	0.00000	-0.29223 d
10.830	65.93000	58.45700	0.00000	0.059125 d
11.400	66.50000	58.46000	0.00000	0.74838 d

d - Displacements include imported displacements.

Structure: bc | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	66.50000	58.46000	0.00000	0.74838 d
0.27800	66.50000	58.18200	0.00000	0.62089 d
0.55600	66.50000	57.90400	0.00000	0.51867 d
0.83400	66.50000	57.62600	0.00000	0.42978 d
1.1120	66.50000	57.34800	0.00000	0.35536 d
1.3900	66.50000	57.07000	0.00000	0.29429 d
1.6680	66.50000	56.79200	0.00000	0.24515 d
1.9460	66.50000	56.51400	0.00000	0.20666 d
2.2240	66.50000	56.23600	0.00000	0.17780 d
2.5020	66.50000	55.95800	0.00000	0.15780 d
2.7800	66.50000	55.68000	0.00000	0.14610 d
3.0580	66.50000	55.40200	0.00000	0.14238 d
3.3360	66.50000	55.12400	0.00000	0.14651 d
3.6140	66.50000	54.84600	0.00000	0.15856 d
3.8920	66.50000	54.56800	0.00000	0.17878 d
4.1700	66.50000	54.29000	0.00000	0.20764 d
4.4480	66.50000	54.01200	0.00000	0.24580 d
4.7260	66.50000	53.73400	0.00000	0.29416 d
5.0040	66.50000	53.45600	0.00000	0.35385 d
5.2820	66.50000	53.17800	0.00000	0.42642 d
5.5600	66.50000	52.90000	0.00000	0.57527 d

d - Displacements include imported displacements.

Structure: cd | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0 66.50000 52.90000 0.00000 0.57527 d
1.7493 65.00000 52.00000 0.00000 0.46981 d
d - Displacements include imported displacements.

Structure: eh | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0 64.74000 51.60000 0.00000 0.88141 d
1.0844 63.65556 51.60000 0.00000 0.48045 d
2.1689 62.57111 51.60000 0.00000 0.067945 d
3.2533 61.48667 51.60000 0.00000 -0.42990 d
4.3378 60.40222 51.60000 0.00000 -1.2333 d
5.4222 59.31778 51.60000 0.00000 -3.8790 d
6.5067 58.23333 51.60000 0.00000 -4.4312 d
7.5911 57.14889 51.60000 0.00000 -4.4904 d
8.6756 56.06444 51.60000 0.00000 -4.2517 d
9.7600 54.98000 51.60000 0.00000 -3.3652 d
d - Displacements include imported displacements.

Structure: hf | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0 54.98000 51.60000 0.00000 -3.3652 d
1.0880 53.89200 51.60000 0.00000 -2.4762 d
2.1760 52.80400 51.60000 0.00000 -2.1451 d
3.2640 51.71600 51.60000 0.00000 -1.9765 d
4.3520 50.62800 51.60000 0.00000 -1.8864 d
5.4400 49.54000 51.60000 0.00000 -1.8464 d
6.5280 48.45200 51.60000 0.00000 -1.8464 d
7.6160 47.36400 51.60000 0.00000 -1.8866 d
8.7040 46.27600 51.60000 0.00000 -1.9812 d
9.7920 45.18800 51.60000 0.00000 -2.2073 d
10.880 44.10000 51.60000 0.00000 -3.1109 d
d - Displacements include imported displacements.

Structure: de | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0 65.00000 52.00000 0.00000 0.46981 d
0.11927 64.93500 51.90000 0.00000 0.58600 d
0.23854 64.87000 51.80000 0.00000 0.69263 d
0.35781 64.80500 51.70000 0.00000 0.79078 d
0.47707 64.74000 51.60000 0.00000 0.88141 d
d - Displacements include imported displacements.

Specific Building Damage Results - All Segments

Structure: 21-20 | Sub-structure:

Vertical Offset	Segment	Start Length	Curvature	Deflection	Average	Max	Max
Gradient	Max Gradient	Min	Damage	Ratio	Horizontal	Tensile	of
from Line for	Radius of Category				Strain	Strain	
of Vertical	Displacement	Curvature					
Vertical	Movement						
Displacement	Curve						

Calculations

Curve

[m] [m] [m] [m] [%] [%] [%]
 [m] 0.0 All settlements are less than the Settlement Trough Limit Sensitivity.
 Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 19-20 | Sub-structure:

Vertical Offset Gradient Max from Line for of Vertical Horizontal Displacement Calculations	Segment Max Gradient Radius of Vertical Displacement Curve	Min Category	Start Damage	Length [m]	Curvature [m]	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of Curve
[m] 0.0 268.06E-6	1 205.31E-6	16543.	0.0	2.0160	Hogging 0	0.0014868	0.025674	0.025851	-

(Negligible)
 Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 19-18 | Sub-structure:

Vertical Offset Gradient Max from Line for of Vertical Horizontal Displacement Calculations	Segment Max Gradient Radius of Vertical Displacement Curve	Min Category	Start Damage	Length [m]	Curvature [m]	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of Curve
[m] 0.0 338.47E-6	1 -263.10E-6	67593.	0.0	2.0092	Hogging 0	368.12E-6	0.033326	0.033370	-

(Negligible)
 Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 18-13 | Sub-structure:

Vertical Offset Gradient Max from Line for of Vertical Horizontal Displacement Calculations	Segment Max Gradient Radius of Vertical Displacement Curve	Min Category	Start Damage	Length [m]	Curvature [m]	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of Curve
[m] 0.0 319.46E-6	1 232.24E-6	59904.	0.0	1.4202	Sagging 0	215.29E-6	-0.028398	0.0056810	

(Negligible)
 176.51E-6 232.24E-6 27872. 2 1.4202 13.539 Hogging 0.0036865 0.0050534 0.0078147

(Negligible)
 Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 21-a | Sub-structure:

Vertical Offset Gradient Max from Line for of Vertical Horizontal Displacement Calculations	Segment Max Gradient Radius of Vertical Displacement Curve	Min Category	Start Damage	Length [m]	Curvature [m]	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of Curve
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from Line for of Vertical Horizontal Displacement Movement Displacement Calculations Curve	of Vertical Displacement Curve	Radius of Curvature	Category	Ratio	Horizontal Strain	Tensile Strain	
[m]	[m]	[m]	[m]	[%]	[%]	[%]	
0.0	164.92E-6	25114.	1 1.0430 6.7906 Sagging	0.0015717	0.0	0.0014689	
(Negligible)							
292.93E-6	164.92E-6	92506.	2 7.8337 0.39104 Hogging	676.47E-6	0.017098	0.017121	-
(Negligible)							
374.82E-6	162.15E-6	176820.	3 8.2247 0.16556 Sagging	503.27E-6	0.031581	0.031591	-
(Negligible)							
374.82E-6	162.15E-6	6764.6	4 8.3903 1.6298 Hogging	0.0026765	0.037496	0.037754	-
(Negligible)							
374.82E-6	0.0013272	456.17	5 10.020 1.7999 Sagging	0.020769	0.037496	0.045549	-
(Negligible)							

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: f-50 | Sub-structure:

Vertical Offset Gradient Max from Line for of Vertical Horizontal Displacement Movement Displacement Calculations Curve	Segment Max Gradient Min	Start Damage	Length	Curvature	Deflection	Average	Max	Max
[m]		[m]	[m]			Ratio	Horizontal Strain	Tensile Strain
374.85E-6	-0.0020612	435.62	1 0.0 2.9450 Sagging	0.043177	0.037499	0.063191	-	
(Negligible)								
374.85E-6	-151.21E-6	35555.	2 2.9450 1.6261 Hogging	273.98E-6	0.026852	0.026878	-	
(Negligible)								
86.626E-6	-151.21E-6	37845.	3 4.5711 6.3483 Sagging	0.0014727	535.32E-6	0.0016387	-	
(Negligible)								

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 14-15 | Sub-structure:

Vertical Offset Gradient Max from Line for of Vertical Horizontal Displacement Movement Displacement Calculations Curve	Segment Max Gradient Min	Start Damage	Length	Curvature	Deflection	Average	Max	Max
[m]		[m]	[m]			Ratio	Horizontal Strain	Tensile Strain
0.0								

All settlements are less than the Settlement Trough Limit Sensitivity.

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 15-16 | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Vertical Horizontal Movement Displacement Calculations Curve	Segment Min	Start Damage	Length [m]	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of
[m]			[m]	[m]	[%]	[%]	[%]	

0.0 All settlements are less than the Settlement Trough Limit Sensitivity.
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 16-17 | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Vertical Horizontal Movement Displacement Calculations Curve	Segment Min	Start Damage	Length [m]	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of
[m]			[m]	[m]	[%]	[%]	[%]	Curve

0.0 1 1.8990 0.0 None 0.0 0.0 0.0
58.668E-6 515.56E-6 - 0
(Negligible)
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 17-g | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Vertical Horizontal Movement Displacement Calculations Curve	Segment Min	Start Damage	Length [m]	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of
[m]			[m]	[m]	[%]	[%]	[%]	Curve

0.0 1 0.0 1.6115 None 0.0 0.038688 0.038688 -
386.73E-6 0.0016050 - 0
(Negligible)
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: h-49 | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Vertical Horizontal Movement Displacement Calculations Curve	Segment Min	Start Damage	Length [m]	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of
[m]			[m]	[m]	[%]	[%]	[%]	Curve

0.0 1 0.0 2.1345 Sagging 0.021069 0.032282 0.041426 -
382.88E-6 -0.0016489 1254.7 0

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 49-36 | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Vertical Horizontal Displacement Movement Displacement Calculations Curve	Segment Min Radius of Category	Start Damage	Length [m]	Curvature [m]	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of
[m]			[m]	[m]	[%]	[%]	[%]	
0.0 82.393E-6	1 6837.4	0.0	2.3890	Sagging 0	0.0043249	647.80E-6	0.0045645	-

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 36-48 | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Vertical Horizontal Displacement Movement Displacement Calculations Curve	Segment Min Radius of Category	Start Damage	Length [m]	Curvature [m]	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of Curve
[m]			[m]	[m]	[%]	[%]	[%]	
0.0 265.13E-6	1 58474.	0.0	0.0	None 0	0.0	0.0	0.0	-

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 48-47 | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Vertical Horizontal Displacement Movement Displacement Calculations Curve	Segment Min Radius of Category	Start Damage	Length [m]	Curvature [m]	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of
[m]			[m]	[m]	[%]	[%]	[%]	
0.0								All settlements are less than the Settlement Trough Limit Sensitivity. Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 47-51 | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Vertical Horizontal Displacement Movement Displacement Calculations Curve	Segment Min Radius of Category	Start Damage	Length [m]	Curvature [m]	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max
[m]			[m]	[m]	[%]	[%]	[%]	

[m]	[m]	[m]	[m]	[%]	[%]	[%]	
[m]	0.0	1	1.0750	9.6740	Hogging	0.0013199	0.0064056 0.0071352 -
99.439E-6	123.68E-6	33782.		0			

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 50-46 | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Vertical Horizontal Displacement Movement Displacement Calculations Curve	Segment Min Radius of Category Displacement Curve	Start Length Damage	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of
[m]	[m]	[m]	[m]	[%]	[%]	[%]	

[m] 0.0 All settlements are less than the Settlement Trough Limit Sensitivity.
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 46-47 | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Vertical Horizontal Displacement Movement Displacement Calculations Curve	Segment Min Radius of Category Displacement Curve	Start Length Damage	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of
[m]	[m]	[m]	[m]	[%]	[%]	[%]	

[m] 0.0 All settlements are less than the Settlement Trough Limit Sensitivity.
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 24-25 | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Vertical Horizontal Displacement Movement Displacement Calculations Curve	Segment Min Radius of Category Displacement Curve	Start Length Damage	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of
[m]	[m]	[m]	[m]	[%]	[%]	[%]	

[m] 0.0 All settlements are less than the Settlement Trough Limit Sensitivity.
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 25-26 | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Vertical Horizontal Displacement Movement Displacement Calculations Curve	Segment Min Radius of Category Displacement Curve	Start Length Damage	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of
[m]	[m]	[m]	[m]	[%]	[%]	[%]	

[m]

Calculations

Curve	[m]	[m]	[m]	[m]	[%]	[%]	[%]
50.201E-6	0.0	3.2167E-6	965550.	1 0.0 4.5636	Hogging	54.968E-6	-485.88E-6 102.25E-6

(Negligible)

50.201E-6	0.0	3.2332E+6	2 4.5636 0.58541	Sagging	0.0	-0.0050198	0.0010040
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(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 33-31 | Sub-structure:

Vertical Offset	Segment	Start	Length	Curvature	Deflection	Average	Max	Max
Gradient Max Gradient	Min	Damage			Ratio	Horizontal	Tensile	of
from Line for	Category					Strain	Strain	
of Vertical	Radius of	Category						
Vertical	Vertical	Category						
Horizontal	Displacement	Curvature						
Movement	Curve							
Displacement	Calculations							
Curve								

[m]	[m]	[m]	[m]	[m]	[%]	[%]	[%]
374.23E-6	0.0	-356.10E-6	14297.	1 10.400 4.8393	Hogging	0.0039612	0.037329 0.038454 -

(Negligible)

371.44E-6	0.0	-356.10E-6	11324.	2 15.239 2.4397	Sagging	0.0019180	0.036777 0.037326 -
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(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 31-34 | Sub-structure:

Vertical Offset	Segment	Start	Length	Curvature	Deflection	Average	Max	Max
Gradient Max Gradient	Min	Damage			Ratio	Horizontal	Tensile	of
from Line for	Category					Strain	Strain	
of Vertical	Radius of	Category						
Vertical	Vertical	Category						
Horizontal	Displacement	Curvature						
Movement	Curve							
Displacement	Calculations							
Curve								

[m]	[m]	[m]	[m]	[m]	[%]	[%]	[%]
801.68E-6	0.0	198.48E-6	13899.	1 0.0 3.3697	Sagging	0.0026774	-0.054546 0.011015

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 34-35 | Sub-structure:

Vertical Offset	Segment	Start	Length	Curvature	Deflection	Average	Max	Max
Gradient Max Gradient	Min	Damage			Ratio	Horizontal	Tensile	of
from Line for	Category					Strain	Strain	
of Vertical	Radius of	Category						
Vertical	Vertical	Category						
Horizontal	Displacement	Curvature						
Movement	Curve							
Displacement	Calculations							
Curve								

[m]	[m]	[m]	[m]	[m]	[%]	[%]	[%]
41.446E-6	0.0	276.40E-6	1 0.0 1.3290	None	0.0	0.0041447	0.0041447 -

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 35-41 | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Vertical Horizontal Displacement Movement Displacement Calculations Curve	Segment Min Radius of Curvature Curve	Start Damage Category	Length [m]	Curvature [m]	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max
[m]			[m]	[m]	[%]	[%]	[%]	

0.0	1	0.0	1.3590	Sagging	102.40E-6	-0.0081452	0.0016301	
96.613E-6	67293.		0					

(Negligible)

127.11E-6	2	1.3590	2.2401	Hogging	535.43E-6	0.0083339	0.0084047	-
233.68E-6	40810.		0					

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 41-40 | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Vertical Horizontal Displacement Movement Displacement Calculations Curve	Segment Min Radius of Curvature Curve	Start Damage Category	Length [m]	Curvature [m]	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max
[m]			[m]	[m]	[%]	[%]	[%]	

0.0	1	0.0	4.0690	Sagging	0.0012092	-0.013192	0.0027257	
209.27E-6	26599.		0					

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 40-39 | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Vertical Horizontal Displacement Movement Displacement Calculations Curve	Segment Min Radius of Curvature Curve	Start Damage Category	Length [m]	Curvature [m]	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max
[m]			[m]	[m]	[%]	[%]	[%]	

0.0	1	0.0	3.8991	Hogging	0.0029190	0.035271	0.035940	-
352.58E-6	14189.		0					

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 39-38 | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Vertical Horizontal Displacement Movement Displacement Calculations Curve	Segment Min Radius of Curvature Curve	Start Damage Category	Length [m]	Curvature [m]	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max
[m]			[m]	[m]	[%]	[%]	[%]	

Vertical Movement Displacement Calculations	Horizontal Displacement Curve	Curvature	Strain	Strain	Strain	Curve
[m]	[m]	[m]	[m]	[%]	[%]	[%]
0.0	1	0.0	0.0	None	0.0	0.0
22.848E-6	10.232E-6	468110.		0		-

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 38-25 | Sub-structure:

Vertical Offset Gradient Max from Line for of Vertical Vertical	Segment Max Gradient Radius of Category	Start Length Damage	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of
Horizontal Movement Displacement Calculations Curve	Displacement Curve	Curvature					
[m]	[m]	[m]	[m]	[%]	[%]	[%]	

0.0 All settlements are less than the Settlement Trough Limit Sensitivity.
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 20-22 | Sub-structure:

Vertical Offset Gradient Max from Line for of Vertical Vertical	Segment Max Gradient Radius of Category	Start Length Damage	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of
Horizontal Movement Displacement Calculations Curve	Displacement Curve	Curvature					
[m]	[m]	[m]	[m]	[%]	[%]	[%]	

0.0 All settlements are less than the Settlement Trough Limit Sensitivity.
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 22-b | Sub-structure:

Vertical Offset Gradient Max from Line for of Vertical Vertical	Segment Max Gradient Radius of Category	Start Length Damage	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of
Horizontal Movement Displacement Calculations Curve	Displacement Curve	Curvature						
[m]	[m]	[m]	[m]	[m]	[%]	[%]	[%]	

0.0 1 1.3872 4.4392 Hogging 0.0035216 0.037423 0.040938 -
374.55E-6 -357.09E-6 13613. 0

(Negligible)

2 5.8264 5.9638 Sagging 0.017263 0.028286 0.054510 -
373.21E-6 871.01E-6 1933.9 1 (Very

Slight)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: e-45 | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Vertical	Segment Min	Start Damage	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max
--	-------------	--------------	--------	-----------	------------------	---------------------------	--------------------	-----

[m]		[m]	[m]		[%]	[%]	[%]	
0.0	1	0.0	5.7061	Sagging	0.015906	0.035044	0.059191	-
350.32E-6	1830.3	1	(Very Slight)					
	2	5.7061	4.1354	Hogging	0.0029461	0.035044	0.037829	-
350.32E-6	15499.		0					

(Negligible)
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 18-31 | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Vertical	Segment Min	Start Damage	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max
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[m]		[m]	[m]		[%]	[%]	[%]	
0.0	1	0.0	3.2941	Sagging	0.0019927	-0.0083744	0.0019003	
242.42E-6	9978.3		0					
	2	3.2941	2.3899	Hogging	29.531E-6	1.2862E-6	28.932E-6	
0.0	477500.		0					
	3	5.6840	1.1451	Sagging	0.0	1.2862E-6	1.3947E-6	
0.0	1.7481E+6		0					

(Negligible)
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 23-24 | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Vertical	Segment Min	Start Damage	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max
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[m]		[m]	[m]		[%]	[%]	[%]	
0.0	1	0.0	5.7141	Sagging	0.0042979	-0.034710	0.0070608	
705.69E-6	12678.		0					
	2	5.7141	4.9693	Hogging	0.0028130	0.021080	0.024129	-
304.99E-6	20247.		0					

(Negligible)
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: b-27 | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Vertical Horizontal Displacement Movement Displacement Calculations Curve	Segment Min Radius of Category	Start Damage	Length [m]	Curvature [m]	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max	Max	of
--	---	-----------------	---------------	------------------	---------------------	---------------------------------	--------------------------	-----	-----	----

[m]		[m]	[m]	[m]	[%]	[%]	[%]			
[m]										
0.0	1	0.0	6.5989	Sagging	0.022398	-0.0096245	0.024204			
0.0025098	1661.2		0							

(Negligible)

	2	6.5989	4.0448	Hogging	0.0031624	0.037411	0.040349	-		
373.97E-6	12954.		0							

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 42-37 | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Vertical Horizontal Displacement Movement Displacement Calculations Curve	Segment Min Radius of Category	Start Damage	Length [m]	Curvature [m]	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max	Max	of
--	---	-----------------	---------------	------------------	---------------------	---------------------------------	--------------------------	-----	-----	----

[m]		[m]	[m]	[m]	[%]	[%]	[%]			
[m]										
0.0	1	0.0	6.7039	Sagging	0.0022786	-0.0092953	0.0019478			
330.78E-6	25717.		0							

(Negligible)

	2	6.7039	4.4977	Hogging	0.0017975	0.013225	0.015037	-		
249.41E-6	27889.		0							

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 47-43 | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Vertical Horizontal Displacement Movement Displacement Calculations Curve	Segment Min Radius of Category	Start Damage	Length [m]	Curvature [m]	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max	Max	of
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[m]		[m]	[m]	[m]	[%]	[%]	[%]			
[m]										
0.0	1	1.0600	1.4121	Hogging	147.82E-6	-0.0079710	0.0015964			
151.58E-6	57589.		0							

(Negligible)

	2	2.4721	6.1542	Sagging	0.0044766	-0.019540	0.0041040			
397.13E-6	13228.		0							

(Negligible)

	3	8.6262	0.91277	Sagging	0.0	0.0021391	0.0021391	-		
21.391E-6	140340.		0							

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 44-39 | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Vertical Horizontal Displacement Movement Displacement Calculations Curve	Segment Min Radius of Category	Start Length Damage	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of
[m]		[m]	[m]	[%]	[%]	[%]	
0.0 23.810E-6	1 253420.	0.0	2.9493 0	Hogging 144.06E-6	0.0023810	0.0024836	-

(Negligible)
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 46-45 | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Vertical Horizontal Displacement Movement Displacement Calculations Curve	Segment Min Radius of Category	Start Length Damage	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of
[m]		[m]	[m]	[%]	[%]	[%]	
0.0				All settlements are less than the Settlement Trough Limit Sensitivity.			

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: a-12 | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Vertical Horizontal Displacement Movement Displacement Calculations Curve	Segment Min Radius of Category	Start Length Damage	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of
[m]		[m]	[m]	[%]	[%]	[%]	Curve
0.0 5.3296E-6	1 1076.4	0.0	4.4594 0	Hogging 0.017923	532.96E-6	0.018484	-

(Negligible)
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 12-11 | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Vertical Horizontal Displacement Movement Displacement Calculations Curve	Segment Min Radius of Category	Start Length Damage	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of
[m]		[m]	[m]	[%]	[%]	[%]	Curve
0.0 0.0014394	1 1049.9	0.0	6.6990 0	Hogging 0.025840	-0.023959	0.014708	

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 11-f | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Vertical Horizontal Displacement Movement Displacement Calculations	Segment Min Radius of Category	Start Damage	Length [m]	Curvature [m]	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of Curve
[m] 0.0 0.0029314	1 452.93	0.0	4.4697	Hogging 0	0.025102	-0.036533	0.016425	

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: ag | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Vertical Horizontal Displacement Movement Displacement Calculations	Segment Min Radius of Category	Start Damage	Length [m]	Curvature [m]	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of Curve
[m] 0.0 9.0631E-6	1 1238.0	0.0	11.050	Sagging 0	0.012418	466.62E-6	0.014167	-

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: gb | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Vertical Horizontal Displacement Movement Displacement Calculations Curve	Segment Min Radius of Category	Start Damage	Length [m]	Curvature [m]	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of Curve
[m] 0.0 0.0021686	1 831.48	0.0	4.7371	Hogging 0	0.025560	0.016604	0.043371	
(Negligible)	2	4.7371	2.9502	Sagging 0	0.021118	-0.028824	0.012666	
(Negligible)	3	7.6873	3.7119	Hogging 0	0.012442	-0.13312	0.027424	

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: bc | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Vertical Horizontal Displacement Movement Displacement Calculations	Segment Min Radius of Category	Start Damage	Length [m]	Curvature [m]	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max	Max	of
[m]			[m]	[m]	[%]	[%]	[%]			Curve
0.0 0.0088425	1 820.11	0.0	5.5590	Hogging	0.0092733	-0.075759	0.015783			

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: cd | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Vertical Horizontal Displacement Movement Displacement Calculations	Segment Min Radius of Category	Start Damage	Length [m]	Curvature [m]	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max	Max	of
[m]			[m]	[m]	[%]	[%]	[%]			Curve
0.0 0.0022504	1 60.426E-6 -	0.0	1.7483	None	0.0	-0.22454	0.044908			

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: eh | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Vertical Horizontal Displacement Movement Displacement Calculations Curve	Segment Min Radius of Category	Start Damage	Length [m]	Curvature [m]	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max	Max	of
[m]			[m]	[m]	[%]	[%]	[%]			Curve
0.0 21.391E-6	1 170370.	0.0	0.20290	None	0.0	0.0021391	0.0021391			-

(Negligible)

0.0014748	2	0.0024433	1855.4	0.20290	4.5695	Sagging	0.018220	-0.012071	0.014699	
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(Negligible)

0.0014748	3	0.0024433	1395.1	4.7724	4.9866	Hogging	0.035301	-0.013295	0.025714	
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(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: hf | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Vertical Horizontal Displacement Movement Displacement	Segment Min Radius of Category	Start Damage	Length [m]	Curvature [m]	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max	Max	of
			[m]	[m]	[%]	[%]	[%]			Curve

Calculations							Curve	
[m]	[m]	[m]	[m]	[m]	[%]	[%]	[%]	
0.0	1	0.0	10.879	Sagging	0.012781	300.52E-6	0.014251	-
8.3053E-6	830.50E-6	1453.6	0					

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: de | Sub-structure:

Vertical Offset	Segment	Start Length	Curvature	Deflection	Average	Max	Max
Gradient Max Gradient	Min	Damage		Ratio	Horizontal	Tensile	of
from Line for	Radius of	Category			Strain	Strain	
of Vertical	Vertical						
Vertical	Displacement	Curvature					
Horizontal	Movement						
Displacement	Curve						
Calculations							
Curve							

[m]	[m]	[m]	[m]	[%]	[%]	[%]
0.0	1	0.0	0.47607	Sagging	0.0035472	0.017545
175.42E-6	-974.06E-6	1445.6	0			0.018406

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Specific Building Damage Results - Critical Values for All Segments within Each Sub-Structure

Structure: 21-20 | Sub-structure:

Vertical	Deflection	Average	Max	Max	Max	Max Gradient	Max Gradient	Min
Min	Damage	Category	Slope	Settlement	Tensile	of	of Vertical	Radius
Offset from	Ratio	Horizontal				Horizontal	Displacement	
of Radius of	of Radius of	Strain				Strain	Curve	
Line for	Line for					Horizontal	Curve	
Curvature	Curvature					Displacement	Curve	
Vertical	Vertical							
(Hogging)	(Sagging)							
Movement	Movement							
Calculations	Calculations							

[m]	[%]	[%]	[mm]	[%]	[m]

Structure: 19-20 | Sub-structure:

Vertical	Deflection	Average	Max Slope	Max	Max	Max Gradient	Max Gradient
Min	Min	Damage		Settlement	Tensile	of	of Vertical
Offset from	Ratio	Horizontal				Horizontal	Displacement
Radius of	Radius of	Strain				Strain	Curve
Line for	Line for					Horizontal	Curve
Curvature	Curvature					Displacement	Curve
Vertical	Vertical						
(Hogging)	(Sagging)						
Movement	Movement						
Calculations	Calculations						

[m]	[%]	[%]	[mm]	[%]
0.0	0.0014868	0.025674	205.31E-6	0.46416
16543.	- 0 (Negligible)			0.025851

Structure: 19-18 | Sub-structure:

Vertical	Deflection	Average	Max Slope	Max	Max	Max Gradient	Max Gradient
Min	Min	Damage		Settlement	Tensile	of	of Vertical
Offset from	Ratio	Horizontal				Horizontal	Displacement
Radius of	Radius of	Strain				Strain	Curve
Line for	Line for					Horizontal	Curve
Curvature	Curvature					Displacement	Curve
Vertical	Vertical						
(Hogging)	(Sagging)						
Movement	Movement						
Calculations	Calculations						

Line for Curvature Vertical (Hogging) Movement Calculations	Curvature	Strain	Strain	Horizontal Displacement	Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]
0.0 67593.	368.12E-6 - 0 (Negligible)	0.033326	-263.10E-6	0.97801	0.033370
				-338.47E-6	-263.10E-6

Structure: 18-13 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0 27872.	0.0036865 59904. 0 (Negligible)	-0.028398	232.24E-6	0.97827	0.0078147	319.46E-6	232.24E-6

Structure: 21-a | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0 6764.6	0.020769 456.17 0 (Negligible)	0.037496	0.0013272	1.6627	0.045549	-374.82E-6	0.0013272

Structure: f-50 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0 35555.	0.043177 435.62 1 (Very Slight)	0.037499	-0.0020612	3.1109	0.063191	-374.85E-6	-0.0020612

Structure: 14-15 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve	Min Radius
[m]	[m]	[%]	[%]	[mm]	[%]			
0.0 35555.	0.043177 435.62 1 (Very Slight)	0.037499	-0.0020612	3.1109	0.063191	-374.85E-6	-0.0020612	

Calculations

[m] [%] [%] [mm] [%] [m]

Structure: 15-16 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve	Min Radius
[m]	[%]	[%]		[mm]	[%]			[m]

Structure: 16-17 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve	
[m]	[%]	[%]		[mm]	[%]			
0.0	0.0	0.0	515.56E-6	1.0353	0.0	58.668E-6	515.56E-6	
-	-	0 (Negligible)						

Structure: 17-g | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve	
[m]	[%]	[%]		[mm]	[%]			
0.0	0.0	0.038688	0.0016050	3.6233	0.038688	-386.73E-6	0.0016050	
-	-	0 (Negligible)						

Structure: h-49 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve	
[m]	[%]	[%]		[mm]	[%]			
0.0	0.021069	0.032282	-0.0016489	3.3652	0.041426	-382.88E-6	-0.0016489	
-	1254.7	0 (Negligible)						

Structure: 49-36 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0	0.0043249	647.80E-6	-453.70E-6	0.75170	0.0045645	-82.393E-6	-453.70E-6
- 6837.4	0	(Negligible)					

Structure: 36-48 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0	0.0	0.0	0.0	50.442E-6	0.12387	0.0	-265.13E-6
-	0	(Negligible)					50.442E-6

Structure: 48-47 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve	Min Radius
[m]	[m]	[%]	[%]	[mm]	[%]			[m]
0.0	0.0013199	0.0064056	123.68E-6	0.36251	0.0071352	-99.439E-6	123.68E-6	
33782.	-	0	(Negligible)					

Structure: 47-51 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve	Min Radius
[m]	[m]	[%]	[%]	[mm]	[%]			[m]
0.0	0.0013199	0.0064056	123.68E-6	0.36251	0.0071352	-99.439E-6	123.68E-6	
33782.	-	0	(Negligible)					

Structure: 50-46 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve	Min Radius
[m]	[m]	[%]	[%]	[mm]	[%]			[m]
0.0	0.0013199	0.0064056	123.68E-6	0.36251	0.0071352	-99.439E-6	123.68E-6	
33782.	-	0	(Negligible)					

Vertical (Hogging) Movement Calculations

Displacement	Curve
[m]	[m]

Structure: 46-47 | Sub-structure:

Vertical Min Offset of Radius of Line for Curvature	Deflection Ratio	Average Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement	Max Gradient of Vertical Displacement	Min Radius
[m]	[%]	[%]	[mm]	[mm]	[%]			[m]

Structure: 24-25 | Sub-structure:

Vertical Min Offset of Radius of Line for Curvature	Deflection Ratio	Average Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement	Max Gradient of Vertical Displacement	Min Radius
[m]	[%]	[%]	[mm]	[mm]	[%]			[m]

Structure: 25-26 | Sub-structure:

Vertical Min Offset of Radius of Line for Curvature	Deflection Ratio	Average Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement	Max Gradient of Vertical Displacement	Min Radius
[m]	[%]	[%]	[mm]	[mm]	[%]			[m]

Structure: 26-27 | Sub-structure:

Vertical Min Offset of Radius of Line for Curvature	Deflection Ratio	Average Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement	Max Gradient of Vertical Displacement	Min Radius
[m]	[%]	[%]	[mm]	[mm]	[%]			[m]
0.0	0.0	0.037497	-94.388E-6	0.22078	0.037497	-374.83E-6	-94.388E-6	- 0 (Negligible)

Structure: 27-28 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0	381.07E-6	-0.010138	20.908E-6	0.22239	0.0020391	120.80E-6	20.908E-6
- 85498.0	0 (Negligible)						

Structure: 28-29 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0	0.0	0.0	0.0	61.802E-6	0.18918	0.0	-274.80E-6
-	- 0 (Negligible)						61.802E-6

Structure: 27-32 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0	54.968E-6	-0.0050198	3.2167E-6	0.22087	0.0010040	50.201E-6	3.2167E-6
965550.0	3.2332E+6 0 (Negligible)						

Structure: 33-31 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0	0.0039612	0.037329	-356.10E-6	2.0481	0.038454	-374.23E-6	-356.10E-6
14297.0	11324.0 (Negligible)						

Structure: 31-34 | Sub-structure:

Vertical Min Offset from Radius of	Deflection Min Ratio	Average Damage Category Horizontal	Max Slope	Max Settlement	Max Tensile	Max Gradient of	Max Gradient of Vertical
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Calculations

[m]	[m]	[%]	[%]		[mm]	[%]		
0.0	14189.	0.0029190	0.035271	291.02E-6	0.91280	0.035940	-352.58E-6	291.02E-6
		- 0 (Negligible)						

Structure: 39-38 | Sub-structure:

Vertical	Deflection	Average	Max Slope	Max	Max	Max	Max Gradient	Max Gradient
Min	Min	Damage Category					of	of Vertical
Offset from	Ratio	Horizontal		Settlement	Tensile		of	of Vertical
Radius of	Radius of	Strain			Strain		Horizontal	Displacement
Line for	Curvature						Displacement	Curve
Curvature	Vertical						Displacement	Curve
(Hogging)	(Sagging)						Curve	
Movement								
Calculations								
[m]	[m]	[%]	[%]		[mm]	[%]		
0.0	-	0.0	0.0	10.232E-6	0.11020	0.0	-22.848E-6	10.232E-6
		- 0 (Negligible)						

Structure: 38-25 | Sub-structure:

Vertical	Deflection	Average	Max	Max	Max	Max Gradient	Max Gradient	Min
Min	Damage Category		Slope	Settlement	Tensile	of	of Vertical	Radius
Offset from	Ratio	Horizontal				of	of Vertical	Radius
Radius of	Radius of	Strain			Strain	Horizontal	Displacement	
Line for	Curvature					Displacement	Curve	
Curvature	Vertical					Displacement	Curve	
(Hogging)	(Sagging)					Curve		
Movement								
Calculations								
[m]	[m]	[%]	[%]		[mm]	[%]		[m]

Structure: 20-22 | Sub-structure:

Vertical	Deflection	Average	Max	Max	Max	Max Gradient	Max Gradient	Min
Min	Damage Category		Slope	Settlement	Tensile	of	of Vertical	Radius
Offset from	Ratio	Horizontal				of	of Vertical	Radius
Radius of	Radius of	Strain			Strain	Horizontal	Displacement	
Line for	Curvature					Displacement	Curve	
Curvature	Vertical					Displacement	Curve	
(Hogging)	(Sagging)					Curve		
Movement								
Calculations								
[m]	[m]	[%]	[%]		[mm]	[%]		[m]

Structure: 22-b | Sub-structure:

Vertical	Deflection	Average	Max Slope	Max	Max	Max	Max Gradient	Max Gradient
Min	Min	Damage Category					of	of Vertical
Offset from	Ratio	Horizontal		Settlement	Tensile		of	of Vertical
Radius of	Radius of	Strain			Strain		Horizontal	Displacement
Line for	Curvature						Displacement	Curve
Curvature	Vertical						Displacement	Curve
(Hogging)	(Sagging)						Curve	
Movement								
Calculations								
[m]	[m]	[%]	[%]		[mm]	[%]		
0.0	13613.	0.017263	0.037423	871.01E-6	2.1193	0.054510	-374.55E-6	871.01E-6
		1933.9 1 (Very Slight)						

Structure: e-45 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0 15499.	0.015906 1830.3	0.035044 1 (Very Slight)	-745.97E-6	1.8688	0.059191	-350.32E-6	-745.97E-6

Structure: 18-31 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0 477500.	0.0019927 9978.3	-0.0083744 0 (Negligible)	-120.50E-6	1.3138	0.0019003	242.42E-6	-120.50E-6

Structure: 23-24 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0 20247.	0.0042979 12678.	-0.034710 0 (Negligible)	261.62E-6	1.8578	0.024129	705.69E-6	261.62E-6

Structure: b-27 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0 12954.	0.022398 1661.2	0.037411 0 (Negligible)	-0.0011592	2.1855	0.040349	0.0025098	-0.0011592

Structure: 42-37 | Sub-structure:

Vertical Min Offset from Radius of	Deflection Min Ratio	Average Damage Category Horizontal	Max Slope	Max Settlement	Max Tensile	Max Gradient of	Max Gradient of Vertical
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Line for Curvature Vertical (Hogging) Movement Calculations

Strain	Strain	Horizontal Displacement	Displacement
[m]	[%]	[mm]	[%]
0.0	0.0022786	1.3832	0.015037
27889.	25717.0 (Negligible)	180.24E-6	330.78E-6

Structure: 47-43 | Sub-structure:

Vertical Deflection Average Max Slope Max Max Max Gradient Max Gradient
 Min Min Damage Category
 Offset from Ratio Horizontal Settlement Tensile of of Vertical
 Radius of Radius of
 Line for Strain Strain Horizontal Displacement
 Curvature Curvature
 Vertical
 (Hogging) (Sagging)
 Movement
 Calculations
 Curve

Strain	Strain	Horizontal Displacement	Displacement
[m]	[%]	[mm]	[%]
0.0	0.0044766	0.95897	0.0041040
57589.	13228.0 (Negligible)	-183.31E-6	397.13E-6

Structure: 44-39 | Sub-structure:

Vertical Deflection Average Max Slope Max Max Max Gradient Max Gradient
 Min Min Damage Category
 Offset from Ratio Horizontal Settlement Tensile of of Vertical
 Radius of Radius of
 Line for Strain Strain Horizontal Displacement
 Curvature Curvature
 Vertical
 (Hogging) (Sagging)
 Movement
 Calculations
 Curve

Strain	Strain	Horizontal Displacement	Displacement
[m]	[%]	[mm]	[%]
0.0	144.06E-6	0.16205	0.0024836
253420.	- 0 (Negligible)	20.482E-6	-23.810E-6

Structure: 46-45 | Sub-structure:

Vertical Deflection Average Max Slope Max Max Max Max Gradient Max Gradient Min
 Min Damage Category
 Offset from Ratio Horizontal Slope Settlement Tensile of of Vertical Radius
 of Radius of
 Line for Strain Strain Horizontal Displacement
 Curvature Curvature
 Vertical
 (Hogging) (Sagging)
 Movement
 Calculations
 Curve

Strain	Strain	Horizontal Displacement	Displacement	Radius
[m]	[%]	[mm]	[%]	[m]
0.0	0.0023810	0.16205	0.0024836	20.482E-6
253420.	- 0 (Negligible)	20.482E-6	-23.810E-6	20.482E-6

Structure: a-12 | Sub-structure:

Vertical Deflection Average Max Slope Max Max Max Max Gradient Max Gradient
 Min Min Damage Category
 Offset from Ratio Horizontal Settlement Tensile of of Vertical
 Radius of Radius of
 Line for Strain Strain Horizontal Displacement
 Curvature Curvature
 Vertical
 (Hogging) (Sagging)
 Movement
 Calculations
 Curve

[m]	[m]	[%]	[%]		[mm]	[%]		
1076.4	0.0	0.017923	532.96E-6	-594.24E-6	2.8786	0.018484	-5.3296E-6	-594.24E-6
		- 0 (Negligible)						

Structure: 12-11 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
1049.9	0.0	0.025840	-0.023959	0.0011827	3.9905	0.014708	0.0014394
		- 0 (Negligible)					0.0011827

Structure: 11-f | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
452.93	0.0	0.025102	-0.036533	0.0016664	3.7853	0.016425	0.0029314
		- 0 (Negligible)					0.0016664

Structure: ag | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
- 1238.0	0.0	0.012418	466.62E-6	0.0011481	3.6237	0.014167	-9.0631E-6
		0 (Negligible)					0.0011481

Structure: gb | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
797.75	0.0	0.025560	-0.13312	-0.0022045	4.4894	0.043371	0.0087603
	927.45	0 (Negligible)					-0.0022045

Structure: bc | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0 820.11		0.0092733 - 0 (Negligible)	-0.075759	-540.17E-6	0.74838 0.015783	0.0088425	-540.17E-6

Structure: cd | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0 -		0.0 - 0 (Negligible)	-0.22454	60.426E-6	0.57527 0.044908	0.0022504	60.426E-6

Structure: eh | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0 1395.1	1855.4	0 (Negligible)	-0.013295	0.0024433	4.4899 0.025714	0.0014748	0.0024433

Structure: hf | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0 -	1453.6	0 (Negligible)	300.52E-6	830.50E-6	3.3652 0.014251	-8.3053E-6	830.50E-6

Structure: de | Sub-structure:

Vertical Min	Deflection Min	Average Damage Category	Max Slope	Max	Max	Max Gradient	Max Gradient
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Offset from Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Ratio of Radius of Curvature (Sagging)	Horizontal Strain	Settlement Strain	Tensile Strain	of Horizontal Displacement Curve	of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]	
0.0	0.0035472	0.017545	-974.06E-6	0.88065	0.018406	-175.42E-6
- 1445.6	0 (Negligible)					-974.06E-6

Specific Building Damage Results - Critical Segments within Each Structure

Structure Name Max	Parameter Max	Critical Min	Critical Min	Start Damage Category Sub-Structure Segment	End	Curvature	Max Slope
Settlement	Tensile	Radius of	Radius of				
Strain	Curvature	Curvature					
(Hogging)	(Sagging)						
[mm]	[%]	[m]	[m]		[m]	[m]	
21-20		All settlements	are less than the	Settlement Trough Limit Sensitivity.			
		All settlements	are less than the	Settlement Trough Limit Sensitivity.			
		All settlements	are less than the	Settlement Trough Limit Sensitivity.			
		All settlements	are less than the	Settlement Trough Limit Sensitivity.			
		All settlements	are less than the	Settlement Trough Limit Sensitivity.			
19-20		Max Slope		1	0.0	2.0160	Hogging
0.46416	0.025851	16543.	- 0 (Negligible)				205.31E-6
		Max Settlement		1	0.0	2.0160	Hogging
0.46416	0.025851	16543.	- 0 (Negligible)				205.31E-6
		Max Tensile		1	0.0	2.0160	Hogging
0.46416	0.025851	16543.	- 0 (Negligible)				205.31E-6
		Strain					
		Min Radius of		1	0.0	2.0160	Hogging
0.46416	0.025851	16543.	- 0 (Negligible)				205.31E-6
		Curvature (Hogging)					
		Min Radius of		-	-	-	-
-	-	-	-				
		Curvature (Sagging)					
19-18		Max Slope		1	0.0	2.0092	Hogging
0.97801	0.033370	67593.	- 0 (Negligible)				263.10E-6
		Max Settlement		1	0.0	2.0092	Hogging
0.97801	0.033370	67593.	- 0 (Negligible)				263.10E-6
		Max Tensile		1	0.0	2.0092	Hogging
0.97801	0.033370	67593.	- 0 (Negligible)				263.10E-6
		Strain					
		Min Radius of		1	0.0	2.0092	Hogging
0.97801	0.033370	67593.	- 0 (Negligible)				263.10E-6
		Curvature (Hogging)					
		Min Radius of		-	-	-	-
-	-	-	-				
		Curvature (Sagging)					
18-13		Max Slope		1	0.0	1.4202	Sagging
0.97827	0.0056810	-	59904. 0 (Negligible)				232.24E-6
		Max Settlement		1	0.0	1.4202	Sagging
0.97827	0.0056810	-	59904. 0 (Negligible)				232.24E-6
		Max Tensile		2	1.4202	14.959	Hogging
0.66096	0.0078147	27872.	- 0 (Negligible)				232.24E-6
		Strain					
		Min Radius of		2	1.4202	14.959	Hogging
0.66096	0.0078147	27872.	- 0 (Negligible)				232.24E-6
		Curvature (Hogging)					
		Min Radius of		1	0.0	1.4202	Sagging
0.97827	0.0056810	-	59904. 0 (Negligible)				232.24E-6
		Curvature (Sagging)					

21-a		Max Slope			5	10.020	11.820	Sagging	0.0013272
1.6627	0.045549	-	456.17	0 (Negligible)					
		Max Settlement			5	10.020	11.820	Sagging	0.0013272
1.6627	0.045549	-	456.17	0 (Negligible)					
		Max Tensile			5	10.020	11.820	Sagging	0.0013272
1.6627	0.045549	-	456.17	0 (Negligible)					
		Strain							
0.86140	0.037754	Min Radius of	6764.6	- 0 (Negligible)	4	8.3903	10.020	Hogging	162.15E-6
		Curvature (Hogging)							
		Min Radius of			5	10.020	11.820	Sagging	0.0013272
1.6627	0.045549	-	456.17	0 (Negligible)					
		Curvature (Sagging)							
f-50		Max Slope			1	0.0	2.9450	Sagging	0.0020612
3.1109	0.063191	-	435.62	1 (Very Slight)					
		Max Settlement			1	0.0	2.9450	Sagging	0.0020612
3.1109	0.063191	-	435.62	1 (Very Slight)					
		Max Tensile			1	0.0	2.9450	Sagging	0.0020612
3.1109	0.063191	-	435.62	1 (Very Slight)					
		Strain							
0.84378	0.026878	Min Radius of	35555.	- 0 (Negligible)	2	2.9450	4.5711	Hogging	151.21E-6
		Curvature (Hogging)							
		Min Radius of			1	0.0	2.9450	Sagging	0.0020612
3.1109	0.063191	-	435.62	1 (Very Slight)					
		Curvature (Sagging)							
14-15		All settlements are less than the Settlement Trough Limit Sensitivity.							
		All settlements are less than the Settlement Trough Limit Sensitivity.							
		All settlements are less than the Settlement Trough Limit Sensitivity.							
		All settlements are less than the Settlement Trough Limit Sensitivity.							
15-16		All settlements are less than the Settlement Trough Limit Sensitivity.							
		All settlements are less than the Settlement Trough Limit Sensitivity.							
		All settlements are less than the Settlement Trough Limit Sensitivity.							
		All settlements are less than the Settlement Trough Limit Sensitivity.							
16-17		Max Slope			1	1.8990	1.8990	Sagging	515.56E-6
1.0353	0.0	-	-	0 (Negligible)					
		Max Settlement			1	1.8990	1.8990	Sagging	515.56E-6
1.0353	0.0	-	-	0 (Negligible)					
		Max Tensile			1	1.8990	1.8990	Sagging	515.56E-6
1.0353	0.0	-	-	0 (Negligible)					
		Strain							
-	-	Min Radius of	-	-	-	-	-	-	-
		Curvature (Hogging)							
-	-	Min Radius of	-	-	-	-	-	-	-
		Curvature (Sagging)							
17-g		Max Slope			1	0.0	1.6115	Sagging	0.0016050
3.6233	0.038688	-	-	0 (Negligible)					
		Max Settlement			1	0.0	1.6115	Sagging	0.0016050
3.6233	0.038688	-	-	0 (Negligible)					
		Max Tensile			1	0.0	1.6115	Sagging	0.0016050
3.6233	0.038688	-	-	0 (Negligible)					
		Strain							
-	-	Min Radius of	-	-	-	-	-	-	-
		Curvature (Hogging)							
-	-	Min Radius of	-	-	-	-	-	-	-
		Curvature (Sagging)							
h-49		Max Slope			1	0.0	2.1345	Sagging	0.0016489
3.3652	0.041426	-	1254.7	0 (Negligible)					
		Max Settlement			1	0.0	2.1345	Sagging	0.0016489
3.3652	0.041426	-	1254.7	0 (Negligible)					
		Max Tensile			1	0.0	2.1345	Sagging	0.0016489
3.3652	0.041426	-	1254.7	0 (Negligible)					
		Strain							

-	-	Min Radius of	-	-	-	-	-	-
-	-	Curvature (Hogging)	-	-	-	-	-	-
3.3652	0.041426	Min Radius of	-	1254.7	0 (Negligible)	1	0.0	2.1345 Sagging 0.0016489
49-36	0.75170	Curvature (Sagging)	-	-	-	1	0.0	2.3890 Sagging 453.70E-6
0.75170	0.0045645	Max Slope	-	6837.4	0 (Negligible)	1	0.0	2.3890 Sagging 453.70E-6
0.75170	0.0045645	Max Settlement	-	6837.4	0 (Negligible)	1	0.0	2.3890 Sagging 453.70E-6
0.75170	0.0045645	Max Tensile	-	6837.4	0 (Negligible)	1	0.0	2.3890 Sagging 453.70E-6
-	-	Strain	-	-	-	-	-	-
-	-	Min Radius of	-	-	-	-	-	-
-	-	Curvature (Hogging)	-	-	-	-	-	-
0.75170	0.0045645	Min Radius of	-	6837.4	0 (Negligible)	1	0.0	2.3890 Sagging 453.70E-6
36-48	0.12387	Curvature (Sagging)	-	-	-	1	0.0	0.0 Sagging 50.442E-6
0.12387	0.0	Max Slope	-	58474.0	0 (Negligible)	1	0.0	0.0 Sagging 50.442E-6
0.12387	0.0	Max Settlement	-	58474.0	0 (Negligible)	1	0.0	0.0 Sagging 50.442E-6
0.12387	0.0	Max Tensile	-	58474.0	0 (Negligible)	1	0.0	0.0 Sagging 50.442E-6
-	-	Strain	-	-	-	-	-	-
-	-	Min Radius of	-	-	-	-	-	-
-	-	Curvature (Hogging)	-	-	-	-	-	-
-	-	Min Radius of	-	-	-	-	-	-
48-47	-	Curvature (Sagging)	-	-	-	-	-	-
47-51	0.36251	All settlements are less than the Settlement Trough Limit Sensitivity.	-	-	-	-	-	-
0.36251	0.0071352	All settlements are less than the Settlement Trough Limit Sensitivity.	-	-	-	-	-	-
0.36251	0.0071352	All settlements are less than the Settlement Trough Limit Sensitivity.	-	-	-	-	-	-
0.36251	0.0071352	All settlements are less than the Settlement Trough Limit Sensitivity.	-	-	-	-	-	-
0.36251	0.0071352	All settlements are less than the Settlement Trough Limit Sensitivity.	-	-	-	-	-	-
0.36251	0.0071352	Max Slope	-	33782.0	0 (Negligible)	1	1.0750	10.749 Hogging 123.68E-6
0.36251	0.0071352	Max Settlement	-	33782.0	0 (Negligible)	1	1.0750	10.749 Hogging 123.68E-6
0.36251	0.0071352	Max Tensile	-	33782.0	0 (Negligible)	1	1.0750	10.749 Hogging 123.68E-6
0.36251	0.0071352	Strain	-	33782.0	0 (Negligible)	1	1.0750	10.749 Hogging 123.68E-6
0.36251	0.0071352	Min Radius of	-	33782.0	0 (Negligible)	1	1.0750	10.749 Hogging 123.68E-6
-	-	Curvature (Hogging)	-	-	-	-	-	-
-	-	Min Radius of	-	-	-	-	-	-
50-46	-	Curvature (Sagging)	-	-	-	-	-	-
46-47	-	All settlements are less than the Settlement Trough Limit Sensitivity.	-	-	-	-	-	-
24-25	-	All settlements are less than the Settlement Trough Limit Sensitivity.	-	-	-	-	-	-
25-26	-	All settlements are less than the Settlement Trough Limit Sensitivity.	-	-	-	-	-	-

31-34		Max Slope			1	0.0	3.3697	Sagging	198.48E-6	
2.0484	0.011015	-	13899.0	(Negligible)	1	0.0	3.3697	Sagging	198.48E-6	
2.0484	0.011015	Max Settlement	-	13899.0	(Negligible)	1	0.0	3.3697	Sagging	198.48E-6
		Max Tensile	-	13899.0	(Negligible)	1	0.0	3.3697	Sagging	198.48E-6
2.0484	0.011015	Strain	-	13899.0	(Negligible)	1	0.0	3.3697	Sagging	198.48E-6
-	-	Min Radius of	-	-	-	-	-	-	-	
-	-	Curvature (Hogging)	-	-	-	-	-	-	-	
2.0484	0.011015	Min Radius of	-	13899.0	(Negligible)	1	0.0	3.3697	Sagging	198.48E-6
		Curvature (Sagging)	-	-	-	-	-	-	-	
34-35		Max Slope			1	0.0	1.3290	Sagging	276.40E-6	
1.6495	0.0041447	-	-	0 (Negligible)	1	0.0	1.3290	Sagging	276.40E-6	
1.6495	0.0041447	Max Settlement	-	-	0 (Negligible)	1	0.0	1.3290	Sagging	276.40E-6
		Max Tensile	-	-	0 (Negligible)	1	0.0	1.3290	Sagging	276.40E-6
1.6495	0.0041447	Strain	-	-	0 (Negligible)	1	0.0	1.3290	Sagging	276.40E-6
-	-	Min Radius of	-	-	-	-	-	-	-	
-	-	Curvature (Hogging)	-	-	-	-	-	-	-	
-	-	Min Radius of	-	-	-	-	-	-	-	
-	-	Curvature (Sagging)	-	-	-	-	-	-	-	
35-41		Max Slope			1	0.0	1.3590	Sagging	233.68E-6	
1.2818	0.0016301	-	67293.0	(Negligible)	1	0.0	1.3590	Sagging	233.68E-6	
1.2818	0.0016301	Max Settlement	-	67293.0	(Negligible)	1	0.0	1.3590	Sagging	233.68E-6
		Max Tensile	40810.	-	0 (Negligible)	2	1.3590	3.5991	Hogging	233.68E-6
0.97622	0.0084047	Strain	40810.	-	0 (Negligible)	2	1.3590	3.5991	Hogging	233.68E-6
		Min Radius of	40810.	-	0 (Negligible)	2	1.3590	3.5991	Hogging	233.68E-6
0.97622	0.0084047	Curvature (Hogging)	40810.	-	0 (Negligible)	2	1.3590	3.5991	Hogging	233.68E-6
		Min Radius of	-	67293.0	(Negligible)	1	0.0	1.3590	Sagging	233.68E-6
1.2818	0.0016301	Curvature (Sagging)	-	67293.0	(Negligible)	1	0.0	1.3590	Sagging	233.68E-6
		Max Slope			1	0.0	4.0690	Sagging	135.80E-6	
41-40		Max Slope			1	0.0	4.0690	Sagging	135.80E-6	
0.91273	0.0027257	-	26599.0	(Negligible)	1	0.0	4.0690	Sagging	135.80E-6	
0.91273	0.0027257	Max Settlement	-	26599.0	(Negligible)	1	0.0	4.0690	Sagging	135.80E-6
		Max Tensile	-	26599.0	(Negligible)	1	0.0	4.0690	Sagging	135.80E-6
0.91273	0.0027257	Strain	-	26599.0	(Negligible)	1	0.0	4.0690	Sagging	135.80E-6
-	-	Min Radius of	-	-	-	-	-	-	-	
-	-	Curvature (Hogging)	-	-	-	-	-	-	-	
0.91273	0.0027257	Min Radius of	-	26599.0	(Negligible)	1	0.0	4.0690	Sagging	135.80E-6
		Curvature (Sagging)	-	-	-	-	-	-	-	
40-39		Max Slope			1	0.0	3.8991	Hogging	291.02E-6	
0.91280	0.035940	14189.	-	0 (Negligible)	1	0.0	3.8991	Hogging	291.02E-6	
0.91280	0.035940	Max Settlement	14189.	-	0 (Negligible)	1	0.0	3.8991	Hogging	291.02E-6
		Max Tensile	14189.	-	0 (Negligible)	1	0.0	3.8991	Hogging	291.02E-6
0.91280	0.035940	Strain	14189.	-	0 (Negligible)	1	0.0	3.8991	Hogging	291.02E-6
		Min Radius of	14189.	-	0 (Negligible)	1	0.0	3.8991	Hogging	291.02E-6
0.91280	0.035940	Curvature (Hogging)	14189.	-	0 (Negligible)	1	0.0	3.8991	Hogging	291.02E-6
-	-	Min Radius of	-	-	-	-	-	-	-	
-	-	Curvature (Sagging)	-	-	-	-	-	-	-	
39-38		Max Slope			1	0.0	0.0	Sagging	10.232E-6	
0.11020	0.0	-	468110.0	(Negligible)	1	0.0	0.0	Sagging	10.232E-6	

			Max Settlement		1	0.0	0.0	Sagging	10.232E-6
0.11020	0.0	-	468110.0 (Negligible)						
			Max Tensile		1	0.0	0.0	Sagging	10.232E-6
0.11020	0.0	-	468110.0 (Negligible)						
			Strain		-	-	-	-	-
-	-	-	Min Radius of						
			Curvature (Hogging)		-	-	-	-	-
-	-	-	Min Radius of						
			Curvature (Sagging)		-	-	-	-	-
38-25			All settlements are less than the Settlement Trough Limit Sensitivity.						
			All settlements are less than the Settlement Trough Limit Sensitivity.						
			All settlements are less than the Settlement Trough Limit Sensitivity.						
			All settlements are less than the Settlement Trough Limit Sensitivity.						
20-22			All settlements are less than the Settlement Trough Limit Sensitivity.						
			All settlements are less than the Settlement Trough Limit Sensitivity.						
			All settlements are less than the Settlement Trough Limit Sensitivity.						
			All settlements are less than the Settlement Trough Limit Sensitivity.						
22-b			Max Slope		2	5.8264	11.790	Sagging	871.01E-6
2.1193	0.054510	-	1933.9 1 (Very Slight)						
			Max Settlement		2	5.8264	11.790	Sagging	871.01E-6
2.1193	0.054510	-	1933.9 1 (Very Slight)						
			Max Tensile		2	5.8264	11.790	Sagging	871.01E-6
2.1193	0.054510	-	1933.9 1 (Very Slight)						
			Strain		1	1.3872	5.8264	Hogging	357.09E-6
1.2755	0.040938	13613.	- 0 (Negligible)						
			Curvature (Hogging)		2	5.8264	11.790	Sagging	871.01E-6
2.1193	0.054510	-	1933.9 1 (Very Slight)						
			Curvature (Sagging)		1	0.0	5.7061	Sagging	745.97E-6
e-45			Max Slope						
1.8688	0.059191	-	1830.3 1 (Very Slight)						
			Max Settlement		1	0.0	5.7061	Sagging	745.97E-6
1.8688	0.059191	-	1830.3 1 (Very Slight)						
			Max Tensile		1	0.0	5.7061	Sagging	745.97E-6
1.8688	0.059191	-	1830.3 1 (Very Slight)						
			Strain		2	5.7061	9.8415	Hogging	320.72E-6
1.1103	0.037829	15499.	- 0 (Negligible)						
			Curvature (Hogging)		1	0.0	5.7061	Sagging	745.97E-6
1.8688	0.059191	-	1830.3 1 (Very Slight)						
			Curvature (Sagging)		1	0.0	3.2941	Sagging	120.50E-6
18-31			Max Slope						
1.1841	0.0019003	-	9978.3 0 (Negligible)						
			Max Settlement		3	5.6840	6.8291	Sagging	37.217E-6
1.3138	1.3947E-6	-	1.7481E+6 0 (Negligible)						
			Max Tensile		1	0.0	3.2941	Sagging	120.50E-6
1.1841	0.0019003	-	9978.3 0 (Negligible)						
			Strain		2	3.2941	5.6840	Hogging	37.217E-6
1.2715	28.932E-6	477500.	- 0 (Negligible)						
			Curvature (Hogging)		1	0.0	3.2941	Sagging	120.50E-6
1.1841	0.0019003	-	9978.3 0 (Negligible)						
			Curvature (Sagging)		1	0.0	5.7141	Sagging	261.62E-6
23-24			Max Slope						
1.8578	0.0070608	-	12678.0 (Negligible)						
			Max Settlement		1	0.0	5.7141	Sagging	261.62E-6
1.8578	0.0070608	-	12678.0 (Negligible)						
			Max Tensile		2	5.7141	10.683	Hogging	261.62E-6
1.0344	0.024129	20247.	- 0 (Negligible)						
			Strain		2	5.7141	10.683	Hogging	261.62E-6
1.0344	0.024129	20247.	- 0 (Negligible)						

		Curvature (Hogging)										
1.8578	0.0070608	Min Radius of	-	12678.0	0	(Negligible)	1	0.0	5.7141	Sagging	261.62E-6	
		Curvature (Sagging)										
b-27		Max Slope					1	0.0	6.5989	Sagging	0.0011592	
2.1855	0.024204	Max Settlement	-	1661.2	0	(Negligible)	1	0.0	6.5989	Sagging	0.0011592	
2.1855	0.024204	Max Tensile	-	1661.2	0	(Negligible)	2	6.5989	10.644	Hogging	356.04E-6	
1.2991	0.040349	Strain		12954.		0 (Negligible)	2	6.5989	10.644	Hogging	356.04E-6	
1.2991	0.040349	Min Radius of	-	12954.		0 (Negligible)	2	6.5989	10.644	Hogging	356.04E-6	
		Curvature (Hogging)										
2.1855	0.024204	Min Radius of	-	1661.2	0	(Negligible)	1	0.0	6.5989	Sagging	0.0011592	
		Curvature (Sagging)										
42-37		Max Slope					1	0.0	6.7039	Sagging	180.24E-6	
1.3832	0.0019478	Max Settlement	-	25717.0	0	(Negligible)	1	0.0	6.7039	Sagging	180.24E-6	
1.3832	0.0019478	Max Tensile	-	25717.0	0	(Negligible)	2	6.7039	11.202	Hogging	180.24E-6	
0.70445	0.015037	Strain		27889.		0 (Negligible)	2	6.7039	11.202	Hogging	180.24E-6	
0.70445	0.015037	Min Radius of	-	27889.		0 (Negligible)	2	6.7039	11.202	Hogging	180.24E-6	
		Curvature (Hogging)										
1.3832	0.0019478	Min Radius of	-	25717.0	0	(Negligible)	1	0.0	6.7039	Sagging	180.24E-6	
		Curvature (Sagging)										
47-43		Max Slope					1	1.0600	2.4721	Hogging	183.31E-6	
0.42241	0.0015964	Max Settlement	-	57589.		0 (Negligible)	2	2.4721	8.6262	Sagging	183.31E-6	
0.95897	0.0041040	Max Tensile	-	13228.0	0	(Negligible)	2	2.4721	8.6262	Sagging	183.31E-6	
0.95897	0.0041040	Strain		13228.0		0 (Negligible)	2	2.4721	8.6262	Sagging	183.31E-6	
0.42241	0.0015964	Min Radius of	-	57589.		0 (Negligible)	1	1.0600	2.4721	Hogging	183.31E-6	
		Curvature (Hogging)										
0.95897	0.0041040	Min Radius of	-	13228.0	0	(Negligible)	2	2.4721	8.6262	Sagging	183.31E-6	
		Curvature (Sagging)										
44-39		Max Slope					1	0.0	2.9493	Hogging	20.482E-6	
0.16205	0.0024836	Max Settlement	-	253420.		0 (Negligible)	1	0.0	2.9493	Hogging	20.482E-6	
0.16205	0.0024836	Max Tensile	-	253420.		0 (Negligible)	1	0.0	2.9493	Hogging	20.482E-6	
0.16205	0.0024836	Strain		253420.		0 (Negligible)	1	0.0	2.9493	Hogging	20.482E-6	
0.16205	0.0024836	Min Radius of	-	253420.		0 (Negligible)	1	0.0	2.9493	Hogging	20.482E-6	
		Curvature (Hogging)										
-	-	Min Radius of	-	-	-	-	-	-	-	-	-	-
		Curvature (Sagging)										
46-45		All settlements are less than the Settlement Trough Limit Sensitivity.										
		All settlements are less than the Settlement Trough Limit Sensitivity.										
		All settlements are less than the Settlement Trough Limit Sensitivity.										
		All settlements are less than the Settlement Trough Limit Sensitivity.										
		All settlements are less than the Settlement Trough Limit Sensitivity.										
a-12		Max Slope					1	0.0	4.4594	Hogging	594.24E-6	
2.8786	0.018484	Max Settlement	-	1076.4	0	(Negligible)	1	0.0	4.4594	Hogging	594.24E-6	
2.8786	0.018484	Max Tensile	-	1076.4	0	(Negligible)	1	0.0	4.4594	Hogging	594.24E-6	
2.8786	0.018484	Strain		1076.4		0 (Negligible)	1	0.0	4.4594	Hogging	594.24E-6	

2.8786	0.018484	Strain Min Radius of 1076.4	- 0 (Negligible)	1	0.0	4.4594	Hogging	594.24E-6
-	-	Curvature (Hogging) Min Radius of	- -	-	-	-	-	-
12-11		Curvature (Sagging) Max Slope		1	0.0	6.6990	Hogging	0.0011827
3.9905	0.014708	1049.9	- 0 (Negligible)	1	0.0	6.6990	Hogging	0.0011827
3.9905	0.014708	Max Settlement 1049.9	- 0 (Negligible)	1	0.0	6.6990	Hogging	0.0011827
3.9905	0.014708	Max Tensile 1049.9	- 0 (Negligible)	1	0.0	6.6990	Hogging	0.0011827
3.9905	0.014708	Strain Min Radius of 1049.9	- 0 (Negligible)	1	0.0	6.6990	Hogging	0.0011827
-	-	Curvature (Hogging) Min Radius of	- -	-	-	-	-	-
11-f		Curvature (Sagging) Max Slope		1	0.0	4.4697	Hogging	0.0016664
3.7853	0.016425	452.93	- 0 (Negligible)	1	0.0	4.4697	Hogging	0.0016664
3.7853	0.016425	Max Settlement 452.93	- 0 (Negligible)	1	0.0	4.4697	Hogging	0.0016664
3.7853	0.016425	Max Tensile 452.93	- 0 (Negligible)	1	0.0	4.4697	Hogging	0.0016664
3.7853	0.016425	Strain Min Radius of 452.93	- 0 (Negligible)	1	0.0	4.4697	Hogging	0.0016664
-	-	Curvature (Hogging) Min Radius of	- -	-	-	-	-	-
ag		Curvature (Sagging) Max Slope		1	0.0	11.050	Sagging	0.0011481
3.6237	0.014167	- 1238.0 0	(Negligible)	1	0.0	11.050	Sagging	0.0011481
3.6237	0.014167	Max Settlement - 1238.0 0	(Negligible)	1	0.0	11.050	Sagging	0.0011481
3.6237	0.014167	Max Tensile - 1238.0 0	(Negligible)	1	0.0	11.050	Sagging	0.0011481
-	-	Strain Min Radius of	- -	-	-	-	-	-
3.6237	0.014167	Curvature (Hogging) Min Radius of - 1238.0 0	(Negligible)	1	0.0	11.050	Sagging	0.0011481
4.4894	0.043371	Curvature (Sagging) Max Slope		1	0.0	4.7371	Hogging	0.0022045
4.4894	0.043371	831.48	- 0 (Negligible)	1	0.0	4.7371	Hogging	0.0022045
4.4894	0.043371	Max Settlement 831.48	- 0 (Negligible)	1	0.0	4.7371	Hogging	0.0022045
1.1390	0.027424	Max Tensile 831.48	- 0 (Negligible)	1	0.0	4.7371	Hogging	0.0022045
1.1390	0.027424	Strain Min Radius of 797.75	- 0 (Negligible)	3	7.6873	11.399	Hogging	0.0012198
2.9535	0.012666	Curvature (Hogging) Min Radius of - 927.45 0	(Negligible)	2	4.7371	7.6873	Sagging	0.0022045
bc		Curvature (Sagging) Max Slope		1	0.0	5.5590	Hogging	540.17E-6
0.74838	0.015783	820.11	- 0 (Negligible)	1	0.0	5.5590	Hogging	540.17E-6
0.74838	0.015783	Max Settlement 820.11	- 0 (Negligible)	1	0.0	5.5590	Hogging	540.17E-6
0.74838	0.015783	Max Tensile 820.11	- 0 (Negligible)	1	0.0	5.5590	Hogging	540.17E-6
		Strain						

0.74838	0.015783	Min Radius of Curvature (Hogging)	820.11	- 0 (Negligible)	1	0.0	5.5590	Hogging	540.17E-6
-	-	Min Radius of Curvature (Sagging)	-	-	-	-	-	-	-
cd	0.57527	Max Slope	0.044908	- 0 (Negligible)	1	0.0	1.7483	Sagging	60.426E-6
0.57527	0.044908	Max Settlement	-	- 0 (Negligible)	1	0.0	1.7483	Sagging	60.426E-6
0.57527	0.044908	Max Tensile	-	- 0 (Negligible)	1	0.0	1.7483	Sagging	60.426E-6
0.57527	0.044908	Strain	-	- 0 (Negligible)	1	0.0	1.7483	Sagging	60.426E-6
-	-	Min Radius of Curvature (Hogging)	-	-	-	-	-	-	-
-	-	Min Radius of Curvature (Sagging)	-	-	-	-	-	-	-
eh	2.2936	Max Slope	0.014699	- 1855.4 0 (Negligible)	2	0.20290	4.7724	Sagging	0.0024433
4.4899	0.025714	Max Settlement	1395.1	- 0 (Negligible)	3	4.7724	9.7590	Hogging	0.0024433
4.4899	0.025714	Max Tensile	1395.1	- 0 (Negligible)	3	4.7724	9.7590	Hogging	0.0024433
4.4899	0.025714	Strain	1395.1	- 0 (Negligible)	3	4.7724	9.7590	Hogging	0.0024433
4.4899	0.025714	Min Radius of Curvature (Hogging)	1395.1	- 0 (Negligible)	3	4.7724	9.7590	Hogging	0.0024433
2.2936	0.014699	Min Radius of Curvature (Sagging)	-	1855.4 0 (Negligible)	2	0.20290	4.7724	Sagging	0.0024433
hf	3.3652	Max Slope	0.014251	- 1453.6 0 (Negligible)	1	0.0	10.879	Sagging	830.50E-6
3.3652	0.014251	Max Settlement	-	1453.6 0 (Negligible)	1	0.0	10.879	Sagging	830.50E-6
3.3652	0.014251	Max Tensile	-	1453.6 0 (Negligible)	1	0.0	10.879	Sagging	830.50E-6
3.3652	0.014251	Strain	-	1453.6 0 (Negligible)	1	0.0	10.879	Sagging	830.50E-6
-	-	Min Radius of Curvature (Hogging)	-	-	-	-	-	-	-
3.3652	0.014251	Min Radius of Curvature (Sagging)	-	1453.6 0 (Negligible)	1	0.0	10.879	Sagging	830.50E-6
de	0.88065	Max Slope	0.018406	- 1445.6 0 (Negligible)	1	0.0	0.47607	Sagging	974.06E-6
0.88065	0.018406	Max Settlement	-	1445.6 0 (Negligible)	1	0.0	0.47607	Sagging	974.06E-6
0.88065	0.018406	Max Tensile	-	1445.6 0 (Negligible)	1	0.0	0.47607	Sagging	974.06E-6
0.88065	0.018406	Strain	-	1445.6 0 (Negligible)	1	0.0	0.47607	Sagging	974.06E-6
-	-	Min Radius of Curvature (Hogging)	-	-	-	-	-	-	-
0.88065	0.018406	Min Radius of Curvature (Sagging)	-	1445.6 0 (Negligible)	1	0.0	0.47607	Sagging	974.06E-6

Specific Building Damage Results - All Combined Segments

Structure: 21-20 | Sub-structure:

Vertical	Combined Start Length	Curvature Deflection	Average	Max	Damage Category
----------	-----------------------	----------------------	---------	-----	-----------------

[m] [m] [m] [%] [%] [%]
No structures have segments combined.

Structure: 15-16 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]	[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 16-17 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]	[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 17-g | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]	[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: h-49 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]	[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 49-36 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]	[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 36-48 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]	[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 48-47 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 47-51 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 50-46 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 46-47 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 24-25 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 25-26 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 26-27 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

**Movement
Calculations**

[m] [m] [m] [%] [%] [%]
No structures have segments combined.

Structure: 27-28 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
---	-----------------------------	-------------------------	------------------	-----------------------------	--	-----------------------------------	------------------------

[m] [m] [m] [%] [%] [%]
No structures have segments combined.

Structure: 28-29 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
---	-----------------------------	-------------------------	------------------	-----------------------------	--	-----------------------------------	------------------------

[m] [m] [m] [%] [%] [%]
No structures have segments combined.

Structure: 27-32 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
---	-----------------------------	-------------------------	------------------	-----------------------------	--	-----------------------------------	------------------------

[m] [m] [m] [%] [%] [%]
No structures have segments combined.

Structure: 33-31 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
---	-----------------------------	-------------------------	------------------	-----------------------------	--	-----------------------------------	------------------------

[m] [m] [m] [%] [%] [%]
No structures have segments combined.

Structure: 31-34 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
---	-----------------------------	-------------------------	------------------	-----------------------------	--	-----------------------------------	------------------------

[m] [m] [m] [%] [%] [%]
No structures have segments combined.

Structure: 34-35 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
---	-----------------------------	-------------------------	------------------	-----------------------------	--	-----------------------------------	------------------------

[m] [m] [m] [%] [%] [%]
No structures have segments combined.

Structure: 35-41 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: 41-40 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: 40-39 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: 39-38 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: 38-25 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: 20-22 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: 22-b | Sub-structure:

Vertical Offset from	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
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Line for Vertical Movement Calculations	Strain	Strain
[m] [m] [m]	[%]	[%]

No structures have segments combined.

Structure: e-45 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]	[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 18-31 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]	[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 23-24 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]	[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: b-27 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]	[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 42-37 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]	[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 47-43 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]	[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 44-39 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 46-45 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: a-12 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 12-11 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 11-f | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: ag | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: gb | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: bc | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: cd | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: eh | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: hf | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: de | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

DEMOLITION + EXCAVATION + LOADING (LONG TERM)

Analysis Options

Analysis: Boussinesq
 Global Poisson's ratio: 0.20
 Maximum allowable ratio between values of E: 1.5
 Horizontal rigid boundary level: -45.40 [m OD]
 Displacements at area centroids calculated.

Soil Profiles Soil Profile 1

Layer	Level at top	Number of intermediate displacement levels	Youngs Modulus		Poissons ratio	Non-linear curve
	[mOD]		Top [kN/m ²]	Btm [kN/m ²]		
1	0.0	8	10000.	10000.	0.20000	None
2	-4.2000	2	8640.0	8640.0	0.20000	None
3	-5.2000	2	24000.	24000.	0.20000	None
4	-6.2500	4	24000.	24000.	0.20000	None
5	-8.3500	1	24000.	24000.	0.20000	None
6	-9.0000	61	16000.	75328.	0.20000	None
7	-39.600	11	300000.	300000.	0.20000	None

Soil Zones

Zone	Name	X coordinates		Y coordinates		Profile
		min [m]	max [m]	min [m]	max [m]	
1	demo	0.0	110.00	0.0	110.00	Soil Profile 1

Load Data

Load ref.	Name	Shape Polygon	Orientation of Plane	Centre of load (Global) (local z) X	Centre of load (Global) (local x) Y	Centre of load (Global) (local y) Z	Angle of Tangential local x from	Width x or Radius	Length
y	Coordinates	Rectangle	of	(local z)	(local x)	(local y)	(level) [Degrees]	[m]	[m]
	tolerance rectangles			[m]	[m]	[m]			
1	basement A	Polygonal	Horizontal	N/A	N/A	-0.60000	N/A	N/A	
N/A	(66,58.3) (66,53.2)		10.000	2	-10.000		N/A	N/A	
	(59.8,51.7) (55,51.6)								
	(55,58.4)								
2	vault A	Polygonal	Horizontal	N/A	N/A	-3.1300	N/A	N/A	
N/A	(55,58.4) (59.8,58.4)		10.000	1	-20.000		N/A	N/A	
	(59.8,51.6) (55,51.6)								
3	vault B	Polygonal	Horizontal	N/A	N/A	-3.1300	N/A	N/A	
N/A	(44.3,58.4) (44.3,51.6)		10.000	1	-20.000		N/A	N/A	
	(39.6,51.7) (39.6,58.4)								
4	basement B	Polygonal	Horizontal	N/A	N/A	-3.1300	N/A	N/A	
N/A	(55,58.4) (55,51.6)		10.000	1	-10.000		N/A	N/A	
	(39.6,51.7) (39.6,58.4)								
5	new basement	Polygonal	Horizontal	N/A	N/A	-4.2000	N/A	N/A	
N/A	(66,58.3) (66,53.2)		10.000	2	10.000		N/A	N/A	
	(59.8,51.7) (39.6,51.7)								
	(39.6,58.4)								

Displacement Data

intrvls	Direction No. of intrvls	Line/Line for extrusion Show	No. of
---------	--------------------------	------------------------------	--------

Ref. across	Type Extrusion	Name Extrusion	of along	First point			Second point			
				Calculate	Detailed		X	Y	Z(level)	
		Depth	Extrusion	X	Y	Z(level)	X	Y	Z(level)	
			extrusion	[m]	[m]	[m]	[m]	[m]	[m]	
[m]										
99	1	Grid	Grid 1	Global X	30.000	35.000	0.0	N/A	80.000	0.0
		70.000		99	Yes	Yes				
11	2	Line	21-20	N/A	55.960	70.700	0.0	44.210	70.720	0.0
		N/A	N/A		Yes	Yes				
5	3	Line	19-20	N/A	59.140	66.790	0.0	55.960	70.700	0.0
		N/A	N/A		Yes	Yes				
2	4	Line	19-18	N/A	59.140	66.790	0.0	59.170	64.780	0.0
		N/A	N/A		Yes	Yes				
14	5	Line	18-13	N/A	59.170	64.780	0.0	44.210	64.800	0.0
		N/A	N/A		Yes	Yes				
34	6	Line	21-a	N/A	44.210	70.720	0.0	44.060	58.900	0.0
		N/A	N/A		Yes	Yes				
15	7	Line	f-50	N/A	44.100	51.600	0.0	44.160	36.710	0.0
		N/A	N/A		Yes	Yes				
2	8	Line	14-15	N/A	55.000	64.760	0.0	55.000	62.620	0.0
		N/A	N/A		Yes	Yes				
1	9	Line	15-16	N/A	55.000	62.620	0.0	56.230	61.460	0.0
		N/A	N/A		Yes	Yes				
1	10	Line	16-17	N/A	56.230	61.460	0.0	56.220	59.560	0.0
		N/A	N/A		Yes	Yes				
1	11	Line	17-g	N/A	56.220	59.560	0.0	55.100	58.400	0.0
		N/A	N/A		Yes	Yes				
2	12	Line	h-49	N/A	54.980	51.600	0.0	56.500	50.100	0.0
		N/A	N/A		Yes	Yes				
2	13	Line	49-36	N/A	56.500	50.100	0.0	56.500	47.710	0.0
		N/A	N/A		Yes	Yes				
2	14	Line	36-48	N/A	56.500	47.710	0.0	54.960	46.000	0.0
		N/A	N/A		Yes	Yes				
1	15	Line	48-47	N/A	54.960	46.000	0.0	54.960	44.830	0.0
		N/A	N/A		Yes	Yes				
10	16	Line	47-51	N/A	54.960	44.830	0.0	44.210	44.830	0.0
		N/A	N/A		Yes	Yes				
10	17	Line	50-46	N/A	44.160	36.710	0.0	54.960	36.710	0.0
		N/A	N/A		Yes	Yes				
8	18	Line	46-47	N/A	54.960	36.710	0.0	54.960	44.830	0.0
		N/A	N/A		Yes	Yes				
9	19	Line	24-25	N/A	78.820	63.100	0.0	88.080	63.070	0.0
		N/A	N/A		Yes	Yes				
5	20	Line	25-26	N/A	88.080	63.070	0.0	88.000	57.750	0.0
		N/A	N/A		Yes	Yes				
11	21	Line	26-27	N/A	88.000	57.750	0.0	76.730	57.900	0.0
		N/A	N/A		Yes	Yes				
3	22	Line	27-28	N/A	76.730	57.900	0.0	76.710	61.070	0.0
		N/A	N/A		Yes	Yes				
2	23	Line	28-29	N/A	76.710	61.070	0.0	78.820	63.100	0.0
		N/A	N/A		Yes	Yes				
5	24	Line	27-32	N/A	76.730	57.900	0.0	76.750	52.750	0.0
		N/A	N/A		Yes	Yes				
17	25	Line	33-31	N/A	87.930	52.750	0.0	70.250	52.750	0.0
		N/A	N/A		Yes	Yes				
3	26	Line	31-34	N/A	70.250	52.750	0.0	70.180	49.380	0.0
		N/A	N/A		Yes	Yes				
1	27	Line	34-35	N/A	70.180	49.380	0.0	71.510	49.370	0.0
		N/A	N/A		Yes	Yes				
3	28	Line	35-41	N/A	71.510	49.370	0.0	71.480	45.770	0.0
		N/A	N/A		Yes	Yes				
4	29	Line	41-40	N/A	71.480	45.770	0.0	67.410	45.770	0.0
		N/A	N/A		Yes	Yes				
3	30	Line	40-39	N/A	67.410	45.770	0.0	67.390	41.870	0.0
		N/A	N/A		Yes	Yes				
20	31	Line	39-38	N/A	67.390	41.870	0.0	88.000	41.700	0.0
		N/A	N/A		Yes	Yes				
21	32	Line	38-25	N/A	88.000	41.700	0.0	88.080	63.070	0.0
		N/A	N/A		Yes	Yes				
10	33	Line	20-22	N/A	55.960	70.700	0.0	66.130	70.690	0.0
		N/A	N/A		Yes	Yes				
17	34	Line	22-b	N/A	66.130	70.690	0.0	66.300	58.900	0.0
		N/A	N/A		Yes	Yes				
15	35	Line	e-45	N/A	64.740	51.600	0.0	64.480	36.840	0.0
		N/A	N/A		Yes	Yes				

36	Line	18-31	N/A	59.170	64.780	0.0	66.000	64.740	0.0
6	N/A	N/A	Yes	Yes					
37	Line	23-24	N/A	66.000	63.140	0.0	78.820	63.100	0.0
12	N/A	N/A	Yes	Yes					
38	Line	b-27	N/A	66.100	58.460	0.0	76.730	57.900	0.0
10	N/A	N/A	Yes	Yes					
39	Line	42-37	N/A	64.540	46.730	0.0	87.960	46.450	0.0
23	N/A	N/A	Yes	Yes					
40	Line	47-43	N/A	54.960	44.830	0.0	64.500	44.830	0.0
9	N/A	N/A	Yes	Yes					
41	Line	44-39	N/A	64.440	41.910	0.0	67.390	41.870	0.0
2	N/A	N/A	Yes	Yes					
42	Line	46-45	N/A	54.960	36.710	0.0	64.480	36.840	0.0
9	N/A	N/A	Yes	Yes					
43	Line	a-12	N/A	44.060	58.900	0.0	39.630	58.380	0.0
4	N/A	N/A	Yes	Yes					
44	Line	12-11	N/A	39.630	58.380	0.0	39.630	51.680	0.0
6	N/A	N/A	Yes	Yes					
45	Line	11-f	N/A	39.630	51.680	0.0	44.100	51.600	0.0
8	N/A	N/A	Yes	Yes					
46	Line	ag	N/A	44.060	58.900	0.0	55.100	58.400	0.0
11	N/A	N/A	Yes	Yes					
47	Line	gb	N/A	55.100	58.400	0.0	66.500	58.460	0.0
20	N/A	N/A	Yes	Yes					
48	Line	bc	N/A	66.500	58.460	0.0	66.500	52.900	0.0
20	N/A	N/A	Yes	Yes					
49	Line	cd	N/A	66.500	52.900	0.0	65.000	52.000	0.0
1	N/A	N/A	Yes	Yes					
50	Line	eh	N/A	64.740	51.600	0.0	54.980	51.600	0.0
9	N/A	N/A	Yes	Yes					
51	Line	hf	N/A	54.980	51.600	0.0	44.100	51.600	0.0
10	N/A	N/A	Yes	Yes					
52	Line	de	N/A	65.000	52.000	0.0	64.740	51.600	0.0
4	N/A	N/A	Yes	Yes					

Problem Type

Problem Type : Tunnelling and Embedded Wall Excavations

Displacement Data

Type of intervals across extrusion/line	Name of Extrusion	Direction of intervals of extrusion along	Point/Line/Line for extrusion Calculate Surface of type for	No.
			First point X Y Z(level) [m] [m] [m]	Second point X Y Z(level) [m] [m] [m]
[m]				
Grid 99	Grid 1	Global X	30.00000 35.00000 0.00000	- 80.00000 0.00000
Line 11	21-20	Yes	Surface	
Line 5	19-20	-	55.96000 70.70000 0.00000	44.21000 70.72000 0.00000
Line 2	19-18	Yes	Surface	
Line 14	18-13	-	59.14000 66.79000 0.00000	55.96000 70.70000 0.00000
Line 34	21-a	Yes	Surface	
Line 15	f-50	-	59.14000 66.79000 0.00000	59.17000 64.78000 0.00000
Line 2	14-15	Yes	Surface	
Line 1	15-16	-	59.17000 64.78000 0.00000	44.21000 64.80000 0.00000
		Yes	Surface	
		-	44.21000 70.72000 0.00000	44.06000 58.90000 0.00000
		Yes	Surface	
		-	44.10000 51.60000 0.00000	44.16000 36.71000 0.00000
		Yes	Surface	
		-	55.00000 64.76000 0.00000	55.00000 62.62000 0.00000
		Yes	Surface	
		-	55.00000 62.62000 0.00000	56.23000 61.46000 0.00000
		Yes	Surface	

Line	16-17	-	-	56.23000	61.46000	0.00000	56.22000	59.56000	0.00000
1	-	-	Yes	Surface					
Line	17-g	-	-	56.22000	59.56000	0.00000	55.10000	58.40000	0.00000
1	-	-	Yes	Surface					
Line	h-49	-	-	54.98000	51.60000	0.00000	56.50000	50.10000	0.00000
2	-	-	Yes	Surface					
Line	49-36	-	-	56.50000	50.10000	0.00000	56.50000	47.71000	0.00000
2	-	-	Yes	Surface					
Line	36-48	-	-	56.50000	47.71000	0.00000	54.96000	46.00000	0.00000
2	-	-	Yes	Surface					
Line	48-47	-	-	54.96000	46.00000	0.00000	54.96000	44.83000	0.00000
1	-	-	Yes	Surface					
Line	47-51	-	-	54.96000	44.83000	0.00000	44.21000	44.83000	0.00000
10	-	-	Yes	Surface					
Line	50-46	-	-	44.16000	36.71000	0.00000	54.96000	36.71000	0.00000
10	-	-	Yes	Surface					
Line	46-47	-	-	54.96000	36.71000	0.00000	54.96000	44.83000	0.00000
8	-	-	Yes	Surface					
Line	24-25	-	-	78.82000	63.10000	0.00000	88.08000	63.07000	0.00000
9	-	-	Yes	Surface					
Line	25-26	-	-	88.08000	63.07000	0.00000	88.00000	57.75000	0.00000
5	-	-	Yes	Surface					
Line	26-27	-	-	88.00000	57.75000	0.00000	76.73000	57.90000	0.00000
11	-	-	Yes	Surface					
Line	27-28	-	-	76.73000	57.90000	0.00000	76.71000	61.07000	0.00000
3	-	-	Yes	Surface					
Line	28-29	-	-	76.71000	61.07000	0.00000	78.82000	63.10000	0.00000
2	-	-	Yes	Surface					
Line	27-32	-	-	76.73000	57.90000	0.00000	76.75000	52.75000	0.00000
5	-	-	Yes	Surface					
Line	33-31	-	-	87.93000	52.75000	0.00000	70.25000	52.75000	0.00000
17	-	-	Yes	Surface					
Line	31-34	-	-	70.25000	52.75000	0.00000	70.18000	49.38000	0.00000
3	-	-	Yes	Surface					
Line	34-35	-	-	70.18000	49.38000	0.00000	71.51000	49.37000	0.00000
1	-	-	Yes	Surface					
Line	35-41	-	-	71.51000	49.37000	0.00000	71.48000	45.77000	0.00000
3	-	-	Yes	Surface					
Line	41-40	-	-	71.48000	45.77000	0.00000	67.41000	45.77000	0.00000
4	-	-	Yes	Surface					
Line	40-39	-	-	67.41000	45.77000	0.00000	67.39000	41.87000	0.00000
3	-	-	Yes	Surface					
Line	39-38	-	-	67.39000	41.87000	0.00000	88.00000	41.70000	0.00000
20	-	-	Yes	Surface					
Line	38-25	-	-	88.00000	41.70000	0.00000	88.08000	63.07000	0.00000
21	-	-	Yes	Surface					
Line	20-22	-	-	55.96000	70.70000	0.00000	66.13000	70.69000	0.00000
10	-	-	Yes	Surface					
Line	22-b	-	-	66.13000	70.69000	0.00000	66.30000	58.90000	0.00000
17	-	-	Yes	Surface					
Line	e-45	-	-	64.74000	51.60000	0.00000	64.48000	36.84000	0.00000
15	-	-	Yes	Surface					
Line	18-31	-	-	59.17000	64.78000	0.00000	66.00000	64.74000	0.00000
6	-	-	Yes	Surface					
Line	23-24	-	-	66.00000	63.14000	0.00000	78.82000	63.10000	0.00000
12	-	-	Yes	Surface					
Line	b-27	-	-	66.10000	58.46000	0.00000	76.73000	57.90000	0.00000
10	-	-	Yes	Surface					
Line	42-37	-	-	64.54000	46.73000	0.00000	87.96000	46.45000	0.00000
23	-	-	Yes	Surface					
Line	47-43	-	-	54.96000	44.83000	0.00000	64.50000	44.83000	0.00000
9	-	-	Yes	Surface					
Line	44-39	-	-	64.44000	41.91000	0.00000	67.39000	41.87000	0.00000
2	-	-	Yes	Surface					
Line	46-45	-	-	54.96000	36.71000	0.00000	64.48000	36.84000	0.00000
9	-	-	Yes	Surface					
Line	a-12	-	-	44.06000	58.90000	0.00000	39.63000	58.38000	0.00000
4	-	-	Yes	Surface					
Line	12-11	-	-	39.63000	58.38000	0.00000	39.63000	51.68000	0.00000
6	-	-	Yes	Surface					
Line	11-f	-	-	39.63000	51.68000	0.00000	44.10000	51.60000	0.00000
8	-	-	Yes	Surface					
Line	ag	-	-	44.06000	58.90000	0.00000	55.10000	58.40000	0.00000
11	-	-	Yes	Surface					
Line	gb	-	-	55.10000	58.40000	0.00000	66.50000	58.46000	0.00000
20	-	-	Yes	Surface					

Line bc	-	-	66.50000	58.46000	0.00000	66.50000	52.90000	0.00000
20	-	Yes	Surface					
Line cd	-	-	66.50000	52.90000	0.00000	65.00000	52.00000	0.00000
1	-	Yes	Surface					
Line eh	-	-	64.74000	51.60000	0.00000	54.98000	51.60000	0.00000
9	-	Yes	Surface					
Line hf	-	-	54.98000	51.60000	0.00000	44.10000	51.60000	0.00000
10	-	Yes	Surface					
Line de	-	-	65.00000	52.00000	0.00000	64.74000	51.60000	0.00000
4	-	Yes	Surface					

Vertical Ground Movement Curves

Curve Name: No vertical ground movement

Coordinates: [Distance from wall / wall depth or max. excavation depth (x), Depth / wall depth or max. excavation depth (y), Settlement / wall depth or max. excavation depth (z) (%)]
 [0.000,0.000,0.000] [1.000,0.000,0.000] [0.000,1.000,0.000] [1.000,1.000,0.000]

Curve Fitting Method: Polynomial

x Order: 1
y Order: 0
Polynomial: z = 0.0x + 0.0
Coeff. of -2147483648.E+2147483647
Determination:

Curve Name: Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11 (b))

Coordinates: [Distance from wall / wall depth or max. excavation depth (x), Depth / wall depth or max. excavation depth (y), Settlement / wall depth or max. excavation depth (z) (%)]
 [0.000,0.000,0.039] [0.100,0.000,0.049] [0.200,0.000,0.056] [0.300,0.000,0.062] [0.400,0.000,0.067] [0.500,0.000,0.070] [0.600,0.000,0.072] [0.700,0.000,0.073] [0.800,0.000,0.073] [0.900,0.000,0.072] [1.000,0.000,0.070] [1.100,0.000,0.068] [1.200,0.000,0.065] [1.300,0.000,0.061] [1.400,0.000,0.058] [1.500,0.000,0.054] [1.600,0.000,0.050] [1.700,0.000,0.046] [1.800,0.000,0.042] [1.900,0.000,0.038] [2.000,0.000,0.034] [2.100,0.000,0.030] [2.200,0.000,0.027] [2.300,0.000,0.023] [2.400,0.000,0.020] [2.500,0.000,0.017] [2.600,0.000,0.014] [2.700,0.000,0.012] [2.800,0.000,0.010] [2.900,0.000,0.008] [3.000,0.000,0.007] [3.100,0.000,0.005] [3.200,0.000,0.004] [3.300,0.000,0.004] [3.400,0.000,0.003] [3.500,0.000,0.002] [3.600,0.000,0.002] [3.700,0.000,0.002] [3.800,0.000,0.001] [3.900,0.000,0.001] [4.000,0.000,0.000]

Curve Fitting Method: Polynomial

x Order: 4
y Order: 0
Polynomial: z = -2.6455E-3x⁴ + 2.8495E-2x³ - 1.0051E-1x² + 1.0569E-1x + 3.8990E-2
Coeff. of 9.9991E-1
Determination:

Horizontal Ground Movement Curves

Curve Name: No horizontal ground movement

Coordinates: [Distance from wall / wall depth or max. excavation depth (x), Depth / wall depth or max. excavation depth (y), Horizontal movement / wall depth or max. excavation depth (z) (%)]
 [0.000,0.000,0.000] [1.000,0.000,0.000] [0.000,1.000,0.000] [1.000,1.000,0.000]

Curve Fitting Method: Polynomial

x Order: 0
y Order: 0
Polynomial: z = 0.0
Coeff. of -2147483648.E+2147483647
Determination:

Curve Name: Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11 (a))

Coordinates: [Distance from wall / wall depth or max. excavation depth (x), Depth / wall depth or max. excavation depth (y), Horizontal movement / wall depth or max. excavation depth (z) (%)]
 [0.000,0.000,0.150] [4.000,0.000,0.000]

3	66.000	53.200	-3.6000	No	-	-	-	-	-	-
4	59.820	51.680	-3.6000	No	-	-	-	-	-	-

Side	Corner 1		Corner 2		Ground Movement Curve	
	x [m]	y [m]	x [m]	y [m]	Vertical	Horizontal
1 of high stiff clay 2.11(a))	59.820	58.310	66.020	58.310	Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(b))	Excavation in front stiffness wall in (CIRIA 580 Fig.
2 of high stiff clay 2.11(a))	66.020	58.310	66.000	53.200	Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(b))	Excavation in front stiffness wall in (CIRIA 580 Fig.
3 of high stiff clay 2.11(a))	66.000	53.200	59.820	51.680	Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(b))	Excavation in front stiffness wall in (CIRIA 580 Fig.
4 movement	59.820	51.680	59.820	58.310	No vertical ground movement	No horizontal ground

Excavation Name: Excavation 3
Surface level [m]: 0.0
Contribution: Negative
Enabled: Yes
Surface movement curves which are selected are applied between surface and [m]: -5.0000

Corner	x [m]	y [m]	Base Level [m]	Stiffened	Previous Side			Next Side		
					d [m]	p1 [%]	p2* [%]	d [m]	p1 [%]	p2* [%]
1	59.820	58.310	-1.0700	No	-	-	-	-	-	-
2	66.020	58.310	-1.0700	No	-	-	-	-	-	-
3	66.000	53.200	-1.0700	No	-	-	-	-	-	-
4	59.820	51.680	-1.0700	No	-	-	-	-	-	-

Side	Corner 1		Corner 2		Ground Movement Curve	
	x [m]	y [m]	x [m]	y [m]	Vertical	Horizontal
1 of high stiff clay 2.11(a))	59.820	58.310	66.020	58.310	Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(b))	Excavation in front stiffness wall in (CIRIA 580 Fig.
2 of high stiff clay 2.11(a))	66.020	58.310	66.000	53.200	Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(b))	Excavation in front stiffness wall in (CIRIA 580 Fig.
3 of high stiff clay 2.11(a))	66.000	53.200	59.820	51.680	Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(b))	Excavation in front stiffness wall in (CIRIA 580 Fig.
4 movement	59.820	51.680	59.820	58.310	No vertical ground movement	No horizontal ground

Damage Category Strains

Name	0 (Negligible)	1 (Very Slight)	2 (Slight)	3 (Moderate)
	to	to	to	to
Burland Strain Limits	1 (Very Slight)	2 (Slight)	3 (Moderate)	4 (Severe)
	0.0	500.00E-6	750.00E-6	0.0015000

Specific Structures - Geometry

Structure Name	Sub-Structure	Displacement	Start	End	Vertical	Vertical
Damage Category	Strains	Poisson's	Distance	Distance	Offsets from	Displacement
Ratio	Name	Line	Along	Along	Line for	Limit
			Line	Line	Vertical	Sensitivity
			[m]	[m]	Movement	[mm]
					Calculations	
21-20		21-20	0.00000	11.74902	0.0	0.10000
Burland Strain Limits	0.20000	2.6000				
19-20		19-20	0.00000	5.03889	0.0	0.10000
Burland Strain Limits	0.20000	2.6000				
19-18		19-18	0.00000	2.00922	0.0	0.10000
Burland Strain Limits	0.20000	2.6000				
18-13		18-13	0.00000	14.95901	0.0	0.10000
Burland Strain Limits	0.20000	2.6000				
21-a		21-a	0.00000	11.81995	0.0	0.10000
Burland Strain Limits	0.20000	2.6000				
f-50		f-50	0.00000	14.88912	0.0	0.10000
Burland Strain Limits	0.20000	2.6000				
14-15		14-15	0.00000	2.13900	0.0	0.10000
Burland Strain Limits	0.20000	2.6000				
15-16		15-16	0.00000	1.68971	0.0	0.10000
Burland Strain Limits	0.20000	2.6000				
16-17		16-17	0.00000	1.89903	0.0	0.10000
Burland Strain Limits	0.20000	2.6000				
17-g		17-g	0.00000	1.61145	0.0	0.10000
Burland Strain Limits	0.20000	2.6000				
h-49		h-49	0.00000	2.13451	0.0	0.10000
Burland Strain Limits	0.20000	2.6000				
49-36		49-36	0.00000	2.38900	0.0	0.10000
Burland Strain Limits	0.20000	2.6000				
36-48		36-48	0.00000	2.30024	0.0	0.10000
Burland Strain Limits	0.20000	2.6000				
48-47		48-47	0.00000	1.16900	0.0	0.10000
Burland Strain Limits	0.20000	2.6000				
47-51		47-51	0.00000	10.74900	0.0	0.10000
Burland Strain Limits	0.20000	2.6000				
50-46		50-46	0.00000	10.79900	0.0	0.10000
Burland Strain Limits	0.20000	2.6000				
46-47		46-47	0.00000	8.11900	0.0	0.10000
Burland Strain Limits	0.20000	2.6000				
24-25		24-25	0.00000	9.25905	0.0	0.10000
Burland Strain Limits	0.20000	2.6000				
25-26		25-26	0.00000	5.31960	0.0	0.10000
Burland Strain Limits	0.20000	2.6000				
26-27		26-27	0.00000	11.27000	0.0	0.10000
Burland Strain Limits	0.20000	2.6000				
27-28		27-28	0.00000	3.16906	0.0	0.10000
Burland Strain Limits	0.20000	2.6000				
28-29		28-29	0.00000	2.92697	0.0	0.10000
Burland Strain Limits	0.20000	2.6000				
27-32		27-32	0.00000	5.14904	0.0	0.10000
Burland Strain Limits	0.20000	2.6000				
33-31		33-31	0.00000	17.67900	0.0	0.10000
Burland Strain Limits	0.20000	2.6000				
31-34		31-34	0.00000	3.36973	0.0	0.10000
Burland Strain Limits	0.20000	2.6000				
34-35		34-35	0.00000	1.32904	0.0	0.10000
Burland Strain Limits	0.20000	2.6000				
35-41		35-41	0.00000	3.59912	0.0	0.10000
Burland Strain Limits	0.20000	2.6000				
41-40		41-40	0.00000	4.06900	0.0	0.10000
Burland Strain Limits	0.20000	2.6000				
40-39		40-39	0.00000	3.89905	0.0	0.10000
Burland Strain Limits	0.20000	2.6000				
39-38		39-38	0.00000	20.60970	0.0	0.10000
Burland Strain Limits	0.20000	2.6000				
38-25		38-25	0.00000	21.36915	0.0	0.10000
Burland Strain Limits	0.20000	2.6000				
20-22		20-22	0.00000	10.16900	0.0	0.10000
Burland Strain Limits	0.20000	2.6000				

22-b	22-b	0.00000	11.79023	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
e-45	e-45	0.00000	14.76129	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
18-31	18-31	0.00000	6.82912	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
23-24	23-24	0.00000	12.81906	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
b-27	b-27	0.00000	10.64374	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
42-37	42-37	0.00000	23.42067	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
47-43	47-43	0.00000	9.53900	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
44-39	44-39	0.00000	2.94927	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
46-45	46-45	0.00000	9.51989	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
a-12	a-12	0.00000	4.45941	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
12-11	12-11	0.00000	6.69900	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
11-f	11-f	0.00000	4.46972	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
ag	ag	0.00000	11.05032	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
gb	gb	0.00000	11.39916	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
bc	bc	0.00000	5.55900	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
cd	cd	0.00000	1.74829	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
eh	eh	0.00000	9.75900	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
hf	hf	0.00000	10.87900	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
de	de	0.00000	0.47607	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				

Specific Structures - Bending Parameters

Structure Name	Sub-Structure	Height	Default	Hogging			
				Sagging			
Name		Properties		2nd Moment	Distance	Distance	2nd Moment
Distance	Distance			of Area	of Bending	of N.A.	of Area
of Bending	of N.A.			(per unit	Strain	from Edge	(per unit
Strain	from Edge			width)	from N.A.	of Beam in	width)
from N.A.	of Beam in					Tension	
Tension							
[m]	[m]	[m]		[m ³]	[m]	[m]	[m ³]
21-20		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
19-20		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
19-18		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
18-13		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
21-a		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
f-50		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
14-15		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
15-16		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
16-17		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						

17-g		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
h-49		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
49-36		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
36-48		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
48-47		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
47-51		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
50-46		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
46-47		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
24-25		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
25-26		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
26-27		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
27-28		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
28-29		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
27-32		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
33-31		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
31-34		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
34-35		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
35-41		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
41-40		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
40-39		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
39-38		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
38-25		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
20-22		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						
22-b		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						
e-45		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						
18-31		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						
23-24		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						
b-27		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						
42-37		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						
47-43		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						
44-39		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						
46-45		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						
a-12		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						
12-11		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						
11-f		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						
ag		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
gb		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						
bc		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						

cd			3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000							
eh			3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000							
hf			13.0000	Yes	732.33	13.0000	13.0000	183.08
6.5000	6.5000							
de			3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000							

Building Segment Combinations

Structure Name	Sub-Structure Name	Vertical Offset from Line for Vertical Movement Calculations	Segment Start	Length	Curvature	Combined Segment
		[m]	[m]	[m]		

No structures have segments combined.

Utility Strain Calculation Options

Neglect beneficial contribution of axial strains : No

Specific Building Damage Results - Horizontal Displacements

Structure: 21-20 | Sub-structure:

Dist.	Coordinates			Displacements			
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	55.96000	70.70000	0.00000	0.12817	-0.41142	-0.12887	0.41120 d
1.0682	54.89182	70.70182	0.00000	0.11194	-0.28146	-0.11242	0.28127 d
2.1364	53.82364	70.70364	0.00000	0.073605	-0.15213	-0.073864	0.15201 d
3.2046	52.75545	70.70545	0.00000	0.016518	-0.028982	-0.016567	0.028954 d
4.2727	51.68727	70.70727	0.00000	0.0	0.0	0.0	0.0 d
5.3409	50.61909	70.70909	0.00000	0.0	0.0	0.0	0.0 d
6.4091	49.55091	70.71091	0.00000	0.0	0.0	0.0	0.0 d
7.4773	48.48273	70.71273	0.00000	0.0	0.0	0.0	0.0 d
8.5455	47.41455	70.71455	0.00000	0.0	0.0	0.0	0.0 d
9.6137	46.34636	70.71636	0.00000	0.0	0.0	0.0	0.0 d
10.682	45.27818	70.71818	0.00000	0.0	0.0	0.0	0.0 d
11.750	44.21000	70.72000	0.00000	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: 19-20 | Sub-structure:

Dist.	Coordinates			Displacements			
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	59.14000	66.79000	0.00000	0.16764	-2.0905	-1.7276	1.1890 d
1.0080	58.50400	67.57200	0.00000	0.24222	-1.7048	-1.4754	0.88772 d
2.0160	57.86800	68.35400	0.00000	0.26175	-1.3468	-1.2100	0.64673 d
3.0239	57.23200	69.13600	0.00000	0.24244	-1.0142	-0.93977	0.45181 d
4.0319	56.59600	69.91800	0.00000	0.19537	-0.70344	-0.66901	0.29228 d
5.0399	55.96000	70.70000	0.00000	0.12817	-0.41142	-0.40005	0.16015 d

d - Displacements include imported displacements.

Structure: 19-18 | Sub-structure:

Dist.	Coordinates			Displacements			
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular

[m]	[m]	[m]	[m]	[mm]	[mm]	Line [mm]	to Line [mm]
0.0	59.14000	66.79000	0.00000	0.16764	-2.0905	2.0928	0.13642 d
1.0051	59.15500	65.78500	0.00000	0.21619	-2.4301	2.4331	0.17990 d
2.0102	59.17000	64.78000	0.00000	0.27717	-2.7589	2.7627	0.23596 d

d - Displacements include imported displacements.

Structure: 18-13 | Sub-structure:

Dist.	Coordinates			Displacements			
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	59.17000	64.78000	0.00000	0.27717	-2.7589	-0.28085	2.7585 d
1.0686	58.10143	64.78143	0.00000	0.61900	-2.3309	-0.62211	2.3301 d
2.1371	57.03286	64.78286	0.00000	0.80818	-1.8769	-0.81069	1.8758 d
3.2057	55.96429	64.78429	0.00000	0.86676	-1.4554	-0.86870	1.4542 d
4.2743	54.89571	64.78571	0.00000	0.83344	-1.0960	-0.83491	1.0949 d
5.3429	53.82714	64.78714	0.00000	0.74509	-0.80530	-0.74617	0.80430 d
6.4114	52.75857	64.78857	0.00000	0.62906	-0.57714	-0.62983	0.57629 d
7.4800	51.69000	64.79000	0.00000	0.50296	-0.40088	-0.50349	0.40021 d
8.5486	50.62143	64.79143	0.00000	0.37701	-0.26565	-0.37737	0.26514 d
9.6172	49.55286	64.79286	0.00000	0.25664	-0.16205	-0.25686	0.16171 d
10.686	48.48429	64.79429	0.00000	0.14436	-0.082578	-0.14447	0.082384 d
11.754	47.41571	64.79571	0.00000	0.041021	-0.021448	-0.041050	0.021393 d
12.823	46.34714	64.79714	0.00000	0.0	0.0	0.0	0.0 d
13.891	45.27857	64.79857	0.00000	0.0	0.0	0.0	0.0 d
14.960	44.21000	64.80000	0.00000	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: 21-a | Sub-structure:

Dist.	Coordinates			Displacements			
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	44.21000	70.72000	0.00000	0.0	0.0	0.0	0.0 d
0.34768	44.20559	70.37235	0.00000	0.0	0.0	0.0	0.0 d
0.69535	44.20118	70.02471	0.00000	0.0	0.0	0.0	0.0 d
1.0430	44.19676	69.67706	0.00000	0.0	0.0	0.0	0.0 d
1.3907	44.19235	69.32941	0.00000	0.0	0.0	0.0	0.0 d
1.7384	44.18794	68.98176	0.00000	0.0	0.0	0.0	0.0 d
2.0861	44.18353	68.63412	0.00000	0.0	0.0	0.0	0.0 d
2.4337	44.17912	68.28647	0.00000	0.0	0.0	0.0	0.0 d
2.7814	44.17471	67.93882	0.00000	0.0	0.0	0.0	0.0 d
3.1291	44.17029	67.59118	0.00000	0.0	0.0	0.0	0.0 d
3.4768	44.16588	67.24353	0.00000	0.0	0.0	0.0	0.0 d
3.8244	44.16147	66.89588	0.00000	0.0	0.0	0.0	0.0 d
4.1721	44.15706	66.54824	0.00000	0.0	0.0	0.0	0.0 d
4.5198	44.15265	66.20059	0.00000	0.0	0.0	0.0	0.0 d
4.8675	44.14824	65.85294	0.00000	0.0	0.0	0.0	0.0 d
5.2151	44.14382	65.50529	0.00000	0.0	0.0	0.0	0.0 d
5.5628	44.13941	65.15765	0.00000	0.0	0.0	0.0	0.0 d
5.9105	44.13500	64.81000	0.00000	0.0	0.0	0.0	0.0 d
6.2582	44.13059	64.46235	0.00000	0.0	0.0	0.0	0.0 d
6.6058	44.12618	64.11471	0.00000	0.0	0.0	0.0	0.0 d
6.9535	44.12176	63.76706	0.00000	0.0	0.0	0.0	0.0 d
7.3012	44.11735	63.41941	0.00000	0.0	0.0	0.0	0.0 d
7.6489	44.11294	63.07176	0.00000	0.0	0.0	0.0	0.0 d
7.9965	44.10853	62.72412	0.00000	0.0	0.0	0.0	0.0 d
8.3442	44.10412	62.37647	0.00000	-270.23E-6	-0.10188	0.10187	0.0010226 d
8.6919	44.09971	62.02882	0.00000	-616.05E-6	-0.23225	0.23224	0.0023311 d
9.0396	44.09529	61.68118	0.00000	-961.86E-6	-0.36262	0.36260	0.0036396 d
9.3872	44.09088	61.33353	0.00000	-0.0013077	-0.49299	0.49297	0.0049482 d
9.7349	44.08647	60.98588	0.00000	-0.0016535	-0.62336	0.62333	0.0062567 d
10.083	44.08206	60.63824	0.00000	-0.0019993	-0.75373	0.75370	0.0075652 d
10.430	44.07765	60.29059	0.00000	-0.0023451	-0.88410	0.88406	0.0088738 d
10.778	44.07324	59.94294	0.00000	-0.0026909	-1.0145	1.0144	0.010182 d
11.126	44.06882	59.59529	0.00000	-0.0030367	-1.1448	1.1448	0.011491 d
11.473	44.06441	59.24765	0.00000	-0.0033825	-1.2752	1.2752	0.012799 d
11.821	44.06000	58.90000	0.00000	-0.0037284	-1.4056	1.4055	0.014108 d

d - Displacements include imported displacements.

Structure: f-50 | Sub-structure:

Dist.	Coordinates			Displacements			
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	44.10000	51.60000	0.00000	0.0	1.5750	-1.5750	0.0063465 d
0.99267	44.10400	50.60733	0.00000	0.0	1.2028	-1.2027	0.0048465 d
1.9853	44.10800	49.61467	0.00000	0.0	0.83050	-0.83049	0.0033465 d
2.9780	44.11200	48.62200	0.00000	0.0	0.45825	-0.45825	0.0018465 d
3.9707	44.11600	47.62933	0.00000	0.0	0.086000	-0.085999	346.54E-6 d
4.9634	44.12000	46.63667	0.00000	0.0	0.0	0.0	0.0 d
5.9560	44.12400	45.64400	0.00000	0.0	0.0	0.0	0.0 d
6.9487	44.12800	44.65133	0.00000	0.0	0.0	0.0	0.0 d
7.9414	44.13200	43.65867	0.00000	0.0	0.0	0.0	0.0 d
8.9341	44.13600	42.66600	0.00000	0.0	0.0	0.0	0.0 d
9.9267	44.14000	41.67333	0.00000	0.0	0.0	0.0	0.0 d
10.919	44.14400	40.68067	0.00000	0.0	0.0	0.0	0.0 d
11.912	44.14800	39.68800	0.00000	0.0	0.0	0.0	0.0 d
12.905	44.15200	38.69533	0.00000	0.0	0.0	0.0	0.0 d
13.897	44.15600	37.70267	0.00000	0.0	0.0	0.0	0.0 d
14.890	44.16000	36.71000	0.00000	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: 14-15 | Sub-structure:

Dist.	Coordinates			Displacements			
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	55.00000	64.76000	0.00000	0.84279	-1.1278	1.1278	0.84279 d
1.0700	55.00000	63.69000	0.00000	0.96061	-1.0722	1.0722	0.96061 d
2.1400	55.00000	62.62000	0.00000	1.0302	-0.92116	0.92116	1.0302 d

d - Displacements include imported displacements.

Structure: 15-16 | Sub-structure:

Dist.	Coordinates			Displacements			
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	55.00000	62.62000	0.00000	1.0302	-0.92116	1.3815	0.036647 d
1.6907	56.23000	61.46000	0.00000	1.2426	-1.5248	1.9502	-0.25675 d

d - Displacements include imported displacements.

Structure: 16-17 | Sub-structure:

Dist.	Coordinates			Displacements			
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	56.23000	61.46000	0.00000	1.2426	-1.5248	1.5183	1.2507 d
1.9000	56.22000	59.56000	0.00000	0.75970	-1.4108	1.4068	0.76712 d

d - Displacements include imported displacements.

Structure: 17-g | Sub-structure:

Dist.	Coordinates			Displacements			
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line

[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	56.22000	59.56000	0.00000	0.75970	-1.4108	0.48727	1.5265 d
1.6125	55.10000	58.40000	0.00000	0.039851	-1.5829	1.1111	1.1282 d

d - Displacements include imported displacements.

Structure: h-49 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
	0.0	54.98000	51.60000	0.00000	0.032693	1.5755	-1.0834	1.1444 d
1.0678	55.74000	50.85000	0.00000	0.41190	1.3775		-0.67442	1.2698 d
2.1355	56.50000	50.10000	0.00000	0.84003	1.4123		-0.39408	1.5953 d

d - Displacements include imported displacements.

Structure: 49-36 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
	0.0	56.50000	50.10000	0.00000	0.84003	1.4123	-1.4123	0.84003 d
1.1950	56.50000	48.90500	0.00000	1.1136	1.4952		-1.4952	1.1136 d
2.3900	56.50000	47.71000	0.00000	1.0708	1.3967		-1.3967	1.0708 d

d - Displacements include imported displacements.

Structure: 36-48 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
	0.0	56.50000	47.71000	0.00000	1.0708	1.3967	-1.7545	-0.13899 d
1.1506	55.73000	46.85500	0.00000	0.93757	1.1061		-1.4493	-0.043491 d
2.3012	54.96000	46.00000	0.00000	0.80409	0.93976		-1.2364	-0.031390 d

d - Displacements include imported displacements.

Structure: 48-47 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
	0.0	54.96000	46.00000	0.00000	0.80409	0.93976	-0.93976	0.80409 d
1.1700	54.96000	44.83000	0.00000	0.68541	0.96606		-0.96606	0.68541 d

d - Displacements include imported displacements.

Structure: 47-51 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
	0.0	54.96000	44.83000	0.00000	0.68541	0.96606	-0.68541	-0.96606 d
1.0750	53.88500	44.83000	0.00000	0.61968	0.71522		-0.61968	-0.71522 d
2.1500	52.81000	44.83000	0.00000	0.52678	0.51476		-0.52678	-0.51476 d
3.2250	51.73500	44.83000	0.00000	0.42213	0.35765		-0.42213	-0.35765 d
4.3000	50.66000	44.83000	0.00000	0.31522	0.23573		-0.31522	-0.23573 d
5.3750	49.58500	44.83000	0.00000	0.21143	0.14150		-0.21143	-0.14150 d
6.4500	48.51000	44.83000	0.00000	0.11350	0.068740		-0.11350	-0.068740 d
7.5250	47.43500	44.83000	0.00000	0.022589	0.012493		-0.022589	-0.012493 d

8.6000	46.36000	44.83000	0.00000	0.0	0.0	0.0	0.0 d
9.6750	45.28500	44.83000	0.00000	0.0	0.0	0.0	0.0 d
10.750	44.21000	44.83000	0.00000	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: 50-46 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	44.16000	36.71000	0.00000	0.0	0.0	0.0	0.0	0.0 d
1.0800	45.24000	36.71000	0.00000	0.0	0.0	0.0	0.0	0.0 d
2.1600	46.32000	36.71000	0.00000	0.0	0.0	0.0	0.0	0.0 d
3.2400	47.40000	36.71000	0.00000	0.0	0.0	0.0	0.0	0.0 d
4.3200	48.48000	36.71000	0.00000	0.0	0.0	0.0	0.0	0.0 d
5.4000	49.56000	36.71000	0.00000	0.0	0.0	0.0	0.0	0.0 d
6.4800	50.64000	36.71000	0.00000	0.0	0.0	0.0	0.0	0.0 d
7.5600	51.72000	36.71000	0.00000	0.0	0.0	0.0	0.0	0.0 d
8.6400	52.80000	36.71000	0.00000	0.0	0.0	0.0	0.0	0.0 d
9.7200	53.88000	36.71000	0.00000	0.0	0.0	0.0	0.0	0.0 d
10.800	54.96000	36.71000	0.00000	0.0	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: 46-47 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	54.96000	36.71000	0.00000	0.0	0.0	0.0	0.0	0.0 d
1.0150	54.96000	37.72500	0.00000	0.0	0.0	0.0	0.0	0.0 d
2.0300	54.96000	38.74000	0.00000	0.050906	0.13554	0.13554	-0.050906	d
3.0450	54.96000	39.75500	0.00000	0.14079	0.34546	0.34546	-0.14079	d
4.0600	54.96000	40.77000	0.00000	0.23826	0.53485	0.53485	-0.23826	d
5.0750	54.96000	41.78500	0.00000	0.34320	0.69876	0.69876	-0.34320	d
6.0900	54.96000	42.80000	0.00000	0.45473	0.83086	0.83086	-0.45473	d
7.1050	54.96000	43.81500	0.00000	0.57047	0.92320	0.92320	-0.57047	d
8.1200	54.96000	44.83000	0.00000	0.68541	0.96606	0.96606	-0.68541	d

d - Displacements include imported displacements.

Structure: 24-25 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	78.82000	63.10000	0.00000	-0.25748	-0.096352	-0.25716	-0.097186	d
1.0289	79.84889	63.09667	0.00000	0.0	0.0	0.0	0.0	d
2.0578	80.87778	63.09333	0.00000	0.0	0.0	0.0	0.0	d
3.0867	81.90667	63.09000	0.00000	0.0	0.0	0.0	0.0	d
4.1156	82.93556	63.08667	0.00000	0.0	0.0	0.0	0.0	d
5.1445	83.96444	63.08333	0.00000	0.0	0.0	0.0	0.0	d
6.1734	84.99333	63.08000	0.00000	0.0	0.0	0.0	0.0	d
7.2023	86.02222	63.07667	0.00000	0.0	0.0	0.0	0.0	d
8.2312	87.05111	63.07333	0.00000	0.0	0.0	0.0	0.0	d
9.2600	88.08000	63.07000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 25-26 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	

0.0	88.08000	63.07000	0.00000	0.0	0.0	0.0	0.0	d
1.0641	88.06400	62.00600	0.00000	0.0	0.0	0.0	0.0	d
2.1282	88.04800	60.94200	0.00000	0.0	0.0	0.0	0.0	d
3.1924	88.03200	59.87800	0.00000	0.0	0.0	0.0	0.0	d
4.2565	88.01600	58.81400	0.00000	0.0	0.0	0.0	0.0	d
5.3206	88.00000	57.75000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 26-27 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	88.00000	57.75000	0.00000	0.0	0.0	0.0	0.0	d
1.0246	86.97545	57.76364	0.00000	0.0	0.0	0.0	0.0	d
2.0493	85.95091	57.77727	0.00000	0.0	0.0	0.0	0.0	d
3.0739	84.92636	57.79091	0.00000	0.0	0.0	0.0	0.0	d
4.0985	83.90182	57.80455	0.00000	0.0	0.0	0.0	0.0	d
5.1232	82.87727	57.81818	0.00000	0.0	0.0	0.0	0.0	d
6.1478	81.85273	57.83182	0.00000	0.0	0.0	0.0	0.0	d
7.1725	80.82818	57.84545	0.00000	0.0	0.0	0.0	0.0	d
8.1971	79.80364	57.85909	0.00000	-0.23051	902.20E-6	0.23050	0.0021657	d
9.2217	78.77909	57.87273	0.00000	-0.61473	0.0024060	0.61471	0.0057754	d
10.246	77.75455	57.88636	0.00000	-0.99895	0.0039098	0.99891	0.0093851	d
11.271	76.73000	57.90000	0.00000	-1.3832	0.0054136	1.3831	0.012995	d

d - Displacements include imported displacements.

Structure: 27-28 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	76.73000	57.90000	0.00000	-1.3832	0.0054136	0.014140	1.3831	d
1.0567	76.72333	58.95667	0.00000	-1.3764	-0.083160	-0.074474	1.3769	d
2.1134	76.71667	60.01333	0.00000	-1.3216	-0.21044	-0.20210	1.3229	d
3.1701	76.71000	61.07000	0.00000	-1.2198	-0.31493	-0.30723	1.2218	d

d - Displacements include imported displacements.

Structure: 28-29 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	76.71000	61.07000	0.00000	-1.2198	-0.31493	-1.0974	0.61875	d
1.4640	77.76500	62.08500	0.00000	-0.73660	-0.23675	-0.69497	0.34008	d
2.9280	78.82000	63.10000	0.00000	-0.25748	-0.096352	-0.25235	0.10908	d

d - Displacements include imported displacements.

Structure: 27-32 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	76.73000	57.90000	0.00000	-1.3832	0.0054136	-0.010785	-1.3831	d
1.0300	76.73400	56.87000	0.00000	-1.3802	0.0054018	-0.010762	-1.3801	d
2.0600	76.73800	55.84000	0.00000	-1.3771	0.0053900	-0.010738	-1.3771	d
3.0900	76.74200	54.81000	0.00000	-1.3741	0.0053782	-0.010715	-1.3741	d
4.1200	76.74600	53.78000	0.00000	-1.3711	0.0053664	-0.010691	-1.3711	d
5.1500	76.75000	52.75000	0.00000	-1.3640	0.0057099	-0.062395	-1.3638	d

d - Displacements include imported displacements.

Structure: 33-31 | Sub-structure:

Dist.	Coordinates			Displacements			
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	87.93000	52.75000	0.00000	0.0	0.0	0.0	0.0 d
1.0400	86.89000	52.75000	0.00000	0.0	0.0	0.0	0.0 d
2.0800	85.85000	52.75000	0.00000	0.0	0.0	0.0	0.0 d
3.1200	84.81000	52.75000	0.00000	0.0	0.0	0.0	0.0 d
4.1600	83.77000	52.75000	0.00000	0.0	0.0	0.0	0.0 d
5.2000	82.73000	52.75000	0.00000	0.0	0.0	0.0	0.0 d
6.2400	81.69000	52.75000	0.00000	0.0	0.0	0.0	0.0 d
7.2800	80.65000	52.75000	0.00000	0.0	0.0	0.0	0.0 d
8.3200	79.61000	52.75000	0.00000	-0.29330	0.0096977	0.29330	-0.0096977 d
9.3600	78.57000	52.75000	0.00000	-0.68279	0.024444	0.68279	-0.024444 d
10.400	77.53000	52.75000	0.00000	-1.0721	0.041844	1.0721	-0.041844 d
11.440	76.49000	52.75000	0.00000	-1.4613	0.062686	1.4613	-0.062686 d
12.480	75.45000	52.75000	0.00000	-1.8501	0.088102	1.8501	-0.088102 d
13.520	74.41000	52.75000	0.00000	-2.2385	0.11978	2.2385	-0.11978 d
14.560	73.37000	52.75000	0.00000	-2.6262	0.16035	2.6262	-0.16035 d
15.600	72.33000	52.75000	0.00000	-3.0127	0.21417	3.0127	-0.21417 d
16.640	71.29000	52.75000	0.00000	-3.3968	0.28895	3.3968	-0.28895 d
17.680	70.25000	52.75000	0.00000	-3.7762	0.39984	3.7762	-0.39984 d

d - Displacements include imported displacements.

Structure: 31-34 | Sub-structure:

Dist.	Coordinates			Displacements			
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	70.25000	52.75000	0.00000	-3.7762	0.39984	-0.32133	-3.7837 d
1.1236	70.22667	51.62667	0.00000	-3.4758	1.2938	-1.2214	-3.5019 d
2.2472	70.20333	50.50333	0.00000	-2.9688	1.9046	-1.8426	-3.0077 d
3.3707	70.18000	49.38000	0.00000	-2.4187	2.2104	-2.1597	-2.4641 d

d - Displacements include imported displacements.

Structure: 34-35 | Sub-structure:

Dist.	Coordinates			Displacements			
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	70.18000	49.38000	0.00000	-2.4187	2.2104	-2.4352	2.1921 d
1.3300	71.51000	49.37000	0.00000	-2.3678	1.6458	-2.3801	1.6280 d

d - Displacements include imported displacements.

Structure: 35-41 | Sub-structure:

Dist.	Coordinates			Displacements			
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	71.51000	49.37000	0.00000	-2.3678	1.6458	-1.6261	-2.3814 d
1.2000	71.50000	48.17000	0.00000	-1.9223	1.7581	-1.7420	-1.9369 d
2.4001	71.49000	46.97000	0.00000	-1.5114	1.7152	-1.7025	-1.5257 d
3.6001	71.48000	45.77000	0.00000	-1.1503	1.5596	-1.5499	-1.1632 d

d - Displacements include imported displacements.

Structure: 41-40 | Sub-structure:

Dist.	Coordinates			Displacements	
	x	y	z	x	y
	[m]	[m]	[m]	[mm]	[mm]
0.0	71.51000	49.37000	0.00000	-2.3678	1.6458

d - Displacements include imported displacements.

						displacement along the Line	displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	71.48000	45.77000	0.00000	-1.1503	1.5596	1.1503	-1.5596	d
1.0175	70.46250	45.77000	0.00000	-1.1069	1.8430	1.1069	-1.8430	d
2.0350	69.44500	45.77000	0.00000	-0.97961	2.1128	0.97961	-2.1128	d
3.0525	68.42750	45.77000	0.00000	-0.76672	2.3467	0.76672	-2.3467	d
4.0700	67.41000	45.77000	0.00000	-0.61336	2.4938	0.61336	-2.4938	d

d - Displacements include imported displacements.

Structure: 40-39 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	67.41000	45.77000	0.00000	-0.61336	2.4938	-2.4906	-0.62614	d
1.3000	67.40333	44.47000	0.00000	-0.50044	2.0347	-2.0321	-0.51086	d
2.6000	67.39667	43.17000	0.00000	-0.38752	1.5756	-1.5735	-0.39559	d
3.9001	67.39000	41.87000	0.00000	-0.27459	1.1164	-1.1150	-0.28032	d

d - Displacements include imported displacements.

Structure: 39-38 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	67.39000	41.87000	0.00000	-0.27459	1.1164	-0.28379	1.1141	d
1.0305	68.42050	41.86150	0.00000	-0.25181	1.0238	-0.26025	1.0217	d
2.0611	69.45100	41.85300	0.00000	-0.27713	0.91122	-0.28464	0.90891	d
3.0916	70.48150	41.84450	0.00000	-0.30178	0.76467	-0.30808	0.76215	d
4.1221	71.51200	41.83600	0.00000	-0.28963	0.59713	-0.29455	0.59472	d
5.1527	72.54250	41.82750	0.00000	-0.23933	0.41602	-0.24275	0.41403	d
6.1832	73.57300	41.81900	0.00000	-0.15159	0.22781	-0.15346	0.22655	d
7.2137	74.60350	41.81050	0.00000	-0.028529	0.037767	-0.028839	0.037530	d
8.2443	75.63400	41.80200	0.00000	0.0	0.0	0.0	0.0	d
9.2748	76.66450	41.79350	0.00000	0.0	0.0	0.0	0.0	d
10.305	77.69500	41.78500	0.00000	0.0	0.0	0.0	0.0	d
11.336	78.72550	41.77650	0.00000	0.0	0.0	0.0	0.0	d
12.366	79.75600	41.76800	0.00000	0.0	0.0	0.0	0.0	d
13.397	80.78650	41.75950	0.00000	0.0	0.0	0.0	0.0	d
14.427	81.81700	41.75100	0.00000	0.0	0.0	0.0	0.0	d
15.458	82.84750	41.74250	0.00000	0.0	0.0	0.0	0.0	d
16.489	83.87800	41.73400	0.00000	0.0	0.0	0.0	0.0	d
17.519	84.90850	41.72550	0.00000	0.0	0.0	0.0	0.0	d
18.550	85.93900	41.71700	0.00000	0.0	0.0	0.0	0.0	d
19.580	86.96950	41.70850	0.00000	0.0	0.0	0.0	0.0	d
20.611	88.00000	41.70000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 38-25 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	88.00000	41.70000	0.00000	0.0	0.0	0.0	0.0	d
1.0176	88.00381	42.71762	0.00000	0.0	0.0	0.0	0.0	d
2.0353	88.00762	43.73524	0.00000	0.0	0.0	0.0	0.0	d
3.0529	88.01143	44.75286	0.00000	0.0	0.0	0.0	0.0	d
4.0705	88.01524	45.77048	0.00000	0.0	0.0	0.0	0.0	d
5.0881	88.01905	46.78810	0.00000	0.0	0.0	0.0	0.0	d
6.1058	88.02286	47.80571	0.00000	0.0	0.0	0.0	0.0	d
7.1234	88.02667	48.82333	0.00000	0.0	0.0	0.0	0.0	d
8.1410	88.03048	49.84095	0.00000	0.0	0.0	0.0	0.0	d
9.1586	88.03429	50.85857	0.00000	0.0	0.0	0.0	0.0	d

10.176	88.03810	51.87619	0.00000	0.0	0.0	0.0	0.0	d
11.194	88.04190	52.89381	0.00000	0.0	0.0	0.0	0.0	d
12.212	88.04571	53.91143	0.00000	0.0	0.0	0.0	0.0	d
13.229	88.04952	54.92905	0.00000	0.0	0.0	0.0	0.0	d
14.247	88.05333	55.94667	0.00000	0.0	0.0	0.0	0.0	d
15.264	88.05714	56.96429	0.00000	0.0	0.0	0.0	0.0	d
16.282	88.06095	57.98190	0.00000	0.0	0.0	0.0	0.0	d
17.300	88.06476	58.99952	0.00000	0.0	0.0	0.0	0.0	d
18.317	88.06857	60.01714	0.00000	0.0	0.0	0.0	0.0	d
19.335	88.07238	61.03476	0.00000	0.0	0.0	0.0	0.0	d
20.353	88.07619	62.05238	0.00000	0.0	0.0	0.0	0.0	d
21.370	88.08000	63.07000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 20-22 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	55.96000	70.70000	0.00000	0.12817	-0.41142	0.12858	-0.41129	d
1.0170	56.97700	70.69900	0.00000	0.12132	-0.52867	0.12184	-0.52855	d
2.0340	57.99400	70.69800	0.00000	0.093137	-0.63186	0.093758	-0.63177	d
3.0510	59.01100	70.69700	0.00000	0.046536	-0.71253	0.047236	-0.71248	d
4.0680	60.02800	70.69600	0.00000	0.0	-0.75525	742.63E-6	-0.75525	d
5.0850	61.04500	70.69500	0.00000	0.0	-0.75563	742.99E-6	-0.75562	d
6.1020	62.06200	70.69400	0.00000	0.0	-0.75600	743.36E-6	-0.75600	d
7.1190	63.07900	70.69300	0.00000	0.0	-0.75638	743.73E-6	-0.75637	d
8.1360	64.09600	70.69200	0.00000	0.0	-0.75675	744.10E-6	-0.75675	d
9.1530	65.11300	70.69100	0.00000	0.0	-0.75713	744.47E-6	-0.75712	d
10.170	66.13000	70.69000	0.00000	-0.0067287	-0.75729	-0.0059841	-0.75729	d

d - Displacements include imported displacements.

Structure: 22-b | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	66.13000	70.69000	0.00000	-0.0067287	-0.75729	0.75711	-0.017646	d
0.69360	66.14000	69.99647	0.00000	-0.010446	-1.0173	1.0170	-0.025111	d
1.3872	66.15000	69.30294	0.00000	-0.015105	-1.2773	1.2769	-0.033518	d
2.0808	66.16000	68.60941	0.00000	-0.020895	-1.5372	1.5368	-0.043056	d
2.7744	66.17000	67.91588	0.00000	-0.028063	-1.7971	1.7965	-0.053970	d
3.4680	66.18000	67.22235	0.00000	-0.036928	-2.0570	2.0563	-0.066581	d
4.1616	66.19000	66.52882	0.00000	-0.047921	-2.3168	2.3159	-0.081318	d
4.8552	66.20000	65.83529	0.00000	-0.061627	-2.5765	2.5753	-0.098767	d
5.5488	66.21000	65.14176	0.00000	-0.078873	-2.8360	2.8346	-0.11975	d
6.2424	66.22000	64.44824	0.00000	-0.10085	-3.0953	3.0935	-0.14547	d
6.9360	66.23000	63.75471	0.00000	-0.12937	-3.3542	3.3520	-0.17772	d
7.6296	66.24000	63.06118	0.00000	-0.16728	-3.6125	3.6097	-0.21934	d
8.3232	66.25000	62.36765	0.00000	-0.21935	-3.8697	3.8662	-0.27512	d
9.0168	66.26000	61.67412	0.00000	-0.29427	-4.1248	4.1201	-0.35370	d
9.7104	66.27000	60.98059	0.00000	-0.40956	-4.3750	4.3687	-0.47259	d
10.404	66.28000	60.28706	0.00000	-0.60658	-4.6125	4.6033	-0.67302	d
11.098	66.29000	59.59353	0.00000	-1.0104	-4.8030	4.7880	-1.0795	d
11.791	66.30000	58.90000	0.00000	-2.2102	-4.6572	4.6249	-2.2771	d

d - Displacements include imported displacements.

Structure: e-45 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	64.74000	51.60000	0.00000	-1.1775	4.7875	-4.7661	-1.2617	d
0.98415	64.72267	50.61600	0.00000	-1.0923	4.4411	-4.4212	-1.1704	d
1.9683	64.70533	49.63200	0.00000	-1.0071	4.0946	-4.0763	-1.0791	d

2.9525	64.68800	48.64800	0.00000	-0.92189	3.7482	-3.7314	-0.98776	d
3.9366	64.67067	47.66400	0.00000	-0.83668	3.4018	-3.3865	-0.89646	d
4.9208	64.65333	46.68000	0.00000	-0.75147	3.0553	-3.0416	-0.80516	d
5.9049	64.63600	45.69600	0.00000	-0.66626	2.7089	-2.6967	-0.71387	d
6.8891	64.61867	44.71200	0.00000	-0.58105	2.3624	-2.3518	-0.62257	d
7.8732	64.60133	43.72800	0.00000	-0.49584	2.0160	-2.0069	-0.53127	d
8.8574	64.58400	42.74400	0.00000	-0.41063	1.6695	-1.6620	-0.43997	d
9.8415	64.56667	41.76000	0.00000	-0.32542	1.3231	-1.3172	-0.34867	d
10.826	64.54933	40.77600	0.00000	-0.24021	0.97665	-0.97227	-0.25738	d
11.810	64.53200	39.79200	0.00000	-0.15500	0.63021	-0.62738	-0.16608	d
12.794	64.51467	38.80800	0.00000	-0.069793	0.28377	-0.28249	-0.074780	d
13.778	64.49733	37.82400	0.00000	0.0	0.0	0.0	0.0	d
14.762	64.48000	36.84000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 18-31 | Sub-structure:

Dist.	Coordinates			Displacements					
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line		
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]		
	0.0	59.17000	64.78000	0.00000	0.27717	-2.7589	0.29332	-2.7572	d
1.1384	60.30833	64.77333	0.00000	0.0	-2.9762	0.017430	-2.9762	d	
2.2767	61.44667	64.76667	0.00000	0.0	-2.9788	0.017445	-2.9787	d	
3.4151	62.58500	64.76000	0.00000	0.0	-2.9813	0.017459	-2.9812	d	
4.5534	63.72333	64.75333	0.00000	0.0	-2.9838	0.017474	-2.9837	d	
5.6918	64.86167	64.74667	0.00000	0.0	-2.9862	0.017489	-2.9862	d	
6.8301	66.00000	64.74000	0.00000	0.0	-2.9888	0.017503	-2.9887	d	

d - Displacements include imported displacements.

Structure: 23-24 | Sub-structure:

Dist.	Coordinates			Displacements					
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line		
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]		
	0.0	66.00000	63.14000	0.00000	0.0	-3.5888	0.011197	-3.5887	d
1.0683	67.06833	63.13667	0.00000	-0.75301	-3.4670	-0.74219	-3.4693	d	
2.1367	68.13667	63.13333	0.00000	-1.3762	-3.1361	-1.3664	-3.1403	d	
3.2050	69.20500	63.13000	0.00000	-1.7826	-2.6978	-1.7742	-2.7033	d	
4.2734	70.27333	63.12667	0.00000	-1.9793	-2.2415	-1.9723	-2.2476	d	
5.3417	71.34167	63.12333	0.00000	-2.0092	-1.8173	-2.0036	-1.8236	d	
6.4100	72.41000	63.12000	0.00000	-1.9181	-1.4438	-1.9136	-1.4498	d	
7.4784	73.47833	63.11667	0.00000	-1.7422	-1.1228	-1.7386	-1.1282	d	
8.5467	74.54667	63.11333	0.00000	-1.5073	-0.84913	-1.5047	-0.85383	d	
9.6150	75.61500	63.11000	0.00000	-1.2313	-0.61596	-1.2294	-0.61980	d	
10.683	76.68333	63.10667	0.00000	-0.92594	-0.41652	-0.92464	-0.41940	d	
11.752	77.75167	63.10333	0.00000	-0.59947	-0.24493	-0.59870	-0.24680	d	
12.820	78.82000	63.10000	0.00000	-0.25748	-0.096352	-0.25717	-0.097155	d	

d - Displacements include imported displacements.

Structure: b-27 | Sub-structure:

Dist.	Coordinates			Displacements					
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line		
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]		
	0.0	66.10000	58.46000	0.00000	-2.5112	-4.7085	-2.2600	-4.8340	d
1.0645	67.16300	58.40400	0.00000	-4.9532	-0.40735	-4.9249	-0.66737	d	
2.1289	68.22600	58.34800	0.00000	-4.5719	-0.078755	-4.5615	-0.31917	d	
3.1934	69.28900	58.29200	0.00000	-4.1741	0.016337	-4.1692	-0.20328	d	
4.2579	70.35200	58.23600	0.00000	-3.7754	0.014776	-3.7709	-0.18386	d	
5.3224	71.41500	58.18000	0.00000	-3.3767	0.013216	-3.3727	-0.16444	d	
6.3868	72.47800	58.12400	0.00000	-2.9780	0.011655	-2.9745	-0.14503	d	
7.4513	73.54100	58.06800	0.00000	-2.5793	0.010095	-2.5762	-0.12561	d	
8.5158	74.60400	58.01200	0.00000	-2.1806	0.0085345	-2.1780	-0.10619	d	
9.5803	75.66700	57.95600	0.00000	-1.7819	0.0069740	-1.7798	-0.086776	d	
10.645	76.73000	57.90000	0.00000	-1.3832	0.0054136	-1.3815	-0.067360	d	

d - Displacements include imported displacements.

Structure: 42-37 | Sub-structure:

Dist.	Coordinates			Displacements			
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	64.54000	46.73000	0.00000	-0.75824	3.0829	-0.79504	3.0736 d
1.0183	65.55826	46.71783	0.00000	-0.73540	2.9900	-0.77109	2.9810 d
2.0367	66.57652	46.70565	0.00000	-0.71256	2.8971	-0.74714	2.8884 d
3.0550	67.59478	46.69348	0.00000	-0.68972	2.8043	-0.72320	2.7958 d
4.0733	68.61304	46.68130	0.00000	-1.0293	2.5678	-1.0599	2.5553 d
5.0917	69.63130	46.66913	0.00000	-1.2624	2.2704	-1.2895	2.2552 d
6.1100	70.64957	46.65696	0.00000	-1.3844	1.9482	-1.4076	1.9315 d
7.1283	71.66783	46.64478	0.00000	-1.4064	1.6266	-1.4258	1.6097 d
8.1467	72.68609	46.63261	0.00000	-1.3451	1.3213	-1.3608	1.3051 d
9.1650	73.70435	46.62043	0.00000	-1.2172	1.0395	-1.2296	1.0249 d
10.183	74.72261	46.60826	0.00000	-1.0372	0.78381	-1.0465	0.77136 d
11.202	75.74087	46.59609	0.00000	-0.81681	0.55377	-0.82338	0.54396 d
12.220	76.75913	46.58391	0.00000	-0.56522	0.34757	-0.56933	0.34079 d
13.238	77.77739	46.57174	0.00000	-0.28939	0.16287	-0.29132	0.15940 d
14.257	78.79565	46.55957	0.00000	0.0	0.0	0.0	0.0 d
15.275	79.81391	46.54739	0.00000	0.0	0.0	0.0	0.0 d
16.293	80.83217	46.53522	0.00000	0.0	0.0	0.0	0.0 d
17.312	81.85043	46.52304	0.00000	0.0	0.0	0.0	0.0 d
18.330	82.86870	46.51087	0.00000	0.0	0.0	0.0	0.0 d
19.348	83.88696	46.49870	0.00000	0.0	0.0	0.0	0.0 d
20.367	84.90522	46.48652	0.00000	0.0	0.0	0.0	0.0 d
21.385	85.92348	46.47435	0.00000	0.0	0.0	0.0	0.0 d
22.403	86.94174	46.46217	0.00000	0.0	0.0	0.0	0.0 d
23.422	87.96000	46.45000	0.00000	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: 47-43 | Sub-structure:

Dist.	Coordinates			Displacements			
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	54.96000	44.83000	0.00000	0.68541	0.96606	0.68541	0.96606 d
1.0600	56.02000	44.83000	0.00000	0.70166	1.2648	0.70166	1.2648 d
2.1200	57.08000	44.83000	0.00000	0.64246	1.6062	0.64246	1.6062 d
3.1800	58.14000	44.83000	0.00000	0.48181	1.9645	0.48181	1.9645 d
4.2400	59.20000	44.83000	0.00000	0.20776	2.2954	0.20776	2.2954 d
5.3000	60.26000	44.83000	0.00000	-0.16345	2.5446	-0.16345	2.5446 d
6.3600	61.32000	44.83000	0.00000	-0.58424	2.6680	-0.58424	2.6680 d
7.4200	62.38000	44.83000	0.00000	-0.63920	2.5989	-0.63920	2.5989 d
8.4800	63.44000	44.83000	0.00000	-0.61653	2.5067	-0.61653	2.5067 d
9.5400	64.50000	44.83000	0.00000	-0.59385	2.4145	-0.59385	2.4145 d

d - Displacements include imported displacements.

Structure: 44-39 | Sub-structure:

Dist.	Coordinates			Displacements			
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	64.44000	41.91000	0.00000	-0.34118	1.3872	-0.35995	1.3824 d
1.4751	65.91500	41.89000	0.00000	-0.30789	1.2518	-0.32483	1.2475 d
2.9503	67.39000	41.87000	0.00000	-0.27459	1.1164	-0.28971	1.1126 d

d - Displacements include imported displacements.

Structure: 46-45 | Sub-structure:

Dist.	Coordinates			Displacements	
	x	y	z	x	y
[m]	[m]	[m]	[m]	[mm]	[mm]
0.0	64.44000	41.91000	0.00000	-0.34118	1.3872
1.4751	65.91500	41.89000	0.00000	-0.30789	1.2518
2.9503	67.39000	41.87000	0.00000	-0.27459	1.1164

d - Displacements include imported displacements.

	displacement		displacement		displacement		displacement	
	along the		perpendicular		along the		perpendicular	
	Line		to Line		Line		to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	54.96000	36.71000	0.00000	0.0	0.0	0.0	0.0	d
1.0579	56.01778	36.72444	0.00000	0.0	0.0	0.0	0.0	d
2.1158	57.07556	36.73889	0.00000	0.0	0.0	0.0	0.0	d
3.1736	58.13333	36.75333	0.00000	0.0	0.0	0.0	0.0	d
4.2315	59.19111	36.76778	0.00000	0.0	0.0	0.0	0.0	d
5.2894	60.24889	36.78222	0.00000	0.0	0.0	0.0	0.0	d
6.3473	61.30667	36.79667	0.00000	0.0	0.0	0.0	0.0	d
7.4051	62.36444	36.81111	0.00000	0.0	0.0	0.0	0.0	d
8.4630	63.42222	36.82556	0.00000	0.0	0.0	0.0	0.0	d
9.5209	64.48000	36.84000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: a-12 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	44.06000	58.90000	0.00000	-0.0037284	-1.4056	0.16757	1.3956	d
1.1151	42.95250	58.77000	0.00000	-0.0038606	-1.4554	0.17351	1.4451	d
2.2302	41.84500	58.64000	0.00000	-0.0039928	-1.5053	0.17945	1.4946	d
3.3453	40.73750	58.51000	0.00000	-0.0041250	-1.5551	0.18540	1.5441	d
4.4604	39.63000	58.38000	0.00000	-0.0042573	-1.6050	0.19134	1.5936	d

d - Displacements include imported displacements.

Structure: 12-11 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	39.63000	58.38000	0.00000	-0.0042573	-1.6050	1.6050	-0.0042573	d
1.1167	39.63000	57.26333	0.00000	1.6050	0.0	0.0	1.6050	d
2.2333	39.63000	56.14667	0.00000	1.6050	0.0	0.0	1.6050	d
3.3500	39.63000	55.03000	0.00000	1.6050	0.0	0.0	1.6050	d
4.4667	39.63000	53.91333	0.00000	1.6050	0.0	0.0	1.6050	d
5.5833	39.63000	52.79667	0.00000	1.6050	0.0	0.0	1.6050	d
6.7000	39.63000	51.68000	0.00000	1.6050	0.0	0.0	1.6050	d

d - Displacements include imported displacements.

Structure: 11-f | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	39.63000	51.68000	0.00000	1.6050	0.0	1.6047	0.028720	d
0.55884	40.18875	51.67000	0.00000	0.0	1.6013	-0.028653	1.6010	d
1.1177	40.74750	51.66000	0.00000	0.0	1.5975	-0.028586	1.5972	d
1.6765	41.30625	51.65000	0.00000	0.0	1.5938	-0.028519	1.5935	d
2.2354	41.86500	51.64000	0.00000	0.0	1.5900	-0.028452	1.5897	d
2.7942	42.42375	51.63000	0.00000	0.0	1.5863	-0.028385	1.5860	d
3.3530	42.98250	51.62000	0.00000	0.0	1.5825	-0.028318	1.5822	d
3.9119	43.54125	51.61000	0.00000	0.0	1.5788	-0.028251	1.5785	d
4.4707	44.10000	51.60000	0.00000	0.0	1.5750	-0.028183	1.5747	d

d - Displacements include imported displacements.

Structure: ag | Sub-structure:

Dist.	Coordinates			Displacements			
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line

[m]	[m]	[m]	[m]	[mm]	[mm]	Line [mm]	to Line [mm]
0.0	44.06000	58.90000	0.00000	-0.0037284	-1.4056	0.059869	-1.4043 d
1.0047	45.06364	58.85455	0.00000	-0.0037709	-1.4216	0.060553	-1.4204 d
2.0093	46.06727	58.80909	0.00000	0.0017098	-1.4379	0.066763	-1.4363 d
3.0140	47.07091	58.76364	0.00000	0.010084	-1.4542	0.075868	-1.4523 d
4.0187	48.07455	58.71818	0.00000	0.018044	-1.4705	0.084558	-1.4682 d
5.0233	49.07818	58.67273	0.00000	0.025472	-1.4868	0.092715	-1.4841 d
6.0280	50.08182	58.62727	0.00000	0.032204	-1.5031	0.10017	-1.5001 d
7.0327	51.08545	58.58182	0.00000	0.037999	-1.5192	0.10670	-1.5160 d
8.0373	52.08909	58.53636	0.00000	0.042493	-1.5353	0.11191	-1.5318 d
9.0420	53.09273	58.49091	0.00000	0.045102	-1.5513	0.11524	-1.5477 d
10.047	54.09636	58.44545	0.00000	0.044834	-1.5672	0.11569	-1.5636 d
11.051	55.10000	58.40000	0.00000	0.039851	-1.5829	0.11143	-1.5795 d

d - Displacements include imported displacements.

Structure: gb | Sub-structure:

Dist.	Coordinates			Displacements			
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	55.10000	58.40000	0.00000	0.039851	-1.5829	0.031519	-1.5831 d
0.57001	55.67000	58.40300	0.00000	0.049926	-1.5816	0.041601	-1.5819 d
1.1400	56.24000	58.40600	0.00000	0.060559	-1.5805	0.052241	-1.5808 d
1.7100	56.81000	58.40900	0.00000	0.075208	-1.5796	0.066893	-1.5800 d
2.2800	57.38000	58.41200	0.00000	0.096670	-1.5796	0.088355	-1.5800 d
2.8500	57.95000	58.41500	0.00000	0.13113	-1.5812	0.12280	-1.5819 d
3.4200	58.52000	58.41800	0.00000	0.19539	-1.5885	0.18703	-1.5895 d
3.9901	59.09000	58.42100	0.00000	0.35626	-1.6251	0.34770	-1.6269 d
4.5601	59.66000	58.42400	0.00000	1.2139	-2.4365	1.2011	-2.4428 d
5.1301	60.23000	58.42700	0.00000	-0.0041562	-5.3619	-0.032376	-5.3618 d
5.7001	60.80000	58.43000	0.00000	-0.0041517	-5.3602	-0.032363	-5.3601 d
6.2701	61.37000	58.43300	0.00000	-0.0041472	-5.3585	-0.032349	-5.3584 d
6.8401	61.94000	58.43600	0.00000	-0.0041427	-5.3568	-0.032336	-5.3567 d
7.4101	62.51000	58.43900	0.00000	-0.0041382	-5.3551	-0.032323	-5.3550 d
7.9801	63.08000	58.44200	0.00000	-0.0041337	-5.3534	-0.032309	-5.3533 d
8.5501	63.65000	58.44500	0.00000	-0.0041292	-5.3517	-0.032296	-5.3516 d
9.1201	64.22000	58.44800	0.00000	-0.0041248	-5.3500	-0.032282	-5.3499 d
9.6901	64.79000	58.45100	0.00000	-0.0041203	-5.3483	-0.032269	-5.3482 d
10.260	65.36000	58.45400	0.00000	-0.0041158	-5.3467	-0.032256	-5.3466 d
10.830	65.93000	58.45700	0.00000	-0.0041113	-5.3450	-0.032242	-5.3449 d
11.400	66.50000	58.46000	0.00000	-4.9742	-1.5544	-4.9823	-1.5282 d

d - Displacements include imported displacements.

Structure: bc | Sub-structure:

Dist.	Coordinates			Displacements			
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	66.50000	58.46000	0.00000	-4.9742	-1.5544	1.5544	-4.9742 d
0.27800	66.50000	58.18200	0.00000	-5.2198	0.020430	-0.020430	-5.2198 d
0.55600	66.50000	57.90400	0.00000	-5.2194	0.020428	-0.020428	-5.2194 d
0.83400	66.50000	57.62600	0.00000	-5.2190	0.020426	-0.020426	-5.2190 d
1.1120	66.50000	57.34800	0.00000	-5.2185	0.020425	-0.020425	-5.2185 d
1.3900	66.50000	57.07000	0.00000	-5.2181	0.020423	-0.020423	-5.2181 d
1.6680	66.50000	56.79200	0.00000	-5.2177	0.020422	-0.020422	-5.2177 d
1.9460	66.50000	56.51400	0.00000	-5.2173	0.020420	-0.020420	-5.2173 d
2.2240	66.50000	56.23600	0.00000	-5.2169	0.020418	-0.020418	-5.2169 d
2.5020	66.50000	55.95800	0.00000	-5.2165	0.020417	-0.020417	-5.2165 d
2.7800	66.50000	55.68000	0.00000	-5.2161	0.020415	-0.020415	-5.2161 d
3.0580	66.50000	55.40200	0.00000	-5.2157	0.020414	-0.020414	-5.2157 d
3.3360	66.50000	55.12400	0.00000	-5.2153	0.020412	-0.020412	-5.2153 d
3.6140	66.50000	54.84600	0.00000	-5.2149	0.020410	-0.020410	-5.2149 d
3.8920	66.50000	54.56800	0.00000	-5.2145	0.020409	-0.020409	-5.2145 d
4.1700	66.50000	54.29000	0.00000	-5.2141	0.020407	-0.020407	-5.2141 d
4.4480	66.50000	54.01200	0.00000	-5.2137	0.020406	-0.020406	-5.2137 d
4.7260	66.50000	53.73400	0.00000	-5.2132	0.020404	-0.020404	-5.2132 d
5.0040	66.50000	53.45600	0.00000	-5.2128	0.020402	-0.020402	-5.2128 d
5.2820	66.50000	53.17800	0.00000	-5.2073	0.22912	-0.22912	-5.2073 d

5.5600 66.50000 52.90000 0.00000 -4.4430 2.6658 -2.6658 -4.4430 d
 d - Displacements include imported displacements.

Structure: cd | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
	0.0	66.50000	52.90000	0.00000	-4.4430	2.6658	2.4383	-4.5718 d
	1.7493	65.00000	52.00000	0.00000	-1.2067	4.9064	-1.4895	-4.8280 d

d - Displacements include imported displacements.

Structure: eh | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
	0.0	64.74000	51.60000	0.00000	-1.1775	4.7875	1.1775	-4.7875 d
	1.0844	63.65556	51.60000	0.00000	-1.2007	4.8818	1.2007	-4.8818 d
	2.1689	62.57111	51.60000	0.00000	-1.2239	4.9762	1.2239	-4.9762 d
	3.2533	61.48667	51.60000	0.00000	-1.2471	5.0705	1.2471	-5.0705 d
	4.3378	60.40222	51.60000	0.00000	-1.2703	5.1648	1.2703	-5.1648 d
	5.4222	59.31778	51.60000	0.00000	0.32672	1.6270	-0.32672	-1.6270 d
	6.5067	58.23333	51.60000	0.00000	0.10538	1.5803	-0.10538	-1.5803 d
	7.5911	57.14889	51.60000	0.00000	0.062681	1.5769	-0.062681	-1.5769 d
	8.6756	56.06444	51.60000	0.00000	0.044598	1.5760	-0.044598	-1.5760 d
	9.7600	54.98000	51.60000	0.00000	0.032693	1.5755	-0.032693	-1.5755 d

d - Displacements include imported displacements.

Structure: hf | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
	0.0	54.98000	51.60000	0.00000	0.032693	1.5755	-0.032693	-1.5755 d
	1.0880	53.89200	51.60000	0.00000	0.023657	1.5753	-0.023657	-1.5753 d
	2.1760	52.80400	51.60000	0.00000	0.017422	1.5752	-0.017422	-1.5752 d
	3.2640	51.71600	51.60000	0.00000	0.012861	1.5751	-0.012861	-1.5751 d
	4.3520	50.62800	51.60000	0.00000	0.0093794	1.5751	-0.0093794	-1.5751 d
	5.4400	49.54000	51.60000	0.00000	0.0066347	1.5751	-0.0066347	-1.5751 d
	6.5280	48.45200	51.60000	0.00000	0.0044153	1.5750	-0.0044153	-1.5750 d
	7.6160	47.36400	51.60000	0.00000	0.0025836	1.5750	-0.0025836	-1.5750 d
	8.7040	46.27600	51.60000	0.00000	0.0010461	1.5750	-0.0010461	-1.5750 d
	9.7920	45.18800	51.60000	0.00000	0.0	1.5750	0.0	-1.5750 d
	10.880	44.10000	51.60000	0.00000	0.0	1.5750	0.0	-1.5750 d

d - Displacements include imported displacements.

Structure: de | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
	0.0	65.00000	52.00000	0.00000	-1.2067	4.9064	-3.4560	-3.6857 d
	0.11927	64.93500	51.90000	0.00000	-1.1994	4.8767	-3.4351	-3.6634 d
	0.23854	64.87000	51.80000	0.00000	-1.1921	4.8469	-3.4142	-3.6411 d
	0.35781	64.80500	51.70000	0.00000	-1.1848	4.8172	-3.3933	-3.6187 d
	0.47707	64.74000	51.60000	0.00000	-1.1775	4.7875	-3.3723	-3.5964 d

d - Displacements include imported displacements.

Specific Building Damage Results - Vertical Displacements

Structure: 21-20 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	55.96000	70.70000	0.00000	-0.13764	d
1.0682	54.89182	70.70182	0.00000	-0.15355	d
2.1364	53.82364	70.70364	0.00000	-0.17028	d
3.2046	52.75545	70.70545	0.00000	-0.19151	d
4.2727	51.68727	70.70727	0.00000	-0.19990	d
5.3409	50.61909	70.70909	0.00000	-0.19914	d
6.4091	49.55091	70.71091	0.00000	-0.19798	d
7.4773	48.48273	70.71273	0.00000	-0.19649	d
8.5455	47.41455	70.71455	0.00000	-0.19464	d
9.6137	46.34636	70.71636	0.00000	-0.19233	d
10.682	45.27818	70.71818	0.00000	-0.18946	d
11.750	44.21000	70.72000	0.00000	-0.18587	d

d - Displacements include imported displacements.

Structure: 19-20 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	59.14000	66.79000	0.00000	0.38351	d
1.0080	58.50400	67.57200	0.00000	0.16900	d
2.0160	57.86800	68.35400	0.00000	0.017123	d
3.0239	57.23200	69.13600	0.00000	-0.076091	d
4.0319	56.59600	69.91800	0.00000	-0.12158	d
5.0399	55.96000	70.70000	0.00000	-0.13764	d

d - Displacements include imported displacements.

Structure: 19-18 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	59.14000	66.79000	0.00000	0.38351	d
1.0051	59.15500	65.78500	0.00000	0.64562	d
2.0102	59.17000	64.78000	0.00000	0.92838	d

d - Displacements include imported displacements.

Structure: 18-13 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	59.17000	64.78000	0.00000	0.92838	d
1.0686	58.10143	64.78143	0.00000	0.69151	d
2.1371	57.03286	64.78286	0.00000	0.44368	d
3.2057	55.96429	64.78429	0.00000	0.21150	d
4.2743	54.89571	64.78571	0.00000	0.012141	d
5.3429	53.82714	64.78714	0.00000	-0.14625	d
6.4114	52.75857	64.78857	0.00000	-0.26263	d
7.4800	51.69000	64.79000	0.00000	-0.34097	d
8.5486	50.62143	64.79143	0.00000	-0.38851	d
9.6172	49.55286	64.79286	0.00000	-0.41463	d
10.686	48.48429	64.79429	0.00000	-0.43000	d
11.754	47.41571	64.79571	0.00000	-0.44608	d
12.823	46.34714	64.79714	0.00000	-0.45959	d
13.891	45.27857	64.79857	0.00000	-0.46425	d
14.960	44.21000	64.80000	0.00000	-0.46671	d

d - Displacements include imported displacements.

Structure: 21-a | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	44.21000	70.72000	0.00000	-0.18587	d
0.34768	44.20559	70.37235	0.00000	-0.19527	d
0.69535	44.20118	70.02471	0.00000	-0.20523	d
1.0430	44.19676	69.67706	0.00000	-0.21580	d
1.3907	44.19235	69.32941	0.00000	-0.22703	d
1.7384	44.18794	68.98176	0.00000	-0.23896	d
2.0861	44.18353	68.63412	0.00000	-0.25165	d
2.4337	44.17912	68.28647	0.00000	-0.26516	d
2.7814	44.17471	67.93882	0.00000	-0.27957	d
3.1291	44.17029	67.59118	0.00000	-0.29496	d
3.4768	44.16588	67.24353	0.00000	-0.31140	d
3.8244	44.16147	66.89588	0.00000	-0.32900	d
4.1721	44.15706	66.54824	0.00000	-0.34786	d
4.5198	44.15265	66.20059	0.00000	-0.36810	d
4.8675	44.14824	65.85294	0.00000	-0.38987	d
5.2151	44.14382	65.50529	0.00000	-0.41330	d
5.5628	44.13941	65.15765	0.00000	-0.43859	d
5.9105	44.13500	64.81000	0.00000	-0.46593	d
6.2582	44.13059	64.46235	0.00000	-0.49554	d
6.6058	44.12618	64.11471	0.00000	-0.52769	d
6.9535	44.12176	63.76706	0.00000	-0.56269	d
7.3012	44.11735	63.41941	0.00000	-0.60091	d
7.6489	44.11294	63.07176	0.00000	-0.64279	d
7.9965	44.10853	62.72412	0.00000	-0.68887	d
8.3442	44.10412	62.37647	0.00000	-0.72394	d
8.6919	44.09971	62.02882	0.00000	-0.76644	d
9.0396	44.09529	61.68118	0.00000	-0.80259	d
9.3872	44.09088	61.33353	0.00000	-0.82083	d
9.7349	44.08647	60.98588	0.00000	-0.81794	d
10.083	44.08206	60.63824	0.00000	-0.79952	d
10.430	44.07765	60.29059	0.00000	-0.78080	d
10.778	44.07324	59.94294	0.00000	-0.78829	d
11.126	44.06882	59.59529	0.00000	-0.86245	d
11.473	44.06441	59.24765	0.00000	-1.0626	d
11.821	44.06000	58.90000	0.00000	-1.4782	d

d - Displacements include imported displacements.

Structure: f-50 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	44.10000	51.60000	0.00000	-2.6994	d
0.99267	44.10400	50.60733	0.00000	-0.94488	d
1.9853	44.10800	49.61467	0.00000	-0.79652	d
2.9780	44.11200	48.62200	0.00000	-0.82528	d
3.9707	44.11600	47.62933	0.00000	-0.72481	d
4.9634	44.12000	46.63667	0.00000	-0.60620	d
5.9560	44.12400	45.64400	0.00000	-0.50412	d
6.9487	44.12800	44.65133	0.00000	-0.42359	d
7.9414	44.13200	43.65867	0.00000	-0.35892	d
8.9341	44.13600	42.66600	0.00000	-0.30624	d
9.9267	44.14000	41.67333	0.00000	-0.26281	d
10.919	44.14400	40.68067	0.00000	-0.22664	d
11.912	44.14800	39.68800	0.00000	-0.19627	d
12.905	44.15200	38.69533	0.00000	-0.17056	d
13.897	44.15600	37.70267	0.00000	-0.14867	d
14.890	44.16000	36.71000	0.00000	-0.12992	d

d - Displacements include imported displacements.

Structure: 14-15 | Sub-structure:

Dist.	Coordinates			Displacements
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	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	55.00000	64.76000	0.00000	0.030670	d
1.0700	55.00000	63.69000	0.00000	0.032889	d
2.1400	55.00000	62.62000	0.00000	-0.058364	d

d - Displacements include imported displacements.

Structure: 15-16 | Sub-structure:

Dist.	Coordinates			Displacements	
	x	y	z	z	
[m]	[m]	[m]	[m]	[mm]	

Vertical Offset 1

0.0	55.00000	62.62000	0.00000	-0.058364	d
1.6907	56.23000	61.46000	0.00000	0.023368	d

d - Displacements include imported displacements.

Structure: 16-17 | Sub-structure:

Dist.	Coordinates			Displacements	
	x	y	z	z	
[m]	[m]	[m]	[m]	[mm]	

Vertical Offset 1

0.0	56.23000	61.46000	0.00000	0.023368	d
1.9000	56.22000	59.56000	0.00000	-0.83733	d

d - Displacements include imported displacements.

Structure: 17-g | Sub-structure:

Dist.	Coordinates			Displacements	
	x	y	z	z	
[m]	[m]	[m]	[m]	[mm]	

Vertical Offset 1

0.0	56.22000	59.56000	0.00000	-0.83733	d
1.6125	55.10000	58.40000	0.00000	-2.9117	d

d - Displacements include imported displacements.

Structure: h-49 | Sub-structure:

Dist.	Coordinates			Displacements	
	x	y	z	z	
[m]	[m]	[m]	[m]	[mm]	

Vertical Offset 1

0.0	54.98000	51.60000	0.00000	-2.6452	d
1.0678	55.74000	50.85000	0.00000	-1.3532	d
2.1355	56.50000	50.10000	0.00000	-0.60383	d

d - Displacements include imported displacements.

Structure: 49-36 | Sub-structure:

Dist.	Coordinates			Displacements	
	x	y	z	z	
[m]	[m]	[m]	[m]	[mm]	

Vertical Offset 1

0.0	56.50000	50.10000	0.00000	-0.60383	d
1.1950	56.50000	48.90500	0.00000	-0.13011	d
2.3900	56.50000	47.71000	0.00000	0.14332	d

d - Displacements include imported displacements.

Structure: 36-48 | Sub-structure:

Dist.	Coordinates			Displacements	
	x	y	z	z	
[m]	[m]	[m]	[m]	[mm]	

Vertical Offset 1

0.0 56.50000 47.71000 0.00000 0.14332 d
1.1506 55.73000 46.85500 0.00000 0.058100 d
2.3012 54.96000 46.00000 0.00000 -0.046006 d
d - Displacements include imported displacements.

Structure: 48-47 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0 54.96000 46.00000 0.00000 -0.046006 d
1.1700 54.96000 44.83000 0.00000 -0.051769 d
d - Displacements include imported displacements.

Structure: 47-51 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0 54.96000 44.83000 0.00000 -0.051769 d
1.0750 53.88500 44.83000 0.00000 -0.18081 d
2.1500 52.81000 44.83000 0.00000 -0.27559 d
3.2250 51.73500 44.83000 0.00000 -0.33890 d
4.3000 50.66000 44.83000 0.00000 -0.37671 d
5.3750 49.58500 44.83000 0.00000 -0.39710 d
6.4500 48.51000 44.83000 0.00000 -0.40951 d
7.5250 47.43500 44.83000 0.00000 -0.42419 d
8.6000 46.36000 44.83000 0.00000 -0.43289 d
9.6750 45.28500 44.83000 0.00000 -0.43590 d
10.750 44.21000 44.83000 0.00000 -0.43685 d
d - Displacements include imported displacements.

Structure: 50-46 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0 44.16000 36.71000 0.00000 -0.12992 d
1.0800 45.24000 36.71000 0.00000 -0.13269 d
2.1600 46.32000 36.71000 0.00000 -0.13498 d
3.2400 47.40000 36.71000 0.00000 -0.13681 d
4.3200 48.48000 36.71000 0.00000 -0.13821 d
5.4000 49.56000 36.71000 0.00000 -0.13922 d
6.4800 50.64000 36.71000 0.00000 -0.13982 d
7.5600 51.72000 36.71000 0.00000 -0.13999 d
8.6400 52.80000 36.71000 0.00000 -0.13970 d
9.7200 53.88000 36.71000 0.00000 -0.13889 d
10.800 54.96000 36.71000 0.00000 -0.13750 d
d - Displacements include imported displacements.

Structure: 46-47 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0 54.96000 36.71000 0.00000 -0.13750 d
1.0150 54.96000 37.72500 0.00000 -0.15808 d
2.0300 54.96000 38.74000 0.00000 -0.15631 d
3.0450 54.96000 39.75500 0.00000 -0.16080 d
4.0600 54.96000 40.77000 0.00000 -0.16629 d
5.0750 54.96000 41.78500 0.00000 -0.15723 d
6.0900 54.96000 42.80000 0.00000 -0.12930 d
7.1050 54.96000 43.81500 0.00000 -0.088789 d

8.1200 54.96000 44.83000 0.00000 -0.051769 d
d - Displacements include imported displacements.

Structure: 24-25 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	78.82000	63.10000	0.00000	-0.013875	d
1.0289	79.84889	63.09667	0.00000	-0.052468	d
2.0578	80.87778	63.09333	0.00000	-0.046040	d
3.0867	81.90667	63.09000	0.00000	-0.040421	d
4.1156	82.93556	63.08667	0.00000	-0.035500	d
5.1445	83.96444	63.08333	0.00000	-0.031185	d
6.1734	84.99333	63.08000	0.00000	-0.027395	d
7.2023	86.02222	63.07667	0.00000	-0.024061	d
8.2312	87.05111	63.07333	0.00000	-0.021124	d
9.2600	88.08000	63.07000	0.00000	-0.018534	d

d - Displacements include imported displacements.

Structure: 25-26 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	88.08000	63.07000	0.00000	-0.018534	d
1.0641	88.06400	62.00600	0.00000	-0.019192	d
2.1282	88.04800	60.94200	0.00000	-0.019785	d
3.1924	88.03200	59.87800	0.00000	-0.020303	d
4.2565	88.01600	58.81400	0.00000	-0.020739	d
5.3206	88.00000	57.75000	0.00000	-0.021085	d

d - Displacements include imported displacements.

Structure: 26-27 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	88.00000	57.75000	0.00000	-0.021085	d
1.0246	86.97545	57.76364	0.00000	-0.024105	d
2.0493	85.95091	57.77727	0.00000	-0.027556	d
3.0739	84.92636	57.79091	0.00000	-0.031507	d
4.0985	83.90182	57.80455	0.00000	-0.036042	d
5.1232	82.87727	57.81818	0.00000	-0.041259	d
6.1478	81.85273	57.83182	0.00000	-0.047280	d
7.1725	80.82818	57.84545	0.00000	-0.054248	d
8.1971	79.80364	57.85909	0.00000	-0.021763	d
9.2217	78.77909	57.87273	0.00000	0.0093361	d
10.246	77.75455	57.88636	0.00000	0.055487	d
11.271	76.73000	57.90000	0.00000	0.15374	d

d - Displacements include imported displacements.

Structure: 27-28 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	76.73000	57.90000	0.00000	0.15374	d
1.0567	76.72333	58.95667	0.00000	0.15454	d
2.1134	76.71667	60.01333	0.00000	0.14255	d
3.1701	76.71000	61.07000	0.00000	0.11955	d

d - Displacements include imported displacements.

Structure: 28-29 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	76.71000	61.07000	0.00000	0.11955	d
1.4640	77.76500	62.08500	0.00000	0.028309	d
2.9280	78.82000	63.10000	0.00000	-0.013875	d

d - Displacements include imported displacements.

Structure: 27-32 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	76.73000	57.90000	0.00000	0.15374	d
1.0300	76.73400	56.87000	0.00000	0.15092	d
2.0600	76.73800	55.84000	0.00000	0.14886	d
3.0900	76.74200	54.81000	0.00000	0.14761	d
4.1200	76.74600	53.78000	0.00000	0.14716	d
5.1500	76.75000	52.75000	0.00000	0.14640	d

d - Displacements include imported displacements.

Structure: 33-31 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	87.93000	52.75000	0.00000	-0.021354	d
1.0400	86.89000	52.75000	0.00000	-0.024469	d
2.0800	85.85000	52.75000	0.00000	-0.028037	d
3.1200	84.81000	52.75000	0.00000	-0.032134	d
4.1600	83.77000	52.75000	0.00000	-0.036849	d
5.2000	82.73000	52.75000	0.00000	-0.042292	d
6.2400	81.69000	52.75000	0.00000	-0.048593	d
7.2800	80.65000	52.75000	0.00000	-0.055911	d
8.3200	79.61000	52.75000	0.00000	-0.06353	d
9.3600	78.57000	52.75000	0.00000	0.014383	d
10.400	77.53000	52.75000	0.00000	0.068453	d
11.440	76.49000	52.75000	0.00000	0.18157	d
12.480	75.45000	52.75000	0.00000	0.37344	d
13.520	74.41000	52.75000	0.00000	0.64771	d
14.560	73.37000	52.75000	0.00000	0.99188	d
15.600	72.33000	52.75000	0.00000	1.3772	d
16.640	71.29000	52.75000	0.00000	1.7580	d
17.680	70.25000	52.75000	0.00000	2.0714	d

d - Displacements include imported displacements.

Structure: 31-34 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	70.25000	52.75000	0.00000	2.0714	d
1.1236	70.22667	51.62667	0.00000	2.0114	d
2.2472	70.20333	50.50333	0.00000	1.8594	d
3.3707	70.18000	49.38000	0.00000	1.6188	d

d - Displacements include imported displacements.

Structure: 34-35 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0 70.18000 49.38000 0.00000 1.6188 d
1.3300 71.51000 49.37000 0.00000 1.2339 d
d - Displacements include imported displacements.

Structure: 35-41 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0 71.51000 49.37000 0.00000 1.2339 d
1.2000 71.50000 48.17000 0.00000 0.95552 d
2.4001 71.49000 46.97000 0.00000 0.66700 d
3.6001 71.48000 45.77000 0.00000 0.40622 d
d - Displacements include imported displacements.

Structure: 41-40 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0 71.48000 45.77000 0.00000 0.40622 d
1.0175 70.46250 45.77000 0.00000 0.54655 d
2.0350 69.44500 45.77000 0.00000 0.67782 d
3.0525 68.42750 45.77000 0.00000 0.78330 d
4.0700 67.41000 45.77000 0.00000 0.85269 d
d - Displacements include imported displacements.

Structure: 40-39 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0 67.41000 45.77000 0.00000 0.85269 d
1.3000 67.40333 44.47000 0.00000 0.46092 d
2.6000 67.39667 43.17000 0.00000 0.18236 d
3.9001 67.39000 41.87000 0.00000 0.024324 d
d - Displacements include imported displacements.

Structure: 39-38 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0 67.39000 41.87000 0.00000 0.024324 d
1.0305 68.42050 41.86150 0.00000 0.014973 d
2.0611 69.45100 41.85300 0.00000 0.0070895 d
3.0916 70.48150 41.84450 0.00000 -0.0025302 d
4.1221 71.51200 41.83600 0.00000 -0.011860 d
5.1527 72.54250 41.82750 0.00000 -0.020734 d
6.1832 73.57300 41.81900 0.00000 -0.032941 d
7.2137 74.60350 41.81050 0.00000 -0.057836 d
8.2443 75.63400 41.80200 0.00000 -0.062689 d
9.2748 76.66450 41.79350 0.00000 -0.055850 d
10.305 77.69500 41.78500 0.00000 -0.049716 d
11.336 78.72550 41.77650 0.00000 -0.044223 d
12.366 79.75600 41.76800 0.00000 -0.039308 d
13.397 80.78650 41.75950 0.00000 -0.034915 d
14.427 81.81700 41.75100 0.00000 -0.030990 d
15.458 82.84750 41.74250 0.00000 -0.027485 d
16.489 83.87800 41.73400 0.00000 -0.024355 d
17.519 84.90850 41.72550 0.00000 -0.021561 d
18.550 85.93900 41.71700 0.00000 -0.019066 d
19.580 86.96950 41.70850 0.00000 -0.016839 d
20.611 88.00000 41.70000 0.00000 -0.014850 d
d - Displacements include imported displacements.

Structure: 38-25 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]
Vertical Offset 1				
0.0	88.00000	41.70000	0.00000	-0.014850 d
1.0176	88.00381	42.71762	0.00000	-0.015631 d
2.0353	88.00762	43.73524	0.00000	-0.016394 d
3.0529	88.01143	44.75286	0.00000	-0.017130 d
4.0705	88.01524	45.77048	0.00000	-0.017831 d
5.0881	88.01905	46.78810	0.00000	-0.018489 d
6.1058	88.02286	47.80571	0.00000	-0.019094 d
7.1234	88.02667	48.82333	0.00000	-0.019639 d
8.1410	88.03048	49.84095	0.00000	-0.020116 d
9.1586	88.03429	50.85857	0.00000	-0.020518 d
10.176	88.03810	51.87619	0.00000	-0.020839 d
11.194	88.04190	52.89381	0.00000	-0.021072 d
12.212	88.04571	53.91143	0.00000	-0.021216 d
13.229	88.04952	54.92905	0.00000	-0.021266 d
14.247	88.05333	55.94667	0.00000	-0.021223 d
15.264	88.05714	56.96429	0.00000	-0.021087 d
16.282	88.06095	57.98190	0.00000	-0.020860 d
17.300	88.06476	58.99952	0.00000	-0.020546 d
18.317	88.06857	60.01714	0.00000	-0.020149 d
19.335	88.07238	61.03476	0.00000	-0.019677 d
20.353	88.07619	62.05238	0.00000	-0.019136 d
21.370	88.08000	63.07000	0.00000	-0.018534 d

d - Displacements include imported displacements.

Structure: 20-22 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]
Vertical Offset 1				
0.0	55.96000	70.70000	0.00000	-0.13764 d
1.0170	56.97700	70.69900	0.00000	-0.12194 d
2.0340	57.99400	70.69800	0.00000	-0.10598 d
3.0510	59.01100	70.69700	0.00000	-0.090899 d
4.0680	60.02800	70.69600	0.00000	-0.079009 d
5.0850	61.04500	70.69500	0.00000	-0.071457 d
6.1020	62.06200	70.69400	0.00000	-0.063103 d
7.1190	63.07900	70.69300	0.00000	-0.054137 d
8.1360	64.09600	70.69200	0.00000	-0.044762 d
9.1530	65.11300	70.69100	0.00000	-0.035176 d
10.170	66.13000	70.69000	0.00000	-0.025586 d

d - Displacements include imported displacements.

Structure: 22-b | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]
Vertical Offset 1				
0.0	66.13000	70.69000	0.00000	-0.025586 d
0.69360	66.14000	69.99647	0.00000	0.0074922 d
1.3872	66.15000	69.30294	0.00000	0.065233 d
2.0808	66.16000	68.60941	0.00000	0.15500 d
2.7744	66.17000	67.91588	0.00000	0.28099 d
3.4680	66.18000	67.22235	0.00000	0.44426 d
4.1616	66.19000	66.52882	0.00000	0.64269 d
4.8552	66.20000	65.83529	0.00000	0.87101 d
5.5488	66.21000	65.14176	0.00000	1.1208 d
6.2424	66.22000	64.44824	0.00000	1.3803 d
6.9360	66.23000	63.75471	0.00000	1.6347 d
7.6296	66.24000	63.06118	0.00000	1.8657 d
8.3232	66.25000	62.36765	0.00000	2.0515 d
9.0168	66.26000	61.67412	0.00000	2.1666 d
9.7104	66.27000	60.98059	0.00000	2.1811 d

10.404	66.28000	60.28706	0.00000	2.0602	d
11.098	66.29000	59.59353	0.00000	1.7648	d
11.791	66.30000	58.90000	0.00000	1.2659	d

d - Displacements include imported displacements.

Structure: e-45 | Sub-structure:

Dist.	Coordinates			Displacements	
	x	y	z	z	
[m]	[m]	[m]	[m]	[mm]	
Vertical Offset 1					
0.0	64.74000	51.60000	0.00000	1.3217	d
0.98415	64.72267	50.61600	0.00000	1.8502	d
1.9683	64.70533	49.63200	0.00000	1.9921	d
2.9525	64.68800	48.64800	0.00000	1.8927	d
3.9366	64.67067	47.66400	0.00000	1.6489	d
4.9208	64.65333	46.68000	0.00000	1.3314	d
5.9049	64.63600	45.69600	0.00000	0.99318	d
6.8891	64.61867	44.71200	0.00000	0.67421	d
7.8732	64.60133	43.72800	0.00000	0.40220	d
8.8574	64.58400	42.74400	0.00000	0.19340	d
9.8415	64.56667	41.76000	0.00000	0.052700	d
10.826	64.54933	40.77600	0.00000	-0.026268	d
11.810	64.53200	39.79200	0.00000	-0.061114	d
12.794	64.51467	38.80800	0.00000	-0.080677	d
13.778	64.49733	37.82400	0.00000	-0.11351	d
14.762	64.48000	36.84000	0.00000	-0.10032	d

d - Displacements include imported displacements.

Structure: 18-31 | Sub-structure:

Dist.	Coordinates			Displacements	
	x	y	z	z	
[m]	[m]	[m]	[m]	[mm]	
Vertical Offset 1					
0.0	59.17000	64.78000	0.00000	0.92838	d
1.1384	60.30833	64.77333	0.00000	1.0680	d
2.2767	61.44667	64.76667	0.00000	1.1047	d
3.4151	62.58500	64.76000	0.00000	1.1450	d
4.5534	63.72333	64.75333	0.00000	1.1863	d
5.6918	64.86167	64.74667	0.00000	1.2269	d
6.8301	66.00000	64.74000	0.00000	1.2655	d

d - Displacements include imported displacements.

Structure: 23-24 | Sub-structure:

Dist.	Coordinates			Displacements	
	x	y	z	z	
[m]	[m]	[m]	[m]	[mm]	
Vertical Offset 1					
0.0	66.00000	63.14000	0.00000	1.8326	d
1.0683	67.06833	63.13667	0.00000	1.8375	d
2.1367	68.13667	63.13333	0.00000	1.7533	d
3.2050	69.20500	63.13000	0.00000	1.5851	d
4.2734	70.27333	63.12667	0.00000	1.3492	d
5.3417	71.34167	63.12333	0.00000	1.0728	d
6.4100	72.41000	63.12000	0.00000	0.78808	d
7.4784	73.47833	63.11667	0.00000	0.52612	d
8.5467	74.54667	63.11333	0.00000	0.31108	d
9.6150	75.61500	63.11000	0.00000	0.15652	d
10.683	76.68333	63.10667	0.00000	0.062923	d
11.752	77.75167	63.10333	0.00000	0.016085	d
12.820	78.82000	63.10000	0.00000	-0.013875	d

d - Displacements include imported displacements.

Structure: b-27 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	66.10000	58.46000	0.00000	0.70963	d
1.0645	67.16300	58.40400	0.00000	1.6851	d
2.1289	68.22600	58.34800	0.00000	2.1712	d
3.1934	69.28900	58.29200	0.00000	2.2500	d
4.2579	70.35200	58.23600	0.00000	2.0669	d
5.3224	71.41500	58.18000	0.00000	1.7345	d
6.3868	72.47800	58.12400	0.00000	1.3391	d
7.4513	73.54100	58.06800	0.00000	0.94611	d
8.5158	74.60400	58.01200	0.00000	0.60181	d
9.5803	75.66700	57.95600	0.00000	0.33426	d
10.645	76.73000	57.90000	0.00000	0.15374	d

d - Displacements include imported displacements.

Structure: 42-37 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	64.54000	46.73000	0.00000	1.3542	d
1.0183	65.55826	46.71783	0.00000	1.2963	d
2.0367	66.57652	46.70565	0.00000	1.2336	d
3.0550	67.59478	46.69348	0.00000	1.1669	d
4.0733	68.61304	46.68130	0.00000	1.0697	d
5.0917	69.63130	46.66913	0.00000	0.92378	d
6.1100	70.64957	46.65696	0.00000	0.74686	d
7.1283	71.66783	46.64478	0.00000	0.55962	d
8.1467	72.68609	46.63261	0.00000	0.38248	d
9.1650	73.70435	46.62043	0.00000	0.23252	d
10.183	74.72261	46.60826	0.00000	0.12061	d
11.202	75.74087	46.59609	0.00000	0.049183	d
12.220	76.75913	46.58391	0.00000	0.010566	d
13.238	77.77739	46.57174	0.00000	-0.014295	d
14.257	78.79565	46.55957	0.00000	-0.058522	d
15.275	79.81391	46.54739	0.00000	-0.051422	d
16.293	80.83217	46.53522	0.00000	-0.045209	d
17.312	81.85043	46.52304	0.00000	-0.039764	d
18.330	82.86870	46.51087	0.00000	-0.034984	d
19.348	83.88696	46.49870	0.00000	-0.030784	d
20.367	84.90522	46.48652	0.00000	-0.027086	d
21.385	85.92348	46.47435	0.00000	-0.023827	d
22.403	86.94174	46.46217	0.00000	-0.020951	d
23.422	87.96000	46.45000	0.00000	-0.018410	d

d - Displacements include imported displacements.

Structure: 47-43 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	54.96000	44.83000	0.00000	-0.051769	d
1.0600	56.02000	44.83000	0.00000	0.10729	d
2.1200	57.08000	44.83000	0.00000	0.29036	d
3.1800	58.14000	44.83000	0.00000	0.48295	d
4.2400	59.20000	44.83000	0.00000	0.66393	d
5.3000	60.26000	44.83000	0.00000	0.80815	d
6.3600	61.32000	44.83000	0.00000	0.89189	d
7.4200	62.38000	44.83000	0.00000	0.84319	d
8.4800	63.44000	44.83000	0.00000	0.77887	d
9.5400	64.50000	44.83000	0.00000	0.71729	d

d - Displacements include imported displacements.

Structure: 44-39 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0 64.44000 41.91000 0.00000 0.072526 d
 1.4751 65.91500 41.89000 0.00000 0.044204 d
 2.9503 67.39000 41.87000 0.00000 0.024324 d
 d - Displacements include imported displacements.

Structure: 46-45 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0 54.96000 36.71000 0.00000 -0.13750 d
 1.0579 56.01778 36.72444 0.00000 -0.13579 d
 2.1158 57.07556 36.73889 0.00000 -0.13344 d
 3.1736 58.13333 36.75333 0.00000 -0.13041 d
 4.2315 59.19111 36.76778 0.00000 -0.12672 d
 5.2894 60.24889 36.78222 0.00000 -0.12239 d
 6.3473 61.30667 36.79667 0.00000 -0.11750 d
 7.4051 62.36444 36.81111 0.00000 -0.11212 d
 8.4630 63.42222 36.82556 0.00000 -0.10636 d
 9.5209 64.48000 36.84000 0.00000 -0.10032 d
 d - Displacements include imported displacements.

Structure: a-12 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0 44.06000 58.90000 0.00000 -1.4782 d
 1.1151 42.95250 58.77000 0.00000 -2.1655 d
 2.2302 41.84500 58.64000 0.00000 -2.6472 d
 3.3453 40.73750 58.51000 0.00000 -2.9044 d
 4.4604 39.63000 58.38000 0.00000 -2.2396 d
 d - Displacements include imported displacements.

Structure: 12-11 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0 39.63000 58.38000 0.00000 -2.2396 d
 1.1167 39.63000 57.26333 0.00000 -3.4346 d
 2.2333 39.63000 56.14667 0.00000 -3.8076 d
 3.3500 39.63000 55.03000 0.00000 -3.9148 d
 4.4667 39.63000 53.91333 0.00000 -3.8376 d
 5.5833 39.63000 52.79667 0.00000 -3.4949 d
 6.7000 39.63000 51.68000 0.00000 -2.3455 d
 d - Displacements include imported displacements.

Structure: 11-f | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0 39.63000 51.68000 0.00000 -2.3455 d
 0.55884 40.18875 51.67000 0.00000 -3.1541 d
 1.1177 40.74750 51.66000 0.00000 -3.5060 d
 1.6765 41.30625 51.65000 0.00000 -3.6619 d
 2.2354 41.86500 51.64000 0.00000 -3.7027 d
 2.7942 42.42375 51.63000 0.00000 -3.6547 d
 3.3530 42.98250 51.62000 0.00000 -3.5138 d
 3.9119 43.54125 51.61000 0.00000 -3.2409 d
 4.4707 44.10000 51.60000 0.00000 -2.6994 d
 d - Displacements include imported displacements.

Structure: ag | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	44.06000	58.90000	0.00000	-1.4782	d
1.0047	45.06364	58.85455	0.00000	-1.0139	d
2.0093	46.06727	58.80909	0.00000	-0.73632	d
3.0140	47.07091	58.76364	0.00000	-0.59409	d
4.0187	48.07455	58.71818	0.00000	-0.52990	d
5.0233	49.07818	58.67273	0.00000	-0.52426	d
6.0280	50.08182	58.62727	0.00000	-0.57233	d
7.0327	51.08545	58.58182	0.00000	-0.67831	d
8.0373	52.08909	58.53636	0.00000	-0.85749	d
9.0420	53.09273	58.49091	0.00000	-1.1473	d
10.047	54.09636	58.44545	0.00000	-1.6528	d
11.051	55.10000	58.40000	0.00000	-2.9117	d

d - Displacements include imported displacements.

Structure: gb | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	55.10000	58.40000	0.00000	-2.9117	d
0.57001	55.67000	58.40300	0.00000	-3.5545	d
1.1400	56.24000	58.40600	0.00000	-3.8536	d
1.7100	56.81000	58.40900	0.00000	-3.9898	d
2.2800	57.38000	58.41200	0.00000	-4.0180	d
2.8500	57.95000	58.41500	0.00000	-3.9556	d
3.4200	58.52000	58.41800	0.00000	-3.7944	d
3.9901	59.09000	58.42100	0.00000	-3.4808	d
4.5601	59.66000	58.42400	0.00000	-2.6666	d
5.1301	60.23000	58.42700	0.00000	-1.2921	d
5.7001	60.80000	58.43000	0.00000	-0.86019	d
6.2701	61.37000	58.43300	0.00000	-0.58634	d
6.8401	61.94000	58.43600	0.00000	-0.38556	d
7.4101	62.51000	58.43900	0.00000	-0.22334	d
7.9801	63.08000	58.44200	0.00000	-0.082560	d
8.5501	63.65000	58.44500	0.00000	0.047762	d
9.1201	64.22000	58.44800	0.00000	0.17713	d
9.6901	64.79000	58.45100	0.00000	0.31591	d
10.260	65.36000	58.45400	0.00000	0.47500	d
10.830	65.93000	58.45700	0.00000	0.64521	d
11.400	66.50000	58.46000	0.00000	1.1141	d

d - Displacements include imported displacements.

Structure: bc | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	66.50000	58.46000	0.00000	1.1141	d
0.27800	66.50000	58.18200	0.00000	1.0422	d
0.55600	66.50000	57.90400	0.00000	0.99109	d
0.83400	66.50000	57.62600	0.00000	0.94472	d
1.1120	66.50000	57.34800	0.00000	0.90472	d
1.3900	66.50000	57.07000	0.00000	0.87146	d
1.6680	66.50000	56.79200	0.00000	0.84465	d
1.9460	66.50000	56.51400	0.00000	0.82374	d
2.2240	66.50000	56.23600	0.00000	0.80818	d
2.5020	66.50000	55.95800	0.00000	0.79748	d
2.7800	66.50000	55.68000	0.00000	0.79130	d
3.0580	66.50000	55.40200	0.00000	0.78940	d
3.3360	66.50000	55.12400	0.00000	0.79171	d
3.6140	66.50000	54.84600	0.00000	0.79826	d
3.8920	66.50000	54.56800	0.00000	0.80924	d
4.1700	66.50000	54.29000	0.00000	0.82493	d
4.4480	66.50000	54.01200	0.00000	0.84575	d

4.7260 66.50000 53.73400 0.00000 0.87221 d
 5.0040 66.50000 53.45600 0.00000 0.90478 d
 5.2820 66.50000 53.17800 0.00000 0.94407 d
 5.5600 66.50000 52.90000 0.00000 1.0522 d
 d - Displacements include imported displacements.

Structure: cd | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0 66.50000 52.90000 0.00000 1.0522 d
 1.7493 65.00000 52.00000 0.00000 1.0531 d
 d - Displacements include imported displacements.

Structure: eh | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0 64.74000 51.60000 0.00000 1.3217 d
 1.0844 63.65556 51.60000 0.00000 0.97766 d
 2.1689 62.57111 51.60000 0.00000 0.57762 d
 3.2533 61.48667 51.60000 0.00000 0.047324 d
 4.3378 60.40222 51.60000 0.00000 -0.82768 d
 5.4222 59.31778 51.60000 0.00000 -3.3322 d
 6.5067 58.23333 51.60000 0.00000 -3.9455 d
 7.5911 57.14889 51.60000 0.00000 -4.0099 d
 8.6756 56.06444 51.60000 0.00000 -3.7011 d
 9.7600 54.98000 51.60000 0.00000 -2.6452 d
 d - Displacements include imported displacements.

Structure: hf | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0 54.98000 51.60000 0.00000 -2.6452 d
 1.0880 53.89200 51.60000 0.00000 -1.5806 d
 2.1760 52.80400 51.60000 0.00000 -1.1527 d
 3.2640 51.71600 51.60000 0.00000 -0.93226 d
 4.3520 50.62800 51.60000 0.00000 -0.82114 d
 5.4400 49.54000 51.60000 0.00000 -0.78539 d
 6.5280 48.45200 51.60000 0.00000 -0.81459 d
 7.6160 47.36400 51.60000 0.00000 -0.91329 d
 8.7040 46.27600 51.60000 0.00000 -1.1083 d
 9.7920 45.18800 51.60000 0.00000 -1.5069 d
 10.880 44.10000 51.60000 0.00000 -2.6994 d
 d - Displacements include imported displacements.

Structure: de | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0 65.00000 52.00000 0.00000 1.0531 d
 0.11927 64.93500 51.90000 0.00000 1.1247 d
 0.23854 64.87000 51.80000 0.00000 1.1937 d
 0.35781 64.80500 51.70000 0.00000 1.2595 d
 0.47707 64.74000 51.60000 0.00000 1.3217 d
 d - Displacements include imported displacements.

Specific Building Damage Results - All Segments

Structure: 21-20 | Sub-structure:

Vertical Offset Max Gradient from Line for of Vertical Vertical Horizontal Displacement Movement Displacement Calculations Curve	Segment Max Gradient Radius of Vertical Displacement Curve	Start Min Category	Length Damage	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of Curve
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[m]	[m]	[m]	[m]	[m]	[%]	[%]	[%]	
0.0	1	0.0	0.067813	Hogging	0.0	0.0015408	0.0015408	
-15.408E-6	14.899E-6	9.7040E+6	0					
(Negligible)								
	2	0.067813	1.7451	Sagging	18.407E-6	0.0024234	0.0024272	
-36.089E-6	15.656E-6	661720.	0					
(Negligible)								
	3	1.8129	9.9361	Hogging	296.27E-6	860.88E-6	0.0010288	
-53.637E-6	19.880E-6	144970.	0					

(Negligible)
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 19-20 | Sub-structure:

Vertical Offset Gradient Max from Line for of Vertical Vertical Horizontal Displacement Movement Displacement Calculations Curve	Segment Max Gradient Radius of Vertical Displacement Curve	Start Min Category	Length Damage	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of Curve
---	---	--------------------------	------------------	-----------	---------------------	---------------------------------	--------------------------	--------------------

[m]	[m]	[m]	[m]	[m]	[%]	[%]	[%]	
0.0	1	0.0	5.0389	Hogging	0.0031283	0.026341	0.027265	-
268.54E-6	212.75E-6	15978.	0					

(Negligible)
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 19-18 | Sub-structure:

Vertical Offset Gradient Max from Line for of Vertical Vertical Horizontal Displacement Movement Displacement Calculations Curve	Segment Max Gradient Radius of Vertical Displacement Curve	Start Min Category	Length Damage	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of Curve
---	---	--------------------------	------------------	-----------	---------------------	---------------------------------	--------------------------	--------------------

[m]	[m]	[m]	[m]	[m]	[%]	[%]	[%]	
0.0	1	0.0	2.0092	Hogging	508.33E-6	0.033326	0.033386	-
338.47E-6	-281.23E-6	48949.	0					

(Negligible)
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 18-13 | Sub-structure:

Vertical Offset Gradient Max from Line for of Vertical Vertical Horizontal Displacement Movement Displacement Calculations Curve	Segment Max Gradient Radius of Vertical Displacement Curve	Start Min Category	Length Damage	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of Curve
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Vertical Horizontal Displacement Curvature Movement Displacement Curve Calculations Curve							Strain	Strain	
[m]	[m]	[m]	[m]	[m]			[%]	[%]	
0.0		1	0.0	1.3285	Sagging		159.75E-6	-0.029141	0.0058289
319.46E-6	231.97E-6	64908.		0					
(Negligible)									
		2	1.3285	13.631	Hogging		0.0035533	0.0049006	0.0075778
176.51E-6	231.97E-6	28038.		0					
(Negligible)									

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 21-a | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of of Vertical Vertical Horizontal Displacement Curvature Movement Displacement Curve Calculations Curve	Segment Min	Start Damage	Length	Curvature	Deflection	Average	Max	Max	
[m]	Radius of	Category	[m]	[m]	Ratio	Horizontal	Tensile	Strain	
0.0		1	0.0	7.6802	Sagging		0.0	0.0010645	
0.0	132.54E-6	32913.		0					
(Negligible)									
		2	7.6802	2.3464	Hogging		0.031227	0.031612	-
374.82E-6	132.54E-6	6393.7		0		0.0027830			
(Negligible)									
		3	10.027	1.7934	Sagging		0.037496	0.044794	-
374.82E-6	0.0011948	508.12		0		0.019631			
(Negligible)									

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: f-50 | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of of Vertical Vertical Horizontal Displacement Curvature Movement Displacement Curve Calculations Curve	Segment Min	Start Damage	Length	Curvature	Deflection	Average	Max	Max	
[m]	Radius of	Category	[m]	[m]	Ratio	Horizontal	Tensile	Strain	
0.0		1	0.0	2.9269	Sagging		0.058732	-	
374.85E-6	-0.0017669	502.24	1	(Very		0.037988			
Slight)									
		2	2.9269	1.8414	Hogging		0.025009	0.025075	-
374.85E-6	-119.48E-6	26487.		0		605.64E-6			
(Negligible)									
		3	4.7683	10.121	Sagging		166.99E-6	0.0013705	-
86.626E-6	-119.48E-6	52494.		0		0.0011610			
(Negligible)									

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 14-15 | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Vertical	Segment Min Radius of Category	Start Damage	Length [m]	Curvature [m]	Deflection Ratio [%]	Average Horizontal Strain [%]	Max Tensile Strain [%]	Max of
0.0								

All settlements are less than the Settlement Trough Limit Sensitivity.
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 15-16 | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Vertical	Segment Min Radius of Category	Start Damage	Length [m]	Curvature [m]	Deflection Ratio [%]	Average Horizontal Strain [%]	Max Tensile Strain [%]	Max of
0.0								

All settlements are less than the Settlement Trough Limit Sensitivity.
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 16-17 | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Vertical	Segment Min Radius of Category	Start Damage	Length [m]	Curvature [m]	Deflection Ratio [%]	Average Horizontal Strain [%]	Max Tensile Strain [%]	Max of Curve
0.0			1.8990	0.0	None	0.0	0.0	0.0
58.668E-6	453.02E-6	-		0				

(Negligible)
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 17-g | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Vertical	Segment Min Radius of Category	Start Damage	Length [m]	Curvature [m]	Deflection Ratio [%]	Average Horizontal Strain [%]	Max Tensile Strain [%]	Max of Curve
0.0			1.0	0.0	1.6115	Sagging	0.0	0.038688
386.73E-6	0.0012860	-		0			0.038688	-

(Negligible)
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: h-49 | Sub-structure:

Vertical Offset Gradient Max from Line for of Vertical Vertical Horizontal Movement Displacement Calculations	Segment Max Gradient Radius of Displacement Curve	Segment Min Category	Start [m]	Length [m]	Curvature Damage	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of Curve
[m]			[m]	[m]		[%]	[%]	[%]	
0.0		1	0.0	2.1345	Sagging	0.012574	0.032282	0.035959	-
382.88E-6	-0.0012095	2102.2			0				

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 49-36 | Sub-structure:

Vertical Offset Gradient Max from Line for of Vertical Vertical Horizontal Movement Displacement Calculations Curve	Segment Max Gradient Radius of Displacement Curve	Segment Min Category	Start [m]	Length [m]	Curvature Damage	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of Curve
[m]			[m]	[m]		[%]	[%]	[%]	
0.0		1	0.0	2.3890	Sagging	0.0041505	647.80E-6	0.0043923	-
82.393E-6	-396.45E-6	7124.7			0				

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 36-48 | Sub-structure:

Vertical Offset Gradient Max from Line for of Vertical Vertical Horizontal Movement Displacement Calculations Curve	Segment Max Gradient Radius of Displacement Curve	Segment Min Category	Start [m]	Length [m]	Curvature Damage	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of Curve
[m]			[m]	[m]		[%]	[%]	[%]	
0.0		1	0.0	0.0	None	0.0	0.0	0.0	-
265.13E-6	74.045E-6	70074.			0				

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 48-47 | Sub-structure:

Vertical Offset Gradient Max from Line for of Vertical Vertical Horizontal Movement Displacement Calculations Curve	Segment Max Gradient Radius of Displacement Curve	Segment Min Category	Start [m]	Length [m]	Curvature Damage	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of Curve
[m]			[m]	[m]		[%]	[%]	[%]	
0.0									

All settlements are less than the Settlement Trough Limit Sensitivity.

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 47-51 | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Vertical Horizontal Displacement Movement Displacement Calculations Curve	Segment Min Radius of Curvature Curve	Start Damage Category	Length [m]	Curvature [m]	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max
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[m]			[m]	[m]	[%]	[%]	[%]	
0.0	1	1.0750	9.6740	Hogging	0.0011426	0.0064056	0.0070372	-
99.439E-6	120.03E-6	34432.		0				

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 50-46 | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Vertical Horizontal Displacement Movement Displacement Calculations Curve	Segment Min Radius of Curvature Curve	Start Damage Category	Length [m]	Curvature [m]	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max	of
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[m]			[m]	[m]	[%]	[%]	[%]		
0.0	1	0.0	10.799	Hogging	50.952E-6	0.0	48.816E-6		
0.0	2.5707E-6	1.9670E+6		0					

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 46-47 | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Vertical Horizontal Displacement Movement Displacement Calculations Curve	Segment Min Radius of Curvature Curve	Start Damage Category	Length [m]	Curvature [m]	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max	of
--	---	-----------------------------	---------------	------------------	---------------------	---------------------------------	--------------------------	-----	----

[m]			[m]	[m]	[%]	[%]	[%]		
0.0	1	0.0	6.0900	Hogging	562.36E-6	0.013643	0.013843	-	
206.78E-6	-39.913E-6	34914.		0					

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 24-25 | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Vertical Horizontal Displacement Movement Displacement Calculations Curve	Segment Min Radius of Curvature Curve	Start Damage Category	Length [m]	Curvature [m]	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max	of
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[m]			[m]	[m]	[%]	[%]	[%]		
-----	--	--	-----	-----	-----	-----	-----	--	--

0.0		1	0.0	0.0	None	0.0	0.0	0.0	-
274.80E-6	62.305E-6	43700.		0					

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 27-32 | Sub-structure:

Vertical Offset	Segment	Start	Length	Curvature	Deflection	Average	Max	Max
Gradient Max Gradient	Min	Damage						
from Line for	Radius of	Category			Ratio	Horizontal	Tensile	
of Vertical	of Vertical					Strain	Strain	
Vertical	Displacement	Curvature						
Horizontal	Movement	Curve						
Displacement	Calculations	Curve						
[m]		[m]	[m]		[%]	[%]	[%]	
[m]	0.0	1	0.0	4.0671	Hogging	38.304E-6	2.2799E-6	39.017E-6
0.0	2.7442E-6	1.3335E+6	0					

(Negligible)

50.201E-6	0.0	2	4.0671	1.0820	Sagging	1.3836E-6	-0.0047740	954.76E-6
	0.0	1.8137E+6	0					

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 33-31 | Sub-structure:

Vertical Offset	Segment	Start	Length	Curvature	Deflection	Average	Max	Max
Gradient Max Gradient	Min	Damage						
from Line for	Radius of	Category			Ratio	Horizontal	Tensile	of
of Vertical	of Vertical					Strain	Strain	
Vertical	Displacement	Curvature						
Horizontal	Movement	Curve						
Displacement	Calculations	Curve						
[m]		[m]	[m]		[%]	[%]	[%]	
[m]	0.0	1	11.440	3.9599	Hogging	0.0031030	0.037299	0.038022
374.04E-6	-370.32E-6	13813.	0					-

(Negligible)

371.44E-6	-370.32E-6	2	15.400	2.2791	Sagging	0.0016208	0.036750	0.037184
		12998.	0					-

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 31-34 | Sub-structure:

Vertical Offset	Segment	Start	Length	Curvature	Deflection	Average	Max	Max
Gradient Max Gradient	Min	Damage						
from Line for	Radius of	Category			Ratio	Horizontal	Tensile	of
of Vertical	of Vertical					Strain	Strain	
Vertical	Displacement	Curvature						
Horizontal	Movement	Curve						
Displacement	Calculations	Curve						Curve
[m]		[m]	[m]		[%]	[%]	[%]	
[m]	0.0	1	0.0	3.3697	Sagging	0.0026954	-0.054546	0.011016
801.68E-6	214.21E-6	13590.	0					

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 34-35 | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Vertical Horizontal Displacement Movement Displacement Calculations Curve	Segment Min Radius of Category	Start Damage	Length [m]	Curvature [m]	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of
[m]			[m]	[m]	[%]	[%]	[%]	
0.0 41.446E-6	1 289.39E-6 -	0.0	1.3290	None 0	0.0	0.0041447	0.0041447	-

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 35-41 | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Vertical Horizontal Displacement Movement Displacement Calculations Curve	Segment Min Radius of Category	Start Damage	Length [m]	Curvature [m]	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max
[m]			[m]	[m]	[%]	[%]	[%]	
0.0 96.613E-6	1 73470.	0.0	1.2413	Sagging 0	26.887E-6	-0.0092303	0.0018461	

(Negligible)

127.11E-6	2 38661.	1.2413	2.3579	Hogging 0	574.32E-6	0.0080820	0.0081620	-
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(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 41-40 | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Vertical Horizontal Displacement Movement Displacement Calculations Curve	Segment Min Radius of Category	Start Damage	Length [m]	Curvature [m]	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of
[m]			[m]	[m]	[%]	[%]	[%]	
0.0 209.27E-6	1 26738.	0.0	4.0690	Sagging 0	0.0011850	-0.013192	0.0027223	

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 40-39 | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Vertical Horizontal Displacement Movement Displacement Calculations Curve	Segment Min Radius of Category	Start Damage	Length [m]	Curvature [m]	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of
[m]			[m]	[m]	[%]	[%]	[%]	

Calculations							Curve	
[m]	[m]	[m]	[m]	[m]	[%]	[%]	[%]	
0.0	1	0.0	2.6000	Hogging	0.0021546	0.035271	0.035601	-
352.58E-6	301.26E-6	14245.	0					

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 39-38 | Sub-structure:

Vertical Offset	Segment	Start Length	Curvature	Deflection	Average	Max	Max
Gradient Max Gradient	Min	Damage		Ratio	Horizontal	Tensile	of
from Line for	Radius of Category				Strain	Strain	
of Vertical	Vertical	Displacement	Curvature				
Vertical	Movement						
Calculations	Curve						
Curve							
[m]	[m]	[m]	[m]	[%]	[%]	[%]	
0.0							

All settlements are less than the Settlement Trough Limit Sensitivity.
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 38-25 | Sub-structure:

Vertical Offset	Segment	Start Length	Curvature	Deflection	Average	Max	Max
Gradient Max Gradient	Min	Damage		Ratio	Horizontal	Tensile	of
from Line for	Radius of Category				Strain	Strain	
of Vertical	Vertical	Displacement	Curvature				
Vertical	Movement						
Calculations	Curve						
Curve							
[m]	[m]	[m]	[m]	[%]	[%]	[%]	
0.0							

All settlements are less than the Settlement Trough Limit Sensitivity.
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 20-22 | Sub-structure:

Vertical Offset	Segment	Start Length	Curvature	Deflection	Average	Max	Max
Gradient Max Gradient	Min	Damage		Ratio	Horizontal	Tensile	of
from Line for	Radius of Category				Strain	Strain	
of Vertical	Vertical	Displacement	Curvature				
Vertical	Movement						
Calculations	Curve						
Curve							
[m]	[m]	[m]	[m]	[%]	[%]	[%]	
0.0	1	0.0	0.97430	None	0.0	-662.67E-6	132.50E-6
6.6267E-6	-15.436E-6	1.8969E+6	0				

(Negligible)

2 0.97430 1.0597 Hogging 0.0 -0.0026766 535.33E-6
45.746E-6 -15.693E-6 882980. 0

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 22-b | Sub-structure:

Vertical Offset	Segment	Start Length	Curvature	Deflection	Average	Max	Max
Gradient Max Gradient	Min	Damage		Ratio	Horizontal	Tensile	of
from Line for	Radius of Category						
of Vertical	Vertical	Displacement	Curvature				
Vertical	Movement						
Calculations	Curve						
Curve							
[m]	[m]	[m]	[m]	[%]	[%]	[%]	

Vertical Horizontal Displacement Calculations Curve	Displacement	Curvature	Start	Length	Curvature	Deflection	Average	Max	Max
[m]	[m]	[m]	[m]	[m]	[%]	[%]	[%]	[%]	[%]
0.0	374.49E-6	-374.02E-6	1	2.0808	3.8844	Hogging	0.0029105	0.037413	0.040030
(Negligible)									
0.0	373.21E-6	719.50E-6	2	5.9652	5.8250	Sagging	0.015619	0.028070	0.051793
(Negligible)									

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: e-45 | Sub-structure:

Vertical Offset Gradient Max from Line for of Vertical Horizontal Movement Displacement Calculations Curve	Segment Max Gradient Min	Start Damage	Length	Curvature	Deflection	Average	Max	Max	
[m]	[m]	[m]	[m]	[%]	[%]	[%]	[%]	[%]	
0.0	350.32E-6	-536.76E-6	1	0.0	5.5080	Sagging	0.013371	0.035044	0.055303
(Negligible)									
0.0	350.32E-6	343.50E-6	2	5.5080	9.2533	Hogging	0.0054073	0.030647	0.038616
(Negligible)									

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 18-31 | Sub-structure:

Vertical Offset Gradient Max from Line for of Vertical Horizontal Movement Displacement Calculations Curve	Segment Max Gradient Min	Start Damage	Length	Curvature	Deflection	Average	Max	Max	
[m]	[m]	[m]	[m]	[%]	[%]	[%]	[%]	[%]	
0.0	242.42E-6	-122.65E-6	1	0.0	3.3587	Sagging	0.0019763	-0.0082132	0.0018646
(Negligible)									
0.0	0.0	-36.338E-6	2	3.3587	0.81004	Hogging	6.1626E-6	1.2862E-6	6.6876E-6
(Negligible)									
0.0	0.0	-36.338E-6	3	4.1688	2.6604	Sagging	47.724E-6	1.2862E-6	55.468E-6
(Negligible)									

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 23-24 | Sub-structure:

Vertical Offset Gradient Max from Line for of Vertical Horizontal Movement Displacement Calculations Curve	Segment Max Gradient Min	Start Damage	Length	Curvature	Deflection	Average	Max	Max
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from Line for
of of Vertical Radius of Category
Vertical
Horizontal Displacement Curvature
Movement
Displacement Curve
Calculations
Curve

[m]	[m]	[m]	[m]	[m]	[m]	Ratio	Horizontal Strain	Tensile Strain
0.0	1	0.0	5.6507	Sagging	0.0042259	-0.035195	0.0071545	
705.69E-6	266.47E-6	12599.	0					

(Negligible)

285.14E-6	266.47E-6	19931.	2	5.6507	3.9644	Hogging	0.0020113	0.018872	0.020711	-

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: b-27 | Sub-structure:

Vertical Offset Segment Start Length Curvature Deflection Average Max Max
Gradient Max Gradient Min Damage Ratio Horizontal Tensile of
from Line for Category
of Vertical Radius of
Vertical
Horizontal Displacement Curvature
Movement
Displacement Curve
Calculations
Curve

[m]	[m]	[m]	[m]	[m]	[m]	Ratio	Horizontal Strain	Tensile Strain
0.0	1	0.0	6.4408	Sagging	0.019564	-0.010779	0.018836	
0.0025098	-918.72E-6	2205.0	0					

(Negligible)

373.97E-6	369.04E-6	12648.	2	6.4408	4.2029	Hogging	0.0033758	0.037411	0.040642	-

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 42-37 | Sub-structure:

Vertical Offset Segment Start Length Curvature Deflection Average Max Max
Gradient Max Gradient Min Damage Ratio Horizontal Tensile
from Line for Category
of Vertical Radius of
Vertical
Horizontal Displacement Curvature
Movement
Displacement Curve
Calculations
Curve

[m]	[m]	[m]	[m]	[m]	[m]	Ratio	Horizontal Strain	Tensile Strain
0.0	1	0.0	6.6472	Sagging	0.0022235	-0.0093593	0.0019575	
330.78E-6	183.88E-6	26216.	0					

(Negligible)

219.05E-6	183.88E-6	27327.	2	6.6472	3.5361	Hogging	0.0011860	0.010483	0.011470	-

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 47-43 | Sub-structure:

Vertical Offset Segment Start Length Curvature Deflection Average Max Max
Gradient Max Gradient Min Damage Ratio Horizontal Tensile
from Line for Category
of Vertical Radius of
Vertical
Horizontal Displacement Curvature
Movement
Displacement Curve
Calculations
Curve

Vertical Horizontal Displacement Curvature Movement Displacement Curve Calculations Curve						Strain	Strain
[m]	[m]	[m]	[m]	[m]	[m]	[%]	[%]
0.0	151.58E-6	-181.72E-6	55082.	1 1.0600	1.4677 Hogging	179.33E-6	-0.0082431 0.0016518
(Negligible)				2 2.5277	6.1661 Sagging	0.0044960	-0.019342 0.0040673
397.13E-6	-181.72E-6	13235.		3 8.6938	0.84520 None	0.0	0.0021391 0.0021391 -
21.391E-6	58.097E-6	153590.					

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 44-39 | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Vertical Horizontal Displacement Curvature Movement Displacement Curve Calculations Curve	Segment Min	Start Length Damage	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of
0.0							

All settlements are less than the Settlement Trough Limit Sensitivity.

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 46-45 | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Vertical Horizontal Displacement Curvature Movement Displacement Curve Calculations Curve	Segment Min	Start Length Damage	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of
0.0							

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: a-12 | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Vertical Horizontal Displacement Curvature Movement Displacement Curve Calculations Curve	Segment Min	Start Length Damage	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of
0.0							

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

[m]	[m]	[m]	[m]	[m]	[m]	[%]	[%]	[%]
0.0021686	0.0	1	0.0	4.7389	Hogging	0.030586	0.016515	0.048555
	-0.0024166	768.51		0				
(Negligible)								
0.0021686	0.0	2	4.7389	3.8522	Sagging	0.020829	-0.021973	0.010912
	-0.0024166	877.66		0				
(Negligible)								
0.0087603	0.0	3	8.5911	2.8081	Hogging	0.0091100	-0.17597	0.035545
	-829.84E-6	861.08		0				

(Negligible)
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: bc | Sub-structure:

Vertical Offset	Segment	Start Length	Curvature	Deflection	Average	Max	Max	
Gradient Max Gradient	Min	Damage		Ratio	Horizontal	Tensile	of	
from Line for	Radius of	Category			Strain	Strain		
of Vertical	Vertical	Curvature					Curve	
Horizontal Displacement	Horizontal Displacement	Curvature						
Movement	Curve							
Calculations	Calculations							
[m]	[m]	[m]	[m]	[m]	[%]	[%]	[%]	
0.0088425	0.0	1	0.0	5.5590	Hogging	0.0052480	-0.075759	0.015355
	-392.24E-6	899.17		0				

(Negligible)
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: cd | Sub-structure:

Vertical Offset	Segment	Start Length	Curvature	Deflection	Average	Max	Max	
Gradient Max Gradient	Min	Damage		Ratio	Horizontal	Tensile	of	
from Line for	Radius of	Category			Strain	Strain		
of Vertical	Vertical	Curvature					Curve	
Horizontal Displacement	Horizontal Displacement	Curvature						
Movement	Curve							
Calculations	Calculations							
[m]	[m]	[m]	[m]	[m]	[%]	[%]	[%]	
0.0022504	0.0	1	0.0	1.7483	None	0.0	-0.22454	0.044908
	0.0 -			0				

(Negligible)
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: eh | Sub-structure:

Vertical Offset	Segment	Start Length	Curvature	Deflection	Average	Max	Max	
Gradient Max Gradient	Min	Damage		Ratio	Horizontal	Tensile	of	
from Line for	Radius of	Category			Strain	Strain		
of Vertical	Vertical	Curvature					Curve	
Horizontal Displacement	Horizontal Displacement	Curvature						
Movement	Curve							
Calculations	Calculations							
[m]	[m]	[m]	[m]	[m]	[%]	[%]	[%]	
0.0014748	0.0	1	0.0	4.7586	Sagging	0.018025	-0.011075	0.015662
	0.0023129	1924.8		0				
(Negligible)								
0.0014748	0.0	2	4.7586	5.0004	Hogging	0.036958	-0.013663	0.026959
	0.0023129	1398.2		0				

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: hf | Sub-structure:

Vertical Offset Gradient Max from Line for of Vertical Horizontal Displacement Calculations	Segment Max Gradient Radius of Displacement Curve	Min Category	Start Damage	Length [m]	Curvature [m]	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of Curve
[m]	[m]		[m]	[m]	[m]	[%]	[%]	[%]	
0.0	0.0010961	1	0.0	10.879	Sagging	0.017329	300.52E-6	0.019214	-
8.3053E-6		1256.7			0				

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: de | Sub-structure:

Vertical Offset Gradient Max from Line for of Vertical Horizontal Displacement Calculations	Segment Max Gradient Radius of Displacement Curve	Min Category	Start Damage	Length [m]	Curvature [m]	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of Curve
[m]	[m]		[m]	[m]	[m]	[%]	[%]	[%]	
0.0	-599.87E-6	1	0.0	0.47607	Sagging	0.0013155	0.017545	0.017864	-
175.42E-6		3831.7			0				

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Specific Building Damage Results - Critical Values for All Segments within Each Sub-Structure

Structure: 21-20 | Sub-structure:

Vertical Offset from Radius of Line for Curvature (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Horizontal Strain	Max Slope Category	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0	296.27E-6	0.0024234	19.880E-6	0.19987	0.0024272	-53.637E-6	19.880E-6
144970.	661720.	0	(Negligible)				

Structure: 19-20 | Sub-structure:

Vertical Offset from Radius of Line for Curvature	Deflection Min Ratio	Average Damage Horizontal Strain	Max Slope Category	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement	Max Gradient of Vertical Displacement
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Vertical (Hogging) (Sagging) Movement Calculations
 Displacement Curve
 Curve
 [m] [%] [%] [mm] [%]
 [m] [m] 0.0 0.0031283 0.026341 212.75E-6 0.38351 0.027265 -268.54E-6 212.75E-6
 15978. - 0 (Negligible)

Structure: 19-18 | Sub-structure:

Vertical Deflection Average Max Slope Max Max Max Gradient Max Gradient
Min Min Damage Category
Offset from Ratio Horizontal Settlement Tensile of of Vertical
Radius of Radius of Strain Strain Horizontal Displacement
Line for Strain Strain Horizontal Displacement
Curvature Curvature Displacement Curve
Vertical (Hogging) (Sagging) Movement Calculations
 Curve
 [m] [%] [%] [mm] [%]
 [m] [m] 0.0 508.33E-6 0.033326 -281.23E-6 0.92810 0.033386 -338.47E-6 -281.23E-6
 48949. - 0 (Negligible)

Structure: 18-13 | Sub-structure:

Vertical Deflection Average Max Slope Max Max Max Gradient Max Gradient
Min Min Damage Category
Offset from Ratio Horizontal Settlement Tensile of of Vertical
Radius of Radius of Strain Strain Horizontal Displacement
Line for Strain Strain Horizontal Displacement
Curvature Curvature Displacement Curve
Vertical (Hogging) (Sagging) Movement Calculations
 Curve
 [m] [%] [%] [mm] [%]
 [m] [m] 0.0 0.0035533 -0.029141 231.97E-6 0.92838 0.0075778 319.46E-6 231.97E-6
 28038. 64908. 0 (Negligible)

Structure: 21-a | Sub-structure:

Vertical Deflection Average Max Slope Max Max Max Gradient Max Gradient
Min Min Damage Category
Offset from Ratio Horizontal Settlement Tensile of of Vertical
Radius of Radius of Strain Strain Horizontal Displacement
Line for Strain Strain Horizontal Displacement
Curvature Curvature Displacement Curve
Vertical (Hogging) (Sagging) Movement Calculations
 Curve
 [m] [%] [%] [mm] [%]
 [m] [m] 0.0 0.019631 0.037496 0.0011948 1.4770 0.044794 -374.82E-6 0.0011948
 6393.7 508.12 0 (Negligible)

Structure: f-50 | Sub-structure:

Vertical Deflection Average Max Slope Max Max Max Gradient Max Gradient
Min Min Damage Category
Offset from Ratio Horizontal Settlement Tensile of of Vertical
Radius of Radius of Strain Strain Horizontal Displacement
Line for Strain Strain Horizontal Displacement
Curvature Curvature Displacement Curve
Vertical (Hogging) (Sagging) Movement Calculations
 Curve

[m]	[%]	[%]	[%]	[mm]	[%]			
0.0	0.037988	0.037499	-0.0017669	2.6994	0.058732	-374.85E-6	-0.0017669	
26487.	502.24	1	(Very Slight)					

Structure: 14-15 | Sub-structure:

Vertical Min Offset of Radius of Line for Curvature (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category	Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve	Min Radius
[m]	[m]	[%]	[%]	[mm]	[mm]	[%]	[m]	[m]	[m]

Structure: 15-16 | Sub-structure:

Vertical Min Offset of Radius of Line for Curvature (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category	Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve	Min Radius
[m]	[m]	[%]	[%]	[mm]	[mm]	[%]	[m]	[m]	[m]

Structure: 16-17 | Sub-structure:

Vertical Min Offset of Radius of Line for Curvature (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category	Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve	Min Radius
[m]	[m]	[%]	[%]	[mm]	[mm]	[%]	[m]	[m]	[m]
0.0	0.0	0.0	0.0	453.02E-6	0.83688	0.0	58.668E-6	453.02E-6	
-	-	0	(Negligible)						

Structure: 17-g | Sub-structure:

Vertical Min Offset of Radius of Line for Curvature (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category	Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve	Min Radius
[m]	[m]	[%]	[%]	[mm]	[mm]	[%]	[m]	[m]	[m]
0.0	0.0	0.0	0.038688	0.0012860	2.9104	0.038688	-386.73E-6	0.0012860	
-	-	0	(Negligible)						

Structure: h-49 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature (Hogging) Movement Calculations	Deflection Min Ratio of Radius of Curvature (Sagging)	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0	0.012574	0.032282	-0.0012095	2.6452	0.035959	-382.88E-6	-0.0012095
- 2102.2	0 (Negligible)						

Structure: 49-36 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature (Hogging) Movement Calculations	Deflection Min Ratio of Radius of Curvature (Sagging)	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0	0.0041505	647.80E-6	-396.45E-6	0.60383	0.0043923	-82.393E-6	-396.45E-6
- 7124.7	0 (Negligible)						

Structure: 36-48 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature (Hogging) Movement Calculations	Deflection Min Ratio of Radius of Curvature (Sagging)	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0	0.0	0.0	74.045E-6	0.14332	0.0	-265.13E-6	74.045E-6
- 0	0 (Negligible)						

Structure: 48-47 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature (Hogging) Movement Calculations	Deflection Min Ratio of Radius of Curvature (Sagging)	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve	Min Radius of Curvature
[m]	[m]	[%]	[%]	[mm]	[%]			[m]
0.0	0.0	0.0	74.045E-6	0.14332	0.0	-265.13E-6	74.045E-6	0.0
- 0	0 (Negligible)							

Structure: 47-51 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature (Hogging) Movement Calculations	Deflection Min Ratio of Radius of Curvature (Sagging)	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0	0.0	0.0	74.045E-6	0.14332	0.0	-265.13E-6	74.045E-6
- 0	0 (Negligible)						

Vertical (Hogging) (Sagging) Movement Calculations
 Displacement Curve
 Curve
 [m] [%] [%] [mm] [%]
 [m] [m]
 0.0 0.0011426 0.0064056 120.03E-6 0.43685 0.0070372 -99.439E-6 120.03E-6
 34432. - 0 (Negligible)

Structure: 50-46 | Sub-structure:

Vertical Deflection Average Max Slope Max Max Max Gradient Max Gradient
Min Min Damage Category
Offset from Ratio Horizontal Settlement Tensile of of Vertical
Radius of Radius of Strain Strain Horizontal Displacement
Line for Strain Strain Horizontal Displacement
Curvature Curvature Displacement Curve
Vertical (Hogging) (Sagging) Movement Calculations
 Curve
 [m] [%] [%] [mm] [%]
 [m] [m]
 0.0 50.952E-6 0.0 2.5707E-6 0.13998 48.816E-6 0.0 2.5707E-6
 1.9670E+6 - 0 (Negligible)

Structure: 46-47 | Sub-structure:

Vertical Deflection Average Max Slope Max Max Max Gradient Max Gradient
Min Min Damage Category
Offset from Ratio Horizontal Settlement Tensile of of Vertical
Radius of Radius of Strain Strain Horizontal Displacement
Line for Strain Strain Horizontal Displacement
Curvature Curvature Displacement Curve
Vertical (Hogging) (Sagging) Movement Calculations
 Curve
 [m] [%] [%] [mm] [%]
 [m] [m]
 0.0 562.36E-6 0.013643 -39.913E-6 0.16629 0.013843 -206.78E-6 -39.913E-6
 34914. - 0 (Negligible)

Structure: 24-25 | Sub-structure:

Vertical Deflection Average Max Max Max Max Gradient Max Gradient Min
Min Damage Category
Offset from Ratio Horizontal Slope Settlement Tensile of of Vertical Radius
of Radius of Strain Strain Horizontal Displacement
Line for Strain Strain Horizontal Displacement
Curvature Curvature Displacement Curve
Vertical (Hogging) (Sagging) Movement Calculations
 Curve
 [m] [%] [%] [mm] [%] [m]
 [m]

Structure: 25-26 | Sub-structure:

Vertical Deflection Average Max Max Max Max Gradient Max Gradient Min
Min Damage Category
Offset from Ratio Horizontal Slope Settlement Tensile of of Vertical Radius
of Radius of Strain Strain Horizontal Displacement
Line for Strain Strain Horizontal Displacement
Curvature Curvature Displacement Curve
Vertical (Hogging) (Sagging) Movement Calculations
 Curve
 [m] [%] [%] [mm] [%] [m]
 [m]

Structure: 26-27 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0	0.0	0.0	0.0	-95.857E-6	0.15365	0.0	-374.83E-6 -95.857E-6
-	-	0 (Negligible)					

Structure: 27-28 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0	84410.0	384.56E-6	-0.010138	21.770E-6	0.15454	0.0020393	120.80E-6 21.770E-6
-	-	0 (Negligible)					

Structure: 28-29 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0	0	0.0	0.0	62.305E-6	0.11955	0.0	-274.80E-6 62.305E-6
-	-	0 (Negligible)					

Structure: 27-32 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0	1.3335E+6	38.304E-6	-0.0047740	2.7442E-6	0.15374	954.76E-6	50.201E-6 2.7442E-6
-	-	1.8137E+6 0 (Negligible)					

Structure: 33-31 | Sub-structure:

Vertical Min	Deflection Min	Average Damage Category	Max Slope	Max	Max	Max Gradient	Max Gradient
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Vertical (Hogging) (Sagging) Displacement Curve
 Movement Curve
 Calculations

[m]	[m]	[%]	[%]	[mm]	[%]		
0.0		0.0011850	-0.013192	-137.93E-6	0.85262	0.0027223	209.27E-6
-26738.0		(Negligible)					

Structure: 40-39 | Sub-structure:

Vertical Deflection Average Max Slope Max Max Max Gradient Max Gradient
 Min Min Damage Category
 Offset from Ratio Horizontal Settlement Tensile of of Vertical
 Radius of Radius of Strain Strain Horizontal Displacement
 Line for Curvature Curvature
 Vertical Displacement Curve
 (Hogging) (Sagging)
 Movement Curve
 Calculations

[m]	[m]	[%]	[%]	[mm]	[%]		
0.0		0.0021546	0.035271	301.26E-6	0.85269	0.035601	-352.58E-6
14245.		(Negligible)					

Structure: 39-38 | Sub-structure:

Vertical Deflection Average Max Max Max Max Gradient Max Gradient Min
 Min Damage Category
 Offset from Ratio Horizontal Slope Settlement Tensile of of Vertical Radius
 of Radius of Strain Strain Horizontal Displacement
 Line for Curvature Curvature
 Vertical Displacement Curve
 (Hogging) (Sagging)
 Movement Curve
 Calculations

[m]	[%]	[%]	[mm]	[%]		[m]

Structure: 38-25 | Sub-structure:

Vertical Deflection Average Max Max Max Max Gradient Max Gradient Min
 Min Damage Category
 Offset from Ratio Horizontal Slope Settlement Tensile of of Vertical Radius
 of Radius of Strain Strain Horizontal Displacement
 Line for Curvature Curvature
 Vertical Displacement Curve
 (Hogging) (Sagging)
 Movement Curve
 Calculations

[m]	[%]	[%]	[mm]	[%]		[m]

Structure: 20-22 | Sub-structure:

Vertical Deflection Average Max Slope Max Max Max Gradient Max Gradient
 Min Min Damage Category
 Offset from Ratio Horizontal Settlement Tensile of of Vertical
 Radius of Radius of Strain Strain Horizontal Displacement
 Line for Curvature Curvature
 Vertical Displacement Curve
 (Hogging) (Sagging)
 Movement Curve
 Calculations

[m]	[m]	[%]	[%]	[mm]	[%]		
0.0		0.0	-0.0026766	-15.693E-6	0.13764	535.33E-6	45.746E-6
882980.		(Negligible)					

Structure: 22-b | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0 13210.	2276.3	0.015619 1 (Very Slight)	0.037413	719.50E-6	2.1803 0.051793	-374.49E-6	719.50E-6

Structure: e-45 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0 14869.	2292.4	0.013371 1 (Very Slight)	0.035044	-536.76E-6	1.9891 0.055303	-350.32E-6	-536.76E-6

Structure: 18-31 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0 1.0524E+6	10007.	0.0019763 0 (Negligible)	-0.0082132	-122.65E-6	1.2654 0.0018646	242.42E-6	-122.65E-6

Structure: 23-24 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0 19931.	12599.	0.0042259 0 (Negligible)	-0.035195	266.47E-6	1.8373 0.020711	705.69E-6	266.47E-6

Structure: b-27 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
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Calculations

[m]	[%]	[%]	[%]	[mm]	[%]			
[m]	[m]							
0.0	60.333E-6	0.0	-5.7106E-6	0.13750	89.514E-6	0.0	-5.7106E-6	
1.6834E+6	- 0 (Negligible)							

Structure: a-12 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
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[m]	[%]	[%]		[mm]	[%]		
[m]	[m]						
0.0	0.019146	532.96E-6	616.36E-6	2.9016	0.019709	-5.3296E-6	616.36E-6
1133.9	- 0 (Negligible)						

Structure: 12-11 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
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[m]	[%]	[%]		[mm]	[%]		
[m]	[m]						
0.0	0.024174	-0.023959	0.0010716	3.9124	0.013702	0.0014394	0.0010716
1293.9	- 0 (Negligible)						

Structure: 11-f | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
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[m]	[%]	[%]		[mm]	[%]		
[m]	[m]						
0.0	0.026480	-0.036533	0.0014511	3.7011	0.017291	0.0029314	0.0014511
594.27	- 0 (Negligible)						

Structure: ag | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
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[m]	[%]	[%]		[mm]	[%]		
[m]	[m]						
0.0	0.015487	466.62E-6	0.0012531	2.9105	0.017554	-9.0631E-6	0.0012531
- 1136.1	0 (Negligible)						

Structure: gb | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0 768.51	0.030586 877.66	0 (Negligible)	-0.17597	-0.0024166	4.0165	0.048555	0.0087603 -0.0024166

Structure: bc | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0 899.17	0.0052480 -	0 (Negligible)	-0.075759	-392.24E-6	1.1141	0.015355	0.0088425 -392.24E-6

Structure: cd | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve	Min Radius
[m]	[m]	[%]	[%]	[mm]	[%]			[m]
0.0 -	0.0 -	0 (Negligible)	-0.22454	0.0	1.0531	0.044908	0.0022504 0.0	

Structure: eh | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0 1398.2	0.036958 1924.8	0 (Negligible)	-0.013663	0.0023129	4.0096	0.026959	0.0014748 0.0023129

Structure: hf | Sub-structure:

19-18		Max Slope		1	0.0	2.0092	Hogging	281.23E-6
0.92810	0.033386	48949.	- 0 (Negligible)	1	0.0	2.0092	Hogging	281.23E-6
0.92810	0.033386	Max Settlement	- 0 (Negligible)	1	0.0	2.0092	Hogging	281.23E-6
		48949.	- 0 (Negligible)	1	0.0	2.0092	Hogging	281.23E-6
0.92810	0.033386	Max Tensile	- 0 (Negligible)	1	0.0	2.0092	Hogging	281.23E-6
		48949.	- 0 (Negligible)	1	0.0	2.0092	Hogging	281.23E-6
		Strain						
0.92810	0.033386	Min Radius of	- 0 (Negligible)	1	0.0	2.0092	Hogging	281.23E-6
		48949.	- 0 (Negligible)	1	0.0	2.0092	Hogging	281.23E-6
		Curvature						
		(Hogging)						
		Min Radius of						
-	-	-	- -	-	-	-	-	-
		Curvature						
		(Sagging)						
18-13		Max Slope		1	0.0	1.3285	Sagging	231.97E-6
0.92838	0.0058289	-	64908. 0 (Negligible)	1	0.0	1.3285	Sagging	231.97E-6
0.92838	0.0058289	Max Settlement	- 64908. 0 (Negligible)	1	0.0	1.3285	Sagging	231.97E-6
		-	- 64908. 0 (Negligible)	2	1.3285	14.959	Hogging	231.97E-6
0.63123	0.0075778	Max Tensile	- 0 (Negligible)	2	1.3285	14.959	Hogging	231.97E-6
		28038.	- 0 (Negligible)	2	1.3285	14.959	Hogging	231.97E-6
		Strain						
0.63123	0.0075778	Min Radius of	- 0 (Negligible)	2	1.3285	14.959	Hogging	231.97E-6
		28038.	- 0 (Negligible)	2	1.3285	14.959	Hogging	231.97E-6
		Curvature						
		(Hogging)						
0.92838	0.0058289	Min Radius of	- 64908. 0 (Negligible)	1	0.0	1.3285	Sagging	231.97E-6
		-	- 64908. 0 (Negligible)	1	0.0	1.3285	Sagging	231.97E-6
		Curvature						
		(Sagging)						
21-a		Max Slope		3	10.027	11.820	Sagging	0.0011948
1.4770	0.044794	-	508.12 0 (Negligible)	3	10.027	11.820	Sagging	0.0011948
1.4770	0.044794	Max Settlement	- 508.12 0 (Negligible)	3	10.027	11.820	Sagging	0.0011948
		-	- 508.12 0 (Negligible)	3	10.027	11.820	Sagging	0.0011948
1.4770	0.044794	Max Tensile	- 508.12 0 (Negligible)	3	10.027	11.820	Sagging	0.0011948
		-	- 508.12 0 (Negligible)	3	10.027	11.820	Sagging	0.0011948
		Strain						
0.82080	0.031612	Min Radius of	- 0 (Negligible)	2	7.6802	10.027	Hogging	132.54E-6
		6393.7	- 0 (Negligible)	2	7.6802	10.027	Hogging	132.54E-6
		Curvature						
		(Hogging)						
1.4770	0.044794	Min Radius of	- 508.12 0 (Negligible)	3	10.027	11.820	Sagging	0.0011948
		-	- 508.12 0 (Negligible)	3	10.027	11.820	Sagging	0.0011948
		Curvature						
		(Sagging)						
f-50		Max Slope		1	0.0	2.9269	Sagging	0.0017669
2.6994	0.058732	-	502.24 1 (Very Slight)	1	0.0	2.9269	Sagging	0.0017669
2.6994	0.058732	Max Settlement	- 502.24 1 (Very Slight)	1	0.0	2.9269	Sagging	0.0017669
		-	- 502.24 1 (Very Slight)	1	0.0	2.9269	Sagging	0.0017669
2.6994	0.058732	Max Tensile	- 502.24 1 (Very Slight)	1	0.0	2.9269	Sagging	0.0017669
		-	- 502.24 1 (Very Slight)	1	0.0	2.9269	Sagging	0.0017669
		Strain						
0.82487	0.025075	Min Radius of	- 0 (Negligible)	2	2.9269	4.7683	Hogging	119.48E-6
		26487.	- 0 (Negligible)	2	2.9269	4.7683	Hogging	119.48E-6
		Curvature						
		(Hogging)						
2.6994	0.058732	Min Radius of	- 502.24 1 (Very Slight)	1	0.0	2.9269	Sagging	0.0017669
		-	- 502.24 1 (Very Slight)	1	0.0	2.9269	Sagging	0.0017669
		Curvature						
		(Sagging)						
14-15		All settlements are less than the Settlement Trough Limit Sensitivity.						
		All settlements are less than the Settlement Trough Limit Sensitivity.						
		All settlements are less than the Settlement Trough Limit Sensitivity.						
		All settlements are less than the Settlement Trough Limit Sensitivity.						
15-16		All settlements are less than the Settlement Trough Limit Sensitivity.						
		All settlements are less than the Settlement Trough Limit Sensitivity.						
		All settlements are less than the Settlement Trough Limit Sensitivity.						
		All settlements are less than the Settlement Trough Limit Sensitivity.						
16-17		Max Slope		1	1.8990	1.8990	Sagging	453.02E-6
0.83688	0.0	-	- 0 (Negligible)	1	1.8990	1.8990	Sagging	453.02E-6
0.83688	0.0	Max Settlement	- 0 (Negligible)	1	1.8990	1.8990	Sagging	453.02E-6
		-	- 0 (Negligible)	1	1.8990	1.8990	Sagging	453.02E-6
0.83688	0.0	Max Tensile	- 0 (Negligible)	1	1.8990	1.8990	Sagging	453.02E-6
		-	- 0 (Negligible)	1	1.8990	1.8990	Sagging	453.02E-6
		Strain						

-	-	Min Radius of	-	-	-	-	-
-	-	Curvature (Hogging)	-	-	-	-	-
-	-	Min Radius of	-	-	-	-	-
-	-	Curvature (Sagging)	-	-	-	-	-
17-g		Max Slope					
2.9104	0.038688	-	- 0 (Negligible)	1	0.0	1.6115	Sagging 0.0012860
2.9104	0.038688	Max Settlement	- 0 (Negligible)	1	0.0	1.6115	Sagging 0.0012860
2.9104	0.038688	Max Tensile	- 0 (Negligible)	1	0.0	1.6115	Sagging 0.0012860
-	-	Strain	-	-	-	-	-
-	-	Min Radius of	-	-	-	-	-
-	-	Curvature (Hogging)	-	-	-	-	-
-	-	Min Radius of	-	-	-	-	-
-	-	Curvature (Sagging)	-	-	-	-	-
h-49		Max Slope					
2.6452	0.035959	-	2102.2 0 (Negligible)	1	0.0	2.1345	Sagging 0.0012095
2.6452	0.035959	Max Settlement	- 2102.2 0 (Negligible)	1	0.0	2.1345	Sagging 0.0012095
2.6452	0.035959	Max Tensile	- 2102.2 0 (Negligible)	1	0.0	2.1345	Sagging 0.0012095
-	-	Strain	-	-	-	-	-
-	-	Min Radius of	-	-	-	-	-
-	-	Curvature (Hogging)	-	-	-	-	-
2.6452	0.035959	Min Radius of	- 2102.2 0 (Negligible)	1	0.0	2.1345	Sagging 0.0012095
-	-	Curvature (Sagging)	-	-	-	-	-
49-36		Max Slope					
0.60383	0.0043923	-	7124.7 0 (Negligible)	1	0.0	2.3890	Sagging 396.45E-6
0.60383	0.0043923	Max Settlement	- 7124.7 0 (Negligible)	1	0.0	2.3890	Sagging 396.45E-6
0.60383	0.0043923	Max Tensile	- 7124.7 0 (Negligible)	1	0.0	2.3890	Sagging 396.45E-6
-	-	Strain	-	-	-	-	-
-	-	Min Radius of	-	-	-	-	-
-	-	Curvature (Hogging)	-	-	-	-	-
0.60383	0.0043923	Min Radius of	- 7124.7 0 (Negligible)	1	0.0	2.3890	Sagging 396.45E-6
-	-	Curvature (Sagging)	-	-	-	-	-
36-48		Max Slope					
0.14332	0.0	-	70074. 0 (Negligible)	1	0.0	0.0	Sagging 74.045E-6
0.14332	0.0	Max Settlement	- 70074. 0 (Negligible)	1	0.0	0.0	Sagging 74.045E-6
0.14332	0.0	Max Tensile	- 70074. 0 (Negligible)	1	0.0	0.0	Sagging 74.045E-6
-	-	Strain	-	-	-	-	-
-	-	Min Radius of	-	-	-	-	-
-	-	Curvature (Hogging)	-	-	-	-	-
-	-	Min Radius of	-	-	-	-	-
-	-	Curvature (Sagging)	-	-	-	-	-
48-47		All settlements are less than the Settlement Trough Limit Sensitivity.					
		All settlements are less than the Settlement Trough Limit Sensitivity.					
		All settlements are less than the Settlement Trough Limit Sensitivity.					
		All settlements are less than the Settlement Trough Limit Sensitivity.					
		All settlements are less than the Settlement Trough Limit Sensitivity.					
47-51		Max Slope					
0.43685	0.0070372	34432.	- 0 (Negligible)	1	1.0750	10.749	Hogging 120.03E-6
0.43685	0.0070372	Max Settlement	- 0 (Negligible)	1	1.0750	10.749	Hogging 120.03E-6
		34432.	- 0 (Negligible)				

0.43685	0.0070372	Max Tensile Strain	34432.	- 0 (Negligible)	1	1.0750	10.749	Hogging	120.03E-6	
0.43685	0.0070372	Min Radius of Curvature (Hogging)	34432.	- 0 (Negligible)	1	1.0750	10.749	Hogging	120.03E-6	
-	-	Min Radius of Curvature (Sagging)	-	-	-	-	-	-	-	
50-46	0.13998	Max Slope	48.816E-6	1.9670E+6	- 0 (Negligible)	1	0.0	10.799	Hogging	2.5707E-6
0.13998	48.816E-6	Max Settlement	1.9670E+6	- 0 (Negligible)	1	0.0	10.799	Hogging	2.5707E-6	
0.13998	48.816E-6	Max Tensile Strain	1.9670E+6	- 0 (Negligible)	1	0.0	10.799	Hogging	2.5707E-6	
0.13998	48.816E-6	Min Radius of Curvature (Hogging)	1.9670E+6	- 0 (Negligible)	1	0.0	10.799	Hogging	2.5707E-6	
-	-	Min Radius of Curvature (Sagging)	-	-	-	-	-	-	-	
46-47	0.16629	Max Slope	0.013843	34914.	- 0 (Negligible)	1	0.0	6.0900	Hogging	39.913E-6
0.16629	0.013843	Max Settlement	34914.	- 0 (Negligible)	1	0.0	6.0900	Hogging	39.913E-6	
0.16629	0.013843	Max Tensile Strain	34914.	- 0 (Negligible)	1	0.0	6.0900	Hogging	39.913E-6	
0.16629	0.013843	Min Radius of Curvature (Hogging)	34914.	- 0 (Negligible)	1	0.0	6.0900	Hogging	39.913E-6	
-	-	Min Radius of Curvature (Sagging)	-	-	-	-	-	-	-	
24-25		All settlements are less than the Settlement Trough Limit Sensitivity.								
25-26		All settlements are less than the Settlement Trough Limit Sensitivity.								
26-27		All settlements are less than the Settlement Trough Limit Sensitivity.								
0.15365	0.0	Max Slope	-	17113. 0 (Negligible)	1	11.270	11.270	Sagging	95.857E-6	
0.15365	0.0	Max Settlement	-	17113. 0 (Negligible)	1	11.270	11.270	Sagging	95.857E-6	
0.15365	0.0	Max Tensile Strain	-	17113. 0 (Negligible)	1	11.270	11.270	Sagging	95.857E-6	
-	-	Min Radius of Curvature (Hogging)	-	-	-	-	-	-	-	
-	-	Min Radius of Curvature (Sagging)	-	-	-	-	-	-	-	
27-28	0.15454	Max Slope	0.0020393	-	84410. 0 (Negligible)	1	0.0	3.1691	Sagging	21.770E-6
0.15454	0.0020393	Max Settlement	-	84410. 0 (Negligible)	1	0.0	3.1691	Sagging	21.770E-6	
0.15454	0.0020393	Max Tensile Strain	-	84410. 0 (Negligible)	1	0.0	3.1691	Sagging	21.770E-6	
-	-	Min Radius of Curvature (Hogging)	-	-	-	-	-	-	-	
-	-	Min Radius of Curvature (Sagging)	-	-	-	-	-	-	-	

2.1803	0.051793	Max Tensile	-	2276.3	1	(Very Slight)	2	5.9652	11.790	Sagging	719.50E-6
		Strain									
1.2765	0.040030	Min Radius of	13210.	-	0	(Negligible)	1	2.0808	5.9652	Hogging	374.02E-6
		Curvature									
		(Hogging)									
2.1803	0.051793	Min Radius of	-	2276.3	1	(Very Slight)	2	5.9652	11.790	Sagging	719.50E-6
		Curvature									
		(Sagging)									
e-45		Max Slope					1	0.0	5.5080	Sagging	536.76E-6
1.9891	0.055303	Max Settlement	-	2292.4	1	(Very Slight)	1	0.0	5.5080	Sagging	536.76E-6
1.9891	0.055303	Max Tensile	-	2292.4	1	(Very Slight)	1	0.0	5.5080	Sagging	536.76E-6
1.9891	0.055303	Strain					1	0.0	5.5080	Sagging	536.76E-6
		Min Radius of	14869.	-	0	(Negligible)	2	5.5080	14.761	Hogging	343.50E-6
1.1296	0.038616	Curvature									
		(Hogging)									
1.9891	0.055303	Min Radius of	-	2292.4	1	(Very Slight)	1	0.0	5.5080	Sagging	536.76E-6
		Curvature									
		(Sagging)									
18-31		Max Slope					1	0.0	3.3587	Sagging	122.65E-6
1.1430	0.0018646	Max Settlement	-	10007.0	0	(Negligible)	3	4.1688	6.8291	Sagging	36.338E-6
1.2654	55.468E-6	Max Tensile	-	550180.0	0	(Negligible)	1	0.0	3.3587	Sagging	122.65E-6
1.1430	0.0018646	Strain					2	3.3587	4.1688	Hogging	36.338E-6
		Min Radius of	1.0524E+6	-	0	(Negligible)	1	0.0	3.3587	Sagging	122.65E-6
1.1724	6.6876E-6	Curvature									
		(Hogging)									
1.1430	0.0018646	Min Radius of	-	10007.0	0	(Negligible)	1	0.0	3.3587	Sagging	122.65E-6
		Curvature									
		(Sagging)									
23-24		Max Slope					1	0.0	5.6507	Sagging	266.47E-6
1.8373	0.0071545	Max Settlement	-	12599.0	0	(Negligible)	1	0.0	5.6507	Sagging	266.47E-6
1.8373	0.0071545	Max Tensile	-	12599.0	0	(Negligible)	2	5.6507	9.6150	Hogging	266.47E-6
0.99045	0.020711	Strain	19931.	-	0	(Negligible)	2	5.6507	9.6150	Hogging	266.47E-6
		Min Radius of	19931.	-	0	(Negligible)	2	5.6507	9.6150	Hogging	266.47E-6
0.99045	0.020711	Curvature									
		(Hogging)									
1.8373	0.0071545	Min Radius of	-	12599.0	0	(Negligible)	1	0.0	5.6507	Sagging	266.47E-6
		Curvature									
		(Sagging)									
b-27		Max Slope					1	0.0	6.4408	Sagging	918.72E-6
2.2497	0.018836	Max Settlement	-	2205.0	0	(Negligible)	1	0.0	6.4408	Sagging	918.72E-6
2.2497	0.018836	Max Tensile	-	2205.0	0	(Negligible)	2	6.4408	10.644	Hogging	369.04E-6
1.3192	0.040642	Strain	12648.	-	0	(Negligible)	2	6.4408	10.644	Hogging	369.04E-6
		Min Radius of	12648.	-	0	(Negligible)	2	6.4408	10.644	Hogging	369.04E-6
1.3192	0.040642	Curvature									
		(Hogging)									
2.2497	0.018836	Min Radius of	-	2205.0	0	(Negligible)	1	0.0	6.4408	Sagging	918.72E-6
		Curvature									
		(Sagging)									
42-37		Max Slope					1	0.0	6.6472	Sagging	183.88E-6
1.3542	0.0019575	Max Settlement	-	26216.0	0	(Negligible)	1	0.0	6.6472	Sagging	183.88E-6
1.3542	0.0019575	Max Tensile	-	26216.0	0	(Negligible)	2	6.6472	10.183	Hogging	183.88E-6
0.64808	0.011470	Strain	27327.	-	0	(Negligible)	2	6.6472	10.183	Hogging	183.88E-6

		Max Settlement		1	0.0	4.4697	Hogging	0.0014511
3.7011	0.017291	594.27	- 0 (Negligible)	1	0.0	4.4697	Hogging	0.0014511
		Max Tensile		1	0.0	4.4697	Hogging	0.0014511
3.7011	0.017291	594.27	- 0 (Negligible)	1	0.0	4.4697	Hogging	0.0014511
		Strain		1	0.0	4.4697	Hogging	0.0014511
3.7011	0.017291	Min Radius of		1	0.0	4.4697	Hogging	0.0014511
		594.27	- 0 (Negligible)	-	-	-	-	-
		Curvature		-	-	-	-	-
		(Hogging)		-	-	-	-	-
		Min Radius of		-	-	-	-	-
		Curvature		-	-	-	-	-
		(Sagging)		-	-	-	-	-
ag		Max Slope		1	0.0	11.050	Sagging	0.0012531
2.9105	0.017554	-	1136.1 0 (Negligible)	1	0.0	11.050	Sagging	0.0012531
		Max Settlement		1	0.0	11.050	Sagging	0.0012531
2.9105	0.017554	-	1136.1 0 (Negligible)	1	0.0	11.050	Sagging	0.0012531
		Max Tensile		1	0.0	11.050	Sagging	0.0012531
2.9105	0.017554	-	1136.1 0 (Negligible)	1	0.0	11.050	Sagging	0.0012531
		Strain		1	0.0	11.050	Sagging	0.0012531
		Min Radius of		-	-	-	-	-
		Curvature		-	-	-	-	-
		(Hogging)		-	-	-	-	-
		Min Radius of		1	0.0	11.050	Sagging	0.0012531
2.9105	0.017554	-	1136.1 0 (Negligible)	1	0.0	11.050	Sagging	0.0012531
		Curvature		1	0.0	4.7389	Hogging	0.0024166
		(Sagging)		1	0.0	4.7389	Hogging	0.0024166
gb		Max Slope		1	0.0	4.7389	Hogging	0.0024166
4.0165	0.048555	768.51	- 0 (Negligible)	1	0.0	4.7389	Hogging	0.0024166
		Max Settlement		1	0.0	4.7389	Hogging	0.0024166
4.0165	0.048555	768.51	- 0 (Negligible)	1	0.0	4.7389	Hogging	0.0024166
		Max Tensile		1	0.0	4.7389	Hogging	0.0024166
4.0165	0.048555	768.51	- 0 (Negligible)	1	0.0	4.7389	Hogging	0.0024166
		Strain		1	0.0	4.7389	Hogging	0.0024166
		Min Radius of		1	0.0	4.7389	Hogging	0.0024166
4.0165	0.048555	768.51	- 0 (Negligible)	2	4.7389	8.5911	Sagging	0.0024166
		Curvature		2	4.7389	8.5911	Sagging	0.0024166
		(Hogging)		2	4.7389	8.5911	Sagging	0.0024166
		Min Radius of		2	4.7389	8.5911	Sagging	0.0024166
2.2354	0.010912	-	877.66 0 (Negligible)	2	4.7389	8.5911	Sagging	0.0024166
		Curvature		2	4.7389	8.5911	Sagging	0.0024166
		(Sagging)		2	4.7389	8.5911	Sagging	0.0024166
bc		Max Slope		1	0.0	5.5590	Hogging	392.24E-6
1.1141	0.015355	899.17	- 0 (Negligible)	1	0.0	5.5590	Hogging	392.24E-6
		Max Settlement		1	0.0	5.5590	Hogging	392.24E-6
1.1141	0.015355	899.17	- 0 (Negligible)	1	0.0	5.5590	Hogging	392.24E-6
		Max Tensile		1	0.0	5.5590	Hogging	392.24E-6
1.1141	0.015355	899.17	- 0 (Negligible)	1	0.0	5.5590	Hogging	392.24E-6
		Strain		1	0.0	5.5590	Hogging	392.24E-6
		Min Radius of		1	0.0	5.5590	Hogging	392.24E-6
1.1141	0.015355	899.17	- 0 (Negligible)	1	0.0	5.5590	Hogging	392.24E-6
		Curvature		1	0.0	5.5590	Hogging	392.24E-6
		(Hogging)		1	0.0	5.5590	Hogging	392.24E-6
		Min Radius of		-	-	-	-	-
		Curvature		-	-	-	-	-
		(Sagging)		-	-	-	-	-
cd		Max Slope		1	0.0	1.7483	Sagging	0.0
1.0531	0.044908	-	- 0 (Negligible)	1	0.0	1.7483	Sagging	0.0
		Max Settlement		1	0.0	1.7483	Sagging	0.0
1.0531	0.044908	-	- 0 (Negligible)	1	0.0	1.7483	Sagging	0.0
		Max Tensile		1	0.0	1.7483	Sagging	0.0
1.0531	0.044908	-	- 0 (Negligible)	1	0.0	1.7483	Sagging	0.0
		Strain		1	0.0	1.7483	Sagging	0.0
		Min Radius of		-	-	-	-	-
		Curvature		-	-	-	-	-
		(Hogging)		-	-	-	-	-
		Min Radius of		-	-	-	-	-
		Curvature		-	-	-	-	-
		(Sagging)		-	-	-	-	-
eh		Max Slope		1	0.0	4.7586	Sagging	0.0023129
1.7997	0.015662	-	1924.8 0 (Negligible)	1	0.0	4.7586	Sagging	0.0023129
		Max Settlement		2	4.7586	9.7590	Hogging	0.0023129
4.0096	0.026959	1398.2	- 0 (Negligible)	2	4.7586	9.7590	Hogging	0.0023129

4.0096	0.026959	Max Tensile Strain	1398.2	- 0 (Negligible)	2	4.7586	9.7590	Hogging	0.0023129
4.0096	0.026959	Min Radius of Curvature (Hogging)	1398.2	- 0 (Negligible)	2	4.7586	9.7590	Hogging	0.0023129
1.7997	0.015662	Min Radius of Curvature (Sagging)	-	1924.8 0 (Negligible)	1	0.0	4.7586	Sagging	0.0023129
hf		Max Slope			1	0.0	10.879	Sagging	0.0010961
2.6984	0.019214	Max Settlement	-	1256.7 0 (Negligible)	1	0.0	10.879	Sagging	0.0010961
2.6984	0.019214	Max Tensile Strain	-	1256.7 0 (Negligible)	1	0.0	10.879	Sagging	0.0010961
2.6984	0.019214	Min Radius of Curvature (Hogging)	-	-	-	-	-	-	-
-	-	Min Radius of Curvature (Sagging)	-	-	-	-	-	-	-
2.6984	0.019214	Max Slope	-	1256.7 0 (Negligible)	1	0.0	10.879	Sagging	0.0010961
de		Max Settlement			1	0.0	0.47607	Sagging	599.87E-6
1.3212	0.017864	Max Tensile Strain	-	3831.7 0 (Negligible)	1	0.0	0.47607	Sagging	599.87E-6
1.3212	0.017864	Min Radius of Curvature (Hogging)	-	3831.7 0 (Negligible)	1	0.0	0.47607	Sagging	599.87E-6
1.3212	0.017864	Min Radius of Curvature (Sagging)	-	3831.7 0 (Negligible)	1	0.0	0.47607	Sagging	599.87E-6
-	-	Max Slope	-	-	-	-	-	-	-
1.3212	0.017864	Max Settlement	-	3831.7 0 (Negligible)	1	0.0	0.47607	Sagging	599.87E-6
		Curvature (Sagging)							

Specific Building Damage Results - All Combined Segments

Structure: 21-20 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start [m]	Length [m]	Curvature	Deflection Ratio [%]	Average Horizontal Strain [%]	Max Tensile Strain [%]	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: 19-20 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start [m]	Length [m]	Curvature	Deflection Ratio [%]	Average Horizontal Strain [%]	Max Tensile Strain [%]	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: 19-18 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start [m]	Length [m]	Curvature	Deflection Ratio [%]	Average Horizontal Strain [%]	Max Tensile Strain [%]	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

**Movement
Calculations**

[m] [m] [m] [%] [%] [%]
No structures have segments combined.

Structure: 18-13 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
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[m] [m] [m] [%] [%] [%]
No structures have segments combined.

Structure: 21-a | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
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[m] [m] [m] [%] [%] [%]
No structures have segments combined.

Structure: f-50 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
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[m] [m] [m] [%] [%] [%]
No structures have segments combined.

Structure: 14-15 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
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[m] [m] [m] [%] [%] [%]
No structures have segments combined.

Structure: 15-16 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
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[m] [m] [m] [%] [%] [%]
No structures have segments combined.

Structure: 16-17 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
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[m] [m] [m] [%] [%] [%]
No structures have segments combined.

Structure: 17-g | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: h-49 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: 49-36 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: 36-48 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: 48-47 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: 47-51 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: 50-46 | Sub-structure:

Vertical Offset from	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
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Line for Vertical Movement Calculations	Strain	Strain
[m] [m] [m]	[%]	[%]

No structures have segments combined.

Structure: 46-47 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]	[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 24-25 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]	[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 25-26 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]	[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 26-27 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]	[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 27-28 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]	[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 28-29 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]	[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 27-32 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 33-31 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 31-34 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 34-35 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 35-41 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 41-40 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 40-39 | Sub-structure:

Calculations

[m] [m] [m] [%] [%] [%]
No structures have segments combined.

Structure: 23-24 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
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[m] [m] [m] [%] [%] [%]
No structures have segments combined.

Structure: b-27 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
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[m] [m] [m] [%] [%] [%]
No structures have segments combined.

Structure: 42-37 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
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[m] [m] [m] [%] [%] [%]
No structures have segments combined.

Structure: 47-43 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
--	------------------	--------------	-----------	------------------	---------------------------	--------------------	-----------------

[m] [m] [m] [%] [%] [%]
No structures have segments combined.

Structure: 44-39 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
--	------------------	--------------	-----------	------------------	---------------------------	--------------------	-----------------

[m] [m] [m] [%] [%] [%]
No structures have segments combined.

Structure: 46-45 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
--	------------------	--------------	-----------	------------------	---------------------------	--------------------	-----------------

[m] [m] [m] [%] [%] [%]
No structures have segments combined.

Structure: a-12 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: 12-11 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: 11-f | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: ag | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: gb | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: bc | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: cd | Sub-structure:

Vertical Offset from Line for	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
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Vertical Movement Calculations
 [m] [m] [m] [%] [%] [%]
 No structures have segments combined.

Structure: eh | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: hf | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: de | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

METHOD 2 (1m SOFT CLAY)

DEMOLITION

Analysis Options

Analysis: Boussinesq
 Global Poisson's ratio: 0.50
 Maximum allowable ratio between values of E: 1.5
 Horizontal rigid boundary level: -45.40 [m OD]
 Displacements at area centroids calculated.

Soil Profiles Soil Profile 1

Layer	Level at top [mOD]	Number of intermediate displacement levels	Youngs Modulus		Poissons ratio	Non-linear curve
			Top [kN/m ²]	Btm [kN/m ²]		
1	0.0	8	10000.	10000.	0.20000	None
2	-4.2000	2	10800.	10800.	0.50000	None
3	-5.2000	2	30000.	30000.	0.50000	None
4	-6.2500	4	24000.	24000.	0.20000	None
5	-8.3500	1	30000.	30000.	0.50000	None
6	-9.0000	61	20000.	94160.	0.50000	None
7	-39.600	11	300000.	300000.	0.20000	None

Soil Zones

Zone	Name	X coordinates		Y coordinates		Profile
		min [m]	max [m]	min [m]	max [m]	
1	demo	0.0	110.00	0.0	110.00	Soil Profile 1

Load Data

Load ref.	Name	Shape Polygon	Orientation of Plane	Centre of load (Global)			Angle of Tangential local x from	Width x or Radius	Length
				Number (local z)	Normal (local x)	Z (local y)			
Coordinates	Rectangle	of	of	X	Y	Z	from	Radius	
[m]				[m]	[m]	[m]	[Degrees]	[m]	[m]
1	basement A	Polygonal	Horizontal	N/A	N/A	-0.60000	N/A	N/A	N/A
N/A	(66,58.3)	(66,53.2)	10.000	2	-10.000		N/A	N/A	
	(59.8,51.7)	(55,51.6)							
	(55,58.4)								
2	vault A	Polygonal	Horizontal	N/A	N/A	-3.1300	N/A	N/A	N/A
N/A	(55,58.4)	(59.8,58.4)	10.000	1	-20.000		N/A	N/A	
	(59.8,51.6)	(55,51.6)							
3	vault B	Polygonal	Horizontal	N/A	N/A	-3.1300	N/A	N/A	N/A
N/A	(44.3,58.4)	(44.3,51.6)	10.000	1	-20.000		N/A	N/A	
	(39.6,51.7)	(39.6,58.4)							
4	basement B	Polygonal	Horizontal	N/A	N/A	-3.1300	N/A	N/A	N/A
N/A	(55,58.4)	(55,51.6)	10.000	1	-10.000		N/A	N/A	
	(39.6,51.7)	(39.6,58.4)							

Displacement Data

intrvl Ref.	Type across	No. of intrvl Name	Direction of Extrusion along	Line/Line for extrusion		No. of
				Show First point Calculate	Second point Detailed	

extrusion/line	Depth	Extrusion extrusion	X [m]	Y [m]	Z(level) results [m]	X [m]	Y [m]	Z(level) [m]	
[m]									
1	Grid	Grid 1	Global X	30.000	35.000	0.0	N/A	80.000	0.0
99	70.000	99	Yes	Yes					
2	Line	21-20	N/A	55.960	70.700	0.0	44.210	70.720	0.0
11	N/A	N/A	Yes	Yes					
3	Line	19-20	N/A	59.140	66.790	0.0	55.960	70.700	0.0
5	N/A	N/A	Yes	Yes					
4	Line	19-18	N/A	59.140	66.790	0.0	59.170	64.780	0.0
2	N/A	N/A	Yes	Yes					
5	Line	18-13	N/A	59.170	64.780	0.0	44.210	64.800	0.0
14	N/A	N/A	Yes	Yes					
6	Line	21-a	N/A	44.210	70.720	0.0	44.060	58.900	0.0
34	N/A	N/A	Yes	Yes					
7	Line	f-50	N/A	44.100	51.600	0.0	44.160	36.710	0.0
15	N/A	N/A	Yes	Yes					
8	Line	14-15	N/A	55.000	64.760	0.0	55.000	62.620	0.0
2	N/A	N/A	Yes	Yes					
9	Line	15-16	N/A	55.000	62.620	0.0	56.230	61.460	0.0
1	N/A	N/A	Yes	Yes					
10	Line	16-17	N/A	56.230	61.460	0.0	56.220	59.560	0.0
1	N/A	N/A	Yes	Yes					
11	Line	17-g	N/A	56.220	59.560	0.0	55.100	58.400	0.0
1	N/A	N/A	Yes	Yes					
12	Line	h-49	N/A	54.980	51.600	0.0	56.500	50.100	0.0
2	N/A	N/A	Yes	Yes					
13	Line	49-36	N/A	56.500	50.100	0.0	56.500	47.710	0.0
2	N/A	N/A	Yes	Yes					
14	Line	36-48	N/A	56.500	47.710	0.0	54.960	46.000	0.0
2	N/A	N/A	Yes	Yes					
15	Line	48-47	N/A	54.960	46.000	0.0	54.960	44.830	0.0
1	N/A	N/A	Yes	Yes					
16	Line	47-51	N/A	54.960	44.830	0.0	44.210	44.830	0.0
10	N/A	N/A	Yes	Yes					
17	Line	50-46	N/A	44.160	36.710	0.0	54.960	36.710	0.0
10	N/A	N/A	Yes	Yes					
18	Line	46-47	N/A	54.960	36.710	0.0	54.960	44.830	0.0
8	N/A	N/A	Yes	Yes					
19	Line	24-25	N/A	78.820	63.100	0.0	88.080	63.070	0.0
9	N/A	N/A	Yes	Yes					
20	Line	25-26	N/A	88.080	63.070	0.0	88.000	57.750	0.0
5	N/A	N/A	Yes	Yes					
21	Line	26-27	N/A	88.000	57.750	0.0	76.730	57.900	0.0
11	N/A	N/A	Yes	Yes					
22	Line	27-28	N/A	76.730	57.900	0.0	76.710	61.070	0.0
3	N/A	N/A	Yes	Yes					
23	Line	28-29	N/A	76.710	61.070	0.0	78.820	63.100	0.0
2	N/A	N/A	Yes	Yes					
24	Line	27-32	N/A	76.730	57.900	0.0	76.750	52.750	0.0
5	N/A	N/A	Yes	Yes					
25	Line	33-31	N/A	87.930	52.750	0.0	70.250	52.750	0.0
17	N/A	N/A	Yes	Yes					
26	Line	31-34	N/A	70.250	52.750	0.0	70.180	49.380	0.0
3	N/A	N/A	Yes	Yes					
27	Line	34-35	N/A	70.180	49.380	0.0	71.510	49.370	0.0
1	N/A	N/A	Yes	Yes					
28	Line	35-41	N/A	71.510	49.370	0.0	71.480	45.770	0.0
3	N/A	N/A	Yes	Yes					
29	Line	41-40	N/A	71.480	45.770	0.0	67.410	45.770	0.0
4	N/A	N/A	Yes	Yes					
30	Line	40-39	N/A	67.410	45.770	0.0	67.390	41.870	0.0
3	N/A	N/A	Yes	Yes					
31	Line	39-38	N/A	67.390	41.870	0.0	88.000	41.700	0.0
20	N/A	N/A	Yes	Yes					
32	Line	38-25	N/A	88.000	41.700	0.0	88.080	63.070	0.0
21	N/A	N/A	Yes	Yes					
33	Line	20-22	N/A	55.960	70.700	0.0	66.130	70.690	0.0
10	N/A	N/A	Yes	Yes					
34	Line	22-b	N/A	66.130	70.690	0.0	66.300	58.900	0.0
17	N/A	N/A	Yes	Yes					
35	Line	e-45	N/A	64.740	51.600	0.0	64.480	36.840	0.0
15	N/A	N/A	Yes	Yes					
36	Line	18-31	N/A	59.170	64.780	0.0	66.000	64.740	0.0
6	N/A	N/A	Yes	Yes					

37	Line	23-24	N/A	66.000	63.140	0.0	78.820	63.100	0.0
12	N/A	N/A	Yes	Yes					
38	Line	b-27	N/A	66.100	58.460	0.0	76.730	57.900	0.0
10	N/A	N/A	Yes	Yes					
39	Line	42-37	N/A	64.540	46.730	0.0	87.960	46.450	0.0
23	N/A	N/A	Yes	Yes					
40	Line	47-43	N/A	54.960	44.830	0.0	64.500	44.830	0.0
9	N/A	N/A	Yes	Yes					
41	Line	44-39	N/A	64.440	41.910	0.0	67.390	41.870	0.0
2	N/A	N/A	Yes	Yes					
42	Line	46-45	N/A	54.960	36.710	0.0	64.480	36.840	0.0
9	N/A	N/A	Yes	Yes					
43	Line	a-12	N/A	44.060	58.900	0.0	39.630	58.380	0.0
4	N/A	N/A	Yes	Yes					
44	Line	12-11	N/A	39.630	58.380	0.0	39.630	51.680	0.0
6	N/A	N/A	Yes	Yes					
45	Line	11-f	N/A	39.630	51.680	0.0	44.100	51.600	0.0
8	N/A	N/A	Yes	Yes					
46	Line	ag	N/A	44.060	58.900	0.0	55.100	58.400	0.0
11	N/A	N/A	Yes	Yes					
47	Line	gb	N/A	55.100	58.400	0.0	66.500	58.460	0.0
20	N/A	N/A	Yes	Yes					
48	Line	bc	N/A	66.500	58.460	0.0	66.500	52.900	0.0
20	N/A	N/A	Yes	Yes					
49	Line	cd	N/A	66.500	52.900	0.0	65.000	52.000	0.0
1	N/A	N/A	Yes	Yes					
50	Line	eh	N/A	64.740	51.600	0.0	54.980	51.600	0.0
9	N/A	N/A	Yes	Yes					
51	Line	hf	N/A	54.980	51.600	0.0	44.100	51.600	0.0
10	N/A	N/A	Yes	Yes					
52	Line	de	N/A	65.000	52.000	0.0	64.740	51.600	0.0
4	N/A	N/A	No	N/A					

Problem Type

Problem Type : Tunnelling and Embedded Wall Excavations

Displacement Data

Type of intervals across extrusion/line	Name of Extrusion	Direction No. of intervals of extrusion along	Point/Line/Line for extrusion Calculate Surface type for	No.																		
			<table border="1"> <thead> <tr> <th colspan="3">First point</th> <th colspan="3">Second point</th> </tr> <tr> <th>X</th> <th>Y</th> <th>Z(level)</th> <th>X</th> <th>Y</th> <th>Z(level)</th> </tr> <tr> <th>[m]</th> <th>[m]</th> <th>[m]</th> <th>[m]</th> <th>[m]</th> <th>[m]</th> </tr> </thead> </table>	First point			Second point			X	Y	Z(level)	X	Y	Z(level)	[m]	[m]	[m]	[m]	[m]	[m]	
First point			Second point																			
X	Y	Z(level)	X	Y	Z(level)																	
[m]	[m]	[m]	[m]	[m]	[m]																	
[m]	Grid 1	Global X	30.00000 35.00000 0.00000 - 80.00000 0.00000																			
99	70.00000	99 Yes	Surface																			
Line	21-20	-	55.96000 70.70000 0.00000 44.21000 70.72000 0.00000																			
11	-	Yes	Surface																			
Line	19-20	-	59.14000 66.79000 0.00000 55.96000 70.70000 0.00000																			
5	-	Yes	Surface																			
Line	19-18	-	59.14000 66.79000 0.00000 59.17000 64.78000 0.00000																			
2	-	Yes	Surface																			
Line	18-13	-	59.17000 64.78000 0.00000 44.21000 64.80000 0.00000																			
14	-	Yes	Surface																			
Line	21-a	-	44.21000 70.72000 0.00000 44.06000 58.90000 0.00000																			
34	-	Yes	Surface																			
Line	f-50	-	44.10000 51.60000 0.00000 44.16000 36.71000 0.00000																			
15	-	Yes	Surface																			
Line	14-15	-	55.00000 64.76000 0.00000 55.00000 62.62000 0.00000																			
2	-	Yes	Surface																			
Line	15-16	-	55.00000 62.62000 0.00000 56.23000 61.46000 0.00000																			
1	-	Yes	Surface																			

Line	16-17	-	-	56.23000	61.46000	0.00000	56.22000	59.56000	0.00000
1	-	-	Yes	Surface					
Line	17-g	-	-	56.22000	59.56000	0.00000	55.10000	58.40000	0.00000
1	-	-	Yes	Surface					
Line	h-49	-	-	54.98000	51.60000	0.00000	56.50000	50.10000	0.00000
2	-	-	Yes	Surface					
Line	49-36	-	-	56.50000	50.10000	0.00000	56.50000	47.71000	0.00000
2	-	-	Yes	Surface					
Line	36-48	-	-	56.50000	47.71000	0.00000	54.96000	46.00000	0.00000
2	-	-	Yes	Surface					
Line	48-47	-	-	54.96000	46.00000	0.00000	54.96000	44.83000	0.00000
1	-	-	Yes	Surface					
Line	47-51	-	-	54.96000	44.83000	0.00000	44.21000	44.83000	0.00000
10	-	-	Yes	Surface					
Line	50-46	-	-	44.16000	36.71000	0.00000	54.96000	36.71000	0.00000
10	-	-	Yes	Surface					
Line	46-47	-	-	54.96000	36.71000	0.00000	54.96000	44.83000	0.00000
8	-	-	Yes	Surface					
Line	24-25	-	-	78.82000	63.10000	0.00000	88.08000	63.07000	0.00000
9	-	-	Yes	Surface					
Line	25-26	-	-	88.08000	63.07000	0.00000	88.00000	57.75000	0.00000
5	-	-	Yes	Surface					
Line	26-27	-	-	88.00000	57.75000	0.00000	76.73000	57.90000	0.00000
11	-	-	Yes	Surface					
Line	27-28	-	-	76.73000	57.90000	0.00000	76.71000	61.07000	0.00000
3	-	-	Yes	Surface					
Line	28-29	-	-	76.71000	61.07000	0.00000	78.82000	63.10000	0.00000
2	-	-	Yes	Surface					
Line	27-32	-	-	76.73000	57.90000	0.00000	76.75000	52.75000	0.00000
5	-	-	Yes	Surface					
Line	33-31	-	-	87.93000	52.75000	0.00000	70.25000	52.75000	0.00000
17	-	-	Yes	Surface					
Line	31-34	-	-	70.25000	52.75000	0.00000	70.18000	49.38000	0.00000
3	-	-	Yes	Surface					
Line	34-35	-	-	70.18000	49.38000	0.00000	71.51000	49.37000	0.00000
1	-	-	Yes	Surface					
Line	35-41	-	-	71.51000	49.37000	0.00000	71.48000	45.77000	0.00000
3	-	-	Yes	Surface					
Line	41-40	-	-	71.48000	45.77000	0.00000	67.41000	45.77000	0.00000
4	-	-	Yes	Surface					
Line	40-39	-	-	67.41000	45.77000	0.00000	67.39000	41.87000	0.00000
3	-	-	Yes	Surface					
Line	39-38	-	-	67.39000	41.87000	0.00000	88.00000	41.70000	0.00000
20	-	-	Yes	Surface					
Line	38-25	-	-	88.00000	41.70000	0.00000	88.08000	63.07000	0.00000
21	-	-	Yes	Surface					
Line	20-22	-	-	55.96000	70.70000	0.00000	66.13000	70.69000	0.00000
10	-	-	Yes	Surface					
Line	22-b	-	-	66.13000	70.69000	0.00000	66.30000	58.90000	0.00000
17	-	-	Yes	Surface					
Line	e-45	-	-	64.74000	51.60000	0.00000	64.48000	36.84000	0.00000
15	-	-	Yes	Surface					
Line	18-31	-	-	59.17000	64.78000	0.00000	66.00000	64.74000	0.00000
6	-	-	Yes	Surface					
Line	23-24	-	-	66.00000	63.14000	0.00000	78.82000	63.10000	0.00000
12	-	-	Yes	Surface					
Line	b-27	-	-	66.10000	58.46000	0.00000	76.73000	57.90000	0.00000
10	-	-	Yes	Surface					
Line	42-37	-	-	64.54000	46.73000	0.00000	87.96000	46.45000	0.00000
23	-	-	Yes	Surface					
Line	47-43	-	-	54.96000	44.83000	0.00000	64.50000	44.83000	0.00000
9	-	-	Yes	Surface					
Line	44-39	-	-	64.44000	41.91000	0.00000	67.39000	41.87000	0.00000
2	-	-	Yes	Surface					
Line	46-45	-	-	54.96000	36.71000	0.00000	64.48000	36.84000	0.00000
9	-	-	Yes	Surface					
Line	a-12	-	-	44.06000	58.90000	0.00000	39.63000	58.38000	0.00000
4	-	-	Yes	Surface					
Line	12-11	-	-	39.63000	58.38000	0.00000	39.63000	51.68000	0.00000
6	-	-	Yes	Surface					
Line	11-f	-	-	39.63000	51.68000	0.00000	44.10000	51.60000	0.00000
8	-	-	Yes	Surface					
Line	ag	-	-	44.06000	58.90000	0.00000	55.10000	58.40000	0.00000
11	-	-	Yes	Surface					
Line	gb	-	-	55.10000	58.40000	0.00000	66.50000	58.46000	0.00000
20	-	-	Yes	Surface					

Line bc	-	-	66.50000	58.46000	0.00000	66.50000	52.90000	0.00000
20	-	Yes	Surface					
Line cd	-	-	66.50000	52.90000	0.00000	65.00000	52.00000	0.00000
1	-	Yes	Surface					
Line eh	-	-	64.74000	51.60000	0.00000	54.98000	51.60000	0.00000
9	-	Yes	Surface					
Line hf	-	-	54.98000	51.60000	0.00000	44.10000	51.60000	0.00000
10	-	Yes	Surface					
Line de	-	-	65.00000	52.00000	0.00000	64.74000	51.60000	0.00000
4	-	Yes	Surface					

Vertical Ground Movement Curves

Curve Name: No vertical ground movement
Coordinates: [Distance from wall / wall depth or max. excavation depth (x), Depth / wall depth or max. excavation depth (y), Settlement / wall depth or max. excavation depth (z) (%)]
 [0.000,0.000,0.000] [1.000,0.000,0.000] [0.000,1.000,0.000] [1.000,1.000,0.000]
Curve Fitting Method: Polynomial
Method:
 x Order: 1
 y Order: 0
 Polynomial: $z = 0.0x + 0.0$
 Coeff. of Determination: -2147483648.E+2147483647

Curve Name: Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11 (b))
Coordinates: [Distance from wall / wall depth or max. excavation depth (x), Depth / wall depth or max. excavation depth (y), Settlement / wall depth or max. excavation depth (z) (%)]
 [0.000,0.000,0.039] [0.100,0.000,0.049] [0.200,0.000,0.056] [0.300,0.000,0.062] [0.400,0.000,0.067] [0.500,0.000,0.070] [0.600,0.000,0.072] [0.700,0.000,0.073] [0.800,0.000,0.073] [0.900,0.000,0.072] [1.000,0.000,0.070] [1.100,0.000,0.068] [1.200,0.000,0.065] [1.300,0.000,0.061] [1.400,0.000,0.058] [1.500,0.000,0.054] [1.600,0.000,0.050] [1.700,0.000,0.046] [1.800,0.000,0.042] [1.900,0.000,0.038] [2.000,0.000,0.034] [2.100,0.000,0.030] [2.200,0.000,0.027] [2.300,0.000,0.023] [2.400,0.000,0.020] [2.500,0.000,0.017] [2.600,0.000,0.014] [2.700,0.000,0.012] [2.800,0.000,0.010] [2.900,0.000,0.008] [3.000,0.000,0.007] [3.100,0.000,0.005] [3.200,0.000,0.004] [3.300,0.000,0.004] [3.400,0.000,0.003] [3.500,0.000,0.002] [3.600,0.000,0.002] [3.700,0.000,0.002] [3.800,0.000,0.001] [3.900,0.000,0.001] [4.000,0.000,0.000]
Curve Fitting Method: Polynomial
Method:
 x Order: 4
 y Order: 0
 Polynomial: $z = -2.6455E-3x^4 + 2.8495E-2x^3 - 1.0051E-1x^2 + 1.0569E-1x + 3.8990E-2$
 Coeff. of Determination: 9.9991E-1

Horizontal Ground Movement Curves

Curve Name: No horizontal ground movement
Coordinates: [Distance from wall / wall depth or max. excavation depth (x), Depth / wall depth or max. excavation depth (y), Horizontal movement / wall depth or max. excavation depth (z) (%)]
 [0.000,0.000,0.000] [1.000,0.000,0.000] [0.000,1.000,0.000] [1.000,1.000,0.000]
Curve Fitting Method: Polynomial
Method:
 x Order: 0
 y Order: 0
 Polynomial: $z = 0.0$
 Coeff. of Determination: -2147483648.E+2147483647

Curve Name: Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11 (a))
Coordinates: [Distance from wall / wall depth or max. excavation depth (x), Depth / wall depth or max. excavation depth (y), Horizontal movement / wall depth or max. excavation depth (z) (%)]
 [0.000,0.000,0.150] [4.000,0.000,0.000]

3	66.000	53.200	-3.6000	No	-	-	-	-	-	-
4	59.820	51.680	-3.6000	No	-	-	-	-	-	-

Side	Corner 1		Corner 2		Ground Movement Curve	
	x [m]	y [m]	x [m]	y [m]	Vertical	Horizontal
1 of high stiff clay 2.11(a))	59.820	58.310	66.020	58.310	Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(b))	Excavation in front stiffness wall in (CIRIA 580 Fig.
2 of high stiff clay 2.11(a))	66.020	58.310	66.000	53.200	Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(b))	Excavation in front stiffness wall in (CIRIA 580 Fig.
3 of high stiff clay 2.11(a))	66.000	53.200	59.820	51.680	Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(b))	Excavation in front stiffness wall in (CIRIA 580 Fig.
4 movement	59.820	51.680	59.820	58.310	No vertical ground movement	No horizontal ground

Excavation Name: Excavation 3
Surface level [m]: 0.0
Contribution: Negative
Enabled: No
Surface movement curves which are selected are applied between surface and [m]: -5.0000

Corner	x [m]	y [m]	Base Level [m]	Stiffened	Previous Side			Next Side		
					d [m]	p1 [%]	p2* [%]	d [m]	p1 [%]	p2* [%]
1	59.820	58.310	-1.0700	No	-	-	-	-	-	-
2	66.020	58.310	-1.0700	No	-	-	-	-	-	-
3	66.000	53.200	-1.0700	No	-	-	-	-	-	-
4	59.820	51.680	-1.0700	No	-	-	-	-	-	-

Side	Corner 1		Corner 2		Ground Movement Curve	
	x [m]	y [m]	x [m]	y [m]	Vertical	Horizontal
1 of high stiff clay 2.11(a))	59.820	58.310	66.020	58.310	Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(b))	Excavation in front stiffness wall in (CIRIA 580 Fig.
2 of high stiff clay 2.11(a))	66.020	58.310	66.000	53.200	Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(b))	Excavation in front stiffness wall in (CIRIA 580 Fig.
3 of high stiff clay 2.11(a))	66.000	53.200	59.820	51.680	Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(b))	Excavation in front stiffness wall in (CIRIA 580 Fig.
4 movement	59.820	51.680	59.820	58.310	No vertical ground movement	No horizontal ground

Damage Category Strains

Name	0 (Negligible)	1 (Very Slight)	2 (Slight)	3 (Moderate)
	to	to	to	to
Burland Strain Limits	1 (Very Slight)	2 (Slight)	3 (Moderate)	4 (Severe)
	0.0	500.00E-6	750.00E-6	0.0015000

Specific Structures - Geometry

Structure Name	Sub-Structure	Displacement	Start	End	Vertical	Vertical
Damage Category	Strains	Poisson's	Distance	Distance	Offsets from	Displacement
Ratio	Name	Line	Along	Along	Line for	Limit
			Line	Line	Vertical	Sensitivity
			[m]	[m]	Movement	[mm]
					Calculations	
21-20		21-20	0.00000	11.74902	0.0	0.10000
Burland Strain Limits	0.20000	2.6000				
19-20		19-20	0.00000	5.03889	0.0	0.10000
Burland Strain Limits	0.20000	2.6000				
19-18		19-18	0.00000	2.00922	0.0	0.10000
Burland Strain Limits	0.20000	2.6000				
18-13		18-13	0.00000	14.95901	0.0	0.10000
Burland Strain Limits	0.20000	2.6000				
21-a		21-a	0.00000	11.81995	0.0	0.10000
Burland Strain Limits	0.20000	2.6000				
f-50		f-50	0.00000	14.88912	0.0	0.10000
Burland Strain Limits	0.20000	2.6000				
14-15		14-15	0.00000	2.13900	0.0	0.10000
Burland Strain Limits	0.20000	2.6000				
15-16		15-16	0.00000	1.68971	0.0	0.10000
Burland Strain Limits	0.20000	2.6000				
16-17		16-17	0.00000	1.89903	0.0	0.10000
Burland Strain Limits	0.20000	2.6000				
17-g		17-g	0.00000	1.61145	0.0	0.10000
Burland Strain Limits	0.20000	2.6000				
h-49		h-49	0.00000	2.13451	0.0	0.10000
Burland Strain Limits	0.20000	2.6000				
49-36		49-36	0.00000	2.38900	0.0	0.10000
Burland Strain Limits	0.20000	2.6000				
36-48		36-48	0.00000	2.30024	0.0	0.10000
Burland Strain Limits	0.20000	2.6000				
48-47		48-47	0.00000	1.16900	0.0	0.10000
Burland Strain Limits	0.20000	2.6000				
47-51		47-51	0.00000	10.74900	0.0	0.10000
Burland Strain Limits	0.20000	2.6000				
50-46		50-46	0.00000	10.79900	0.0	0.10000
Burland Strain Limits	0.20000	2.6000				
46-47		46-47	0.00000	8.11900	0.0	0.10000
Burland Strain Limits	0.20000	2.6000				
24-25		24-25	0.00000	9.25905	0.0	0.10000
Burland Strain Limits	0.20000	2.6000				
25-26		25-26	0.00000	5.31960	0.0	0.10000
Burland Strain Limits	0.20000	2.6000				
26-27		26-27	0.00000	11.27000	0.0	0.10000
Burland Strain Limits	0.20000	2.6000				
27-28		27-28	0.00000	3.16906	0.0	0.10000
Burland Strain Limits	0.20000	2.6000				
28-29		28-29	0.00000	2.92697	0.0	0.10000
Burland Strain Limits	0.20000	2.6000				
27-32		27-32	0.00000	5.14904	0.0	0.10000
Burland Strain Limits	0.20000	2.6000				
33-31		33-31	0.00000	17.67900	0.0	0.10000
Burland Strain Limits	0.20000	2.6000				
31-34		31-34	0.00000	3.36973	0.0	0.10000
Burland Strain Limits	0.20000	2.6000				
34-35		34-35	0.00000	1.32904	0.0	0.10000
Burland Strain Limits	0.20000	2.6000				
35-41		35-41	0.00000	3.59912	0.0	0.10000
Burland Strain Limits	0.20000	2.6000				
41-40		41-40	0.00000	4.06900	0.0	0.10000
Burland Strain Limits	0.20000	2.6000				
40-39		40-39	0.00000	3.89905	0.0	0.10000
Burland Strain Limits	0.20000	2.6000				
39-38		39-38	0.00000	20.60970	0.0	0.10000
Burland Strain Limits	0.20000	2.6000				
38-25		38-25	0.00000	21.36915	0.0	0.10000
Burland Strain Limits	0.20000	2.6000				
20-22		20-22	0.00000	10.16900	0.0	0.10000
Burland Strain Limits	0.20000	2.6000				

22-b	22-b	0.00000	11.79023	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
e-45	e-45	0.00000	14.76129	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
18-31	18-31	0.00000	6.82912	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
23-24	23-24	0.00000	12.81906	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
b-27	b-27	0.00000	10.64374	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
42-37	42-37	0.00000	23.42067	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
47-43	47-43	0.00000	9.53900	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
44-39	44-39	0.00000	2.94927	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
46-45	46-45	0.00000	9.51989	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
a-12	a-12	0.00000	4.45941	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
12-11	12-11	0.00000	6.69900	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
11-f	11-f	0.00000	4.46972	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
ag	ag	0.00000	11.05032	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
gb	gb	0.00000	11.39916	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
bc	bc	0.00000	5.55900	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
cd	cd	0.00000	1.74829	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
eh	eh	0.00000	9.75900	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
hf	hf	0.00000	10.87900	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
de	de	0.00000	0.47607	0.10000	0.10000
Burland Strain Limits	0.20000 2.6000				

Specific Structures - Bending Parameters

Structure Name	Sub-Structure	Height	Default	Hogging			
				Sagging			
	Name	Properties	2nd Moment	Distance	Distance	2nd Moment	
Distance	Distance		of Area	of Bending	of N.A.	of Area	
of Bending	of N.A.		(per unit	Strain	from Edge	(per unit	
Strain	from Edge		width)	from N.A.	of Beam in	width)	
from N.A.	of Beam in				Tension		
Tension							
[m]	[m]	[m]	[m ³]	[m]	[m]	[m ³]	
21-20		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
19-20		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
19-18		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
18-13		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
21-a		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
f-50		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
14-15		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
15-16		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
16-17		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						

17-g		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
h-49		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
49-36		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
36-48		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
48-47		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
47-51		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
50-46		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
46-47		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
24-25		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
25-26		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
26-27		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
27-28		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
28-29		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
27-32		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
33-31		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
31-34		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
34-35		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
35-41		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
41-40		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
40-39		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
39-38		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
38-25		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
20-22		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						
22-b		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						
e-45		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						
18-31		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						
23-24		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						
b-27		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						
42-37		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						
47-43		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						
44-39		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						
46-45		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						
a-12		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						
12-11		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						
11-f		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						
ag		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
gb		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						
bc		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						

cd			3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000							
eh			3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000							
hf			13.0000	Yes	732.33	13.0000	13.0000	183.08
6.5000	6.5000							
de			3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000							

Building Segment Combinations

Structure Name	Sub-Structure Name	Vertical Offset from Line for Vertical Movement Calculations	Segment Start	Length	Curvature	Combined Segment
		[m]	[m]	[m]		

No structures have segments combined.

Utility Strain Calculation Options

Neglect beneficial contribution of axial strains : No

Specific Building Damage Results - Horizontal Displacements

Structure: 21-20 | Sub-structure:

Dist.	Coordinates			Displacements		Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
	x	y	z	x	y		
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	55.96000	70.70000	0.00000	0.0	0.0	0.0	0.0 d
1.0682	54.89182	70.70182	0.00000	0.0	0.0	0.0	0.0 d
2.1364	53.82364	70.70364	0.00000	0.0	0.0	0.0	0.0 d
3.2046	52.75545	70.70545	0.00000	0.0	0.0	0.0	0.0 d
4.2727	51.68727	70.70727	0.00000	0.0	0.0	0.0	0.0 d
5.3409	50.61909	70.70909	0.00000	0.0	0.0	0.0	0.0 d
6.4091	49.55091	70.71091	0.00000	0.0	0.0	0.0	0.0 d
7.4773	48.48273	70.71273	0.00000	0.0	0.0	0.0	0.0 d
8.5455	47.41455	70.71455	0.00000	0.0	0.0	0.0	0.0 d
9.6137	46.34636	70.71636	0.00000	0.0	0.0	0.0	0.0 d
10.682	45.27818	70.71818	0.00000	0.0	0.0	0.0	0.0 d
11.750	44.21000	70.72000	0.00000	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: 19-20 | Sub-structure:

Dist.	Coordinates			Displacements		Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
	x	y	z	x	y		
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	59.14000	66.79000	0.00000	0.0	0.0	0.0	0.0 d
1.0080	58.50400	67.57200	0.00000	0.0	0.0	0.0	0.0 d
2.0160	57.86800	68.35400	0.00000	0.0	0.0	0.0	0.0 d
3.0239	57.23200	69.13600	0.00000	0.0	0.0	0.0	0.0 d
4.0319	56.59600	69.91800	0.00000	0.0	0.0	0.0	0.0 d
5.0399	55.96000	70.70000	0.00000	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: 19-18 | Sub-structure:

Dist.	Coordinates			Displacements		Horizontal displacement along the	Horizontal displacement perpendicular
	x	y	z	x	y		

	[m]	[m]	[m]	[m]	[mm]	[mm]	Line [mm]	to Line [mm]	
	0.0	59.14000	66.79000	0.00000	0.0	0.0	0.0	0.0	0.0 d
1.0051	59.15500	65.78500	0.00000	0.0	0.0		0.0		0.0 d
2.0102	59.17000	64.78000	0.00000	0.0	0.0		0.0		0.0 d

d - Displacements include imported displacements.

Structure: 18-13 | Sub-structure:

Dist.	Coordinates					Displacements			
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line		
	[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
	0.0	59.17000	64.78000	0.00000	0.0	0.0	0.0	0.0	0.0 d
1.0686	58.10143	64.78143	0.00000	0.0	0.0		0.0		0.0 d
2.1371	57.03286	64.78286	0.00000	0.0	0.0		0.0		0.0 d
3.2057	55.96429	64.78429	0.00000	0.0	0.0		0.0		0.0 d
4.2743	54.89571	64.78571	0.00000	0.0	0.0		0.0		0.0 d
5.3429	53.82714	64.78714	0.00000	0.0	0.0		0.0		0.0 d
6.4114	52.75857	64.78857	0.00000	0.0	0.0		0.0		0.0 d
7.4800	51.69000	64.79000	0.00000	0.0	0.0		0.0		0.0 d
8.5486	50.62143	64.79143	0.00000	0.0	0.0		0.0		0.0 d
9.6172	49.55286	64.79286	0.00000	0.0	0.0		0.0		0.0 d
10.686	48.48429	64.79429	0.00000	0.0	0.0		0.0		0.0 d
11.754	47.41571	64.79571	0.00000	0.0	0.0		0.0		0.0 d
12.823	46.34714	64.79714	0.00000	0.0	0.0		0.0		0.0 d
13.891	45.27857	64.79857	0.00000	0.0	0.0		0.0		0.0 d
14.960	44.21000	64.80000	0.00000	0.0	0.0		0.0		0.0 d

d - Displacements include imported displacements.

Structure: 21-a | Sub-structure:

Dist.	Coordinates					Displacements			
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line		
	[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
	0.0	44.21000	70.72000	0.00000	0.0	0.0	0.0	0.0	0.0 d
0.34768	44.20559	70.37235	0.00000	0.0	0.0		0.0		0.0 d
0.69535	44.20118	70.02471	0.00000	0.0	0.0		0.0		0.0 d
1.0430	44.19676	69.67706	0.00000	0.0	0.0		0.0		0.0 d
1.3907	44.19235	69.32941	0.00000	0.0	0.0		0.0		0.0 d
1.7384	44.18794	68.98176	0.00000	0.0	0.0		0.0		0.0 d
2.0861	44.18353	68.63412	0.00000	0.0	0.0		0.0		0.0 d
2.4337	44.17912	68.28647	0.00000	0.0	0.0		0.0		0.0 d
2.7814	44.17471	67.93882	0.00000	0.0	0.0		0.0		0.0 d
3.1291	44.17029	67.59118	0.00000	0.0	0.0		0.0		0.0 d
3.4768	44.16588	67.24353	0.00000	0.0	0.0		0.0		0.0 d
3.8244	44.16147	66.89588	0.00000	0.0	0.0		0.0		0.0 d
4.1721	44.15706	66.54824	0.00000	0.0	0.0		0.0		0.0 d
4.5198	44.15265	66.20059	0.00000	0.0	0.0		0.0		0.0 d
4.8675	44.14824	65.85294	0.00000	0.0	0.0		0.0		0.0 d
5.2151	44.14382	65.50529	0.00000	0.0	0.0		0.0		0.0 d
5.5628	44.13941	65.15765	0.00000	0.0	0.0		0.0		0.0 d
5.9105	44.13500	64.81000	0.00000	0.0	0.0		0.0		0.0 d
6.2582	44.13059	64.46235	0.00000	0.0	0.0		0.0		0.0 d
6.6058	44.12618	64.11471	0.00000	0.0	0.0		0.0		0.0 d
6.9535	44.12176	63.76706	0.00000	0.0	0.0		0.0		0.0 d
7.3012	44.11735	63.41941	0.00000	0.0	0.0		0.0		0.0 d
7.6489	44.11294	63.07176	0.00000	0.0	0.0		0.0		0.0 d
7.9965	44.10853	62.72412	0.00000	0.0	0.0		0.0		0.0 d
8.3442	44.10412	62.37647	0.00000	0.0	0.0		0.0		0.0 d
8.6919	44.09971	62.02882	0.00000	0.0	0.0		0.0		0.0 d
9.0396	44.09529	61.68118	0.00000	0.0	0.0		0.0		0.0 d
9.3872	44.09088	61.33353	0.00000	0.0	0.0		0.0		0.0 d
9.7349	44.08647	60.98588	0.00000	0.0	0.0		0.0		0.0 d
10.083	44.08206	60.63824	0.00000	0.0	0.0		0.0		0.0 d
10.430	44.07765	60.29059	0.00000	0.0	0.0		0.0		0.0 d
10.778	44.07324	59.94294	0.00000	0.0	0.0		0.0		0.0 d
11.126	44.06882	59.59529	0.00000	0.0	0.0		0.0		0.0 d
11.473	44.06441	59.24765	0.00000	0.0	0.0		0.0		0.0 d
11.821	44.06000	58.90000	0.00000	0.0	0.0		0.0		0.0 d

d - Displacements include imported displacements.

Structure: f-50 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	44.10000	51.60000	0.00000	0.0	0.0	0.0	0.0	d
0.99267	44.10400	50.60733	0.00000	0.0	0.0	0.0	0.0	d
1.9853	44.10800	49.61467	0.00000	0.0	0.0	0.0	0.0	d
2.9780	44.11200	48.62200	0.00000	0.0	0.0	0.0	0.0	d
3.9707	44.11600	47.62933	0.00000	0.0	0.0	0.0	0.0	d
4.9634	44.12000	46.63667	0.00000	0.0	0.0	0.0	0.0	d
5.9560	44.12400	45.64400	0.00000	0.0	0.0	0.0	0.0	d
6.9487	44.12800	44.65133	0.00000	0.0	0.0	0.0	0.0	d
7.9414	44.13200	43.65867	0.00000	0.0	0.0	0.0	0.0	d
8.9341	44.13600	42.66600	0.00000	0.0	0.0	0.0	0.0	d
9.9267	44.14000	41.67333	0.00000	0.0	0.0	0.0	0.0	d
10.919	44.14400	40.68067	0.00000	0.0	0.0	0.0	0.0	d
11.912	44.14800	39.68800	0.00000	0.0	0.0	0.0	0.0	d
12.905	44.15200	38.69533	0.00000	0.0	0.0	0.0	0.0	d
13.897	44.15600	37.70267	0.00000	0.0	0.0	0.0	0.0	d
14.890	44.16000	36.71000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 14-15 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	55.00000	64.76000	0.00000	0.0	0.0	0.0	0.0	d
1.0700	55.00000	63.69000	0.00000	0.0	0.0	0.0	0.0	d
2.1400	55.00000	62.62000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 15-16 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	55.00000	62.62000	0.00000	0.0	0.0	0.0	0.0	d
1.6907	56.23000	61.46000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 16-17 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	56.23000	61.46000	0.00000	0.0	0.0	0.0	0.0	d
1.9000	56.22000	59.56000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 17-g | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	

[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	56.22000	59.56000	0.00000	0.0	0.0	0.0	0.0 d
1.6125	55.10000	58.40000	0.00000	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: h-49 | Sub-structure:

Dist.	Coordinates			Displacements			
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	54.98000	51.60000	0.00000	0.0	0.0	0.0	0.0 d
1.0678	55.74000	50.85000	0.00000	0.0	0.0	0.0	0.0 d
2.1355	56.50000	50.10000	0.00000	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: 49-36 | Sub-structure:

Dist.	Coordinates			Displacements			
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	56.50000	50.10000	0.00000	0.0	0.0	0.0	0.0 d
1.1950	56.50000	48.90500	0.00000	0.0	0.0	0.0	0.0 d
2.3900	56.50000	47.71000	0.00000	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: 36-48 | Sub-structure:

Dist.	Coordinates			Displacements			
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	56.50000	47.71000	0.00000	0.0	0.0	0.0	0.0 d
1.1506	55.73000	46.85500	0.00000	0.0	0.0	0.0	0.0 d
2.3012	54.96000	46.00000	0.00000	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: 48-47 | Sub-structure:

Dist.	Coordinates			Displacements			
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	54.96000	46.00000	0.00000	0.0	0.0	0.0	0.0 d
1.1700	54.96000	44.83000	0.00000	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: 47-51 | Sub-structure:

Dist.	Coordinates			Displacements			
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	54.96000	44.83000	0.00000	0.0	0.0	0.0	0.0 d
1.0750	53.88500	44.83000	0.00000	0.0	0.0	0.0	0.0 d
2.1500	52.81000	44.83000	0.00000	0.0	0.0	0.0	0.0 d
3.2250	51.73500	44.83000	0.00000	0.0	0.0	0.0	0.0 d
4.3000	50.66000	44.83000	0.00000	0.0	0.0	0.0	0.0 d
5.3750	49.58500	44.83000	0.00000	0.0	0.0	0.0	0.0 d
6.4500	48.51000	44.83000	0.00000	0.0	0.0	0.0	0.0 d
7.5250	47.43500	44.83000	0.00000	0.0	0.0	0.0	0.0 d

8.6000	46.36000	44.83000	0.00000	0.0	0.0	0.0	0.0	d
9.6750	45.28500	44.83000	0.00000	0.0	0.0	0.0	0.0	d
10.750	44.21000	44.83000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 50-46 | Sub-structure:

Dist.	Coordinates			Displacements		Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	x	y	z	x	y			
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	44.16000	36.71000	0.00000	0.0	0.0	0.0	0.0	d
1.0800	45.24000	36.71000	0.00000	0.0	0.0	0.0	0.0	d
2.1600	46.32000	36.71000	0.00000	0.0	0.0	0.0	0.0	d
3.2400	47.40000	36.71000	0.00000	0.0	0.0	0.0	0.0	d
4.3200	48.48000	36.71000	0.00000	0.0	0.0	0.0	0.0	d
5.4000	49.56000	36.71000	0.00000	0.0	0.0	0.0	0.0	d
6.4800	50.64000	36.71000	0.00000	0.0	0.0	0.0	0.0	d
7.5600	51.72000	36.71000	0.00000	0.0	0.0	0.0	0.0	d
8.6400	52.80000	36.71000	0.00000	0.0	0.0	0.0	0.0	d
9.7200	53.88000	36.71000	0.00000	0.0	0.0	0.0	0.0	d
10.800	54.96000	36.71000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 46-47 | Sub-structure:

Dist.	Coordinates			Displacements		Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	x	y	z	x	y			
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	54.96000	36.71000	0.00000	0.0	0.0	0.0	0.0	d
1.0150	54.96000	37.72500	0.00000	0.0	0.0	0.0	0.0	d
2.0300	54.96000	38.74000	0.00000	0.0	0.0	0.0	0.0	d
3.0450	54.96000	39.75500	0.00000	0.0	0.0	0.0	0.0	d
4.0600	54.96000	40.77000	0.00000	0.0	0.0	0.0	0.0	d
5.0750	54.96000	41.78500	0.00000	0.0	0.0	0.0	0.0	d
6.0900	54.96000	42.80000	0.00000	0.0	0.0	0.0	0.0	d
7.1050	54.96000	43.81500	0.00000	0.0	0.0	0.0	0.0	d
8.1200	54.96000	44.83000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 24-25 | Sub-structure:

Dist.	Coordinates			Displacements		Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	x	y	z	x	y			
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	78.82000	63.10000	0.00000	0.0	0.0	0.0	0.0	d
1.0289	79.84889	63.09667	0.00000	0.0	0.0	0.0	0.0	d
2.0578	80.87778	63.09333	0.00000	0.0	0.0	0.0	0.0	d
3.0867	81.90667	63.09000	0.00000	0.0	0.0	0.0	0.0	d
4.1156	82.93556	63.08667	0.00000	0.0	0.0	0.0	0.0	d
5.1445	83.96444	63.08333	0.00000	0.0	0.0	0.0	0.0	d
6.1734	84.99333	63.08000	0.00000	0.0	0.0	0.0	0.0	d
7.2023	86.02222	63.07667	0.00000	0.0	0.0	0.0	0.0	d
8.2312	87.05111	63.07333	0.00000	0.0	0.0	0.0	0.0	d
9.2600	88.08000	63.07000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 25-26 | Sub-structure:

Dist.	Coordinates			Displacements		Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	x	y	z	x	y			
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	

0.0	88.08000	63.07000	0.00000	0.0	0.0	0.0	0.0	0.0	d
1.0641	88.06400	62.00600	0.00000	0.0	0.0	0.0	0.0	0.0	d
2.1282	88.04800	60.94200	0.00000	0.0	0.0	0.0	0.0	0.0	d
3.1924	88.03200	59.87800	0.00000	0.0	0.0	0.0	0.0	0.0	d
4.2565	88.01600	58.81400	0.00000	0.0	0.0	0.0	0.0	0.0	d
5.3206	88.00000	57.75000	0.00000	0.0	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 26-27 | Sub-structure:

Dist.	Coordinates			Displacements		Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	x	y	z	x	y			
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	88.00000	57.75000	0.00000	0.0	0.0	0.0	0.0	d
1.0246	86.97545	57.76364	0.00000	0.0	0.0	0.0	0.0	d
2.0493	85.95091	57.77727	0.00000	0.0	0.0	0.0	0.0	d
3.0739	84.92636	57.79091	0.00000	0.0	0.0	0.0	0.0	d
4.0985	83.90182	57.80455	0.00000	0.0	0.0	0.0	0.0	d
5.1232	82.87727	57.81818	0.00000	0.0	0.0	0.0	0.0	d
6.1478	81.85273	57.83182	0.00000	0.0	0.0	0.0	0.0	d
7.1725	80.82818	57.84545	0.00000	0.0	0.0	0.0	0.0	d
8.1971	79.80364	57.85909	0.00000	0.0	0.0	0.0	0.0	d
9.2217	78.77909	57.87273	0.00000	0.0	0.0	0.0	0.0	d
10.246	77.75455	57.88636	0.00000	0.0	0.0	0.0	0.0	d
11.271	76.73000	57.90000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 27-28 | Sub-structure:

Dist.	Coordinates			Displacements		Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	x	y	z	x	y			
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	76.73000	57.90000	0.00000	0.0	0.0	0.0	0.0	d
1.0567	76.72333	58.95667	0.00000	0.0	0.0	0.0	0.0	d
2.1134	76.71667	60.01333	0.00000	0.0	0.0	0.0	0.0	d
3.1701	76.71000	61.07000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 28-29 | Sub-structure:

Dist.	Coordinates			Displacements		Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	x	y	z	x	y			
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	76.71000	61.07000	0.00000	0.0	0.0	0.0	0.0	d
1.4640	77.76500	62.08500	0.00000	0.0	0.0	0.0	0.0	d
2.9280	78.82000	63.10000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 27-32 | Sub-structure:

Dist.	Coordinates			Displacements		Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	x	y	z	x	y			
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	76.73000	57.90000	0.00000	0.0	0.0	0.0	0.0	d
1.0300	76.73400	56.87000	0.00000	0.0	0.0	0.0	0.0	d
2.0600	76.73800	55.84000	0.00000	0.0	0.0	0.0	0.0	d
3.0900	76.74200	54.81000	0.00000	0.0	0.0	0.0	0.0	d
4.1200	76.74600	53.78000	0.00000	0.0	0.0	0.0	0.0	d
5.1500	76.75000	52.75000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 33-31 | Sub-structure:

Dist.	Coordinates			Displacements		Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
	x	y	z	x	y		
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	87.93000	52.75000	0.00000	0.0	0.0	0.0	0.0 d
1.0400	86.89000	52.75000	0.00000	0.0	0.0	0.0	0.0 d
2.0800	85.85000	52.75000	0.00000	0.0	0.0	0.0	0.0 d
3.1200	84.81000	52.75000	0.00000	0.0	0.0	0.0	0.0 d
4.1600	83.77000	52.75000	0.00000	0.0	0.0	0.0	0.0 d
5.2000	82.73000	52.75000	0.00000	0.0	0.0	0.0	0.0 d
6.2400	81.69000	52.75000	0.00000	0.0	0.0	0.0	0.0 d
7.2800	80.65000	52.75000	0.00000	0.0	0.0	0.0	0.0 d
8.3200	79.61000	52.75000	0.00000	0.0	0.0	0.0	0.0 d
9.3600	78.57000	52.75000	0.00000	0.0	0.0	0.0	0.0 d
10.400	77.53000	52.75000	0.00000	0.0	0.0	0.0	0.0 d
11.440	76.49000	52.75000	0.00000	0.0	0.0	0.0	0.0 d
12.480	75.45000	52.75000	0.00000	0.0	0.0	0.0	0.0 d
13.520	74.41000	52.75000	0.00000	0.0	0.0	0.0	0.0 d
14.560	73.37000	52.75000	0.00000	0.0	0.0	0.0	0.0 d
15.600	72.33000	52.75000	0.00000	0.0	0.0	0.0	0.0 d
16.640	71.29000	52.75000	0.00000	0.0	0.0	0.0	0.0 d
17.680	70.25000	52.75000	0.00000	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: 31-34 | Sub-structure:

Dist.	Coordinates			Displacements		Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
	x	y	z	x	y		
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	70.25000	52.75000	0.00000	0.0	0.0	0.0	0.0 d
1.1236	70.22667	51.62667	0.00000	0.0	0.0	0.0	0.0 d
2.2472	70.20333	50.50333	0.00000	0.0	0.0	0.0	0.0 d
3.3707	70.18000	49.38000	0.00000	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: 34-35 | Sub-structure:

Dist.	Coordinates			Displacements		Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
	x	y	z	x	y		
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	70.18000	49.38000	0.00000	0.0	0.0	0.0	0.0 d
1.3300	71.51000	49.37000	0.00000	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: 35-41 | Sub-structure:

Dist.	Coordinates			Displacements		Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
	x	y	z	x	y		
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	71.51000	49.37000	0.00000	0.0	0.0	0.0	0.0 d
1.2000	71.50000	48.17000	0.00000	0.0	0.0	0.0	0.0 d
2.4001	71.49000	46.97000	0.00000	0.0	0.0	0.0	0.0 d
3.6001	71.48000	45.77000	0.00000	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: 41-40 | Sub-structure:

Dist.	Coordinates			Displacements	
	x	y	z	x	y
	[m]	[m]	[m]	[mm]	[mm]

[m]	[m]	[m]	[m]	[mm]	[mm]	displacement	
						displacement along the Line	displacement perpendicular to Line
						[mm]	[mm]
0.0	71.48000	45.77000	0.00000	0.0	0.0	0.0	0.0 d
1.0175	70.46250	45.77000	0.00000	0.0	0.0	0.0	0.0 d
2.0350	69.44500	45.77000	0.00000	0.0	0.0	0.0	0.0 d
3.0525	68.42750	45.77000	0.00000	0.0	0.0	0.0	0.0 d
4.0700	67.41000	45.77000	0.00000	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: 40-39 | Sub-structure:

Dist.	Coordinates			Displacements			
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	67.41000	45.77000	0.00000	0.0	0.0	0.0	0.0 d
1.3000	67.40333	44.47000	0.00000	0.0	0.0	0.0	0.0 d
2.6000	67.39667	43.17000	0.00000	0.0	0.0	0.0	0.0 d
3.9001	67.39000	41.87000	0.00000	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: 39-38 | Sub-structure:

Dist.	Coordinates			Displacements			
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	67.39000	41.87000	0.00000	0.0	0.0	0.0	0.0 d
1.0305	68.42050	41.86150	0.00000	0.0	0.0	0.0	0.0 d
2.0611	69.45100	41.85300	0.00000	0.0	0.0	0.0	0.0 d
3.0916	70.48150	41.84450	0.00000	0.0	0.0	0.0	0.0 d
4.1221	71.51200	41.83600	0.00000	0.0	0.0	0.0	0.0 d
5.1527	72.54250	41.82750	0.00000	0.0	0.0	0.0	0.0 d
6.1832	73.57300	41.81900	0.00000	0.0	0.0	0.0	0.0 d
7.2137	74.60350	41.81050	0.00000	0.0	0.0	0.0	0.0 d
8.2443	75.63400	41.80200	0.00000	0.0	0.0	0.0	0.0 d
9.2748	76.66450	41.79350	0.00000	0.0	0.0	0.0	0.0 d
10.305	77.69500	41.78500	0.00000	0.0	0.0	0.0	0.0 d
11.336	78.72550	41.77650	0.00000	0.0	0.0	0.0	0.0 d
12.366	79.75600	41.76800	0.00000	0.0	0.0	0.0	0.0 d
13.397	80.78650	41.75950	0.00000	0.0	0.0	0.0	0.0 d
14.427	81.81700	41.75100	0.00000	0.0	0.0	0.0	0.0 d
15.458	82.84750	41.74250	0.00000	0.0	0.0	0.0	0.0 d
16.489	83.87800	41.73400	0.00000	0.0	0.0	0.0	0.0 d
17.519	84.90850	41.72550	0.00000	0.0	0.0	0.0	0.0 d
18.550	85.93900	41.71700	0.00000	0.0	0.0	0.0	0.0 d
19.580	86.96950	41.70850	0.00000	0.0	0.0	0.0	0.0 d
20.611	88.00000	41.70000	0.00000	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: 38-25 | Sub-structure:

Dist.	Coordinates			Displacements			
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	88.00000	41.70000	0.00000	0.0	0.0	0.0	0.0 d
1.0176	88.00381	42.71762	0.00000	0.0	0.0	0.0	0.0 d
2.0353	88.00762	43.73524	0.00000	0.0	0.0	0.0	0.0 d
3.0529	88.01143	44.75286	0.00000	0.0	0.0	0.0	0.0 d
4.0705	88.01524	45.77048	0.00000	0.0	0.0	0.0	0.0 d
5.0881	88.01905	46.78810	0.00000	0.0	0.0	0.0	0.0 d
6.1058	88.02286	47.80571	0.00000	0.0	0.0	0.0	0.0 d
7.1234	88.02667	48.82333	0.00000	0.0	0.0	0.0	0.0 d
8.1410	88.03048	49.84095	0.00000	0.0	0.0	0.0	0.0 d
9.1586	88.03429	50.85857	0.00000	0.0	0.0	0.0	0.0 d

10.176	88.03810	51.87619	0.00000	0.0	0.0	0.0	0.0	d
11.194	88.04190	52.89381	0.00000	0.0	0.0	0.0	0.0	d
12.212	88.04571	53.91143	0.00000	0.0	0.0	0.0	0.0	d
13.229	88.04952	54.92905	0.00000	0.0	0.0	0.0	0.0	d
14.247	88.05333	55.94667	0.00000	0.0	0.0	0.0	0.0	d
15.264	88.05714	56.96429	0.00000	0.0	0.0	0.0	0.0	d
16.282	88.06095	57.98190	0.00000	0.0	0.0	0.0	0.0	d
17.300	88.06476	58.99952	0.00000	0.0	0.0	0.0	0.0	d
18.317	88.06857	60.01714	0.00000	0.0	0.0	0.0	0.0	d
19.335	88.07238	61.03476	0.00000	0.0	0.0	0.0	0.0	d
20.353	88.07619	62.05238	0.00000	0.0	0.0	0.0	0.0	d
21.370	88.08000	63.07000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 20-22 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	55.96000	70.70000	0.00000	0.0	0.0	0.0	0.0	d
1.0170	56.97700	70.69900	0.00000	0.0	0.0	0.0	0.0	d
2.0340	57.99400	70.69800	0.00000	0.0	0.0	0.0	0.0	d
3.0510	59.01100	70.69700	0.00000	0.0	0.0	0.0	0.0	d
4.0680	60.02800	70.69600	0.00000	0.0	0.0	0.0	0.0	d
5.0850	61.04500	70.69500	0.00000	0.0	0.0	0.0	0.0	d
6.1020	62.06200	70.69400	0.00000	0.0	0.0	0.0	0.0	d
7.1190	63.07900	70.69300	0.00000	0.0	0.0	0.0	0.0	d
8.1360	64.09600	70.69200	0.00000	0.0	0.0	0.0	0.0	d
9.1530	65.11300	70.69100	0.00000	0.0	0.0	0.0	0.0	d
10.170	66.13000	70.69000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 22-b | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	66.13000	70.69000	0.00000	0.0	0.0	0.0	0.0	d
0.69360	66.14000	69.99647	0.00000	0.0	0.0	0.0	0.0	d
1.3872	66.15000	69.30294	0.00000	0.0	0.0	0.0	0.0	d
2.0808	66.16000	68.60941	0.00000	0.0	0.0	0.0	0.0	d
2.7744	66.17000	67.91588	0.00000	0.0	0.0	0.0	0.0	d
3.4680	66.18000	67.22235	0.00000	0.0	0.0	0.0	0.0	d
4.1616	66.19000	66.52882	0.00000	0.0	0.0	0.0	0.0	d
4.8552	66.20000	65.83529	0.00000	0.0	0.0	0.0	0.0	d
5.5488	66.21000	65.14176	0.00000	0.0	0.0	0.0	0.0	d
6.2424	66.22000	64.44824	0.00000	0.0	0.0	0.0	0.0	d
6.9360	66.23000	63.75471	0.00000	0.0	0.0	0.0	0.0	d
7.6296	66.24000	63.06118	0.00000	0.0	0.0	0.0	0.0	d
8.3232	66.25000	62.36765	0.00000	0.0	0.0	0.0	0.0	d
9.0168	66.26000	61.67412	0.00000	0.0	0.0	0.0	0.0	d
9.7104	66.27000	60.98059	0.00000	0.0	0.0	0.0	0.0	d
10.404	66.28000	60.28706	0.00000	0.0	0.0	0.0	0.0	d
11.098	66.29000	59.59353	0.00000	0.0	0.0	0.0	0.0	d
11.791	66.30000	58.90000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: e-45 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	64.74000	51.60000	0.00000	0.0	0.0	0.0	0.0	d
0.98415	64.72267	50.61600	0.00000	0.0	0.0	0.0	0.0	d
1.9683	64.70533	49.63200	0.00000	0.0	0.0	0.0	0.0	d

2.9525	64.68800	48.64800	0.00000	0.0	0.0	0.0	0.0	0.0	d
3.9366	64.67067	47.66400	0.00000	0.0	0.0	0.0	0.0	0.0	d
4.9208	64.65333	46.68000	0.00000	0.0	0.0	0.0	0.0	0.0	d
5.9049	64.63600	45.69600	0.00000	0.0	0.0	0.0	0.0	0.0	d
6.8891	64.61867	44.71200	0.00000	0.0	0.0	0.0	0.0	0.0	d
7.8732	64.60133	43.72800	0.00000	0.0	0.0	0.0	0.0	0.0	d
8.8574	64.58400	42.74400	0.00000	0.0	0.0	0.0	0.0	0.0	d
9.8415	64.56667	41.76000	0.00000	0.0	0.0	0.0	0.0	0.0	d
10.826	64.54933	40.77600	0.00000	0.0	0.0	0.0	0.0	0.0	d
11.810	64.53200	39.79200	0.00000	0.0	0.0	0.0	0.0	0.0	d
12.794	64.51467	38.80800	0.00000	0.0	0.0	0.0	0.0	0.0	d
13.778	64.49733	37.82400	0.00000	0.0	0.0	0.0	0.0	0.0	d
14.762	64.48000	36.84000	0.00000	0.0	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 18-31 | Sub-structure:

Dist.	Coordinates			Displacements					
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line		
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]		
0.0	59.17000	64.78000	0.00000	0.0	0.0	0.0	0.0	0.0	d
1.1384	60.30833	64.77333	0.00000	0.0	0.0	0.0	0.0	0.0	d
2.2767	61.44667	64.76667	0.00000	0.0	0.0	0.0	0.0	0.0	d
3.4151	62.58500	64.76000	0.00000	0.0	0.0	0.0	0.0	0.0	d
4.5534	63.72333	64.75333	0.00000	0.0	0.0	0.0	0.0	0.0	d
5.6918	64.86167	64.74667	0.00000	0.0	0.0	0.0	0.0	0.0	d
6.8301	66.00000	64.74000	0.00000	0.0	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 23-24 | Sub-structure:

Dist.	Coordinates			Displacements					
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line		
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]		
0.0	66.00000	63.14000	0.00000	0.0	0.0	0.0	0.0	0.0	d
1.0683	67.06833	63.13667	0.00000	0.0	0.0	0.0	0.0	0.0	d
2.1367	68.13667	63.13333	0.00000	0.0	0.0	0.0	0.0	0.0	d
3.2050	69.20500	63.13000	0.00000	0.0	0.0	0.0	0.0	0.0	d
4.2734	70.27333	63.12667	0.00000	0.0	0.0	0.0	0.0	0.0	d
5.3417	71.34167	63.12333	0.00000	0.0	0.0	0.0	0.0	0.0	d
6.4100	72.41000	63.12000	0.00000	0.0	0.0	0.0	0.0	0.0	d
7.4784	73.47833	63.11667	0.00000	0.0	0.0	0.0	0.0	0.0	d
8.5467	74.54667	63.11333	0.00000	0.0	0.0	0.0	0.0	0.0	d
9.6150	75.61500	63.11000	0.00000	0.0	0.0	0.0	0.0	0.0	d
10.683	76.68333	63.10667	0.00000	0.0	0.0	0.0	0.0	0.0	d
11.752	77.75167	63.10333	0.00000	0.0	0.0	0.0	0.0	0.0	d
12.820	78.82000	63.10000	0.00000	0.0	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: b-27 | Sub-structure:

Dist.	Coordinates			Displacements					
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line		
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]		
0.0	66.10000	58.46000	0.00000	0.0	0.0	0.0	0.0	0.0	d
1.0645	67.16300	58.40400	0.00000	0.0	0.0	0.0	0.0	0.0	d
2.1289	68.22600	58.34800	0.00000	0.0	0.0	0.0	0.0	0.0	d
3.1934	69.28900	58.29200	0.00000	0.0	0.0	0.0	0.0	0.0	d
4.2579	70.35200	58.23600	0.00000	0.0	0.0	0.0	0.0	0.0	d
5.3224	71.41500	58.18000	0.00000	0.0	0.0	0.0	0.0	0.0	d
6.3868	72.47800	58.12400	0.00000	0.0	0.0	0.0	0.0	0.0	d
7.4513	73.54100	58.06800	0.00000	0.0	0.0	0.0	0.0	0.0	d
8.5158	74.60400	58.01200	0.00000	0.0	0.0	0.0	0.0	0.0	d
9.5803	75.66700	57.95600	0.00000	0.0	0.0	0.0	0.0	0.0	d
10.645	76.73000	57.90000	0.00000	0.0	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 42-37 | Sub-structure:

Dist.	Coordinates			Displacements		Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	x	y	z	x	y			
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	64.54000	46.73000	0.00000	0.0	0.0	0.0	0.0	d
1.0183	65.55826	46.71783	0.00000	0.0	0.0	0.0	0.0	d
2.0367	66.57652	46.70565	0.00000	0.0	0.0	0.0	0.0	d
3.0550	67.59478	46.69348	0.00000	0.0	0.0	0.0	0.0	d
4.0733	68.61304	46.68130	0.00000	0.0	0.0	0.0	0.0	d
5.0917	69.63130	46.66913	0.00000	0.0	0.0	0.0	0.0	d
6.1100	70.64957	46.65696	0.00000	0.0	0.0	0.0	0.0	d
7.1283	71.66783	46.64478	0.00000	0.0	0.0	0.0	0.0	d
8.1467	72.68609	46.63261	0.00000	0.0	0.0	0.0	0.0	d
9.1650	73.70435	46.62043	0.00000	0.0	0.0	0.0	0.0	d
10.183	74.72261	46.60826	0.00000	0.0	0.0	0.0	0.0	d
11.202	75.74087	46.59609	0.00000	0.0	0.0	0.0	0.0	d
12.220	76.75913	46.58391	0.00000	0.0	0.0	0.0	0.0	d
13.238	77.77739	46.57174	0.00000	0.0	0.0	0.0	0.0	d
14.257	78.79565	46.55957	0.00000	0.0	0.0	0.0	0.0	d
15.275	79.81391	46.54739	0.00000	0.0	0.0	0.0	0.0	d
16.293	80.83217	46.53522	0.00000	0.0	0.0	0.0	0.0	d
17.312	81.85043	46.52304	0.00000	0.0	0.0	0.0	0.0	d
18.330	82.86870	46.51087	0.00000	0.0	0.0	0.0	0.0	d
19.348	83.88696	46.49870	0.00000	0.0	0.0	0.0	0.0	d
20.367	84.90522	46.48652	0.00000	0.0	0.0	0.0	0.0	d
21.385	85.92348	46.47435	0.00000	0.0	0.0	0.0	0.0	d
22.403	86.94174	46.46217	0.00000	0.0	0.0	0.0	0.0	d
23.422	87.96000	46.45000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 47-43 | Sub-structure:

Dist.	Coordinates			Displacements		Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	x	y	z	x	y			
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	54.96000	44.83000	0.00000	0.0	0.0	0.0	0.0	d
1.0600	56.02000	44.83000	0.00000	0.0	0.0	0.0	0.0	d
2.1200	57.08000	44.83000	0.00000	0.0	0.0	0.0	0.0	d
3.1800	58.14000	44.83000	0.00000	0.0	0.0	0.0	0.0	d
4.2400	59.20000	44.83000	0.00000	0.0	0.0	0.0	0.0	d
5.3000	60.26000	44.83000	0.00000	0.0	0.0	0.0	0.0	d
6.3600	61.32000	44.83000	0.00000	0.0	0.0	0.0	0.0	d
7.4200	62.38000	44.83000	0.00000	0.0	0.0	0.0	0.0	d
8.4800	63.44000	44.83000	0.00000	0.0	0.0	0.0	0.0	d
9.5400	64.50000	44.83000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 44-39 | Sub-structure:

Dist.	Coordinates			Displacements		Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	x	y	z	x	y			
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	64.44000	41.91000	0.00000	0.0	0.0	0.0	0.0	d
1.4751	65.91500	41.89000	0.00000	0.0	0.0	0.0	0.0	d
2.9503	67.39000	41.87000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 46-45 | Sub-structure:

Dist.	Coordinates			Displacements		Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	x	y	z	x	y			

	displacement		displacement				displacement		displacement	
	along the		perpendicular				along the		perpendicular	
	Line		to Line				Line		to Line	
	[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]
0.0	54.96000	36.71000	0.00000	0.0	0.0	0.0	0.0	0.0	0.0	d
1.0579	56.01778	36.72444	0.00000	0.0	0.0	0.0	0.0	0.0	0.0	d
2.1158	57.07556	36.73889	0.00000	0.0	0.0	0.0	0.0	0.0	0.0	d
3.1736	58.13333	36.75333	0.00000	0.0	0.0	0.0	0.0	0.0	0.0	d
4.2315	59.19111	36.76778	0.00000	0.0	0.0	0.0	0.0	0.0	0.0	d
5.2894	60.24889	36.78222	0.00000	0.0	0.0	0.0	0.0	0.0	0.0	d
6.3473	61.30667	36.79667	0.00000	0.0	0.0	0.0	0.0	0.0	0.0	d
7.4051	62.36444	36.81111	0.00000	0.0	0.0	0.0	0.0	0.0	0.0	d
8.4630	63.42222	36.82556	0.00000	0.0	0.0	0.0	0.0	0.0	0.0	d
9.5209	64.48000	36.84000	0.00000	0.0	0.0	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: a-12 | Sub-structure:

Dist.	Coordinates					Displacements			
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line		
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]		
0.0	44.06000	58.90000	0.00000	0.0	0.0	0.0	0.0	0.0	d
1.1151	42.95250	58.77000	0.00000	0.0	0.0	0.0	0.0	0.0	d
2.2302	41.84500	58.64000	0.00000	0.0	0.0	0.0	0.0	0.0	d
3.3453	40.73750	58.51000	0.00000	0.0	0.0	0.0	0.0	0.0	d
4.4604	39.63000	58.38000	0.00000	0.0	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 12-11 | Sub-structure:

Dist.	Coordinates					Displacements			
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line		
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]		
0.0	39.63000	58.38000	0.00000	0.0	0.0	0.0	0.0	0.0	d
1.1167	39.63000	57.26333	0.00000	0.0	0.0	0.0	0.0	0.0	d
2.2333	39.63000	56.14667	0.00000	0.0	0.0	0.0	0.0	0.0	d
3.3500	39.63000	55.03000	0.00000	0.0	0.0	0.0	0.0	0.0	d
4.4667	39.63000	53.91333	0.00000	0.0	0.0	0.0	0.0	0.0	d
5.5833	39.63000	52.79667	0.00000	0.0	0.0	0.0	0.0	0.0	d
6.7000	39.63000	51.68000	0.00000	0.0	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 11-f | Sub-structure:

Dist.	Coordinates					Displacements			
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line		
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]		
0.0	39.63000	51.68000	0.00000	0.0	0.0	0.0	0.0	0.0	d
0.55884	40.18875	51.67000	0.00000	0.0	0.0	0.0	0.0	0.0	d
1.1177	40.74750	51.66000	0.00000	0.0	0.0	0.0	0.0	0.0	d
1.6765	41.30625	51.65000	0.00000	0.0	0.0	0.0	0.0	0.0	d
2.2354	41.86500	51.64000	0.00000	0.0	0.0	0.0	0.0	0.0	d
2.7942	42.42375	51.63000	0.00000	0.0	0.0	0.0	0.0	0.0	d
3.3530	42.98250	51.62000	0.00000	0.0	0.0	0.0	0.0	0.0	d
3.9119	43.54125	51.61000	0.00000	0.0	0.0	0.0	0.0	0.0	d
4.4707	44.10000	51.60000	0.00000	0.0	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: ag | Sub-structure:

Dist.	Coordinates					Displacements			
	x	y	z	x	y	Horizontal displacement along the	Horizontal displacement perpendicular		

[m]	[m]	[m]	[m]	[mm]	[mm]	Line [mm]	to Line [mm]	
0.0	44.06000	58.90000	0.00000	0.0	0.0	0.0	0.0	0.0 d
1.0047	45.06364	58.85455	0.00000	0.0	0.0	0.0	0.0	0.0 d
2.0093	46.06727	58.80909	0.00000	0.0	0.0	0.0	0.0	0.0 d
3.0140	47.07091	58.76364	0.00000	0.0	0.0	0.0	0.0	0.0 d
4.0187	48.07455	58.71818	0.00000	0.0	0.0	0.0	0.0	0.0 d
5.0233	49.07818	58.67273	0.00000	0.0	0.0	0.0	0.0	0.0 d
6.0280	50.08182	58.62727	0.00000	0.0	0.0	0.0	0.0	0.0 d
7.0327	51.08545	58.58182	0.00000	0.0	0.0	0.0	0.0	0.0 d
8.0373	52.08909	58.53636	0.00000	0.0	0.0	0.0	0.0	0.0 d
9.0420	53.09273	58.49091	0.00000	0.0	0.0	0.0	0.0	0.0 d
10.047	54.09636	58.44545	0.00000	0.0	0.0	0.0	0.0	0.0 d
11.051	55.10000	58.40000	0.00000	0.0	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: gb | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	55.10000	58.40000	0.00000	0.0	0.0	0.0	0.0	0.0 d
0.57001	55.67000	58.40300	0.00000	0.0	0.0	0.0	0.0	0.0 d
1.1400	56.24000	58.40600	0.00000	0.0	0.0	0.0	0.0	0.0 d
1.7100	56.81000	58.40900	0.00000	0.0	0.0	0.0	0.0	0.0 d
2.2800	57.38000	58.41200	0.00000	0.0	0.0	0.0	0.0	0.0 d
2.8500	57.95000	58.41500	0.00000	0.0	0.0	0.0	0.0	0.0 d
3.4200	58.52000	58.41800	0.00000	0.0	0.0	0.0	0.0	0.0 d
3.9901	59.09000	58.42100	0.00000	0.0	0.0	0.0	0.0	0.0 d
4.5601	59.66000	58.42400	0.00000	0.0	0.0	0.0	0.0	0.0 d
5.1301	60.23000	58.42700	0.00000	0.0	0.0	0.0	0.0	0.0 d
5.7001	60.80000	58.43000	0.00000	0.0	0.0	0.0	0.0	0.0 d
6.2701	61.37000	58.43300	0.00000	0.0	0.0	0.0	0.0	0.0 d
6.8401	61.94000	58.43600	0.00000	0.0	0.0	0.0	0.0	0.0 d
7.4101	62.51000	58.43900	0.00000	0.0	0.0	0.0	0.0	0.0 d
7.9801	63.08000	58.44200	0.00000	0.0	0.0	0.0	0.0	0.0 d
8.5501	63.65000	58.44500	0.00000	0.0	0.0	0.0	0.0	0.0 d
9.1201	64.22000	58.44800	0.00000	0.0	0.0	0.0	0.0	0.0 d
9.6901	64.79000	58.45100	0.00000	0.0	0.0	0.0	0.0	0.0 d
10.260	65.36000	58.45400	0.00000	0.0	0.0	0.0	0.0	0.0 d
10.830	65.93000	58.45700	0.00000	0.0	0.0	0.0	0.0	0.0 d
11.400	66.50000	58.46000	0.00000	0.0	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: bc | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	66.50000	58.46000	0.00000	0.0	0.0	0.0	0.0	0.0 d
0.27800	66.50000	58.18200	0.00000	0.0	0.0	0.0	0.0	0.0 d
0.55600	66.50000	57.90400	0.00000	0.0	0.0	0.0	0.0	0.0 d
0.83400	66.50000	57.62600	0.00000	0.0	0.0	0.0	0.0	0.0 d
1.1120	66.50000	57.34800	0.00000	0.0	0.0	0.0	0.0	0.0 d
1.3900	66.50000	57.07000	0.00000	0.0	0.0	0.0	0.0	0.0 d
1.6680	66.50000	56.79200	0.00000	0.0	0.0	0.0	0.0	0.0 d
1.9460	66.50000	56.51400	0.00000	0.0	0.0	0.0	0.0	0.0 d
2.2240	66.50000	56.23600	0.00000	0.0	0.0	0.0	0.0	0.0 d
2.5020	66.50000	55.95800	0.00000	0.0	0.0	0.0	0.0	0.0 d
2.7800	66.50000	55.68000	0.00000	0.0	0.0	0.0	0.0	0.0 d
3.0580	66.50000	55.40200	0.00000	0.0	0.0	0.0	0.0	0.0 d
3.3360	66.50000	55.12400	0.00000	0.0	0.0	0.0	0.0	0.0 d
3.6140	66.50000	54.84600	0.00000	0.0	0.0	0.0	0.0	0.0 d
3.8920	66.50000	54.56800	0.00000	0.0	0.0	0.0	0.0	0.0 d
4.1700	66.50000	54.29000	0.00000	0.0	0.0	0.0	0.0	0.0 d
4.4480	66.50000	54.01200	0.00000	0.0	0.0	0.0	0.0	0.0 d
4.7260	66.50000	53.73400	0.00000	0.0	0.0	0.0	0.0	0.0 d
5.0040	66.50000	53.45600	0.00000	0.0	0.0	0.0	0.0	0.0 d
5.2820	66.50000	53.17800	0.00000	0.0	0.0	0.0	0.0	0.0 d

5.5600 66.50000 52.90000 0.00000 0.0 0.0 0.0 0.0 d
d - Displacements include imported displacements.

Structure: cd | Sub-structure:

Dist.	Coordinates			Displacements			
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
	0.0	66.50000	52.90000	0.00000	0.0	0.0	0.0 d
1.7493	65.00000	52.00000	0.00000	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: eh | Sub-structure:

Dist.	Coordinates			Displacements			
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
	0.0	64.74000	51.60000	0.00000	0.0	0.0	0.0 d
1.0844	63.65556	51.60000	0.00000	0.0	0.0	0.0	0.0 d
2.1689	62.57111	51.60000	0.00000	0.0	0.0	0.0	0.0 d
3.2533	61.48667	51.60000	0.00000	0.0	0.0	0.0	0.0 d
4.3378	60.40222	51.60000	0.00000	0.0	0.0	0.0	0.0 d
5.4222	59.31778	51.60000	0.00000	0.0	0.0	0.0	0.0 d
6.5067	58.23333	51.60000	0.00000	0.0	0.0	0.0	0.0 d
7.5911	57.14889	51.60000	0.00000	0.0	0.0	0.0	0.0 d
8.6756	56.06444	51.60000	0.00000	0.0	0.0	0.0	0.0 d
9.7600	54.98000	51.60000	0.00000	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: hf | Sub-structure:

Dist.	Coordinates			Displacements			
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
	0.0	54.98000	51.60000	0.00000	0.0	0.0	0.0 d
1.0880	53.89200	51.60000	0.00000	0.0	0.0	0.0	0.0 d
2.1760	52.80400	51.60000	0.00000	0.0	0.0	0.0	0.0 d
3.2640	51.71600	51.60000	0.00000	0.0	0.0	0.0	0.0 d
4.3520	50.62800	51.60000	0.00000	0.0	0.0	0.0	0.0 d
5.4400	49.54000	51.60000	0.00000	0.0	0.0	0.0	0.0 d
6.5280	48.45200	51.60000	0.00000	0.0	0.0	0.0	0.0 d
7.6160	47.36400	51.60000	0.00000	0.0	0.0	0.0	0.0 d
8.7040	46.27600	51.60000	0.00000	0.0	0.0	0.0	0.0 d
9.7920	45.18800	51.60000	0.00000	0.0	0.0	0.0	0.0 d
10.880	44.10000	51.60000	0.00000	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: de | Sub-structure:

Dist.	Coordinates			Displacements			
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
	0.0	65.00000	52.00000	0.00000	0.0	0.0	0.0 d
0.11927	64.93500	51.90000	0.00000	0.0	0.0	0.0	0.0
0.23854	64.87000	51.80000	0.00000	0.0	0.0	0.0	0.0
0.35781	64.80500	51.70000	0.00000	0.0	0.0	0.0	0.0
0.47707	64.74000	51.60000	0.00000	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Specific Building Damage Results - Vertical Displacements

Structure: 21-20 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	55.96000	70.70000	0.00000	-0.094618	d
1.0682	54.89182	70.70182	0.00000	-0.096108	d
2.1364	53.82364	70.70364	0.00000	-0.096704	d
3.2046	52.75545	70.70545	0.00000	-0.096521	d
4.2727	51.68727	70.70727	0.00000	-0.095675	d
5.3409	50.61909	70.70909	0.00000	-0.094265	d
6.4091	49.55091	70.71091	0.00000	-0.092362	d
7.4773	48.48273	70.71273	0.00000	-0.089998	d
8.5455	47.41455	70.71455	0.00000	-0.087165	d
9.6137	46.34636	70.71636	0.00000	-0.083824	d
10.682	45.27818	70.71818	0.00000	-0.079918	d
11.750	44.21000	70.72000	0.00000	-0.075387	d

d - Displacements include imported displacements.

Structure: 19-20 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	59.14000	66.79000	0.00000	-0.25420	d
1.0080	58.50400	67.57200	0.00000	-0.21256	d
2.0160	57.86800	68.35400	0.00000	-0.17640	d
3.0239	57.23200	69.13600	0.00000	-0.14508	d
4.0319	56.59600	69.91800	0.00000	-0.11801	d
5.0399	55.96000	70.70000	0.00000	-0.094618	d

d - Displacements include imported displacements.

Structure: 19-18 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	59.14000	66.79000	0.00000	-0.25420	d
1.0051	59.15500	65.78500	0.00000	-0.33011	d
2.0102	59.17000	64.78000	0.00000	-0.42894	d

d - Displacements include imported displacements.

Structure: 18-13 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	59.17000	64.78000	0.00000	-0.42894	d
1.0686	58.10143	64.78143	0.00000	-0.44640	d
2.1371	57.03286	64.78286	0.00000	-0.45665	d
3.2057	55.96429	64.78429	0.00000	-0.45995	d
4.2743	54.89571	64.78571	0.00000	-0.45739	d
5.3429	53.82714	64.78714	0.00000	-0.45068	d
6.4114	52.75857	64.78857	0.00000	-0.44175	d
7.4800	51.69000	64.79000	0.00000	-0.43228	d
8.5486	50.62143	64.79143	0.00000	-0.42352	d
9.6172	49.55286	64.79286	0.00000	-0.41612	d
10.686	48.48429	64.79429	0.00000	-0.41018	d
11.754	47.41571	64.79571	0.00000	-0.40526	d
12.823	46.34714	64.79714	0.00000	-0.40040	d
13.891	45.27857	64.79857	0.00000	-0.39421	d
14.960	44.21000	64.80000	0.00000	-0.38502	d

d - Displacements include imported displacements.

Structure: 21-a | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]
Vertical Offset 1				
0.0	44.21000	70.72000	0.00000	-0.075387 d
0.34768	44.20559	70.37235	0.00000	-0.084426 d
0.69535	44.20118	70.02471	0.00000	-0.094151 d
1.0430	44.19676	69.67706	0.00000	-0.10462 d
1.3907	44.19235	69.32941	0.00000	-0.11590 d
1.7384	44.18794	68.98176	0.00000	-0.12807 d
2.0861	44.18353	68.63412	0.00000	-0.14119 d
2.4337	44.17912	68.28647	0.00000	-0.15536 d
2.7814	44.17471	67.93882	0.00000	-0.17069 d
3.1291	44.17029	67.59118	0.00000	-0.18726 d
3.4768	44.16588	67.24353	0.00000	-0.20522 d
3.8244	44.16147	66.89588	0.00000	-0.22469 d
4.1721	44.15706	66.54824	0.00000	-0.24582 d
4.5198	44.15265	66.20059	0.00000	-0.26879 d
4.8675	44.14824	65.85294	0.00000	-0.29379 d
5.2151	44.14382	65.50529	0.00000	-0.32103 d
5.5628	44.13941	65.15765	0.00000	-0.35076 d
5.9105	44.13500	64.81000	0.00000	-0.38325 d
6.2582	44.13059	64.46235	0.00000	-0.41880 d
6.6058	44.12618	64.11471	0.00000	-0.45778 d
6.9535	44.12176	63.76706	0.00000	-0.50058 d
7.3012	44.11735	63.41941	0.00000	-0.54766 d
7.6489	44.11294	63.07176	0.00000	-0.59956 d
7.9965	44.10853	62.72412	0.00000	-0.65690 d
8.3442	44.10412	62.37647	0.00000	-0.72042 d
8.6919	44.09971	62.02882	0.00000	-0.79104 d
9.0396	44.09529	61.68118	0.00000	-0.86990 d
9.3872	44.09088	61.33353	0.00000	-0.95856 d
9.7349	44.08647	60.98588	0.00000	-1.0592 d
10.083	44.08206	60.63824	0.00000	-1.1751 d
10.430	44.07765	60.29059	0.00000	-1.3115 d
10.778	44.07324	59.94294	0.00000	-1.4775 d
11.126	44.06882	59.59529	0.00000	-1.6895 d
11.473	44.06441	59.24765	0.00000	-1.9790 d
11.821	44.06000	58.90000	0.00000	-2.4133 d

d - Displacements include imported displacements.

Structure: f-50 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]
Vertical Offset 1				
0.0	44.10000	51.60000	0.00000	-3.6067 d
0.99267	44.10400	50.60733	0.00000	-1.8127 d
1.9853	44.10800	49.61467	0.00000	-1.2570 d
2.9780	44.11200	48.62200	0.00000	-0.93731 d
3.9707	44.11600	47.62933	0.00000	-0.71487 d
4.9634	44.12000	46.63667	0.00000	-0.55060 d
5.9560	44.12400	45.64400	0.00000	-0.42630 d
6.9487	44.12800	44.65133	0.00000	-0.33080 d
7.9414	44.13200	43.65867	0.00000	-0.25650 d
8.9341	44.13600	42.66600	0.00000	-0.19807 d
9.9267	44.14000	41.67333	0.00000	-0.15168 d
10.919	44.14400	40.68067	0.00000	-0.11453 d
11.912	44.14800	39.68800	0.00000	-0.084590 d
12.905	44.15200	38.69533	0.00000	-0.060321 d
13.897	44.15600	37.70267	0.00000	-0.040570 d
14.890	44.16000	36.71000	0.00000	-0.024449 d

d - Displacements include imported displacements.

Structure: 14-15 | Sub-structure:

Dist.	Coordinates	Displacements
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	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	55.00000	64.76000	0.00000	-0.46079	d
1.0700	55.00000	63.69000	0.00000	-0.60342	d
2.1400	55.00000	62.62000	0.00000	-0.79607	d

d - Displacements include imported displacements.

Structure: 15-16 | Sub-structure:

Dist.	Coordinates			Displacements	
	x	y	z	z	
[m]	[m]	[m]	[m]	[mm]	

Vertical Offset 1

0.0	55.00000	62.62000	0.00000	-0.79607	d
1.6907	56.23000	61.46000	0.00000	-1.1407	d

d - Displacements include imported displacements.

Structure: 16-17 | Sub-structure:

Dist.	Coordinates			Displacements	
	x	y	z	z	
[m]	[m]	[m]	[m]	[mm]	

Vertical Offset 1

0.0	56.23000	61.46000	0.00000	-1.1407	d
1.9000	56.22000	59.56000	0.00000	-2.2688	d

d - Displacements include imported displacements.

Structure: 17-g | Sub-structure:

Dist.	Coordinates			Displacements	
	x	y	z	z	
[m]	[m]	[m]	[m]	[mm]	

Vertical Offset 1

0.0	56.22000	59.56000	0.00000	-2.2688	d
1.6125	55.10000	58.40000	0.00000	-4.1299	d

d - Displacements include imported displacements.

Structure: h-49 | Sub-structure:

Dist.	Coordinates			Displacements	
	x	y	z	z	
[m]	[m]	[m]	[m]	[mm]	

Vertical Offset 1

0.0	54.98000	51.60000	0.00000	-3.8808	d
1.0678	55.74000	50.85000	0.00000	-2.6461	d
2.1355	56.50000	50.10000	0.00000	-1.9479	d

d - Displacements include imported displacements.

Structure: 49-36 | Sub-structure:

Dist.	Coordinates			Displacements	
	x	y	z	z	
[m]	[m]	[m]	[m]	[mm]	

Vertical Offset 1

0.0	56.50000	50.10000	0.00000	-1.9479	d
1.1950	56.50000	48.90500	0.00000	-1.2605	d
2.3900	56.50000	47.71000	0.00000	-0.87637	d

d - Displacements include imported displacements.

Structure: 36-48 | Sub-structure:

Dist.	Coordinates			Displacements	
	x	y	z	z	
[m]	[m]	[m]	[m]	[mm]	

Vertical Offset 1

0.0 56.50000 47.71000 0.00000 -0.87637 d
1.1506 55.73000 46.85500 0.00000 -0.68866 d
2.3012 54.96000 46.00000 0.00000 -0.54707 d
d - Displacements include imported displacements.

Structure: 48-47 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0 54.96000 46.00000 0.00000 -0.54707 d
1.1700 54.96000 44.83000 0.00000 -0.40734 d
d - Displacements include imported displacements.

Structure: 47-51 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0 54.96000 44.83000 0.00000 -0.40734 d
1.0750 53.88500 44.83000 0.00000 -0.40392 d
2.1500 52.81000 44.83000 0.00000 -0.39794 d
3.2250 51.73500 44.83000 0.00000 -0.39089 d
4.3000 50.66000 44.83000 0.00000 -0.38391 d
5.3750 49.58500 44.83000 0.00000 -0.37766 d
6.4500 48.51000 44.83000 0.00000 -0.37230 d
7.5250 47.43500 44.83000 0.00000 -0.36751 d
8.6000 46.36000 44.83000 0.00000 -0.36251 d
9.6750 45.28500 44.83000 0.00000 -0.35616 d
10.750 44.21000 44.83000 0.00000 -0.34709 d
d - Displacements include imported displacements.

Structure: 50-46 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0 44.16000 36.71000 0.00000 -0.024449 d
1.0800 45.24000 36.71000 0.00000 -0.027160 d
2.1600 46.32000 36.71000 0.00000 -0.029516 d
3.2400 47.40000 36.71000 0.00000 -0.031517 d
4.3200 48.48000 36.71000 0.00000 -0.033168 d
5.4000 49.56000 36.71000 0.00000 -0.034466 d
6.4800 50.64000 36.71000 0.00000 -0.035404 d
7.5600 51.72000 36.71000 0.00000 -0.035961 d
8.6400 52.80000 36.71000 0.00000 -0.036110 d
9.7200 53.88000 36.71000 0.00000 -0.035818 d
10.800 54.96000 36.71000 0.00000 -0.035048 d
d - Displacements include imported displacements.

Structure: 46-47 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0 54.96000 36.71000 0.00000 -0.035048 d
1.0150 54.96000 37.72500 0.00000 -0.054156 d
2.0300 54.96000 38.74000 0.00000 -0.077696 d
3.0450 54.96000 39.75500 0.00000 -0.10678 d
4.0600 54.96000 40.77000 0.00000 -0.14285 d
5.0750 54.96000 41.78500 0.00000 -0.18783 d
6.0900 54.96000 42.80000 0.00000 -0.24431 d
7.1050 54.96000 43.81500 0.00000 -0.31583 d

8.1200 54.96000 44.83000 0.00000 -0.40734 d
d - Displacements include imported displacements.

Structure: 24-25 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	78.82000	63.10000	0.00000	0.0098279	d
1.0289	79.84889	63.09667	0.00000	0.015860	d
2.0578	80.87778	63.09333	0.00000	0.020698	d
3.0867	81.90667	63.09000	0.00000	0.024543	d
4.1156	82.93556	63.08667	0.00000	0.027564	d
5.1445	83.96444	63.08333	0.00000	0.029901	d
6.1734	84.99333	63.08000	0.00000	0.031668	d
7.2023	86.02222	63.07667	0.00000	0.032962	d
8.2312	87.05111	63.07333	0.00000	0.033864	d
9.2600	88.08000	63.07000	0.00000	0.034440	d

d - Displacements include imported displacements.

Structure: 25-26 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	88.08000	63.07000	0.00000	0.034440	d
1.0641	88.06400	62.00600	0.00000	0.034255	d
2.1282	88.04800	60.94200	0.00000	0.034075	d
3.1924	88.03200	59.87800	0.00000	0.033909	d
4.2565	88.01600	58.81400	0.00000	0.033763	d
5.3206	88.00000	57.75000	0.00000	0.033647	d

d - Displacements include imported displacements.

Structure: 26-27 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	88.00000	57.75000	0.00000	0.033647	d
1.0246	86.97545	57.76364	0.00000	0.032673	d
2.0493	85.95091	57.77727	0.00000	0.031266	d
3.0739	84.92636	57.79091	0.00000	0.029329	d
4.0985	83.90182	57.80455	0.00000	0.026741	d
5.1232	82.87727	57.81818	0.00000	0.023354	d
6.1478	81.85273	57.83182	0.00000	0.018980	d
7.1725	80.82818	57.84545	0.00000	0.013385	d
8.1971	79.80364	57.85909	0.00000	0.0062683	d
9.2217	78.77909	57.87273	0.00000	-0.0027543	d
10.246	77.75455	57.88636	0.00000	-0.014184	d
11.271	76.73000	57.90000	0.00000	-0.028681	d

d - Displacements include imported displacements.

Structure: 27-28 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	76.73000	57.90000	0.00000	-0.028681	d
1.0567	76.72333	58.95667	0.00000	-0.025544	d
2.1134	76.71667	60.01333	0.00000	-0.021613	d
3.1701	76.71000	61.07000	0.00000	-0.017094	d

d - Displacements include imported displacements.

Structure: 28-29 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	76.71000	61.07000	0.00000	-0.017094	d
1.4640	77.76500	62.08500	0.00000	-0.0016065	d
2.9280	78.82000	63.10000	0.00000	0.0098279	d

d - Displacements include imported displacements.

Structure: 27-32 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	76.73000	57.90000	0.00000	-0.028681	d
1.0300	76.73400	56.87000	0.00000	-0.030845	d
2.0600	76.73800	55.84000	0.00000	-0.031962	d
3.0900	76.74200	54.81000	0.00000	-0.031967	d
4.1200	76.74600	53.78000	0.00000	-0.030862	d
5.1500	76.75000	52.75000	0.00000	-0.028718	d

d - Displacements include imported displacements.

Structure: 33-31 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	87.93000	52.75000	0.00000	0.033609	d
1.0400	86.89000	52.75000	0.00000	0.032588	d
2.0800	85.85000	52.75000	0.00000	0.031110	d
3.1200	84.81000	52.75000	0.00000	0.029072	d
4.1600	83.77000	52.75000	0.00000	0.026344	d
5.2000	82.73000	52.75000	0.00000	0.022765	d
6.2400	81.69000	52.75000	0.00000	0.018131	d
7.2800	80.65000	52.75000	0.00000	0.012186	d
8.3200	79.61000	52.75000	0.00000	0.0045986	d
9.3600	78.57000	52.75000	0.00000	-0.0050573	d
10.400	77.53000	52.75000	0.00000	-0.017341	d
11.440	76.49000	52.75000	0.00000	-0.032997	d
12.480	75.45000	52.75000	0.00000	-0.053034	d
13.520	74.41000	52.75000	0.00000	-0.078848	d
14.560	73.37000	52.75000	0.00000	-0.11244	d
15.600	72.33000	52.75000	0.00000	-0.15681	d
16.640	71.29000	52.75000	0.00000	-0.21668	d
17.680	70.25000	52.75000	0.00000	-0.30010	d

d - Displacements include imported displacements.

Structure: 31-34 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	70.25000	52.75000	0.00000	-0.30010	d
1.1236	70.22667	51.62667	0.00000	-0.26842	d
2.2472	70.20333	50.50333	0.00000	-0.23243	d
3.3707	70.18000	49.38000	0.00000	-0.19626	d

d - Displacements include imported displacements.

Structure: 34-35 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0 70.18000 49.38000 0.00000 -0.19626 d
 1.3300 71.51000 49.37000 0.00000 -0.13663 d
 d - Displacements include imported displacements.

Structure: 35-41 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0 71.51000 49.37000 0.00000 -0.13663 d
 1.2000 71.50000 48.17000 0.00000 -0.11238 d
 2.4001 71.49000 46.97000 0.00000 -0.089707 d
 3.6001 71.48000 45.77000 0.00000 -0.069186 d
 d - Displacements include imported displacements.

Structure: 41-40 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0 71.48000 45.77000 0.00000 -0.069186 d
 1.0175 70.46250 45.77000 0.00000 -0.090851 d
 2.0350 69.44500 45.77000 0.00000 -0.11580 d
 3.0525 68.42750 45.77000 0.00000 -0.14414 d
 4.0700 67.41000 45.77000 0.00000 -0.17579 d
 d - Displacements include imported displacements.

Structure: 40-39 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0 67.41000 45.77000 0.00000 -0.17579 d
 1.3000 67.40333 44.47000 0.00000 -0.12952 d
 2.6000 67.39667 43.17000 0.00000 -0.092870 d
 3.9001 67.39000 41.87000 0.00000 -0.063741 d
 d - Displacements include imported displacements.

Structure: 39-38 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0 67.39000 41.87000 0.00000 -0.063741 d
 1.0305 68.42050 41.86150 0.00000 -0.050658 d
 2.0611 69.45100 41.85300 0.00000 -0.038538 d
 3.0916 70.48150 41.84450 0.00000 -0.027476 d
 4.1221 71.51200 41.83600 0.00000 -0.017516 d
 5.1527 72.54250 41.82750 0.00000 -0.0086585 d
 6.1832 73.57300 41.81900 0.00000 -873.27E-6 d
 7.2137 74.60350 41.81050 0.00000 0.0058950 d
 8.2443 75.63400 41.80200 0.00000 0.011717 d
 9.2748 76.66450 41.79350 0.00000 0.016673 d
 10.305 77.69500 41.78500 0.00000 0.020845 d
 11.336 78.72550 41.77650 0.00000 0.024317 d
 12.366 79.75600 41.76800 0.00000 0.027168 d
 13.397 80.78650 41.75950 0.00000 0.029472 d
 14.427 81.81700 41.75100 0.00000 0.031298 d
 15.458 82.84750 41.74250 0.00000 0.032708 d
 16.489 83.87800 41.73400 0.00000 0.033759 d
 17.519 84.90850 41.72550 0.00000 0.034500 d
 18.550 85.93900 41.71700 0.00000 0.034976 d
 19.580 86.96950 41.70850 0.00000 0.035227 d
 20.611 88.00000 41.70000 0.00000 0.035285 d
 d - Displacements include imported displacements.

Structure: 38-25 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	88.00000	41.70000	0.00000	0.035285	d
1.0176	88.00381	42.71762	0.00000	0.035192	d
2.0353	88.00762	43.73524	0.00000	0.035069	d
3.0529	88.01143	44.75286	0.00000	0.034923	d
4.0705	88.01524	45.77048	0.00000	0.034759	d
5.0881	88.01905	46.78810	0.00000	0.034583	d
6.1058	88.02286	47.80571	0.00000	0.034403	d
7.1234	88.02667	48.82333	0.00000	0.034226	d
8.1410	88.03048	49.84095	0.00000	0.034059	d
9.1586	88.03429	50.85857	0.00000	0.033909	d
10.176	88.03810	51.87619	0.00000	0.033782	d
11.194	88.04190	52.89381	0.00000	0.033683	d
12.212	88.04571	53.91143	0.00000	0.033618	d
13.229	88.04952	54.92905	0.00000	0.033588	d
14.247	88.05333	55.94667	0.00000	0.033594	d
15.264	88.05714	56.96429	0.00000	0.033636	d
16.282	88.06095	57.98190	0.00000	0.033712	d
17.300	88.06476	58.99952	0.00000	0.033819	d
18.317	88.06857	60.01714	0.00000	0.033951	d
19.335	88.07238	61.03476	0.00000	0.034104	d
20.353	88.07619	62.05238	0.00000	0.034269	d
21.370	88.08000	63.07000	0.00000	0.034440	d

d - Displacements include imported displacements.

Structure: 20-22 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	55.96000	70.70000	0.00000	-0.094618	d
1.0170	56.97700	70.69900	0.00000	-0.092263	d
2.0340	57.99400	70.69800	0.00000	-0.088966	d
3.0510	59.01100	70.69700	0.00000	-0.084723	d
4.0680	60.02800	70.69600	0.00000	-0.079571	d
5.0850	61.04500	70.69500	0.00000	-0.073593	d
6.1020	62.06200	70.69400	0.00000	-0.066910	d
7.1190	63.07900	70.69300	0.00000	-0.059669	d
8.1360	64.09600	70.69200	0.00000	-0.052034	d
9.1530	65.11300	70.69100	0.00000	-0.044178	d
10.170	66.13000	70.69000	0.00000	-0.036268	d

d - Displacements include imported displacements.

Structure: 22-b | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	66.13000	70.69000	0.00000	-0.036268	d
0.69360	66.14000	69.99647	0.00000	-0.047913	d
1.3872	66.15000	69.30294	0.00000	-0.061186	d
2.0808	66.16000	68.60941	0.00000	-0.076324	d
2.7744	66.17000	67.91588	0.00000	-0.093607	d
3.4680	66.18000	67.22235	0.00000	-0.11337	d
4.1616	66.19000	66.52882	0.00000	-0.13601	d
4.8552	66.20000	65.83529	0.00000	-0.16203	d
5.5488	66.21000	65.14176	0.00000	-0.19203	d
6.2424	66.22000	64.44824	0.00000	-0.22681	d
6.9360	66.23000	63.75471	0.00000	-0.26744	d
7.6296	66.24000	63.06118	0.00000	-0.31542	d
8.3232	66.25000	62.36765	0.00000	-0.37293	d
9.0168	66.26000	61.67412	0.00000	-0.44337	d
9.7104	66.27000	60.98059	0.00000	-0.53209	d

10.404 66.28000 60.28706 0.00000 -0.64792 d
 11.098 66.29000 59.59353 0.00000 -0.80590 d
 11.791 66.30000 58.90000 0.00000 -1.0332 d
 d - Displacements include imported displacements.

Structure: e-45 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]
Vertical Offset 1				
0.0	64.74000	51.60000	0.00000	-1.4500 d
0.98415	64.72267	50.61600	0.00000	-0.98315 d
1.9683	64.70533	49.63200	0.00000	-0.72328 d
2.9525	64.68800	48.64800	0.00000	-0.55445 d
3.9366	64.67067	47.66400	0.00000	-0.43389 d
4.9208	64.65333	46.68000	0.00000	-0.34263 d
5.9049	64.63600	45.69600	0.00000	-0.27113 d
6.8891	64.61867	44.71200	0.00000	-0.21398 d
7.8732	64.60133	43.72800	0.00000	-0.16776 d
8.8574	64.58400	42.74400	0.00000	-0.13009 d
9.8415	64.56667	41.76000	0.00000	-0.099223 d
10.826	64.54933	40.77600	0.00000	-0.073836 d
11.810	64.53200	39.79200	0.00000	-0.052897 d
12.794	64.51467	38.80800	0.00000	-0.035593 d
13.778	64.49733	37.82400	0.00000	-0.021277 d
14.762	64.48000	36.84000	0.00000	-0.0094300 d
d - Displacements include imported displacements.				

Structure: 18-31 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]
Vertical Offset 1				
0.0	59.17000	64.78000	0.00000	-0.42894 d
1.1384	60.30833	64.77333	0.00000	-0.40365 d
2.2767	61.44667	64.76667	0.00000	-0.37220 d
3.4151	62.58500	64.76000	0.00000	-0.33634 d
4.5534	63.72333	64.75333	0.00000	-0.29779 d
5.6918	64.86167	64.74667	0.00000	-0.25815 d
6.8301	66.00000	64.74000	0.00000	-0.21889 d
d - Displacements include imported displacements.				

Structure: 23-24 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]
Vertical Offset 1				
0.0	66.00000	63.14000	0.00000	-0.32239 d
1.0683	67.06833	63.13667	0.00000	-0.26669 d
2.1367	68.13667	63.13333	0.00000	-0.21596 d
3.2050	69.20500	63.13000	0.00000	-0.17135 d
4.2734	70.27333	63.12667	0.00000	-0.13315 d
5.3417	71.34167	63.12333	0.00000	-0.10102 d
6.4100	72.41000	63.12000	0.00000	-0.074325 d
7.4784	73.47833	63.11667	0.00000	-0.052325 d
8.5467	74.54667	63.11333	0.00000	-0.034295 d
9.6150	75.61500	63.11000	0.00000	-0.019586 d
10.683	76.68333	63.10667	0.00000	-0.0076342 d
11.752	77.75167	63.10333	0.00000	0.0020377 d
12.820	78.82000	63.10000	0.00000	0.0098279 d
d - Displacements include imported displacements.				

Structure: b-27 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	66.10000	58.46000	0.00000	-1.3687	d
1.0645	67.16300	58.40400	0.00000	-0.84317	d
2.1289	68.22600	58.34800	0.00000	-0.56237	d
3.1934	69.28900	58.29200	0.00000	-0.39215	d
4.2579	70.35200	58.23600	0.00000	-0.28041	d
5.3224	71.41500	58.18000	0.00000	-0.20267	d
6.3868	72.47800	58.12400	0.00000	-0.14630	d
7.4513	73.54100	58.06800	0.00000	-0.10428	d
8.5158	74.60400	58.01200	0.00000	-0.072341	d
9.5803	75.66700	57.95600	0.00000	-0.047763	d
10.645	76.73000	57.90000	0.00000	-0.028681	d

d - Displacements include imported displacements.

Structure: 42-37 | Sub-structure:

Dist.	Coordinates			Displacements	
	x	y	z	z	
[m]	[m]	[m]	[m]	[mm]	

Vertical Offset 1

0.0	64.54000	46.73000	0.00000	-0.35254	d
1.0183	65.55826	46.71783	0.00000	-0.30101	d
2.0367	66.57652	46.70565	0.00000	-0.25282	d
3.0550	67.59478	46.69348	0.00000	-0.20876	d
4.0733	68.61304	46.68130	0.00000	-0.16937	d
5.0917	69.63130	46.66913	0.00000	-0.13486	d
6.1100	70.64957	46.65696	0.00000	-0.10510	d
7.1283	71.66783	46.64478	0.00000	-0.079770	d
8.1467	72.68609	46.63261	0.00000	-0.058407	d
9.1650	73.70435	46.62043	0.00000	-0.040522	d
10.183	74.72261	46.60826	0.00000	-0.025636	d
11.202	75.74087	46.59609	0.00000	-0.013307	d
12.220	76.75913	46.58391	0.00000	-0.0031431	d
13.238	77.77739	46.57174	0.00000	0.0051959	d
14.257	78.79565	46.55957	0.00000	0.012002	d
15.275	79.81391	46.54739	0.00000	0.017522	d
16.293	80.83217	46.53522	0.00000	0.021966	d
17.312	81.85043	46.52304	0.00000	0.025508	d
18.330	82.86870	46.51087	0.00000	0.028297	d
19.348	83.88696	46.49870	0.00000	0.030455	d
20.367	84.90522	46.48652	0.00000	0.032086	d
21.385	85.92348	46.47435	0.00000	0.033278	d
22.403	86.94174	46.46217	0.00000	0.034102	d
23.422	87.96000	46.45000	0.00000	0.034621	d

d - Displacements include imported displacements.

Structure: 47-43 | Sub-structure:

Dist.	Coordinates			Displacements	
	x	y	z	z	
[m]	[m]	[m]	[m]	[mm]	

Vertical Offset 1

0.0	54.96000	44.83000	0.00000	-0.40734	d
1.0600	56.02000	44.83000	0.00000	-0.40663	d
2.1200	57.08000	44.83000	0.00000	-0.40057	d
3.1800	58.14000	44.83000	0.00000	-0.38839	d
4.2400	59.20000	44.83000	0.00000	-0.37011	d
5.3000	60.26000	44.83000	0.00000	-0.34644	d
6.3600	61.32000	44.83000	0.00000	-0.31860	d
7.4200	62.38000	44.83000	0.00000	-0.28802	d
8.4800	63.44000	44.83000	0.00000	-0.25605	d
9.5400	64.50000	44.83000	0.00000	-0.22385	d

d - Displacements include imported displacements.

Structure: 44-39 | Sub-structure:

Dist.	Coordinates			Displacements	
	x	y	z	z	
[m]	[m]	[m]	[m]	[mm]	

Vertical Offset 1

0.0 64.44000 41.91000 0.00000 -0.10539 d
 1.4751 65.91500 41.89000 0.00000 -0.084025 d
 2.9503 67.39000 41.87000 0.00000 -0.063741 d
 d - Displacements include imported displacements.

Structure: 46-45 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	54.96000	36.71000	0.00000	-0.035048 d
1.0579	56.01778	36.72444	0.00000	-0.034046 d
2.1158	57.07556	36.73889	0.00000	-0.032532 d
3.1736	58.13333	36.75333	0.00000	-0.030500 d
4.2315	59.19111	36.76778	0.00000	-0.027962 d
5.2894	60.24889	36.78222	0.00000	-0.024950 d
6.3473	61.30667	36.79667	0.00000	-0.021517 d
7.4051	62.36444	36.81111	0.00000	-0.017730 d
8.4630	63.42222	36.82556	0.00000	-0.013672 d
9.5209	64.48000	36.84000	0.00000	-0.0094300 d

d - Displacements include imported displacements.

Structure: a-12 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	44.06000	58.90000	0.00000	-2.4133 d
1.1151	42.95250	58.77000	0.00000	-2.8989 d
2.2302	41.84500	58.64000	0.00000	-3.2332 d
3.3453	40.73750	58.51000	0.00000	-3.4233 d
4.4604	39.63000	58.38000	0.00000	-2.6362 d

d - Displacements include imported displacements.

Structure: 12-11 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	39.63000	58.38000	0.00000	-2.6362 d
1.1167	39.63000	57.26333	0.00000	-3.9549 d
2.2333	39.63000	56.14667	0.00000	-4.3047 d
3.3500	39.63000	55.03000	0.00000	-4.4098 d
4.4667	39.63000	53.91333	0.00000	-4.3418 d
5.5833	39.63000	52.79667	0.00000	-4.0284 d
6.7000	39.63000	51.68000	0.00000	-2.7160 d

d - Displacements include imported displacements.

Structure: 11-f | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	39.63000	51.68000	0.00000	-2.7160 d
0.55884	40.18875	51.67000	0.00000	-3.6550 d
1.1177	40.74750	51.66000	0.00000	-4.0082 d
1.6765	41.30625	51.65000	0.00000	-4.1736 d
2.2354	41.86500	51.64000	0.00000	-4.2436 d
2.7942	42.42375	51.63000	0.00000	-4.2458 d
3.3530	42.98250	51.62000	0.00000	-4.1788 d
3.9119	43.54125	51.61000	0.00000	-4.0092 d
4.4707	44.10000	51.60000	0.00000	-3.6067 d

d - Displacements include imported displacements.

Structure: ag | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	44.06000	58.90000	0.00000	-2.4133	d
1.0047	45.06364	58.85455	0.00000	-2.1372	d
2.0093	46.06727	58.80909	0.00000	-2.0034	d
3.0140	47.07091	58.76364	0.00000	-1.9567	d
4.0187	48.07455	58.71818	0.00000	-1.9551	d
5.0233	49.07818	58.67273	0.00000	-1.9889	d
6.0280	50.08182	58.62727	0.00000	-2.0579	d
7.0327	51.08545	58.58182	0.00000	-2.1676	d
8.0373	52.08909	58.53636	0.00000	-2.3321	d
9.0420	53.09273	58.49091	0.00000	-2.5839	d
10.047	54.09636	58.44545	0.00000	-3.0160	d
11.051	55.10000	58.40000	0.00000	-4.1299	d

d - Displacements include imported displacements.

Structure: gb | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	55.10000	58.40000	0.00000	-4.1299	d
0.57001	55.67000	58.40300	0.00000	-4.6759	d
1.1400	56.24000	58.40600	0.00000	-4.9165	d
1.7100	56.81000	58.40900	0.00000	-5.0236	d
2.2800	57.38000	58.41200	0.00000	-5.0479	d
2.8500	57.95000	58.41500	0.00000	-5.0062	d
3.4200	58.52000	58.41800	0.00000	-4.8955	d
3.9901	59.09000	58.42100	0.00000	-4.6836	d
4.5601	59.66000	58.42400	0.00000	-4.2523	d
5.1301	60.23000	58.42700	0.00000	-3.5994	d
5.7001	60.80000	58.43000	0.00000	-3.2614	d
6.2701	61.37000	58.43300	0.00000	-3.0490	d
6.8401	61.94000	58.43600	0.00000	-2.8842	d
7.4101	62.51000	58.43900	0.00000	-2.7377	d
7.9801	63.08000	58.44200	0.00000	-2.5957	d
8.5501	63.65000	58.44500	0.00000	-2.4481	d
9.1201	64.22000	58.44800	0.00000	-2.2843	d
9.6901	64.79000	58.45100	0.00000	-2.0898	d
10.260	65.36000	58.45400	0.00000	-1.8409	d
10.830	65.93000	58.45700	0.00000	-1.4937	d
11.400	66.50000	58.46000	0.00000	-1.1189	d

d - Displacements include imported displacements.

Structure: bc | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	66.50000	58.46000	0.00000	-1.1189	d
0.27800	66.50000	58.18200	0.00000	-1.2286	d
0.55600	66.50000	57.90400	0.00000	-1.3317	d
0.83400	66.50000	57.62600	0.00000	-1.4214	d
1.1120	66.50000	57.34800	0.00000	-1.4967	d
1.3900	66.50000	57.07000	0.00000	-1.5587	d
1.6680	66.50000	56.79200	0.00000	-1.6087	d
1.9460	66.50000	56.51400	0.00000	-1.6480	d
2.2240	66.50000	56.23600	0.00000	-1.6778	d
2.5020	66.50000	55.95800	0.00000	-1.6986	d
2.7800	66.50000	55.68000	0.00000	-1.7112	d
3.0580	66.50000	55.40200	0.00000	-1.7158	d
3.3360	66.50000	55.12400	0.00000	-1.7125	d
3.6140	66.50000	54.84600	0.00000	-1.7013	d
3.8920	66.50000	54.56800	0.00000	-1.6820	d
4.1700	66.50000	54.29000	0.00000	-1.6540	d
4.4480	66.50000	54.01200	0.00000	-1.6167	d

4.7260 66.50000 53.73400 0.00000 -1.5692 d
 5.0040 66.50000 53.45600 0.00000 -1.5104 d
 5.2820 66.50000 53.17800 0.00000 -1.4390 d
 5.5600 66.50000 52.90000 0.00000 -1.3540 d
 d - Displacements include imported displacements.

Structure: cd | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0 66.50000 52.90000 0.00000 -1.3540 d
 1.7493 65.00000 52.00000 0.00000 -1.6905 d
 d - Displacements include imported displacements.

Structure: eh | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0 64.74000 51.60000 0.00000 -1.4500 d
 1.0844 63.65556 51.60000 0.00000 -1.7188 d
 2.1689 62.57111 51.60000 0.00000 -1.9701 d
 3.2533 61.48667 51.60000 0.00000 -2.2755 d
 4.3378 60.40222 51.60000 0.00000 -2.8531 d
 5.4222 59.31778 51.60000 0.00000 -4.4733 d
 6.5067 58.23333 51.60000 0.00000 -4.9793 d
 7.5911 57.14889 51.60000 0.00000 -5.0266 d
 8.6756 56.06444 51.60000 0.00000 -4.7765 d
 9.7600 54.98000 51.60000 0.00000 -3.8808 d
 d - Displacements include imported displacements.

Structure: hf | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0 54.98000 51.60000 0.00000 -3.8808 d
 1.0880 53.89200 51.60000 0.00000 -2.9850 d
 2.1760 52.80400 51.60000 0.00000 -2.6491 d
 3.2640 51.71600 51.60000 0.00000 -2.4772 d
 4.3520 50.62800 51.60000 0.00000 -2.3849 d
 5.4400 49.54000 51.60000 0.00000 -2.3436 d
 6.5280 48.45200 51.60000 0.00000 -2.3429 d
 7.6160 47.36400 51.60000 0.00000 -2.3828 d
 8.7040 46.27600 51.60000 0.00000 -2.4773 d
 9.7920 45.18800 51.60000 0.00000 -2.7032 d
 10.880 44.10000 51.60000 0.00000 -3.6067 d
 d - Displacements include imported displacements.

Structure: de | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0 65.00000 52.00000 0.10000 0.0
 0.11927 64.93500 51.90000 0.10000 0.0
 0.23854 64.87000 51.80000 0.10000 0.0
 0.35781 64.80500 51.70000 0.10000 0.0
 0.47707 64.74000 51.60000 0.10000 0.0

Specific Building Damage Results - All Segments

Structure: 21-20 | Sub-structure:

Vertical Offset Gradient Max from Line for of Vertical Vertical Horizontal Movement Displacement Calculations Curve	Segment Max Gradient Radius of Displacement Curve	Min	Start Damage	Length [m]	Curvature [m]	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of
[m]				[m]	[m]	[%]	[%]	[%]	
0.0									

All settlements are less than the Settlement Trough Limit Sensitivity.
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 19-20 | Sub-structure:

Vertical Offset Gradient Max from Line for of Vertical Vertical Horizontal Movement Displacement Calculations Curve	Segment Max Gradient Radius of Displacement Curve	Min	Start Damage	Length [m]	Curvature [m]	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of	
[m]				[m]	[m]	[%]	[%]	[%]		
0.0										
0.0	-41.307E-6	180440.		1	0.0	4.0319	Sagging	239.67E-6	0.0	233.92E-6

(Negligible)
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 19-18 | Sub-structure:

Vertical Offset Gradient Max from Line for of Vertical Vertical Horizontal Movement Displacement Calculations Curve	Segment Max Gradient Radius of Displacement Curve	Min	Start Damage	Length [m]	Curvature [m]	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of	
[m]				[m]	[m]	[%]	[%]	[%]		
0.0										
0.0	98.332E-6	44053.		1	0.0	2.0092	Sagging	564.64E-6	0.0	561.23E-6

(Negligible)
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 18-13 | Sub-structure:

Vertical Offset Gradient Max from Line for of Vertical Vertical Horizontal Movement Displacement Calculations Curve	Segment Max Gradient Radius of Displacement Curve	Min	Start Damage	Length [m]	Curvature [m]	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of	
[m]				[m]	[m]	[%]	[%]	[%]		
0.0										
0.0	16.335E-6	157200.		1	0.0	6.9858	Hogging	392.23E-6	0.0	385.13E-6

(Negligible)

0.0	-8.8578E-6	861170.	2	6.9858	4.7139	Sagging	66.854E-6	0.0	64.695E-6
					0				

(Negligible)

0.0	-8.6009E-6	334340.	3	11.700	3.2593	Hogging	75.587E-6	0.0	75.281E-6
					0				

(Negligible)
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 21-a | Sub-structure:

Vertical Offset	Segment	Start	Length	Curvature	Deflection	Average	Max	Max
Gradient Max Gradient	Min	Damage				Horizontal	Tensile	
from Line for	of Vertical	Radius of	Category		Ratio	Strain	Strain	
of Vertical	Vertical	Curvature						
Horizontal Displacement	Curve							
Movement	Calculations							
Displacement	Curve							
Calculations								
Curve								
[m]	[m]	[m]	[m]	[m]	[%]	[%]	[%]	
0.0	0.0012493	746.69	1	1.0430	10.777	Sagging	0.0088242	0.0 0.0095682
0.0					0			

(Negligible)
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: f-50 | Sub-structure:

Vertical Offset	Segment	Start	Length	Curvature	Deflection	Average	Max	Max
Gradient Max Gradient	Min	Damage				Horizontal	Tensile	
from Line for	of Vertical	Radius of	Category		Ratio	Strain	Strain	
of Vertical	Vertical	Curvature						
Horizontal Displacement	Curve							
Movement	Calculations							
Displacement	Curve							
Calculations								
Curve								
[m]	[m]	[m]	[m]	[m]	[%]	[%]	[%]	
0.0	-0.0018073	661.81	1	0.0	10.919	Sagging	0.015724	0.0 0.017207
0.0					0			

(Negligible)
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 14-15 | Sub-structure:

Vertical Offset	Segment	Start	Length	Curvature	Deflection	Average	Max	Max
Gradient Max Gradient	Min	Damage				Horizontal	Tensile	
from Line for	of Vertical	Radius of	Category		Ratio	Strain	Strain	
of Vertical	Vertical	Curvature						
Horizontal Displacement	Curve							
Movement	Calculations							
Displacement	Curve							
Calculations								
Curve								
[m]	[m]	[m]	[m]	[m]	[%]	[%]	[%]	
0.0	180.04E-6	22883.	1	0.0	2.1390	Sagging	0.0011572	0.0 0.0011492
0.0					0			

(Negligible)
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 15-16 | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Vertical Horizontal Displacement Movement Displacement Calculations	Segment Min Category	Start Length Damage	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of Curve
[m]		[m]	[m]	[%]	[%]	[%]	
0.0	1	0.0	1.6897	None	0.0	0.0	0.0
0.0			0				

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 16-17 | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Vertical Horizontal Displacement Movement Displacement Calculations	Segment Min Category	Start Length Damage	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of Curve
[m]		[m]	[m]	[%]	[%]	[%]	
0.0	1	0.0	1.8990	None	0.0	0.0	0.0
0.0			0				

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 17-g | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Vertical Horizontal Displacement Movement Displacement Calculations	Segment Min Category	Start Length Damage	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of Curve
[m]		[m]	[m]	[%]	[%]	[%]	
0.0	1	0.0	1.6115	None	0.0	0.0	0.0
0.0			0				

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: h-49 | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Vertical Horizontal Displacement Movement Displacement Calculations	Segment Min Category	Start Length Damage	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of Curve
[m]		[m]	[m]	[%]	[%]	[%]	
0.0	1	0.0	2.1345	Sagging	0.012438	0.0	0.012353
0.0			0				

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

0.0	0.0	1	0.0	3.3085	Hogging	63.266E-6	0.0	62.978E-6	
0.0	-6.5583E-6	393290.	0						
(Negligible)									
0.0	-6.4954E-6	1.4980E+6	2	3.3085	3.7899	Sagging	33.621E-6	0.0	32.938E-6
(Negligible)									
0.0	-8.4414E-6	377270.	3	7.0984	3.6506	Hogging	68.325E-6	0.0	67.985E-6
(Negligible)									

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 50-46 | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Vertical Horizontal Displacement Movement Displacement Calculations Curve	Segment Min Radius of Category	Start Damage	Length [m]	Curvature [m]	Deflection Ratio [%]	Average Horizontal Strain [%]	Max Tensile Strain [%]	Max of
0.0								

All settlements are less than the Settlement Trough Limit Sensitivity.
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 46-47 | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Vertical Horizontal Displacement Movement Displacement Calculations Curve	Segment Min Radius of Category	Start Damage	Length [m]	Curvature [m]	Deflection Ratio [%]	Average Horizontal Strain [%]	Max Tensile Strain [%]	Max	
0.0									
0.0	90.155E-6	48507.	1	3.0450	5.0740	Sagging	841.67E-6	0.0	809.99E-6
(Negligible)									

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 24-25 | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Vertical Horizontal Displacement Movement Displacement Calculations Curve	Segment Min Radius of Category	Start Damage	Length [m]	Curvature [m]	Deflection Ratio [%]	Average Horizontal Strain [%]	Max Tensile Strain [%]	Max of
0.0								

All settlements are less than the Settlement Trough Limit Sensitivity.
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 25-26 | Sub-structure:

Vertical Offset Gradient Max Gradient	Segment Min	Start Damage	Length	Curvature	Deflection	Average	Max	Max
--	----------------	-----------------	--------	-----------	------------	---------	-----	-----

from Line for
of Vertical Radius of Category
Vertical
Horizontal Displacement Curvature
Movement
Displacement Curve
Calculations
Curve

	Ratio	Horizontal Strain	Tensile Strain	of
[m]	[m]	[m]	[m]	[m]
[m]	[%]	[%]	[%]	[%]

0.0 All settlements are less than the Settlement Trough Limit Sensitivity.
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 26-27 | Sub-structure:

Vertical Offset Segment Start Length Curvature Deflection Average Max Max
Gradient Max Gradient Min Damage
from Line for
of Vertical Radius of Category
Vertical
Horizontal Displacement Curvature
Movement
Displacement Curve
Calculations
Curve

	Ratio	Horizontal Strain	Tensile Strain	of
[m]	[m]	[m]	[m]	[m]
[m]	[%]	[%]	[%]	[%]

0.0 All settlements are less than the Settlement Trough Limit Sensitivity.
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 27-28 | Sub-structure:

Vertical Offset Segment Start Length Curvature Deflection Average Max Max
Gradient Max Gradient Min Damage
from Line for
of Vertical Radius of Category
Vertical
Horizontal Displacement Curvature
Movement
Displacement Curve
Calculations
Curve

	Ratio	Horizontal Strain	Tensile Strain	of
[m]	[m]	[m]	[m]	[m]
[m]	[%]	[%]	[%]	[%]

0.0 All settlements are less than the Settlement Trough Limit Sensitivity.
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 28-29 | Sub-structure:

Vertical Offset Segment Start Length Curvature Deflection Average Max Max
Gradient Max Gradient Min Damage
from Line for
of Vertical Radius of Category
Vertical
Horizontal Displacement Curvature
Movement
Displacement Curve
Calculations
Curve

	Ratio	Horizontal Strain	Tensile Strain	of
[m]	[m]	[m]	[m]	[m]
[m]	[%]	[%]	[%]	[%]

0.0 All settlements are less than the Settlement Trough Limit Sensitivity.
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 27-32 | Sub-structure:

Vertical Offset Segment Start Length Curvature Deflection Average Max Max
Gradient Max Gradient Min Damage
from Line for
of Vertical Radius of Category
Vertical
Horizontal Displacement Curvature

	Ratio	Horizontal Strain	Tensile Strain	of
[m]	[m]	[m]	[m]	[m]
[m]	[%]	[%]	[%]	[%]

**Movement
Displacement Curve
Calculations
Curve**

[m]		[m]	[m]		[%]	[%]	[%]	
[m]	0.0	All settlements are less than the Settlement Trough Limit Sensitivity.						

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 33-31 | Sub-structure:

Vertical Offset Gradient Max from Line for of Vertical Vertical	Segment Max Gradient Min Radius of	Start Damage Category	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max
[m]		[m]	[m]		[%]	[%]	[%]	

[m]	0.0	1	14.560	3.1190	Sagging	668.59E-6	0.0	658.86E-6
0.0	80.211E-6	42286.	0					

(Negligible)
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 31-34 | Sub-structure:

Vertical Offset Gradient Max from Line for of Vertical Vertical	Segment Max Gradient Min Radius of	Start Damage Category	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max
[m]		[m]	[m]		[%]	[%]	[%]	

[m]	0.0	1	0.0	2.9105	Hogging	91.792E-6	0.0	91.517E-6
0.0	-32.194E-6	236550.	0					

(Negligible)		2	2.9105	0.45920	Hogging	0.0	0.0	0.0
0.0	-32.194E-6	1.4989E+6	0					

(Negligible)
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 34-35 | Sub-structure:

Vertical Offset Gradient Max from Line for of Vertical Vertical	Segment Max Gradient Min Radius of	Start Damage Category	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of Curve
[m]		[m]	[m]		[%]	[%]	[%]	

[m]	0.0	1	0.0	1.3290	Sagging	0.0	0.0	0.0
0.0	-44.829E-6	-	0					

(Negligible)
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 35-41 | Sub-structure:

Vertical Offset Gradient Max from Line for of Vertical Vertical Horizontal Movement Displacement Calculations	Segment Max Gradient Radius of Displacement Curve	Min Category	Start Damage	Length [m]	Curvature [m]	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of Curve
[m]				[m]	[m]	[%]	[%]	[%]	
0.0		1	0.0	1.2000	None	0.0	0.0	0.0	
0.0	-20.213E-6	834010.		0					

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 41-40 | Sub-structure:

Vertical Offset Gradient Max from Line for of Vertical Vertical Horizontal Movement Displacement Calculations	Segment Max Gradient Radius of Displacement Curve	Min Category	Start Damage	Length [m]	Curvature [m]	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of Curve
[m]				[m]	[m]	[%]	[%]	[%]	
0.0		1	2.0350	2.0340	Sagging	80.714E-6	0.0	80.216E-6	
0.0	31.110E-6	309560.		0					

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 40-39 | Sub-structure:

Vertical Offset Gradient Max from Line for of Vertical Vertical Horizontal Movement Displacement Calculations	Segment Max Gradient Radius of Displacement Curve	Min Category	Start Damage	Length [m]	Curvature [m]	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of Curve
[m]				[m]	[m]	[%]	[%]	[%]	
0.0		1	0.0	1.3000	None	0.0	0.0	0.0	
0.0	-35.595E-6	166510.		0					

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 39-38 | Sub-structure:

Vertical Offset Gradient Max from Line for of Vertical Vertical Horizontal Movement Displacement Calculations	Segment Max Gradient Radius of Displacement Curve	Min Category	Start Damage	Length [m]	Curvature [m]	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of Curve
[m]				[m]	[m]	[%]	[%]	[%]	
0.0									

All settlements are less than the Settlement Trough Limit Sensitivity.

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 38-25 | Sub-structure:

Vertical Offset Gradient	Max Gradient	Segment Min	Start Length	Curvature	Deflection	Average	Max	Max
from Line for	of Vertical	Radius of	Damage		Ratio	Horizontal	Tensile	of
Vertical	Vertical	Category				Strain	Strain	
Horizontal Displacement	Displacement	Curvature						
Movement	Curve							
Calculations								
Curve								
[m]	[m]		[m]	[m]	[%]	[%]	[%]	
0.0								

All settlements are less than the Settlement Trough Limit Sensitivity.
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 20-22 | Sub-structure:

Vertical Offset Gradient	Max Gradient	Segment Min	Start Length	Curvature	Deflection	Average	Max	Max
from Line for	of Vertical	Radius of	Damage		Ratio	Horizontal	Tensile	of
Vertical	Vertical	Category				Strain	Strain	
Horizontal Displacement	Displacement	Curvature						
Movement	Curve							
Calculations								
Curve								
[m]	[m]		[m]	[m]	[%]	[%]	[%]	
0.0								

All settlements are less than the Settlement Trough Limit Sensitivity.
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 22-b | Sub-structure:

Vertical Offset Gradient	Max Gradient	Segment Min	Start Length	Curvature	Deflection	Average	Max	Max
from Line for	of Vertical	Radius of	Damage		Ratio	Horizontal	Tensile	of
Vertical	Vertical	Category				Strain	Strain	
Horizontal Displacement	Displacement	Curvature						
Movement	Curve							
Calculations								
Curve								
[m]	[m]		[m]	[m]	[%]	[%]	[%]	
0.0			1	3.4680	8.3222	Sagging	0.0034011	0.0
0.0	327.66E-6	6319.5			0			0.0048821

(Negligible)
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: e-45 | Sub-structure:

Vertical Offset Gradient	Max Gradient	Segment Min	Start Length	Curvature	Deflection	Average	Max	Max
from Line for	of Vertical	Radius of	Damage		Ratio	Horizontal	Tensile	of
Vertical	Vertical	Category				Strain	Strain	
Horizontal Displacement	Displacement	Curvature						
Movement	Curve							
Calculations								
Curve								
[m]	[m]		[m]	[m]	[%]	[%]	[%]	
0.0			1	0.0	8.8574	Sagging	0.0051434	0.0
0.0	-474.35E-6	4105.1			0			0.0072215

(Negligible)
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 18-31 | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Vertical	Segment Min Radius of	Start Damage Category	Length [m]	Curvature [m]	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max
0.0	196820.	1	0.0	5.6836	Hogging	202.78E-6	0.0	240.22E-6
0.0	-34.821E-6			0				

(Negligible)								
0.0	1.7471E+6	2	5.6836	1.1455	Sagging	0.0	0.0	0.0
0.0	-34.821E-6			0				

(Negligible)
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 23-24 | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Vertical	Segment Min Radius of	Start Damage Category	Length [m]	Curvature [m]	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max
0.0	182780.	1	0.0	5.3417	Sagging	340.89E-6	0.0	515.09E-6
0.0	-52.137E-6			0				

(Negligible)								
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(Negligible)
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: b-27 | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Vertical	Segment Min Radius of	Start Damage Category	Length [m]	Curvature [m]	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max
0.0	4072.7	1	0.0	7.4513	Sagging	0.0059655	0.0	0.0088292
0.0	-493.66E-6			0				

(Negligible)								
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(Negligible)
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 42-37 | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Vertical	Segment Min Radius of	Start Damage Category	Length [m]	Curvature [m]	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max
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**Movement
Displacement Curve
Calculations
Curve**

[m]	[m]	[m]	[m]	[%]	[%]	[%]
0.0	1	0.0	6.1100	Sagging	327.33E-6	0.0 497.00E-6
0.0	-50.594E-6	216290.	0			

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 47-43 | Sub-structure:

Vertical Offset Gradient Max from Line for of Vertical Vertical Horizontal Displacement Movement Displacement Calculations Curve	Segment Min Radius of Curvature	Start Damage Category	Length [m]	Curvature Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max
[m]			[m]	[m]	[%]	[%]	[%]
0.0	1	0.0	9.4472	Hogging	463.41E-6	0.0 686.25E-6	
0.0	-30.386E-6	189540.	0				

(Negligible)

0.0	2	9.4472	0.091759	None	0.0	0.0	0.0
0.0	-30.386E-6	22.485E+6	0				

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 44-39 | Sub-structure:

Vertical Offset Gradient Max from Line for of Vertical Vertical Horizontal Displacement Movement Displacement Calculations Curve	Segment Min Radius of Category	Start Damage Category	Length [m]	Curvature Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of Curve
[m]			[m]	[m]	[%]	[%]	[%]
0.0	1	0.0	0.0	None	0.0	0.0	0.0
0.0	-14.483E-6	2.0135E+6	0				

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 46-45 | Sub-structure:

Vertical Offset Gradient Max from Line for of Vertical Vertical Horizontal Displacement Movement Displacement Calculations Curve	Segment Min Radius of Category	Start Damage Category	Length [m]	Curvature Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of Curve
[m]			[m]	[m]	[%]	[%]	[%]

0.0 All settlements are less than the Settlement Trough Limit Sensitivity.
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: a-12 | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Vertical Horizontal Displacement Movement Displacement Calculations	Segment Min Category	Start Length Damage	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of Curve
[m]		[m]	[m]	[%]	[%]	[%]	Curve
0.0	1	0.0	4.4594	Hogging	0.018855	0.0	0.018885
0.0	-705.88E-6	1048.5	0				

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 12-11 | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Vertical Horizontal Displacement Movement Displacement Calculations	Segment Min Category	Start Length Damage	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of Curve
[m]		[m]	[m]	[%]	[%]	[%]	Curve
0.0	1	0.0	6.6990	Hogging	0.025835	0.0	0.033628
0.0	0.0011810	1049.9	0				

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 11-f | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Vertical Horizontal Displacement Movement Displacement Calculations	Segment Min Category	Start Length Damage	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of Curve
[m]		[m]	[m]	[%]	[%]	[%]	Curve
0.0	1	0.0	4.4697	Hogging	0.025117	0.0	0.025200
0.0	0.0016803	455.67	0				

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: ag | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Vertical Horizontal Displacement Movement Displacement Calculations	Segment Min Category	Start Length Damage	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of Curve
[m]		[m]	[m]	[%]	[%]	[%]	Curve
0.0	1	0.0	11.050	Sagging	0.012103	0.0	0.013354
0.0	0.0011087	1249.8	0				

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: gb | Sub-structure:

Vertical Offset	Segment	Start	Length	Curvature	Deflection	Average	Max	Max
Gradient Max Gradient	Min	Damage			Ratio	Horizontal	Tensile	
from Line for	Radius of	Category				Strain	Strain	
of Vertical	Vertical							
Displacement	Displacement	Curvature						
Calculations	Curve							
Curve								

[m]	[m]	[m]	[m]		[%]	[%]	[%]	
0.0	0.0	1	0.0	4.7848	Hogging	0.020518	0.0	0.021644
0.0	-0.0011454	932.71	0					
(Negligible)								
0.0	-0.0011454	2121.6	2	4.7848	2.9012	Sagging	0.010830	0.0
			0					0.012996
(Negligible)								
0.0	-657.54E-6	4691.4	3	7.6860	3.7131	Hogging	0.0069132	0.0
			0					0.0062950

(Negligible)
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: bc | Sub-structure:

Vertical Offset	Segment	Start	Length	Curvature	Deflection	Average	Max	Max
Gradient Max Gradient	Min	Damage			Ratio	Horizontal	Tensile	of
from Line for	Radius of	Category				Strain	Strain	
of Vertical	Vertical							
Horizontal	Horizontal	Displacement	Curvature					
Movement	Movement	Curve						
Displacement	Displacement	Calculations						
Curve	Curve							

[m]	[m]	[m]	[m]		[%]	[%]	[%]	
0.0	0.0	1	0.0	5.5590	Hogging	0.0085349	0.0	0.0099708
0.0	394.31E-6	5566.1	0					
(Negligible)								
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.								

Structure: cd | Sub-structure:

Vertical Offset	Segment	Start	Length	Curvature	Deflection	Average	Max	Max
Gradient Max Gradient	Min	Damage			Ratio	Horizontal	Tensile	of
from Line for	Radius of	Category				Strain	Strain	
of Vertical	Vertical							
Horizontal	Horizontal	Displacement	Curvature					
Movement	Movement	Curve						
Displacement	Displacement	Calculations						Curve
Curve	Curve							

[m]	[m]	[m]	[m]		[%]	[%]	[%]	
0.0	0.0	1	0.0	1.7483	Sagging	0.0	0.0	0.0
0.0	192.32E-6	-	0					
(Negligible)								
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.								

Structure: eh | Sub-structure:

Vertical Offset	Segment	Start	Length	Curvature	Deflection	Average	Max	Max
Gradient Max Gradient	Min	Damage						

from Line for
of Vertical Radius of Category
Vertical
Horizontal Displacement Curvature
Movement
Displacement Curve
Calculations
Curve

[m]	[m]	[m]	[m]	[m]	[m]	Ratio	Horizontal Strain	Tensile Strain	of
0.0	0.0	247.92E-6	33127.	1	0.0	1.0738	0.0	0.0	0.0
(Negligible)									
0.0	0.0014940		2870.5	2	1.0738	3.7309	0.013725	0.0	0.018804
(Negligible)									
0.0	0.0014940		1604.6	3	4.8046	4.9544	0.026537	0.0	0.028694

(Negligible)
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: hf | Sub-structure:

Vertical Offset Segment Start Length Curvature Deflection Average Max Max
Gradient Max Gradient Min Damage Ratio Horizontal Tensile of
from Line for Radius of Category Strain Strain
of Vertical Radius of Category
Vertical
Horizontal Displacement Curvature
Movement
Displacement Curve
Calculations
Curve

[m]	[m]	[m]	[m]	[m]	[m]	Ratio	Horizontal Strain	Tensile Strain	of
0.0	0.0	830.50E-6	1453.2	1	0.0	10.879	0.012860	0.0	0.014036

(Negligible)
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: de | Sub-structure:

Vertical Offset Segment Start Length Curvature Deflection Average Max Max
Gradient Max Gradient Min Damage Ratio Horizontal Tensile of
from Line for Radius of Category Strain Strain
of Vertical Radius of Category
Vertical
Horizontal Displacement Curvature
Movement
Displacement Curve
Calculations
Curve

[m]	[m]	[m]	[m]	[m]	[m]	Ratio	Horizontal Strain	Tensile Strain	of
0.10000	All settlements are less than the Settlement Trough Limit Sensitivity.								

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Specific Building Damage Results - Critical Values for All Segments within Each Sub-Structure

Structure: 21-20 | Sub-structure:

Vertical Deflection Average Max Max Max Max Gradient Max Gradient Min
Min Damage Category Horizontal Slope Settlement Tensile of of Vertical Radius
Offset from Ratio Strain Curvature Curvature
of Radius of
Line for
Curvature Curvature

Vertical Displacement Curve
(Hogging) (Sagging) Curve
Movement Curve
Calculations
[m] [%] [%] [mm] [%] [m]
[m]

Structure: 19-20 | Sub-structure:

Vertical Deflection Average Max Slope Max Max Max Gradient Max Gradient
Min Min Damage Category
Offset from Ratio Horizontal Settlement Tensile of of Vertical
Radius of Radius of
Line for Strain Strain Horizontal Displacement
Curvature Curvature
Vertical Displacement Curve
(Hogging) (Sagging)
Movement
Calculations Curve
[m] [%] [%] [mm] [%] [m]
[m] [m]
0.0 239.67E-6 0.0 -41.307E-6 0.25420 233.92E-6 0.0 -41.307E-6
- 180440.0 (Negligible)

Structure: 19-18 | Sub-structure:

Vertical Deflection Average Max Slope Max Max Max Gradient Max Gradient
Min Min Damage Category
Offset from Ratio Horizontal Settlement Tensile of of Vertical
Radius of Radius of
Line for Strain Strain Horizontal Displacement
Curvature Curvature
Vertical Displacement Curve
(Hogging) (Sagging)
Movement
Calculations Curve
[m] [%] [%] [mm] [%] [m]
[m] [m]
0.0 564.64E-6 0.0 98.332E-6 0.42884 561.23E-6 0.0 98.332E-6
- 44053.0 (Negligible)

Structure: 18-13 | Sub-structure:

Vertical Deflection Average Max Slope Max Max Max Gradient Max Gradient
Min Min Damage Category
Offset from Ratio Horizontal Settlement Tensile of of Vertical
Radius of Radius of
Line for Strain Strain Horizontal Displacement
Curvature Curvature
Vertical Displacement Curve
(Hogging) (Sagging)
Movement
Calculations Curve
[m] [%] [%] [mm] [%] [m]
[m] [m]
0.0 392.23E-6 0.0 16.335E-6 0.45985 385.13E-6 0.0 16.335E-6
157200. 861170.0 (Negligible)

Structure: 21-a | Sub-structure:

Vertical Deflection Average Max Slope Max Max Max Gradient Max Gradient
Min Min Damage Category
Offset from Ratio Horizontal Settlement Tensile of of Vertical
Radius of Radius of
Line for Strain Strain Horizontal Displacement
Curvature Curvature
Vertical Displacement Curve
(Hogging) (Sagging)
Movement
Calculations Curve
[m] [%] [%] [mm] [%] [m]
[m] [m]

0.0 0.0088242 0.0 0.0012493 2.4121 0.0095682 0.0 0.0012493
 - 746.69 0 (Negligible)

Structure: f-50 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0	0.015724	0.0	-0.0018073	3.6067	0.017207	0.0	-0.0018073
- 661.81	0	(Negligible)					

Structure: 14-15 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0	0.0011572	0.0	180.04E-6	0.79589	0.0011492	0.0	180.04E-6
- 22883.0	0	(Negligible)					

Structure: 15-16 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0	0.0	0.0	203.82E-6	1.1405	0.0	0.0	203.82E-6
- 0	0	(Negligible)					

Structure: 16-17 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0	0.0	0.0	593.76E-6	2.2682	0.0	0.0	593.76E-6
- 0	0	(Negligible)					

Structure: 17-g | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[%]	[%]		[mm]	[%]		
0.0	0.0	0.0	0.0011542	4.1287	0.0	0.0	0.0011542
- 0 (Negligible)							

Structure: h-49 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[%]	[%]		[mm]	[%]		
0.0	0.012438	0.0	-0.0011563	3.8808	0.012353	0.0	-0.0011563
- 2124.4 0 (Negligible)							

Structure: 49-36 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[%]	[%]		[mm]	[%]		
0.0	0.0062832	0.0	-575.22E-6	1.9479	0.0062293	0.0	-575.22E-6
- 4706.7 0 (Negligible)							

Structure: 36-48 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[%]	[%]		[mm]	[%]		
0.0	992.37E-6	0.0	-163.14E-6	0.87637	984.44E-6	0.0	-163.14E-6
- 28694. 0 (Negligible)							

Structure: 48-47 | Sub-structure:

Vertical Min Offset from Radius of	Deflection Min Ratio	Average Damage Category Horizontal	Max Slope	Max Settlement	Max Tensile	Max Gradient of	Max Gradient of Vertical
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Line for Curvature Vertical (Hogging) Movement Calculations	Curvature	Strain	Strain	Horizontal Displacement	Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]
0.0	0.0	0.0	0.0	-119.43E-6	0.54707
-	-	0 (Negligible)			0.0
					-119.43E-6

Structure: 47-51 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0	0.0	68.325E-6	0.0	-8.4414E-6	0.40734	67.985E-6	0.0
377270.	1.4980E+6	0 (Negligible)					-8.4414E-6

Structure: 50-46 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve	Min Radius
[m]	[m]	[%]	[%]	[mm]	[%]			[m]
0.0	0.0	841.67E-6	0.0	90.155E-6	0.40725	809.99E-6	0.0	90.155E-6
-	48507.	0 (Negligible)						

Structure: 46-47 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve	Min Radius
[m]	[m]	[%]	[%]	[mm]	[%]			[m]
0.0	0.0	841.67E-6	0.0	90.155E-6	0.40725	809.99E-6	0.0	90.155E-6
-	48507.	0 (Negligible)						

Structure: 24-25 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve	Min Radius
[m]	[m]	[%]	[%]	[mm]	[%]			[m]
0.0	0.0	841.67E-6	0.0	90.155E-6	0.40725	809.99E-6	0.0	90.155E-6
-	48507.	0 (Negligible)						

[m] [%] [%] [mm] [%] [m]

Structure: 25-26 | Sub-structure:

Vertical Min Offset from of Radius of Line for Curvature	Deflection Damage Category Ratio	Average Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve	Min Radius
(Hogging) Movement Calculations	[m] [%]	[%]	[mm]	[%]	[m]		[m]	

Structure: 26-27 | Sub-structure:

Vertical Min Offset from of Radius of Line for Curvature	Deflection Damage Category Ratio	Average Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve	Min Radius
(Hogging) Movement Calculations	[m] [%]	[%]	[mm]	[%]	[m]		[m]	

Structure: 27-28 | Sub-structure:

Vertical Min Offset from of Radius of Line for Curvature	Deflection Damage Category Ratio	Average Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve	Min Radius
(Hogging) Movement Calculations	[m] [%]	[%]	[mm]	[%]	[m]		[m]	

Structure: 28-29 | Sub-structure:

Vertical Min Offset from of Radius of Line for Curvature	Deflection Damage Category Ratio	Average Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve	Min Radius
(Hogging) Movement Calculations	[m] [%]	[%]	[mm]	[%]	[m]		[m]	

Structure: 27-32 | Sub-structure:

Vertical Min Offset from of Radius of Line for Curvature	Deflection Damage Category Ratio	Average Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement	Max Gradient of Vertical Displacement	Min Radius
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Vertical (Hogging) (Sagging) Displacement Curve
 Movement Curve
 Calculations
 [m] [%] [%] [mm] [%] [m]
 [m]

Structure: 33-31 | Sub-structure:

Vertical Deflection Average Max Slope Max Max Max Gradient Max Gradient
 Min Min Damage Category
 Offset from Ratio Horizontal Settlement Tensile of of Vertical
 Radius of Radius of
 Line for Strain Strain Horizontal Displacement
 Curvature Curvature
 Vertical Displacement Curve
 (Hogging) (Sagging)
 Movement
 Calculations
 [m] [%] [%] [mm] [%]
 [m] [m]
 0.0 668.59E-6 0.0 80.211E-6 0.30002 658.86E-6 0.0 80.211E-6
 - 42286.0 (Negligible)

Structure: 31-34 | Sub-structure:

Vertical Deflection Average Max Slope Max Max Max Gradient Max Gradient
 Min Min Damage Category
 Offset from Ratio Horizontal Settlement Tensile of of Vertical
 Radius of Radius of
 Line for Strain Strain Horizontal Displacement
 Curvature Curvature
 Vertical Displacement Curve
 (Hogging) (Sagging)
 Movement
 Calculations
 [m] [%] [%] [mm] [%]
 [m] [m]
 0.0 91.792E-6 0.0 -32.194E-6 0.30010 91.517E-6 0.0 -32.194E-6
 236550. - 0 (Negligible)

Structure: 34-35 | Sub-structure:

Vertical Deflection Average Max Slope Max Max Max Gradient Max Gradient
 Min Min Damage Category
 Offset from Ratio Horizontal Settlement Tensile of of Vertical
 Radius of Radius of
 Line for Strain Strain Horizontal Displacement
 Curvature Curvature
 Vertical Displacement Curve
 (Hogging) (Sagging)
 Movement
 Calculations
 [m] [%] [%] [mm] [%]
 [m] [m]
 0.0 0.0 0.0 -44.829E-6 0.19626 0.0 0.0 -44.829E-6
 - - 0 (Negligible)

Structure: 35-41 | Sub-structure:

Vertical Deflection Average Max Slope Max Max Max Gradient Max Gradient
 Min Min Damage Category
 Offset from Ratio Horizontal Settlement Tensile of of Vertical
 Radius of Radius of
 Line for Strain Strain Horizontal Displacement
 Curvature Curvature
 Vertical Displacement Curve
 (Hogging) (Sagging)
 Movement
 Calculations
 [m] [%] [%] [mm] [%]
 [m] [m]

Offset from of Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Ratio Curvature (Sagging)	Horizontal Strain	Slope Category	Settlement [mm]	Tensile Strain [%]	of Horizontal Displacement Curve	of Vertical Displacement Curve	Radius [m]
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Structure: 22-b | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Horizontal Strain	Max Slope Category	Max Settlement [mm]	Max Tensile Strain [%]	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
0.0 - 6319.5 0 (Negligible)	0.0034011	0.0	327.66E-6	1.0328	0.0048821	0.0	327.66E-6

Structure: e-45 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Horizontal Strain	Max Slope Category	Max Settlement [mm]	Max Tensile Strain [%]	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
0.0 - 4105.1 0 (Negligible)	0.0051434	0.0	-474.35E-6	1.4500	0.0072215	0.0	-474.35E-6

Structure: 18-31 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Horizontal Strain	Max Slope Category	Max Settlement [mm]	Max Tensile Strain [%]	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
0.0 196820. 1.7471E+6 0 (Negligible)	202.78E-6	0.0	-34.821E-6	0.42894	240.22E-6	0.0	-34.821E-6

Structure: 23-24 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement	Deflection Min Ratio	Average Damage Horizontal Strain	Max Slope Category	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
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Calculations

[m]	[m]	[%]	[%]		[mm]	[%]		
0.0	340.89E-6	0.0	-52.137E-6	0.32239	515.09E-6	0.0	-52.137E-6	
-	182780.0	0	(Negligible)					

Structure: b-27 | Sub-structure:

Vertical	Deflection	Average	Max Slope	Max	Max	Max Gradient	Max Gradient
Min	Min	Damage	Category	Settlement	Tensile	of	of Vertical
Offset from	Ratio	Horizontal				Horizontal	Displacement
Radius of	Radius of	Strain			Strain	Displacement	Curve
Line for	Curvature					Curve	
Curvature	Curvature						
Vertical	Vertical						
(Hogging)	(Sagging)						
Movement							
Calculations							

[m]	[m]	[%]	[%]		[mm]	[%]		
0.0	0.0059655	0.0	-493.66E-6	1.3687	0.0088292	0.0	-493.66E-6	
-	4072.7	0	(Negligible)					

Structure: 42-37 | Sub-structure:

Vertical	Deflection	Average	Max Slope	Max	Max	Max Gradient	Max Gradient
Min	Min	Damage	Category	Settlement	Tensile	of	of Vertical
Offset from	Ratio	Horizontal				Horizontal	Displacement
Radius of	Radius of	Strain			Strain	Displacement	Curve
Line for	Curvature					Curve	
Curvature	Curvature						
Vertical	Vertical						
(Hogging)	(Sagging)						
Movement							
Calculations							

[m]	[m]	[%]	[%]		[mm]	[%]		
0.0	327.33E-6	0.0	-50.594E-6	0.35254	497.00E-6	0.0	-50.594E-6	
-	216290.0	0	(Negligible)					

Structure: 47-43 | Sub-structure:

Vertical	Deflection	Average	Max Slope	Max	Max	Max Gradient	Max Gradient
Min	Min	Damage	Category	Settlement	Tensile	of	of Vertical
Offset from	Ratio	Horizontal				Horizontal	Displacement
Radius of	Radius of	Strain			Strain	Displacement	Curve
Line for	Curvature					Curve	
Curvature	Curvature						
Vertical	Vertical						
(Hogging)	(Sagging)						
Movement							
Calculations							

[m]	[m]	[%]	[%]		[mm]	[%]		
0.0	463.41E-6	0.0	-30.386E-6	0.40734	686.25E-6	0.0	-30.386E-6	
-	189540.0	0	(Negligible)					

Structure: 44-39 | Sub-structure:

Vertical	Deflection	Average	Max Slope	Max	Max	Max Gradient	Max Gradient
Min	Min	Damage	Category	Settlement	Tensile	of	of Vertical
Offset from	Ratio	Horizontal				Horizontal	Displacement
Radius of	Radius of	Strain			Strain	Displacement	Curve
Line for	Curvature					Curve	
Curvature	Curvature						
Vertical	Vertical						
(Hogging)	(Sagging)						
Movement							
Calculations							

[m]	[m]	[%]	[%]		[mm]	[%]		
0.0	0.0	0.0	-14.483E-6	0.10539	0.0	0.0	-14.483E-6	
-	0	0	(Negligible)					

Structure: 46-45 | Sub-structure:

Vertical Min Offset of Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve	Min Radius
[m]	[%]	[%]		[mm]	[%]			[m]
1048.5	0.0	0.018855	0.0	-705.88E-6	3.4213	0.018885	0.0	-705.88E-6
		- 0 (Negligible)						

Structure: a-12 | Sub-structure:

Vertical Min Offset of Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve	Min Radius
[m]	[%]	[%]		[mm]	[%]			[m]
1048.5	0.0	0.018855	0.0	-705.88E-6	3.4213	0.018885	0.0	-705.88E-6
		- 0 (Negligible)						

Structure: 12-11 | Sub-structure:

Vertical Min Offset of Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve	Min Radius
[m]	[%]	[%]		[mm]	[%]			[m]
1049.9	0.0	0.025835	0.0	0.0011810	4.4078	0.033628	0.0	0.0011810
		- 0 (Negligible)						

Structure: 11-f | Sub-structure:

Vertical Min Offset of Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve	Min Radius
[m]	[%]	[%]		[mm]	[%]			[m]
455.67	0.0	0.025117	0.0	0.0016803	4.2456	0.025200	0.0	0.0016803
		- 0 (Negligible)						

Structure: ag | Sub-structure:

Vertical Min	Deflection Min	Average Damage Category	Max Slope	Max	Max	Max Gradient	Max Gradient	Min
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Offset from Radius of Curvature Vertical (Hogging) Movement Calculations	Ratio of Radius of Curvature	Horizontal Strain	Average Damage Category	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]		[mm]	[%]		
0.0	0.012103	0.0	0.0011087	4.1288	0.013354	0.0	0.0011087	
- 1249.8	0	(Negligible)						

Structure: gb | Sub-structure:

Vertical Min Offset from Radius of Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]		[mm]	[%]	
0.0	0.020518	0.0	-0.0011454	5.0475	0.021644	0.0	-0.0011454
932.71	2121.6	0	(Negligible)				

Structure: bc | Sub-structure:

Vertical Min Offset from Radius of Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]		[mm]	[%]	
0.0	0.0085349	0.0	394.31E-6	1.7154	0.0099708	0.0	394.31E-6
5566.1	- 0	(Negligible)					

Structure: cd | Sub-structure:

Vertical Min Offset from Radius of Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]		[mm]	[%]	
0.0	0.0	0.0	0.0	192.32E-6	1.6903	0.0	192.32E-6
-	- 0	(Negligible)					

Structure: eh | Sub-structure:

Vertical Min Offset from Radius of Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]		[mm]	[%]	
0.0	0.0	0.0	0.0	192.32E-6	1.6903	0.0	192.32E-6
-	- 0	(Negligible)					

Vertical Displacement Curve
(Hogging) (Sagging) Curve
Movement
Calculations

[m]	[m]	[%]	[%]	[mm]	[%]		
0.0	1604.6	0.026537	0.0	0.0014940	5.0251	0.028694	0.0 0.0014940
			2870.5				0 (Negligible)

Structure: hf | Sub-structure:

Vertical Deflection Average Max Slope Max Max Max Gradient Max Gradient
Min Min Damage Category
Offset from Ratio Horizontal Settlement Tensile of of Vertical
Radius of Radius of Strain Strain Horizontal Displacement
Line for Curvature Curvature
Vertical Displacement Curve
(Hogging) (Sagging)
Movement
Calculations

[m]	[m]	[%]	[%]	[mm]	[%]		
0.0		0.012860	0.0	830.50E-6	3.8808	0.014036	0.0 830.50E-6
	1453.2						0 (Negligible)

Structure: de | Sub-structure:

Vertical Deflection Average Max Max Max Max Gradient Max Gradient Min
Min Damage Category
Offset from Ratio Horizontal Slope Settlement Tensile of of Vertical Radius
of Radius of Strain Strain Horizontal Displacement
Line for Curvature Curvature
Vertical Displacement Curve
(Hogging) (Sagging)
Movement
Calculations

[m]	[m]	[%]	[%]	[mm]	[%]			[m]

Specific Building Damage Results - Critical Segments within Each Structure

Structure Name	Parameter	Critical	Critical Start	End	Curvature	Max Slope
Max	Max	Min	Damage Category	Sub-Structure Segment	Radius of	Radius of
Settlement	Tensile	Radius of	Radius of			
Strain	Curvature	Curvature				
(Hogging)	(Sagging)					
[mm]	[%]	[m]	[m]	[m]	[m]	[m]
21-20		All settlements are less than the Settlement Trough Limit Sensitivity.				
		All settlements are less than the Settlement Trough Limit Sensitivity.				
		All settlements are less than the Settlement Trough Limit Sensitivity.				
		All settlements are less than the Settlement Trough Limit Sensitivity.				
		All settlements are less than the Settlement Trough Limit Sensitivity.				
19-20		Max Slope		1	0.0 4.0319	Sagging 41.307E-6
0.25420	233.92E-6	-	180440.0 (Negligible)			
		Max Settlement		1	0.0 4.0319	Sagging 41.307E-6
0.25420	233.92E-6	-	180440.0 (Negligible)			
		Max Tensile		1	0.0 4.0319	Sagging 41.307E-6
0.25420	233.92E-6	-	180440.0 (Negligible)			
		Strain				
		Min Radius of		-	-	-
-	-	-	-			
		Curvature				
		(Hogging)				
		Min Radius of		1	0.0 4.0319	Sagging 41.307E-6
0.25420	233.92E-6	-	180440.0 (Negligible)			
		Curvature				
		(Sagging)				

19-18		Max Slope			1	0.0	2.0092	Sagging	98.332E-6
0.42884	561.23E-6	-	44053.0	(Negligible)					
		Max Settlement			1	0.0	2.0092	Sagging	98.332E-6
0.42884	561.23E-6	-	44053.0	(Negligible)					
		Max Tensile			1	0.0	2.0092	Sagging	98.332E-6
0.42884	561.23E-6	-	44053.0	(Negligible)					
		Strain			-	-	-	-	-
		Min Radius of							
		-	-	-					
		Curvature (Hogging)							
		Min Radius of			1	0.0	2.0092	Sagging	98.332E-6
0.42884	561.23E-6	-	44053.0	(Negligible)					
		Curvature (Sagging)							
18-13		Max Slope			1	0.0	6.9858	Hogging	16.335E-6
0.45985	385.13E-6	157200.	-	0 (Negligible)					
		Max Settlement			1	0.0	6.9858	Hogging	16.335E-6
0.45985	385.13E-6	157200.	-	0 (Negligible)					
		Max Tensile			1	0.0	6.9858	Hogging	16.335E-6
0.45985	385.13E-6	157200.	-	0 (Negligible)					
		Strain							
		Min Radius of			1	0.0	6.9858	Hogging	16.335E-6
0.45985	385.13E-6	157200.	-	0 (Negligible)					
		Curvature (Hogging)							
		Min Radius of			2	6.9858	11.700	Sagging	8.8578E-6
0.43666	64.695E-6	-	861170.0	(Negligible)					
		Curvature (Sagging)							
21-a		Max Slope			1	1.0430	11.820	Sagging	0.0012493
2.4121	0.0095682	-	746.69	0 (Negligible)					
		Max Settlement			1	1.0430	11.820	Sagging	0.0012493
2.4121	0.0095682	-	746.69	0 (Negligible)					
		Max Tensile			1	1.0430	11.820	Sagging	0.0012493
2.4121	0.0095682	-	746.69	0 (Negligible)					
		Strain							
		Min Radius of			-	-	-	-	-
		-	-	-					
		Curvature (Hogging)							
		Min Radius of			1	1.0430	11.820	Sagging	0.0012493
2.4121	0.0095682	-	746.69	0 (Negligible)					
		Curvature (Sagging)							
f-50		Max Slope			1	0.0	10.919	Sagging	0.0018073
3.6067	0.017207	-	661.81	0 (Negligible)					
		Max Settlement			1	0.0	10.919	Sagging	0.0018073
3.6067	0.017207	-	661.81	0 (Negligible)					
		Max Tensile			1	0.0	10.919	Sagging	0.0018073
3.6067	0.017207	-	661.81	0 (Negligible)					
		Strain							
		Min Radius of			-	-	-	-	-
		-	-	-					
		Curvature (Hogging)							
		Min Radius of			1	0.0	10.919	Sagging	0.0018073
3.6067	0.017207	-	661.81	0 (Negligible)					
		Curvature (Sagging)							
14-15		Max Slope			1	0.0	2.1390	Sagging	180.04E-6
0.79589	0.0011492	-	22883.0	(Negligible)					
		Max Settlement			1	0.0	2.1390	Sagging	180.04E-6
0.79589	0.0011492	-	22883.0	(Negligible)					
		Max Tensile			1	0.0	2.1390	Sagging	180.04E-6
0.79589	0.0011492	-	22883.0	(Negligible)					
		Strain							
		Min Radius of			-	-	-	-	-
		-	-	-					
		Curvature (Hogging)							
		Min Radius of			1	0.0	2.1390	Sagging	180.04E-6
0.79589	0.0011492	-	22883.0	(Negligible)					
		Curvature (Sagging)							
15-16		Max Slope			1	0.0	1.6897	Sagging	203.82E-6
1.1405	0.0	-	-	0 (Negligible)					

1.1405		Max Settlement			1	0.0	1.6897	Sagging	203.82E-6
	0.0	-	- 0 (Negligible)						
1.1405		Max Tensile			1	0.0	1.6897	Sagging	203.82E-6
	0.0	-	- 0 (Negligible)						
-	-	Strain			-	-	-	-	-
		Min Radius of							
-	-	-	- -						
-	-	Curvature			-	-	-	-	-
		(Hogging)							
-	-	Min Radius of							
		-	- -						
16-17		Curvature			1	0.0	1.8990	Sagging	593.76E-6
2.2682		(Sagging)							
	0.0	Max Slope	- 0 (Negligible)						
2.2682		Max Settlement			1	0.0	1.8990	Sagging	593.76E-6
	0.0	-	- 0 (Negligible)						
2.2682		Max Tensile			1	0.0	1.8990	Sagging	593.76E-6
	0.0	-	- 0 (Negligible)						
-	-	Strain			-	-	-	-	-
		Min Radius of							
-	-	-	- -						
-	-	Curvature			-	-	-	-	-
		(Hogging)							
-	-	Min Radius of							
		-	- -						
17-g		Curvature			1	0.0	1.6115	Sagging	0.0011542
4.1287		(Sagging)							
	0.0	Max Slope	- 0 (Negligible)						
4.1287		Max Settlement			1	0.0	1.6115	Sagging	0.0011542
	0.0	-	- 0 (Negligible)						
4.1287		Max Tensile			1	0.0	1.6115	Sagging	0.0011542
	0.0	-	- 0 (Negligible)						
-	-	Strain			-	-	-	-	-
		Min Radius of							
-	-	-	- -						
-	-	Curvature			-	-	-	-	-
		(Hogging)							
-	-	Min Radius of							
		-	- -						
h-49		Curvature			1	0.0	2.1345	Sagging	0.0011563
3.8808		(Sagging)							
	0.012353	Max Slope	- 2124.4 0 (Negligible)						
3.8808		Max Settlement			1	0.0	2.1345	Sagging	0.0011563
	0.012353	-	- 2124.4 0 (Negligible)						
3.8808		Max Tensile			1	0.0	2.1345	Sagging	0.0011563
	0.012353	-	- 2124.4 0 (Negligible)						
-	-	Strain			-	-	-	-	-
		Min Radius of							
-	-	-	- -						
3.8808		Curvature			1	0.0	2.1345	Sagging	0.0011563
	0.012353	(Hogging)							
		Min Radius of	- 2124.4 0 (Negligible)						
		-	- -						
49-36		Curvature			1	0.0	2.3890	Sagging	575.22E-6
1.9479		(Sagging)							
	0.0062293	Max Slope	- 4706.7 0 (Negligible)						
1.9479		Max Settlement			1	0.0	2.3890	Sagging	575.22E-6
	0.0062293	-	- 4706.7 0 (Negligible)						
1.9479		Max Tensile			1	0.0	2.3890	Sagging	575.22E-6
	0.0062293	-	- 4706.7 0 (Negligible)						
-	-	Strain			-	-	-	-	-
		Min Radius of							
-	-	-	- -						
1.9479		Curvature			1	0.0	2.3890	Sagging	575.22E-6
	0.0062293	(Hogging)							
		Min Radius of	- 4706.7 0 (Negligible)						
		-	- -						
36-48		Curvature			1	0.0	2.3002	Sagging	163.14E-6
0.87637		(Sagging)							
	984.44E-6	Max Slope	- 28694. 0 (Negligible)						
0.87637		Max Settlement			1	0.0	2.3002	Sagging	163.14E-6
	984.44E-6	-	- 28694. 0 (Negligible)						

0.87637	984.44E-6	Max Tensile Strain	-	28694.0	(Negligible)	1	0.0	2.3002	Sagging	163.14E-6	
-	-	Min Radius of Curvature (Hogging)	-	-	-	-	-	-	-	-	
0.87637	984.44E-6	Min Radius of Curvature (Sagging)	-	28694.0	(Negligible)	1	0.0	2.3002	Sagging	163.14E-6	
48-47	0.54707	Max Slope	0.0	-	0 (Negligible)	1	0.0	1.1690	Sagging	119.43E-6	
0.54707	0.0	Max Settlement	-	-	0 (Negligible)	1	0.0	1.1690	Sagging	119.43E-6	
0.54707	0.0	Max Tensile Strain	-	-	0 (Negligible)	1	0.0	1.1690	Sagging	119.43E-6	
-	-	Min Radius of Curvature (Hogging)	-	-	-	-	-	-	-	-	
-	-	Min Radius of Curvature (Sagging)	-	-	-	-	-	-	-	-	
47-51	0.36941	Max Slope	67.985E-6	377270.	- 0 (Negligible)	3	7.0984	10.749	Hogging	8.4414E-6	
0.40734	62.978E-6	Max Settlement	-	393290.	- 0 (Negligible)	1	0.0	3.3085	Hogging	6.5583E-6	
0.36941	67.985E-6	Max Tensile Strain	-	377270.	- 0 (Negligible)	3	7.0984	10.749	Hogging	8.4414E-6	
0.36941	67.985E-6	Min Radius of Curvature (Hogging)	-	377270.	- 0 (Negligible)	3	7.0984	10.749	Hogging	8.4414E-6	
0.39035	32.938E-6	Min Radius of Curvature (Sagging)	-	1.4980E+6	0 (Negligible)	2	3.3085	7.0984	Sagging	6.4954E-6	
50-46		All settlements are less than the Settlement Trough Limit Sensitivity.									
46-47	0.40725	Max Slope	809.99E-6	-	48507.0	(Negligible)	1	3.0450	8.1190	Sagging	90.155E-6
0.40725	809.99E-6	Max Settlement	-	-	48507.0	(Negligible)	1	3.0450	8.1190	Sagging	90.155E-6
0.40725	809.99E-6	Max Tensile Strain	-	-	48507.0	(Negligible)	1	3.0450	8.1190	Sagging	90.155E-6
-	-	Min Radius of Curvature (Hogging)	-	-	-	-	-	-	-	-	
0.40725	809.99E-6	Min Radius of Curvature (Sagging)	-	-	48507.0	(Negligible)	1	3.0450	8.1190	Sagging	90.155E-6
24-25		All settlements are less than the Settlement Trough Limit Sensitivity.									
25-26		All settlements are less than the Settlement Trough Limit Sensitivity.									
26-27		All settlements are less than the Settlement Trough Limit Sensitivity.									
27-28		All settlements are less than the Settlement Trough Limit Sensitivity.									

				All settlements are less than the Settlement Trough Limit Sensitivity.					
				All settlements are less than the Settlement Trough Limit Sensitivity.					
				All settlements are less than the Settlement Trough Limit Sensitivity.					
28-29				All settlements are less than the Settlement Trough Limit Sensitivity.					
				All settlements are less than the Settlement Trough Limit Sensitivity.					
				All settlements are less than the Settlement Trough Limit Sensitivity.					
				All settlements are less than the Settlement Trough Limit Sensitivity.					
27-32				All settlements are less than the Settlement Trough Limit Sensitivity.					
				All settlements are less than the Settlement Trough Limit Sensitivity.					
				All settlements are less than the Settlement Trough Limit Sensitivity.					
				All settlements are less than the Settlement Trough Limit Sensitivity.					
				All settlements are less than the Settlement Trough Limit Sensitivity.					
33-31				All settlements are less than the Settlement Trough Limit Sensitivity.					
				Max Slope	1	14.560	17.679	Sagging	80.211E-6
0.30002	658.86E-6	-	42286.0	(Negligible)	1	14.560	17.679	Sagging	80.211E-6
				Max Settlement	1	14.560	17.679	Sagging	80.211E-6
0.30002	658.86E-6	-	42286.0	(Negligible)	1	14.560	17.679	Sagging	80.211E-6
				Max Tensile	1	14.560	17.679	Sagging	80.211E-6
0.30002	658.86E-6	-	42286.0	(Negligible)					
				Strain					
				Min Radius of	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-
				Curvature (Hogging)					
				Min Radius of	1	14.560	17.679	Sagging	80.211E-6
0.30002	658.86E-6	-	42286.0	(Negligible)					
				Curvature (Sagging)					
31-34				Max Slope	1	0.0	2.9105	Hogging	32.194E-6
0.30010	91.517E-6	236550.	- 0	(Negligible)	1	0.0	2.9105	Hogging	32.194E-6
				Max Settlement	1	0.0	2.9105	Hogging	32.194E-6
0.30010	91.517E-6	236550.	- 0	(Negligible)	1	0.0	2.9105	Hogging	32.194E-6
				Max Tensile	1	0.0	2.9105	Hogging	32.194E-6
0.30010	91.517E-6	236550.	- 0	(Negligible)					
				Strain					
				Min Radius of	1	0.0	2.9105	Hogging	32.194E-6
0.30010	91.517E-6	236550.	- 0	(Negligible)					
				Curvature (Hogging)					
				Min Radius of	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-
				Curvature (Sagging)					
34-35				Max Slope	1	0.0	1.3290	Sagging	44.829E-6
0.19626	0.0	-	- 0	(Negligible)	1	0.0	1.3290	Sagging	44.829E-6
				Max Settlement	1	0.0	1.3290	Sagging	44.829E-6
0.19626	0.0	-	- 0	(Negligible)	1	0.0	1.3290	Sagging	44.829E-6
				Max Tensile	1	0.0	1.3290	Sagging	44.829E-6
0.19626	0.0	-	- 0	(Negligible)					
				Strain					
				Min Radius of	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-
				Curvature (Hogging)					
				Min Radius of	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-
				Curvature (Sagging)					
35-41				Max Slope	1	0.0	1.2000	Sagging	20.213E-6
0.13663	0.0	-	834010.0	(Negligible)	1	0.0	1.2000	Sagging	20.213E-6
				Max Settlement	1	0.0	1.2000	Sagging	20.213E-6
0.13663	0.0	-	834010.0	(Negligible)	1	0.0	1.2000	Sagging	20.213E-6
				Max Tensile	1	0.0	1.2000	Sagging	20.213E-6
0.13663	0.0	-	834010.0	(Negligible)					
				Strain					
				Min Radius of	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-
				Curvature (Hogging)					
				Min Radius of	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-
				Curvature (Sagging)					
41-40				Max Slope	1	2.0350	4.0690	Sagging	31.110E-6
0.17576	80.216E-6	-	309560.0	(Negligible)					

			Max Settlement	1	2.0350	4.0690	Sagging	31.110E-6
0.17576	80.216E-6	-	309560. 0 (Negligible)					
			Max Tensile	1	2.0350	4.0690	Sagging	31.110E-6
0.17576	80.216E-6	-	309560. 0 (Negligible)					
			Strain					
-	-	-	Min Radius of	-	-	-	-	-
			Curvature (Hogging)					
			Min Radius of	1	2.0350	4.0690	Sagging	31.110E-6
0.17576	80.216E-6	-	309560. 0 (Negligible)					
			Curvature (Sagging)					
40-39			Max Slope	1	0.0	1.3000	Sagging	35.595E-6
0.17579	0.0	-	166510. 0 (Negligible)					
			Max Settlement	1	0.0	1.3000	Sagging	35.595E-6
0.17579	0.0	-	166510. 0 (Negligible)					
			Max Tensile	1	0.0	1.3000	Sagging	35.595E-6
0.17579	0.0	-	166510. 0 (Negligible)					
			Strain					
-	-	-	Min Radius of	-	-	-	-	-
			Curvature (Hogging)					
-	-	-	Min Radius of	-	-	-	-	-
			Curvature (Sagging)					
39-38			All settlements are less than the Settlement Trough Limit Sensitivity.					
			All settlements are less than the Settlement Trough Limit Sensitivity.					
			All settlements are less than the Settlement Trough Limit Sensitivity.					
			All settlements are less than the Settlement Trough Limit Sensitivity.					
38-25			All settlements are less than the Settlement Trough Limit Sensitivity.					
			All settlements are less than the Settlement Trough Limit Sensitivity.					
			All settlements are less than the Settlement Trough Limit Sensitivity.					
			All settlements are less than the Settlement Trough Limit Sensitivity.					
20-22			All settlements are less than the Settlement Trough Limit Sensitivity.					
			All settlements are less than the Settlement Trough Limit Sensitivity.					
			All settlements are less than the Settlement Trough Limit Sensitivity.					
			All settlements are less than the Settlement Trough Limit Sensitivity.					
22-b			Max Slope	1	3.4680	11.790	Sagging	327.66E-6
1.0328	0.0048821	-	6319.5 0 (Negligible)					
			Max Settlement	1	3.4680	11.790	Sagging	327.66E-6
1.0328	0.0048821	-	6319.5 0 (Negligible)					
			Max Tensile	1	3.4680	11.790	Sagging	327.66E-6
1.0328	0.0048821	-	6319.5 0 (Negligible)					
			Strain					
-	-	-	Min Radius of	-	-	-	-	-
			Curvature (Hogging)					
			Min Radius of	1	3.4680	11.790	Sagging	327.66E-6
1.0328	0.0048821	-	6319.5 0 (Negligible)					
			Curvature (Sagging)					
e-45			Max Slope	1	0.0	8.8574	Sagging	474.35E-6
1.4500	0.0072215	-	4105.1 0 (Negligible)					
			Max Settlement	1	0.0	8.8574	Sagging	474.35E-6
1.4500	0.0072215	-	4105.1 0 (Negligible)					
			Max Tensile	1	0.0	8.8574	Sagging	474.35E-6
1.4500	0.0072215	-	4105.1 0 (Negligible)					
			Strain					
-	-	-	Min Radius of	-	-	-	-	-
			Curvature (Hogging)					
			Min Radius of	1	0.0	8.8574	Sagging	474.35E-6
1.4500	0.0072215	-	4105.1 0 (Negligible)					
			Curvature (Sagging)					
18-31			Max Slope	1	0.0	5.6836	Hogging	34.821E-6
0.42894	240.22E-6	196820.	- 0 (Negligible)					
			Max Settlement	1	0.0	5.6836	Hogging	34.821E-6
0.42894	240.22E-6	196820.	- 0 (Negligible)					

0.42894	240.22E-6	Max Tensile Strain	196820.	- 0 (Negligible)	1	0.0	5.6836	Hogging	34.821E-6
0.42894	240.22E-6	Min Radius of Curvature (Hogging)	196820.	- 0 (Negligible)	1	0.0	5.6836	Hogging	34.821E-6
0.25844	0.0	Min Radius of Curvature (Sagging)	- 1.7471E+6	0 (Negligible)	2	5.6836	6.8291	Sagging	34.821E-6
23-24		Max Slope			1	0.0	5.3417	Sagging	52.137E-6
0.32239	515.09E-6	Max Settlement	- 182780.	0 (Negligible)	1	0.0	5.3417	Sagging	52.137E-6
0.32239	515.09E-6	Max Tensile Strain	- 182780.	0 (Negligible)	1	0.0	5.3417	Sagging	52.137E-6
0.32239	515.09E-6	Min Radius of Curvature (Hogging)	- 182780.	0 (Negligible)	1	0.0	5.3417	Sagging	52.137E-6
-	-	Min Radius of Curvature (Sagging)	- -	-	-	-	-	-	-
0.32239	515.09E-6	Min Radius of Curvature (Sagging)	- 182780.	0 (Negligible)	1	0.0	5.3417	Sagging	52.137E-6
b-27		Max Slope			1	0.0	7.4513	Sagging	493.66E-6
1.3687	0.0088292	Max Settlement	- 4072.7	0 (Negligible)	1	0.0	7.4513	Sagging	493.66E-6
1.3687	0.0088292	Max Tensile Strain	- 4072.7	0 (Negligible)	1	0.0	7.4513	Sagging	493.66E-6
1.3687	0.0088292	Min Radius of Curvature (Hogging)	- 4072.7	0 (Negligible)	1	0.0	7.4513	Sagging	493.66E-6
-	-	Min Radius of Curvature (Sagging)	- -	-	-	-	-	-	-
1.3687	0.0088292	Min Radius of Curvature (Sagging)	- 4072.7	0 (Negligible)	1	0.0	7.4513	Sagging	493.66E-6
42-37		Max Slope			1	0.0	6.1100	Sagging	50.594E-6
0.35254	497.00E-6	Max Settlement	- 216290.	0 (Negligible)	1	0.0	6.1100	Sagging	50.594E-6
0.35254	497.00E-6	Max Tensile Strain	- 216290.	0 (Negligible)	1	0.0	6.1100	Sagging	50.594E-6
0.35254	497.00E-6	Min Radius of Curvature (Hogging)	- 216290.	0 (Negligible)	1	0.0	6.1100	Sagging	50.594E-6
-	-	Min Radius of Curvature (Sagging)	- -	-	-	-	-	-	-
0.35254	497.00E-6	Min Radius of Curvature (Sagging)	- 216290.	0 (Negligible)	1	0.0	6.1100	Sagging	50.594E-6
47-43		Max Slope			1	0.0	9.4472	Hogging	30.386E-6
0.40734	686.25E-6	Max Settlement	- 189540.	0 (Negligible)	1	0.0	9.4472	Hogging	30.386E-6
0.40734	686.25E-6	Max Tensile Strain	- 189540.	0 (Negligible)	1	0.0	9.4472	Hogging	30.386E-6
0.40734	686.25E-6	Min Radius of Curvature (Hogging)	- 189540.	0 (Negligible)	1	0.0	9.4472	Hogging	30.386E-6
0.40734	686.25E-6	Min Radius of Curvature (Sagging)	- 189540.	0 (Negligible)	1	0.0	9.4472	Hogging	30.386E-6
-	-	Min Radius of Curvature (Sagging)	- -	-	-	-	-	-	-
44-39		Max Slope			1	0.0	0.0	Sagging	14.483E-6
0.10539	0.0	Max Settlement	- 2.0135E+6	0 (Negligible)	1	0.0	0.0	Sagging	14.483E-6
0.10539	0.0	Max Tensile Strain	- 2.0135E+6	0 (Negligible)	1	0.0	0.0	Sagging	14.483E-6
0.10539	0.0	Min Radius of Curvature (Hogging)	- 2.0135E+6	0 (Negligible)	1	0.0	0.0	Sagging	14.483E-6

			Strain										
-	-	-	Min Radius of	-	-	-	-	-	-	-	-	-	-
			Curvature										
			(Hogging)										
-	-	-	Min Radius of	-	-	-	-	-	-	-	-	-	-
			Curvature										
			(Sagging)										
46-45			All settlements are less than the Settlement Trough Limit Sensitivity.										
			All settlements are less than the Settlement Trough Limit Sensitivity.										
			All settlements are less than the Settlement Trough Limit Sensitivity.										
			All settlements are less than the Settlement Trough Limit Sensitivity.										
			All settlements are less than the Settlement Trough Limit Sensitivity.										
a-12			Max Slope	1	0.0	4.4594	Hogging						705.88E-6
3.4213	0.018885	1048.5	- 0 (Negligible)	1	0.0	4.4594	Hogging						705.88E-6
			Max Settlement	1	0.0	4.4594	Hogging						705.88E-6
3.4213	0.018885	1048.5	- 0 (Negligible)	1	0.0	4.4594	Hogging						705.88E-6
			Max Tensile	1	0.0	4.4594	Hogging						705.88E-6
3.4213	0.018885	1048.5	- 0 (Negligible)	1	0.0	4.4594	Hogging						705.88E-6
			Strain										
			Min Radius of	1	0.0	4.4594	Hogging						705.88E-6
3.4213	0.018885	1048.5	- 0 (Negligible)	1	0.0	4.4594	Hogging						705.88E-6
			Curvature										
			(Hogging)										
-	-	-	Min Radius of	-	-	-	-	-	-	-	-	-	-
			Curvature										
			(Sagging)										
12-11			Max Slope	1	0.0	6.6990	Hogging						0.0011810
4.4078	0.033628	1049.9	- 0 (Negligible)	1	0.0	6.6990	Hogging						0.0011810
			Max Settlement	1	0.0	6.6990	Hogging						0.0011810
4.4078	0.033628	1049.9	- 0 (Negligible)	1	0.0	6.6990	Hogging						0.0011810
			Max Tensile	1	0.0	6.6990	Hogging						0.0011810
4.4078	0.033628	1049.9	- 0 (Negligible)	1	0.0	6.6990	Hogging						0.0011810
			Strain										
			Min Radius of	1	0.0	6.6990	Hogging						0.0011810
4.4078	0.033628	1049.9	- 0 (Negligible)	1	0.0	6.6990	Hogging						0.0011810
			Curvature										
			(Hogging)										
-	-	-	Min Radius of	-	-	-	-	-	-	-	-	-	-
			Curvature										
			(Sagging)										
11-f			Max Slope	1	0.0	4.4697	Hogging						0.0016803
4.2456	0.025200	455.67	- 0 (Negligible)	1	0.0	4.4697	Hogging						0.0016803
			Max Settlement	1	0.0	4.4697	Hogging						0.0016803
4.2456	0.025200	455.67	- 0 (Negligible)	1	0.0	4.4697	Hogging						0.0016803
			Max Tensile	1	0.0	4.4697	Hogging						0.0016803
4.2456	0.025200	455.67	- 0 (Negligible)	1	0.0	4.4697	Hogging						0.0016803
			Strain										
			Min Radius of	1	0.0	4.4697	Hogging						0.0016803
4.2456	0.025200	455.67	- 0 (Negligible)	1	0.0	4.4697	Hogging						0.0016803
			Curvature										
			(Hogging)										
-	-	-	Min Radius of	-	-	-	-	-	-	-	-	-	-
			Curvature										
			(Sagging)										
ag			Max Slope	1	0.0	11.050	Sagging						0.0011087
4.1288	0.013354	- 1249.8	0 (Negligible)	1	0.0	11.050	Sagging						0.0011087
			Max Settlement	1	0.0	11.050	Sagging						0.0011087
4.1288	0.013354	- 1249.8	0 (Negligible)	1	0.0	11.050	Sagging						0.0011087
			Max Tensile	1	0.0	11.050	Sagging						0.0011087
4.1288	0.013354	- 1249.8	0 (Negligible)	1	0.0	11.050	Sagging						0.0011087
			Strain										
			Min Radius of	-	-	-	-	-	-	-	-	-	-
			Curvature										
			(Hogging)										
			Min Radius of	1	0.0	11.050	Sagging						0.0011087
4.1288	0.013354	- 1249.8	0 (Negligible)	1	0.0	11.050	Sagging						0.0011087
			Curvature										
			(Sagging)										
gb			Max Slope	1	0.0	4.7848	Hogging						0.0011454
5.0475	0.021644	932.71	- 0 (Negligible)	1	0.0	4.7848	Hogging						0.0011454

			Max Settlement		1	0.0	4.7848	Hogging	0.0011454
5.0475	0.021644		932.71	- 0 (Negligible)					
			Max Tensile		1	0.0	4.7848	Hogging	0.0011454
5.0475	0.021644		932.71	- 0 (Negligible)					
			Strain		1	0.0	4.7848	Hogging	0.0011454
5.0475	0.021644		Min Radius of						
			932.71	- 0 (Negligible)					
			Curvature		2	4.7848	7.6860	Sagging	0.0011454
3.9948	0.012996		-	2121.6 0 (Negligible)					
			(Sagging)						
bc			Max Slope		1	0.0	5.5590	Hogging	394.31E-6
1.7154	0.0099708		5566.1	- 0 (Negligible)					
			Max Settlement		1	0.0	5.5590	Hogging	394.31E-6
1.7154	0.0099708		5566.1	- 0 (Negligible)					
			Max Tensile		1	0.0	5.5590	Hogging	394.31E-6
1.7154	0.0099708		5566.1	- 0 (Negligible)					
			Strain		1	0.0	5.5590	Hogging	394.31E-6
1.7154	0.0099708		Min Radius of						
			5566.1	- 0 (Negligible)					
			Curvature		-	-	-	-	-
-	-		(Hogging)						
			Min Radius of						
-	-		-	-					
			Curvature		1	0.0	1.7483	Sagging	192.32E-6
cd			(Sagging)						
1.6903	0.0		Max Slope	- 0 (Negligible)					
			Max Settlement		1	0.0	1.7483	Sagging	192.32E-6
1.6903	0.0		-	- 0 (Negligible)					
			Max Tensile		1	0.0	1.7483	Sagging	192.32E-6
1.6903	0.0		-	- 0 (Negligible)					
			Strain		-	-	-	-	-
-	-		Min Radius of						
-	-		-	-					
			Curvature		-	-	-	-	-
-	-		(Hogging)						
			Min Radius of						
-	-		-	-					
			Curvature		2	1.0738	4.8046	Sagging	0.0014940
eh			(Sagging)						
3.5506	0.018804		Max Slope	- 2870.5 0 (Negligible)					
			Max Settlement		3	4.8046	9.7590	Hogging	0.0014940
5.0251	0.028694		1604.6	- 0 (Negligible)					
			Max Tensile		3	4.8046	9.7590	Hogging	0.0014940
5.0251	0.028694		1604.6	- 0 (Negligible)					
			Strain		3	4.8046	9.7590	Hogging	0.0014940
5.0251	0.028694		Min Radius of						
			1604.6	- 0 (Negligible)					
			Curvature		2	1.0738	4.8046	Sagging	0.0014940
3.5506	0.018804		(Hogging)						
			Min Radius of						
			-	2870.5 0 (Negligible)					
			Curvature		1	0.0	10.879	Sagging	830.50E-6
hf			(Sagging)						
3.8808	0.014036		Max Slope	- 1453.2 0 (Negligible)					
			Max Settlement		1	0.0	10.879	Sagging	830.50E-6
3.8808	0.014036		-	- 1453.2 0 (Negligible)					
			Max Tensile		1	0.0	10.879	Sagging	830.50E-6
3.8808	0.014036		-	- 1453.2 0 (Negligible)					
			Strain		-	-	-	-	-
-	-		Min Radius of						
-	-		-	-					
			Curvature		1	0.0	10.879	Sagging	830.50E-6
3.8808	0.014036		(Hogging)						
			Min Radius of						
			-	1453.2 0 (Negligible)					
			Curvature						
de			(Sagging)						
			All settlements are less than the Settlement Trough Limit Sensitivity.						
			All settlements are less than the Settlement Trough Limit Sensitivity.						
			All settlements are less than the Settlement Trough Limit Sensitivity.						
			All settlements are less than the Settlement Trough Limit Sensitivity.						

All settlements are less than the Settlement Trough Limit Sensitivity.

Specific Building Damage Results - All Combined Segments

Structure: 21-20 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: 19-20 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: 19-18 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: 18-13 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: 21-a | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: f-50 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: 14-15 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: 15-16 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: 16-17 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: 17-g | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: h-49 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: 49-36 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: 36-48 | Sub-structure:

Vertical	Combined	Start	Length	Curvature	Deflection	Average	Max	Damage Category
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Offset from Line for Vertical Movement Calculations	Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 48-47 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 47-51 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 50-46 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 46-47 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 24-25 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 25-26 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

[m] [m] [m] [%] [%] [%]
No structures have segments combined.

Structure: 26-27 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]	[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 27-28 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]	[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 28-29 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]	[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 27-32 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]	[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 33-31 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]	[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 31-34 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]	[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 34-35 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: 35-41 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: 41-40 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: 40-39 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: 39-38 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: 38-25 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: 20-22 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Movement Calculations

[m] [m] [m] [%] [%] [%]
No structures have segments combined.

Structure: 22-b | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
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[m] [m] [m] [%] [%] [%]
No structures have segments combined.

Structure: e-45 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
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[m] [m] [m] [%] [%] [%]
No structures have segments combined.

Structure: 18-31 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
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[m] [m] [m] [%] [%] [%]
No structures have segments combined.

Structure: 23-24 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
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[m] [m] [m] [%] [%] [%]
No structures have segments combined.

Structure: b-27 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
--	------------------	-------	--------	-----------	------------------	---------------------------	--------------------	-----------------

[m] [m] [m] [%] [%] [%]
No structures have segments combined.

Structure: 42-37 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
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[m] [m] [m] [%] [%] [%]
No structures have segments combined.

Structure: 47-43 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: 44-39 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: 46-45 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: a-12 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: 12-11 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: 11-f | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: ag | Sub-structure:

Vertical Offset from	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
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Line for Vertical Movement Calculations	Strain	Strain
[m] [m] [m]	[%]	[%]

No structures have segments combined.

Structure: gb | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]	[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: bc | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]	[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: cd | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]	[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: eh | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]	[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: hf | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]	[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: de | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]	[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

DEMOLITION + EXCAVATION

Analysis Options

Analysis: Boussinesq
 Global Poisson's ratio: 0.50
 Maximum allowable ratio between values of E: 1.5
 Horizontal rigid boundary level: -45.40 [m OD]
 Displacements at area centroids calculated.

Soil Profiles Soil Profile 1

Layer	Level at top	Number of intermediate displacement levels	Youngs Modulus		Poissons ratio	Non-linear curve
			Top	Btm		
	[mOD]		[kN/m ²]	[kN/m ²]		
1	0.0	8	10000.	10000.	0.20000	None
2	-4.2000	2	10800.	10800.	0.50000	None
3	-5.2000	2	30000.	30000.	0.20000	None
4	-8.3500	1	30000.	30000.	0.50000	None
5	-9.0000	61	20000.	94160.	0.50000	None
6	-39.600	11	300000.	300000.	0.20000	None

Soil Zones

Zone	Name	X coordinates		Y coordinates		Profile
		min	max	min	max	
		[m]	[m]	[m]	[m]	
1	demo	0.0	110.00	0.0	110.00	Soil Profile 1

Load Data

Load ref.	Name	Shape Polygon	Orientation of Plane	Centre of load		Angle of Tangential local x from	Width x or Radius	Length
				Number (local x) X	Normal (Global) (local x) Y			
Coordinates		Rectangle	of	(local z) Z	(local y) Z			
tolerance	rectangles			(level)				
[m]				[m]	[m]	[m]	[Degrees]	[m]
N/A	1 basement A	Polygonal	Horizontal	N/A	N/A	-0.60000	N/A	N/A
(66,58.3)	(66,53.2)			10.000	2	-10.000	N/A	N/A
(59.8,51.7)	(55,51.6)							
(55,58.4)								
N/A	2 vault A	Polygonal	Horizontal	N/A	N/A	-3.1300	N/A	N/A
(55,58.4)	(59.8,58.4)			10.000	1	-20.000	N/A	N/A
(59.8,51.6)	(55,51.6)							
N/A	3 vault B	Polygonal	Horizontal	N/A	N/A	-3.1300	N/A	N/A
(44.3,58.4)	(44.3,51.6)			10.000	1	-20.000	N/A	N/A
(39.6,51.7)	(39.6,58.4)							
N/A	4 basement B	Polygonal	Horizontal	N/A	N/A	-3.1300	N/A	N/A
(55,58.4)	(55,51.6)			10.000	1	-10.000	N/A	N/A
(39.6,51.7)	(39.6,58.4)							
N/A	5 exc (3.6m)	Polygonal	Horizontal	N/A	N/A	-4.2000	N/A	N/A
(66,58.3)	(66,53.2)			10.000	1	-72.000	N/A	N/A
(59.8,51.7)	(59.8,58.3)							

6 exc (1.07m)	Polygonal	Horizontal	N/A	N/A	-4.2000	N/A	N/A
N/A (59.8,58.3)	(59.8,51.7)	10.000	1	-21.400	N/A	N/A	
(39.6,51.7)	(39.6,58.4)						
7 new basement	Polygonal	Horizontal	N/A	N/A	-4.2000	N/A	N/A
N/A (66,58.3)	(66,53.2)	10.000	2	10.000	N/A	N/A	
(59.8,51.7)	(39.6,51.7)						
(39.6,58.4)							

Displacement Data

intrvl	Ref.	Type	Name	Direction of Extrusion	No. of intrvl along extrusion	Line/Line for extrusion			No. of	
						First point	Second point			
across	Extrusion	Depth	Calculate	Detailed	X	Y	Z(level)	X	Y	Z(level)
extrusion/line			results	results	[m]	[m]	[m]	[m]	[m]	[m]
[m]										
99	1	Grid	Grid 1	Global X	30.000	35.000	0.0	N/A	80.000	0.0
		70.000		99	Yes	Yes				
11	2	Line	21-20	N/A	55.960	70.700	0.0	44.210	70.720	0.0
		N/A	N/A	N/A	Yes	Yes				
5	3	Line	19-20	N/A	59.140	66.790	0.0	55.960	70.700	0.0
		N/A	N/A	N/A	Yes	Yes				
2	4	Line	19-18	N/A	59.140	66.790	0.0	59.170	64.780	0.0
		N/A	N/A	N/A	Yes	Yes				
14	5	Line	18-13	N/A	59.170	64.780	0.0	44.210	64.800	0.0
		N/A	N/A	N/A	Yes	Yes				
34	6	Line	21-a	N/A	44.210	70.720	0.0	44.060	58.900	0.0
		N/A	N/A	N/A	Yes	Yes				
15	7	Line	f-50	N/A	44.100	51.600	0.0	44.160	36.710	0.0
		N/A	N/A	N/A	Yes	Yes				
2	8	Line	14-15	N/A	55.000	64.760	0.0	55.000	62.620	0.0
		N/A	N/A	N/A	Yes	Yes				
1	9	Line	15-16	N/A	55.000	62.620	0.0	56.230	61.460	0.0
		N/A	N/A	N/A	Yes	Yes				
1	10	Line	16-17	N/A	56.230	61.460	0.0	56.220	59.560	0.0
		N/A	N/A	N/A	Yes	Yes				
1	11	Line	17-g	N/A	56.220	59.560	0.0	55.100	58.400	0.0
		N/A	N/A	N/A	Yes	Yes				
2	12	Line	h-49	N/A	54.980	51.600	0.0	56.500	50.100	0.0
		N/A	N/A	N/A	Yes	Yes				
2	13	Line	49-36	N/A	56.500	50.100	0.0	56.500	47.710	0.0
		N/A	N/A	N/A	Yes	Yes				
2	14	Line	36-48	N/A	56.500	47.710	0.0	54.960	46.000	0.0
		N/A	N/A	N/A	Yes	Yes				
1	15	Line	48-47	N/A	54.960	46.000	0.0	54.960	44.830	0.0
		N/A	N/A	N/A	Yes	Yes				
10	16	Line	47-51	N/A	54.960	44.830	0.0	44.210	44.830	0.0
		N/A	N/A	N/A	Yes	Yes				
10	17	Line	50-46	N/A	44.160	36.710	0.0	54.960	36.710	0.0
		N/A	N/A	N/A	Yes	Yes				
8	18	Line	46-47	N/A	54.960	36.710	0.0	54.960	44.830	0.0
		N/A	N/A	N/A	Yes	Yes				
9	19	Line	24-25	N/A	78.820	63.100	0.0	88.080	63.070	0.0
		N/A	N/A	N/A	Yes	Yes				
5	20	Line	25-26	N/A	88.080	63.070	0.0	88.000	57.750	0.0
		N/A	N/A	N/A	Yes	Yes				
11	21	Line	26-27	N/A	88.000	57.750	0.0	76.730	57.900	0.0
		N/A	N/A	N/A	Yes	Yes				
3	22	Line	27-28	N/A	76.730	57.900	0.0	76.710	61.070	0.0
		N/A	N/A	N/A	Yes	Yes				
2	23	Line	28-29	N/A	76.710	61.070	0.0	78.820	63.100	0.0
		N/A	N/A	N/A	Yes	Yes				
5	24	Line	27-32	N/A	76.730	57.900	0.0	76.750	52.750	0.0
		N/A	N/A	N/A	Yes	Yes				
17	25	Line	33-31	N/A	87.930	52.750	0.0	70.250	52.750	0.0
		N/A	N/A	N/A	Yes	Yes				
3	26	Line	31-34	N/A	70.250	52.750	0.0	70.180	49.380	0.0
		N/A	N/A	N/A	Yes	Yes				
1	27	Line	34-35	N/A	70.180	49.380	0.0	71.510	49.370	0.0
		N/A	N/A	N/A	Yes	Yes				
3	28	Line	35-41	N/A	71.510	49.370	0.0	71.480	45.770	0.0
		N/A	N/A	N/A	Yes	Yes				

29	Line	41-40	N/A	71.480	45.770	0.0	67.410	45.770	0.0
4	N/A	N/A	Yes	Yes					
30	Line	40-39	N/A	67.410	45.770	0.0	67.390	41.870	0.0
3	N/A	N/A	Yes	Yes					
31	Line	39-38	N/A	67.390	41.870	0.0	88.000	41.700	0.0
20	N/A	N/A	Yes	Yes					
32	Line	38-25	N/A	88.000	41.700	0.0	88.080	63.070	0.0
21	N/A	N/A	Yes	Yes					
33	Line	20-22	N/A	55.960	70.700	0.0	66.130	70.690	0.0
10	N/A	N/A	Yes	Yes					
34	Line	22-b	N/A	66.130	70.690	0.0	66.300	58.900	0.0
17	N/A	N/A	Yes	Yes					
35	Line	e-45	N/A	64.740	51.600	0.0	64.480	36.840	0.0
15	N/A	N/A	Yes	Yes					
36	Line	18-31	N/A	59.170	64.780	0.0	66.000	64.740	0.0
6	N/A	N/A	Yes	Yes					
37	Line	23-24	N/A	66.000	63.140	0.0	78.820	63.100	0.0
12	N/A	N/A	Yes	Yes					
38	Line	b-27	N/A	66.100	58.460	0.0	76.730	57.900	0.0
10	N/A	N/A	Yes	Yes					
39	Line	42-37	N/A	64.540	46.730	0.0	87.960	46.450	0.0
23	N/A	N/A	Yes	Yes					
40	Line	47-43	N/A	54.960	44.830	0.0	64.500	44.830	0.0
9	N/A	N/A	Yes	Yes					
41	Line	44-39	N/A	64.440	41.910	0.0	67.390	41.870	0.0
2	N/A	N/A	Yes	Yes					
42	Line	46-45	N/A	54.960	36.710	0.0	64.480	36.840	0.0
9	N/A	N/A	Yes	Yes					
43	Line	a-12	N/A	44.060	58.900	0.0	39.630	58.380	0.0
4	N/A	N/A	Yes	Yes					
44	Line	12-11	N/A	39.630	58.380	0.0	39.630	51.680	0.0
6	N/A	N/A	Yes	Yes					
45	Line	11-f	N/A	39.630	51.680	0.0	44.100	51.600	0.0
8	N/A	N/A	Yes	Yes					
46	Line	ag	N/A	44.060	58.900	0.0	55.100	58.400	0.0
11	N/A	N/A	Yes	Yes					
47	Line	gb	N/A	55.100	58.400	0.0	66.500	58.460	0.0
20	N/A	N/A	Yes	Yes					
48	Line	bc	N/A	66.500	58.460	0.0	66.500	52.900	0.0
20	N/A	N/A	Yes	Yes					
49	Line	cd	N/A	66.500	52.900	0.0	65.000	52.000	0.0
1	N/A	N/A	Yes	Yes					
50	Line	eh	N/A	64.740	51.600	0.0	54.980	51.600	0.0
9	N/A	N/A	Yes	Yes					
51	Line	hf	N/A	54.980	51.600	0.0	44.100	51.600	0.0
10	N/A	N/A	Yes	Yes					
52	Line	de	N/A	65.000	52.000	0.0	64.740	51.600	0.0
4	N/A	N/A	Yes	Yes					

Problem Type

Problem Type : Tunnelling and Embedded Wall Excavations

Displacement Data

Type of intervals across extrusion/line	Name of Extrusion	Direction No. of intervals of extrusion along	Calculate Surface	Point/Line/Line for extrusion type for tunnels	No.				
				First point	Second point				
				X	Y	Z (level)	X	Y	Z (level)
				[m]	[m]	[m]	[m]	[m]	[m]
[m]	Grid 1	Global X	Yes	30.00000	35.00000	0.00000	-	80.00000	0.00000
99	70.00000	99	Yes	Surface					

Line 11	21-20	-	-	55.96000	70.70000	0.00000	44.21000	70.72000	0.00000
	-	-	Yes	Surface					
Line 5	19-20	-	-	59.14000	66.79000	0.00000	55.96000	70.70000	0.00000
	-	-	Yes	Surface					
Line 2	19-18	-	-	59.14000	66.79000	0.00000	59.17000	64.78000	0.00000
	-	-	Yes	Surface					
Line 14	18-13	-	-	59.17000	64.78000	0.00000	44.21000	64.80000	0.00000
	-	-	Yes	Surface					
Line 34	21-a	-	-	44.21000	70.72000	0.00000	44.06000	58.90000	0.00000
	-	-	Yes	Surface					
Line 15	f-50	-	-	44.10000	51.60000	0.00000	44.16000	36.71000	0.00000
	-	-	Yes	Surface					
Line 2	14-15	-	-	55.00000	64.76000	0.00000	55.00000	62.62000	0.00000
	-	-	Yes	Surface					
Line 1	15-16	-	-	55.00000	62.62000	0.00000	56.23000	61.46000	0.00000
	-	-	Yes	Surface					
Line 1	16-17	-	-	56.23000	61.46000	0.00000	56.22000	59.56000	0.00000
	-	-	Yes	Surface					
Line 1	17-g	-	-	56.22000	59.56000	0.00000	55.10000	58.40000	0.00000
	-	-	Yes	Surface					
Line 2	h-49	-	-	54.98000	51.60000	0.00000	56.50000	50.10000	0.00000
	-	-	Yes	Surface					
Line 2	49-36	-	-	56.50000	50.10000	0.00000	56.50000	47.71000	0.00000
	-	-	Yes	Surface					
Line 2	36-48	-	-	56.50000	47.71000	0.00000	54.96000	46.00000	0.00000
	-	-	Yes	Surface					
Line 1	48-47	-	-	54.96000	46.00000	0.00000	54.96000	44.83000	0.00000
	-	-	Yes	Surface					
Line 10	47-51	-	-	54.96000	44.83000	0.00000	44.21000	44.83000	0.00000
	-	-	Yes	Surface					
Line 10	50-46	-	-	44.16000	36.71000	0.00000	54.96000	36.71000	0.00000
	-	-	Yes	Surface					
Line 8	46-47	-	-	54.96000	36.71000	0.00000	54.96000	44.83000	0.00000
	-	-	Yes	Surface					
Line 9	24-25	-	-	78.82000	63.10000	0.00000	88.08000	63.07000	0.00000
	-	-	Yes	Surface					
Line 5	25-26	-	-	88.08000	63.07000	0.00000	88.00000	57.75000	0.00000
	-	-	Yes	Surface					
Line 11	26-27	-	-	88.00000	57.75000	0.00000	76.73000	57.90000	0.00000
	-	-	Yes	Surface					
Line 3	27-28	-	-	76.73000	57.90000	0.00000	76.71000	61.07000	0.00000
	-	-	Yes	Surface					
Line 2	28-29	-	-	76.71000	61.07000	0.00000	78.82000	63.10000	0.00000
	-	-	Yes	Surface					
Line 5	27-32	-	-	76.73000	57.90000	0.00000	76.75000	52.75000	0.00000
	-	-	Yes	Surface					
Line 17	33-31	-	-	87.93000	52.75000	0.00000	70.25000	52.75000	0.00000
	-	-	Yes	Surface					
Line 3	31-34	-	-	70.25000	52.75000	0.00000	70.18000	49.38000	0.00000
	-	-	Yes	Surface					
Line 1	34-35	-	-	70.18000	49.38000	0.00000	71.51000	49.37000	0.00000
	-	-	Yes	Surface					
Line 3	35-41	-	-	71.51000	49.37000	0.00000	71.48000	45.77000	0.00000
	-	-	Yes	Surface					
Line 4	41-40	-	-	71.48000	45.77000	0.00000	67.41000	45.77000	0.00000
	-	-	Yes	Surface					
Line 3	40-39	-	-	67.41000	45.77000	0.00000	67.39000	41.87000	0.00000
	-	-	Yes	Surface					
Line 20	39-38	-	-	67.39000	41.87000	0.00000	88.00000	41.70000	0.00000
	-	-	Yes	Surface					
Line 21	38-25	-	-	88.00000	41.70000	0.00000	88.08000	63.07000	0.00000
	-	-	Yes	Surface					
Line 10	20-22	-	-	55.96000	70.70000	0.00000	66.13000	70.69000	0.00000
	-	-	Yes	Surface					
Line 17	22-b	-	-	66.13000	70.69000	0.00000	66.30000	58.90000	0.00000
	-	-	Yes	Surface					
Line 15	e-45	-	-	64.74000	51.60000	0.00000	64.48000	36.84000	0.00000
	-	-	Yes	Surface					
Line 6	18-31	-	-	59.17000	64.78000	0.00000	66.00000	64.74000	0.00000
	-	-	Yes	Surface					
Line 12	23-24	-	-	66.00000	63.14000	0.00000	78.82000	63.10000	0.00000
	-	-	Yes	Surface					
Line 10	b-27	-	-	66.10000	58.46000	0.00000	76.73000	57.90000	0.00000
	-	-	Yes	Surface					
Line 23	42-37	-	-	64.54000	46.73000	0.00000	87.96000	46.45000	0.00000
	-	-	Yes	Surface					

Line 47-43	-	-	54.96000	44.83000	0.00000	64.50000	44.83000	0.00000
9	-	Yes	Surface					
Line 44-39	-	-	64.44000	41.91000	0.00000	67.39000	41.87000	0.00000
2	-	Yes	Surface					
Line 46-45	-	-	54.96000	36.71000	0.00000	64.48000	36.84000	0.00000
9	-	Yes	Surface					
Line a-12	-	-	44.06000	58.90000	0.00000	39.63000	58.38000	0.00000
4	-	Yes	Surface					
Line 12-11	-	-	39.63000	58.38000	0.00000	39.63000	51.68000	0.00000
6	-	Yes	Surface					
Line 11-f	-	-	39.63000	51.68000	0.00000	44.10000	51.60000	0.00000
8	-	Yes	Surface					
Line ag	-	-	44.06000	58.90000	0.00000	55.10000	58.40000	0.00000
11	-	Yes	Surface					
Line gb	-	-	55.10000	58.40000	0.00000	66.50000	58.46000	0.00000
20	-	Yes	Surface					
Line bc	-	-	66.50000	58.46000	0.00000	66.50000	52.90000	0.00000
20	-	Yes	Surface					
Line cd	-	-	66.50000	52.90000	0.00000	65.00000	52.00000	0.00000
1	-	Yes	Surface					
Line eh	-	-	64.74000	51.60000	0.00000	54.98000	51.60000	0.00000
9	-	Yes	Surface					
Line hf	-	-	54.98000	51.60000	0.00000	44.10000	51.60000	0.00000
10	-	Yes	Surface					
Line de	-	-	65.00000	52.00000	0.00000	64.74000	51.60000	0.00000
4	-	Yes	Surface					

Vertical Ground Movement Curves

Curve Name: No vertical ground movement
Coordinates: [Distance from wall / wall depth or max. excavation depth (x), Depth / wall depth or max. excavation depth (y), Settlement / wall depth or max. excavation depth (z) (%)]
 [0.000,0.000,0.000] [1.000,0.000,0.000] [0.000,1.000,0.000] [1.000,1.000,0.000]
Curve Fitting Method: Polynomial
Method:
 x Order: 1
 y Order: 0
 Polynomial: $z = 0.0x + 0.0$
 Coeff. of Determination: -2147483648.E+2147483647

Curve Name: Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11 (b))
Coordinates: [Distance from wall / wall depth or max. excavation depth (x), Depth / wall depth or max. excavation depth (y), Settlement / wall depth or max. excavation depth (z) (%)]
 [0.000,0.000,0.039] [0.100,0.000,0.049] [0.200,0.000,0.056] [0.300,0.000,0.062] [0.400,0.000,0.067] [0.500,0.000,0.070] [0.600,0.000,0.072] [0.700,0.000,0.073] [0.800,0.000,0.073] [0.900,0.000,0.072] [1.000,0.000,0.070] [1.100,0.000,0.068] [1.200,0.000,0.065] [1.300,0.000,0.061] [1.400,0.000,0.058] [1.500,0.000,0.054] [1.600,0.000,0.050] [1.700,0.000,0.046] [1.800,0.000,0.042] [1.900,0.000,0.038] [2.000,0.000,0.034] [2.100,0.000,0.030] [2.200,0.000,0.027] [2.300,0.000,0.023] [2.400,0.000,0.020] [2.500,0.000,0.017] [2.600,0.000,0.014] [2.700,0.000,0.012] [2.800,0.000,0.010] [2.900,0.000,0.008] [3.000,0.000,0.007] [3.100,0.000,0.005] [3.200,0.000,0.004] [3.300,0.000,0.004] [3.400,0.000,0.003] [3.500,0.000,0.002] [3.600,0.000,0.002] [3.700,0.000,0.002] [3.800,0.000,0.001] [3.900,0.000,0.001] [4.000,0.000,0.000]
Curve Fitting Method: Polynomial
Method:
 x Order: 4
 y Order: 0
 Polynomial: $z = -2.6455E-3x^4 + 2.8495E-2x^3 - 1.0051E-1x^2 + 1.0569E-1x + 3.8990E-2$
 Coeff. of Determination: 9.9991E-1

Horizontal Ground Movement Curves

Curve Name: No horizontal ground movement
Coordinates: [Distance from wall / wall depth or max. excavation depth (x), Depth / wall depth or max. excavation depth (y), Horizontal movement / wall depth or max. excavation depth (z) (%)]

excavation depth (z) (%)
 [0.000,0.000,0.000] [1.000,0.000,0.000] [0.000,1.000,0.000] [1.000,1.000,0.000]
 Curve Fitting Polynomial
 Method:
 x Order: 0
 y Order: 0
 Polynomial: z = 0.0
 Coeff. of -2147483648.E+2147483647
 Determination:

Curve Name: Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(a))
 Coordinates: [Distance from wall / wall depth or max. excavation depth (x), Depth / wall depth or max. excavation depth (y), Horizontal movement / wall depth or max. excavation depth (z) (%)]
 [0.000,0.000,0.150] [4.000,0.000,0.000]
 Curve Fitting Polynomial
 Method:
 x Order: 1
 y Order: 0
 Polynomial: z = -3.75E-2x + 1.50E-1
 Coeff. of 1.00
 Determination:

Polygonal Excavations

Excavation Name: Excavation 1
 Surface level [m]: 0.0
 Contribution: Positive
 Enabled: No
 Surface movement curves which are selected are applied between surface and [m]: -10.000

Corner	x	y	Base Level	Stiffened	Previous Side	Side	Next Side
	[m]	[m]	[m]		d	p1	p2*
					[m]	[%]	[%]
1	66.020	58.310	-1.0700	No	-	-	-
2	66.000	53.200	-1.0700	No	-	-	-
3	59.820	51.680	-1.0700	No	-	-	-
4	39.630	51.680	-1.0700	No	-	-	-
5	39.630	58.380	-1.0700	No	-	-	-

Side	Corner 1		Corner 2		Ground Movement Curve	
	x	y	x	y	Vertical	Horizontal
	[m]	[m]	[m]	[m]		
1	66.020	58.310	66.000	53.200	Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(b))	Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(a))
2	66.000	53.200	59.820	51.680	Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(b))	Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(a))
3	59.820	51.680	39.630	51.680	Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(b))	Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(a))
4	39.630	51.680	39.630	58.380	Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(b))	Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(a))
5	39.630	58.380	66.020	58.310	Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(b))	Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(a))

2.11(a))

Excavation Name: **Excavation 2**
 Surface level [m]: 0.0
 Contribution: Positive
 Enabled: No
 Surface movement curves which are selected are applied between surface and [m]: -5.0000

Corner	x	y	Base Level	Stiffened	Previous	Side			Next Side		
						d	p1	p2*	d	p1	p2*
	[m]	[m]	[m]		[m]	[%]	[%]	[m]	[%]	[%]	
1	59.820	58.310	-3.6000	No	-	-	-	-	-	-	
2	66.020	58.310	-3.6000	No	-	-	-	-	-	-	
3	66.000	53.200	-3.6000	No	-	-	-	-	-	-	
4	59.820	51.680	-3.6000	No	-	-	-	-	-	-	

Side	Corner 1		Corner 2		Vertical	Ground Movement Curve	
	x	y	x	y		Horizontal	
	[m]	[m]	[m]	[m]			
1	59.820	58.310	66.020	58.310	Excavation in front of high stiffness wall in stiff clay	Excavation in front of high stiffness wall in stiff clay	
					(CIRIA 580 Fig. 2.11(b))	(CIRIA 580 Fig. 2.11(a))	
2	66.020	58.310	66.000	53.200	Excavation in front of high stiffness wall in stiff clay	Excavation in front of high stiffness wall in stiff clay	
					(CIRIA 580 Fig. 2.11(b))	(CIRIA 580 Fig. 2.11(a))	
3	66.000	53.200	59.820	51.680	Excavation in front of high stiffness wall in stiff clay	Excavation in front of high stiffness wall in stiff clay	
					(CIRIA 580 Fig. 2.11(b))	(CIRIA 580 Fig. 2.11(a))	
4	59.820	51.680	59.820	58.310	No vertical ground movement	No horizontal ground movement	

Excavation Name: **Excavation 3**
 Surface level [m]: 0.0
 Contribution: Negative
 Enabled: No
 Surface movement curves which are selected are applied between surface and [m]: -5.0000

Corner	x	y	Base Level	Stiffened	Previous	Side			Next Side		
						d	p1	p2*	d	p1	p2*
	[m]	[m]	[m]		[m]	[%]	[%]	[m]	[%]	[%]	
1	59.820	58.310	-1.0700	No	-	-	-	-	-	-	
2	66.020	58.310	-1.0700	No	-	-	-	-	-	-	
3	66.000	53.200	-1.0700	No	-	-	-	-	-	-	
4	59.820	51.680	-1.0700	No	-	-	-	-	-	-	

Side	Corner 1		Corner 2		Vertical	Ground Movement Curve	
	x	y	x	y		Horizontal	
	[m]	[m]	[m]	[m]			
1	59.820	58.310	66.020	58.310	Excavation in front of high stiffness wall in stiff clay	Excavation in front of high stiffness wall in stiff clay	
					(CIRIA 580 Fig. 2.11(b))	(CIRIA 580 Fig. 2.11(a))	
2	66.020	58.310	66.000	53.200	Excavation in front of high stiffness wall in stiff clay	Excavation in front of high stiffness wall in stiff clay	
					(CIRIA 580 Fig. 2.11(b))	(CIRIA 580 Fig. 2.11(a))	

3	66.000	53.200	59.820	51.680	Excavation in front of high of high	Excavation in front of high
					stiff clay	stiff clay
					(CIRIA 580 Fig. 2.11(b))	(CIRIA 580 Fig. 2.11(b))
2.11(a))						
4	59.820	51.680	59.820	58.310	No vertical ground movement	No horizontal ground movement

Damage Category Strains

Name	0 (Negligible) to 1 (Very Slight)	1 (Very Slight) to 2 (Slight)	2 (Slight) to 3 (Moderate)	3 (Moderate) to 4 (Severe)
Burland Strain Limits	0.0	500.00E-6	750.00E-6	0.0015000

Specific Structures - Geometry

Structure Name	Sub-Structure Name	Displacement Poisson's E/G	Start Distance	End Distance	Vertical Offsets from Line for Vertical Movement Calculations	Vertical Displacement Limit Sensitivity
Ratio		Line	Along Line [m]	Along Line [m]	[m]	[mm]
		21-20	0.00000	11.74902	0.0	0.10000
Burland Strain Limits		0.20000 2.6000				
		19-20	0.00000	5.03889	0.0	0.10000
Burland Strain Limits		0.20000 2.6000				
		19-18	0.00000	2.00922	0.0	0.10000
Burland Strain Limits		0.20000 2.6000				
		18-13	0.00000	14.95901	0.0	0.10000
Burland Strain Limits		0.20000 2.6000				
		21-a	0.00000	11.81995	0.0	0.10000
Burland Strain Limits		0.20000 2.6000				
		f-50	0.00000	14.88912	0.0	0.10000
Burland Strain Limits		0.20000 2.6000				
		14-15	0.00000	2.13900	0.0	0.10000
Burland Strain Limits		0.20000 2.6000				
		15-16	0.00000	1.68971	0.0	0.10000
Burland Strain Limits		0.20000 2.6000				
		16-17	0.00000	1.89903	0.0	0.10000
Burland Strain Limits		0.20000 2.6000				
		17-g	0.00000	1.61145	0.0	0.10000
Burland Strain Limits		0.20000 2.6000				
		h-49	0.00000	2.13451	0.0	0.10000
Burland Strain Limits		0.20000 2.6000				
		49-36	0.00000	2.38900	0.0	0.10000
Burland Strain Limits		0.20000 2.6000				
		36-48	0.00000	2.30024	0.0	0.10000
Burland Strain Limits		0.20000 2.6000				
		48-47	0.00000	1.16900	0.0	0.10000
Burland Strain Limits		0.20000 2.6000				
		47-51	0.00000	10.74900	0.0	0.10000
Burland Strain Limits		0.20000 2.6000				
		50-46	0.00000	10.79900	0.0	0.10000
Burland Strain Limits		0.20000 2.6000				
		46-47	0.00000	8.11900	0.0	0.10000
Burland Strain Limits		0.20000 2.6000				
		24-25	0.00000	9.25905	0.0	0.10000
Burland Strain Limits		0.20000 2.6000				
		25-26	0.00000	5.31960	0.0	0.10000
Burland Strain Limits		0.20000 2.6000				
		26-27	0.00000	11.27000	0.0	0.10000
Burland Strain Limits		0.20000 2.6000				
		27-28	0.00000	3.16906	0.0	0.10000
Burland Strain Limits		0.20000 2.6000				
		28-29	0.00000	2.92697	0.0	0.10000
Burland Strain Limits		0.20000 2.6000				
		27-32	0.00000	5.14904	0.0	0.10000
Burland Strain Limits		0.20000 2.6000				

33-31	33-31	0.00000	17.67900	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
31-34	31-34	0.00000	3.36973	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
34-35	34-35	0.00000	1.32904	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
35-41	35-41	0.00000	3.59912	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
41-40	41-40	0.00000	4.06900	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
40-39	40-39	0.00000	3.89905	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
39-38	39-38	0.00000	20.60970	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
38-25	38-25	0.00000	21.36915	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
20-22	20-22	0.00000	10.16900	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
22-b	22-b	0.00000	11.79023	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
e-45	e-45	0.00000	14.76129	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
18-31	18-31	0.00000	6.82912	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
23-24	23-24	0.00000	12.81906	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
b-27	b-27	0.00000	10.64374	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
42-37	42-37	0.00000	23.42067	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
47-43	47-43	0.00000	9.53900	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
44-39	44-39	0.00000	2.94927	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
46-45	46-45	0.00000	9.51989	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
a-12	a-12	0.00000	4.45941	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
12-11	12-11	0.00000	6.69900	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
11-f	11-f	0.00000	4.46972	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
ag	ag	0.00000	11.05032	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
gb	gb	0.00000	11.39916	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
bc	bc	0.00000	5.55900	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
cd	cd	0.00000	1.74829	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
eh	eh	0.00000	9.75900	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
hf	hf	0.00000	10.87900	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
de	de	0.00000	0.47607	0.10000	0.10000
Burland Strain Limits	0.20000 2.6000				

Specific Structures - Bending Parameters

Structure Name	Sub-Structure	Height	Default	Hogging			
				Sagging			
	Name		Properties	2nd Moment	Distance	Distance	2nd Moment
				of Area	of Bending	of N.A.	of Area
				(per unit	Strain	from Edge	(per unit
				width)	from N.A.	of Beam in	width)
						Tension	
		[m]		[m ³]	[m]	[m]	[m ³]
[m]	[m]						

21-20		11.749	Yes	540.61	11.749	11.749	135.15
5.8745	5.8745						
19-20		5.0389	Yes	42.647	5.0389	5.0389	10.662
2.5194	2.5194						
19-18		2.0092	Yes	2.7037	2.0092	2.0092	0.67593
1.0046	1.0046						
18-13		14.959	Yes	1115.8	14.959	14.959	278.95
7.4795	7.4795						
21-a		11.820	Yes	550.46	11.820	11.820	137.62
5.9100	5.9100						
f-50		14.889	Yes	1100.2	14.889	14.889	275.06
7.4446	7.4446						
14-15		2.1390	Yes	3.2622	2.1390	2.1390	0.81555
1.0695	1.0695						
15-16		1.6897	Yes	1.6081	1.6897	1.6897	0.40203
0.84485	0.84485						
16-17		1.8990	Yes	2.2828	1.8990	1.8990	0.57071
0.94951	0.94951						
17-g		1.6115	Yes	1.3949	1.6115	1.6115	0.34871
0.80573	0.80573						
h-49		2.1345	Yes	3.2417	2.1345	2.1345	0.81043
1.0673	1.0673						
49-36		2.3890	Yes	4.5449	2.3890	2.3890	1.1362
1.1945	1.1945						
36-48		2.3002	Yes	4.0569	2.3002	2.3002	1.0142
1.1501	1.1501						
48-47		1.1690	Yes	0.53250	1.1690	1.1690	0.13313
0.58450	0.58450						
47-51		10.749	Yes	413.98	10.749	10.749	103.50
5.3745	5.3745						
50-46		10.799	Yes	419.79	10.799	10.799	104.95
5.3995	5.3995						
46-47		8.1190	Yes	178.40	8.1190	8.1190	44.599
4.0595	4.0595						
24-25		9.2590	Yes	264.59	9.2590	9.2590	66.148
4.6295	4.6295						
25-26		5.3196	Yes	50.178	5.3196	5.3196	12.545
2.6598	2.6598						
26-27		11.270	Yes	477.14	11.270	11.270	119.29
5.6350	5.6350						
27-28		3.1691	Yes	10.609	3.1691	3.1691	2.6522
1.5845	1.5845						
28-29		2.9270	Yes	8.3586	2.9270	2.9270	2.0896
1.4635	1.4635						
27-32		5.1490	Yes	45.505	5.1490	5.1490	11.376
2.5745	2.5745						
33-31		17.679	Yes	1841.8	17.679	17.679	460.46
8.8395	8.8395						
31-34		3.3697	Yes	12.754	3.3697	3.3697	3.1886
1.6849	1.6849						
34-35		1.3290	Yes	0.78251	1.3290	1.3290	0.19563
0.66452	0.66452						
35-41		3.5991	Yes	15.541	3.5991	3.5991	3.8852
1.7996	1.7996						
41-40		4.0690	Yes	22.456	4.0690	4.0690	5.6141
2.0345	2.0345						
40-39		3.8991	Yes	19.759	3.8991	3.8991	4.9396
1.9495	1.9495						
39-38		20.610	Yes	2918.1	20.610	20.610	729.51
10.305	10.305						
38-25		21.369	Yes	3252.7	21.369	21.369	813.17
10.685	10.685						
20-22		10.169	Yes	350.52	10.169	10.169	87.630
5.0845	5.0845						
22-b		11.790	Yes	546.32	11.790	11.790	136.58
5.8951	5.8951						
e-45		14.761	Yes	1072.1	14.761	14.761	268.04
7.3806	7.3806						
18-31		6.8291	Yes	106.16	6.8291	6.8291	26.541
3.4146	3.4146						
23-24		12.819	Yes	702.18	12.819	12.819	175.54
6.4095	6.4095						
b-27		10.644	Yes	401.94	10.644	10.644	100.49
5.3219	5.3219						
42-37		23.421	Yes	4282.3	23.421	23.421	1070.6
11.710	11.710						

47-43		9.5390	Yes	289.33	9.5390	9.5390	72.331
4.7695	4.7695						
44-39		2.9493	Yes	8.5511	2.9493	2.9493	2.1378
1.4746	1.4746						
46-45		9.5199	Yes	287.59	9.5199	9.5199	71.898
4.7599	4.7599						
a-12		4.4594	Yes	29.561	4.4594	4.4594	7.3901
2.2297	2.2297						
12-11		6.6990	Yes	100.21	6.6990	6.6990	25.052
3.3495	3.3495						
11-f		4.4697	Yes	29.766	4.4697	4.4697	7.4415
2.2349	2.2349						
ag		11.050	Yes	449.78	11.050	11.050	112.45
5.5252	5.5252						
gb		11.399	Yes	493.74	11.399	11.399	123.43
5.6996	5.6996						
bc		5.5590	Yes	57.262	5.5590	5.5590	14.316
2.7795	2.7795						
cd		1.7483	Yes	1.7812	1.7483	1.7483	0.44530
0.87414	0.87414						
eh		9.7590	Yes	309.81	9.7590	9.7590	77.452
4.8795	4.8795						
hf		10.879	Yes	429.19	10.879	10.879	107.30
5.4395	5.4395						
de		0.47607	Yes	0.035967	0.47607	0.47607	0.0089917
0.23804	0.23804						

Building Segment Combinations

Structure Name	Sub-Structure Name	Vertical Offset from Line for Vertical Movement Calculations	Segment Start	Length	Curvature	Combined Segment
		[m]	[m]	[m]		
No structures have segments combined.						

Utility Strain Calculation Options

Neglect beneficial contribution of axial strains : No

Specific Building Damage Results - Horizontal Displacements

Structure: 21-20 | Sub-structure:

Dist.	Coordinates			Displacements		Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	x	y	z	x	y			
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	55.96000	70.70000	0.00000	0.0	0.0	0.0	0.0	d
1.0682	54.89182	70.70182	0.00000	0.0	0.0	0.0	0.0	d
2.1364	53.82364	70.70364	0.00000	0.0	0.0	0.0	0.0	d
3.2046	52.75545	70.70545	0.00000	0.0	0.0	0.0	0.0	d
4.2727	51.68727	70.70727	0.00000	0.0	0.0	0.0	0.0	d
5.3409	50.61909	70.70909	0.00000	0.0	0.0	0.0	0.0	d
6.4091	49.55091	70.71091	0.00000	0.0	0.0	0.0	0.0	d
7.4773	48.48273	70.71273	0.00000	0.0	0.0	0.0	0.0	d
8.5455	47.41455	70.71455	0.00000	0.0	0.0	0.0	0.0	d
9.6137	46.34636	70.71636	0.00000	0.0	0.0	0.0	0.0	d
10.682	45.27818	70.71818	0.00000	0.0	0.0	0.0	0.0	d
11.750	44.21000	70.72000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 19-20 | Sub-structure:

Dist.	Coordinates			Displacements		Horizontal displacement	Horizontal displacement
	x	y	z	x	y		

						along the Line	perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	59.14000	66.79000	0.00000	0.0	0.0	0.0	0.0	d
1.0080	58.50400	67.57200	0.00000	0.0	0.0	0.0	0.0	d
2.0160	57.86800	68.35400	0.00000	0.0	0.0	0.0	0.0	d
3.0239	57.23200	69.13600	0.00000	0.0	0.0	0.0	0.0	d
4.0319	56.59600	69.91800	0.00000	0.0	0.0	0.0	0.0	d
5.0399	55.96000	70.70000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 19-18 | Sub-structure:

Dist.	Coordinates					Displacements		
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	59.14000	66.79000	0.00000	0.0	0.0	0.0	0.0	d
1.0051	59.15500	65.78500	0.00000	0.0	0.0	0.0	0.0	d
2.0102	59.17000	64.78000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 18-13 | Sub-structure:

Dist.	Coordinates					Displacements		
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	59.17000	64.78000	0.00000	0.0	0.0	0.0	0.0	d
1.0686	58.10143	64.78143	0.00000	0.0	0.0	0.0	0.0	d
2.1371	57.03286	64.78286	0.00000	0.0	0.0	0.0	0.0	d
3.2057	55.96429	64.78429	0.00000	0.0	0.0	0.0	0.0	d
4.2743	54.89571	64.78571	0.00000	0.0	0.0	0.0	0.0	d
5.3429	53.82714	64.78714	0.00000	0.0	0.0	0.0	0.0	d
6.4114	52.75857	64.78857	0.00000	0.0	0.0	0.0	0.0	d
7.4800	51.69000	64.79000	0.00000	0.0	0.0	0.0	0.0	d
8.5486	50.62143	64.79143	0.00000	0.0	0.0	0.0	0.0	d
9.6172	49.55286	64.79286	0.00000	0.0	0.0	0.0	0.0	d
10.686	48.48429	64.79429	0.00000	0.0	0.0	0.0	0.0	d
11.754	47.41571	64.79571	0.00000	0.0	0.0	0.0	0.0	d
12.823	46.34714	64.79714	0.00000	0.0	0.0	0.0	0.0	d
13.891	45.27857	64.79857	0.00000	0.0	0.0	0.0	0.0	d
14.960	44.21000	64.80000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 21-a | Sub-structure:

Dist.	Coordinates					Displacements		
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	44.21000	70.72000	0.00000	0.0	0.0	0.0	0.0	d
0.34768	44.20559	70.37235	0.00000	0.0	0.0	0.0	0.0	d
0.69535	44.20118	70.02471	0.00000	0.0	0.0	0.0	0.0	d
1.0430	44.19676	69.67706	0.00000	0.0	0.0	0.0	0.0	d
1.3907	44.19235	69.32941	0.00000	0.0	0.0	0.0	0.0	d
1.7384	44.18794	68.98176	0.00000	0.0	0.0	0.0	0.0	d
2.0861	44.18353	68.63412	0.00000	0.0	0.0	0.0	0.0	d
2.4337	44.17912	68.28647	0.00000	0.0	0.0	0.0	0.0	d
2.7814	44.17471	67.93882	0.00000	0.0	0.0	0.0	0.0	d
3.1291	44.17029	67.59118	0.00000	0.0	0.0	0.0	0.0	d
3.4768	44.16588	67.24353	0.00000	0.0	0.0	0.0	0.0	d
3.8244	44.16147	66.89588	0.00000	0.0	0.0	0.0	0.0	d
4.1721	44.15706	66.54824	0.00000	0.0	0.0	0.0	0.0	d
4.5198	44.15265	66.20059	0.00000	0.0	0.0	0.0	0.0	d
4.8675	44.14824	65.85294	0.00000	0.0	0.0	0.0	0.0	d
5.2151	44.14382	65.50529	0.00000	0.0	0.0	0.0	0.0	d
5.5628	44.13941	65.15765	0.00000	0.0	0.0	0.0	0.0	d

5.9105	44.13500	64.81000	0.00000	0.0	0.0	0.0	0.0	d
6.2582	44.13059	64.46235	0.00000	0.0	0.0	0.0	0.0	d
6.6058	44.12618	64.11471	0.00000	0.0	0.0	0.0	0.0	d
6.9535	44.12176	63.76706	0.00000	0.0	0.0	0.0	0.0	d
7.3012	44.11735	63.41941	0.00000	0.0	0.0	0.0	0.0	d
7.6489	44.11294	63.07176	0.00000	0.0	0.0	0.0	0.0	d
7.9965	44.10853	62.72412	0.00000	0.0	0.0	0.0	0.0	d
8.3442	44.10412	62.37647	0.00000	0.0	0.0	0.0	0.0	d
8.6919	44.09971	62.02882	0.00000	0.0	0.0	0.0	0.0	d
9.0396	44.09529	61.68118	0.00000	0.0	0.0	0.0	0.0	d
9.3872	44.09088	61.33353	0.00000	0.0	0.0	0.0	0.0	d
9.7349	44.08647	60.98588	0.00000	0.0	0.0	0.0	0.0	d
10.083	44.08206	60.63824	0.00000	0.0	0.0	0.0	0.0	d
10.430	44.07765	60.29059	0.00000	0.0	0.0	0.0	0.0	d
10.778	44.07324	59.94294	0.00000	0.0	0.0	0.0	0.0	d
11.126	44.06882	59.59529	0.00000	0.0	0.0	0.0	0.0	d
11.473	44.06441	59.24765	0.00000	0.0	0.0	0.0	0.0	d
11.821	44.06000	58.90000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: f-50 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	44.10000	51.60000	0.00000	0.0	0.0	0.0	0.0	d
0.99267	44.10400	50.60733	0.00000	0.0	0.0	0.0	0.0	d
1.9853	44.10800	49.61467	0.00000	0.0	0.0	0.0	0.0	d
2.9780	44.11200	48.62200	0.00000	0.0	0.0	0.0	0.0	d
3.9707	44.11600	47.62933	0.00000	0.0	0.0	0.0	0.0	d
4.9634	44.12000	46.63667	0.00000	0.0	0.0	0.0	0.0	d
5.9560	44.12400	45.64400	0.00000	0.0	0.0	0.0	0.0	d
6.9487	44.12800	44.65133	0.00000	0.0	0.0	0.0	0.0	d
7.9414	44.13200	43.65867	0.00000	0.0	0.0	0.0	0.0	d
8.9341	44.13600	42.66600	0.00000	0.0	0.0	0.0	0.0	d
9.9267	44.14000	41.67333	0.00000	0.0	0.0	0.0	0.0	d
10.919	44.14400	40.68067	0.00000	0.0	0.0	0.0	0.0	d
11.912	44.14800	39.68800	0.00000	0.0	0.0	0.0	0.0	d
12.905	44.15200	38.69533	0.00000	0.0	0.0	0.0	0.0	d
13.897	44.15600	37.70267	0.00000	0.0	0.0	0.0	0.0	d
14.890	44.16000	36.71000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 14-15 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	55.00000	64.76000	0.00000	0.0	0.0	0.0	0.0	d
1.0700	55.00000	63.69000	0.00000	0.0	0.0	0.0	0.0	d
2.1400	55.00000	62.62000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 15-16 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	55.00000	62.62000	0.00000	0.0	0.0	0.0	0.0	d
1.6907	56.23000	61.46000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 16-17 | Sub-structure:

Structure: 17-g | Sub-structure:

Dist.	Coordinates					Displacements	
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	56.23000	61.46000	0.00000	0.0	0.0	0.0	0.0 d
1.9000	56.22000	59.56000	0.00000	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: 17-g | Sub-structure:

Dist.	Coordinates					Displacements	
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	56.22000	59.56000	0.00000	0.0	0.0	0.0	0.0 d
1.6125	55.10000	58.40000	0.00000	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: h-49 | Sub-structure:

Dist.	Coordinates					Displacements	
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	54.98000	51.60000	0.00000	0.0	0.0	0.0	0.0 d
1.0678	55.74000	50.85000	0.00000	0.0	0.0	0.0	0.0 d
2.1355	56.50000	50.10000	0.00000	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: 49-36 | Sub-structure:

Dist.	Coordinates					Displacements	
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	56.50000	50.10000	0.00000	0.0	0.0	0.0	0.0 d
1.1950	56.50000	48.90500	0.00000	0.0	0.0	0.0	0.0 d
2.3900	56.50000	47.71000	0.00000	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: 36-48 | Sub-structure:

Dist.	Coordinates					Displacements	
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	56.50000	47.71000	0.00000	0.0	0.0	0.0	0.0 d
1.1506	55.73000	46.85500	0.00000	0.0	0.0	0.0	0.0 d
2.3012	54.96000	46.00000	0.00000	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: 48-47 | Sub-structure:

Dist.	Coordinates					Displacements	
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	54.96000	46.00000	0.00000	0.0	0.0	0.0	0.0 d
1.1700	54.96000	44.83000	0.00000	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: 47-51 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	54.96000	44.83000	0.00000	0.0	0.0	0.0	0.0	d
1.0750	53.88500	44.83000	0.00000	0.0	0.0	0.0	0.0	d
2.1500	52.81000	44.83000	0.00000	0.0	0.0	0.0	0.0	d
3.2250	51.73500	44.83000	0.00000	0.0	0.0	0.0	0.0	d
4.3000	50.66000	44.83000	0.00000	0.0	0.0	0.0	0.0	d
5.3750	49.58500	44.83000	0.00000	0.0	0.0	0.0	0.0	d
6.4500	48.51000	44.83000	0.00000	0.0	0.0	0.0	0.0	d
7.5250	47.43500	44.83000	0.00000	0.0	0.0	0.0	0.0	d
8.6000	46.36000	44.83000	0.00000	0.0	0.0	0.0	0.0	d
9.6750	45.28500	44.83000	0.00000	0.0	0.0	0.0	0.0	d
10.750	44.21000	44.83000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 50-46 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	44.16000	36.71000	0.00000	0.0	0.0	0.0	0.0	d
1.0800	45.24000	36.71000	0.00000	0.0	0.0	0.0	0.0	d
2.1600	46.32000	36.71000	0.00000	0.0	0.0	0.0	0.0	d
3.2400	47.40000	36.71000	0.00000	0.0	0.0	0.0	0.0	d
4.3200	48.48000	36.71000	0.00000	0.0	0.0	0.0	0.0	d
5.4000	49.56000	36.71000	0.00000	0.0	0.0	0.0	0.0	d
6.4800	50.64000	36.71000	0.00000	0.0	0.0	0.0	0.0	d
7.5600	51.72000	36.71000	0.00000	0.0	0.0	0.0	0.0	d
8.6400	52.80000	36.71000	0.00000	0.0	0.0	0.0	0.0	d
9.7200	53.88000	36.71000	0.00000	0.0	0.0	0.0	0.0	d
10.800	54.96000	36.71000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 46-47 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	54.96000	36.71000	0.00000	0.0	0.0	0.0	0.0	d
1.0150	54.96000	37.72500	0.00000	0.0	0.0	0.0	0.0	d
2.0300	54.96000	38.74000	0.00000	0.0	0.0	0.0	0.0	d
3.0450	54.96000	39.75500	0.00000	0.0	0.0	0.0	0.0	d
4.0600	54.96000	40.77000	0.00000	0.0	0.0	0.0	0.0	d
5.0750	54.96000	41.78500	0.00000	0.0	0.0	0.0	0.0	d
6.0900	54.96000	42.80000	0.00000	0.0	0.0	0.0	0.0	d
7.1050	54.96000	43.81500	0.00000	0.0	0.0	0.0	0.0	d
8.1200	54.96000	44.83000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 24-25 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	78.82000	63.10000	0.00000	0.0	0.0	0.0	0.0	d
1.0289	79.84889	63.09667	0.00000	0.0	0.0	0.0	0.0	d
2.0578	80.87778	63.09333	0.00000	0.0	0.0	0.0	0.0	d

3.0867	81.90667	63.09000	0.00000	0.0	0.0	0.0	0.0	0.0	d
4.1156	82.93556	63.08667	0.00000	0.0	0.0	0.0	0.0	0.0	d
5.1445	83.96444	63.08333	0.00000	0.0	0.0	0.0	0.0	0.0	d
6.1734	84.99333	63.08000	0.00000	0.0	0.0	0.0	0.0	0.0	d
7.2023	86.02222	63.07667	0.00000	0.0	0.0	0.0	0.0	0.0	d
8.2312	87.05111	63.07333	0.00000	0.0	0.0	0.0	0.0	0.0	d
9.2600	88.08000	63.07000	0.00000	0.0	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 25-26 | Sub-structure:

Dist.	Coordinates			Displacements		Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	x	y	z	x	y			
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	88.08000	63.07000	0.00000	0.0	0.0	0.0	0.0	0.0 d
1.0641	88.06400	62.00600	0.00000	0.0	0.0	0.0	0.0	0.0 d
2.1282	88.04800	60.94200	0.00000	0.0	0.0	0.0	0.0	0.0 d
3.1924	88.03200	59.87800	0.00000	0.0	0.0	0.0	0.0	0.0 d
4.2565	88.01600	58.81400	0.00000	0.0	0.0	0.0	0.0	0.0 d
5.3206	88.00000	57.75000	0.00000	0.0	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: 26-27 | Sub-structure:

Dist.	Coordinates			Displacements		Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	x	y	z	x	y			
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	88.00000	57.75000	0.00000	0.0	0.0	0.0	0.0	0.0 d
1.0246	86.97545	57.76364	0.00000	0.0	0.0	0.0	0.0	0.0 d
2.0493	85.95091	57.77727	0.00000	0.0	0.0	0.0	0.0	0.0 d
3.0739	84.92636	57.79091	0.00000	0.0	0.0	0.0	0.0	0.0 d
4.0985	83.90182	57.80455	0.00000	0.0	0.0	0.0	0.0	0.0 d
5.1232	82.87727	57.81818	0.00000	0.0	0.0	0.0	0.0	0.0 d
6.1478	81.85273	57.83182	0.00000	0.0	0.0	0.0	0.0	0.0 d
7.1725	80.82818	57.84545	0.00000	0.0	0.0	0.0	0.0	0.0 d
8.1971	79.80364	57.85909	0.00000	0.0	0.0	0.0	0.0	0.0 d
9.2217	78.77909	57.87273	0.00000	0.0	0.0	0.0	0.0	0.0 d
10.246	77.75455	57.88636	0.00000	0.0	0.0	0.0	0.0	0.0 d
11.271	76.73000	57.90000	0.00000	0.0	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: 27-28 | Sub-structure:

Dist.	Coordinates			Displacements		Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	x	y	z	x	y			
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	76.73000	57.90000	0.00000	0.0	0.0	0.0	0.0	0.0 d
1.0567	76.72333	58.95667	0.00000	0.0	0.0	0.0	0.0	0.0 d
2.1134	76.71667	60.01333	0.00000	0.0	0.0	0.0	0.0	0.0 d
3.1701	76.71000	61.07000	0.00000	0.0	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: 28-29 | Sub-structure:

Dist.	Coordinates			Displacements		Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	x	y	z	x	y			
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	76.71000	61.07000	0.00000	0.0	0.0	0.0	0.0	0.0 d
1.4640	77.76500	62.08500	0.00000	0.0	0.0	0.0	0.0	0.0 d
2.9280	78.82000	63.10000	0.00000	0.0	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: 27-32 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
	0.0	76.73000	57.90000	0.00000	0.0	0.0	0.0	d
1.0300	76.73400	56.87000	0.00000	0.0	0.0	0.0	0.0	d
2.0600	76.73800	55.84000	0.00000	0.0	0.0	0.0	0.0	d
3.0900	76.74200	54.81000	0.00000	0.0	0.0	0.0	0.0	d
4.1200	76.74600	53.78000	0.00000	0.0	0.0	0.0	0.0	d
5.1500	76.75000	52.75000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 33-31 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
	0.0	87.93000	52.75000	0.00000	0.0	0.0	0.0	d
1.0400	86.89000	52.75000	0.00000	0.0	0.0	0.0	0.0	d
2.0800	85.85000	52.75000	0.00000	0.0	0.0	0.0	0.0	d
3.1200	84.81000	52.75000	0.00000	0.0	0.0	0.0	0.0	d
4.1600	83.77000	52.75000	0.00000	0.0	0.0	0.0	0.0	d
5.2000	82.73000	52.75000	0.00000	0.0	0.0	0.0	0.0	d
6.2400	81.69000	52.75000	0.00000	0.0	0.0	0.0	0.0	d
7.2800	80.65000	52.75000	0.00000	0.0	0.0	0.0	0.0	d
8.3200	79.61000	52.75000	0.00000	0.0	0.0	0.0	0.0	d
9.3600	78.57000	52.75000	0.00000	0.0	0.0	0.0	0.0	d
10.400	77.53000	52.75000	0.00000	0.0	0.0	0.0	0.0	d
11.440	76.49000	52.75000	0.00000	0.0	0.0	0.0	0.0	d
12.480	75.45000	52.75000	0.00000	0.0	0.0	0.0	0.0	d
13.520	74.41000	52.75000	0.00000	0.0	0.0	0.0	0.0	d
14.560	73.37000	52.75000	0.00000	0.0	0.0	0.0	0.0	d
15.600	72.33000	52.75000	0.00000	0.0	0.0	0.0	0.0	d
16.640	71.29000	52.75000	0.00000	0.0	0.0	0.0	0.0	d
17.680	70.25000	52.75000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 31-34 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
	0.0	70.25000	52.75000	0.00000	0.0	0.0	0.0	d
1.1236	70.22667	51.62667	0.00000	0.0	0.0	0.0	0.0	d
2.2472	70.20333	50.50333	0.00000	0.0	0.0	0.0	0.0	d
3.3707	70.18000	49.38000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 34-35 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
	0.0	70.18000	49.38000	0.00000	0.0	0.0	0.0	d
1.3300	71.51000	49.37000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 35-41 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	71.51000	49.37000	0.00000	0.0	0.0	0.0	0.0	d
1.2000	71.50000	48.17000	0.00000	0.0	0.0	0.0	0.0	d
2.4001	71.49000	46.97000	0.00000	0.0	0.0	0.0	0.0	d
3.6001	71.48000	45.77000	0.00000	0.0	0.0	0.0	0.0	d

Structure: 41-40 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	71.48000	45.77000	0.00000	0.0	0.0	0.0	0.0	d
1.0175	70.46250	45.77000	0.00000	0.0	0.0	0.0	0.0	d
2.0350	69.44500	45.77000	0.00000	0.0	0.0	0.0	0.0	d
3.0525	68.42750	45.77000	0.00000	0.0	0.0	0.0	0.0	d
4.0700	67.41000	45.77000	0.00000	0.0	0.0	0.0	0.0	d

Structure: 40-39 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	67.41000	45.77000	0.00000	0.0	0.0	0.0	0.0	d
1.3000	67.40333	44.47000	0.00000	0.0	0.0	0.0	0.0	d
2.6000	67.39667	43.17000	0.00000	0.0	0.0	0.0	0.0	d
3.9001	67.39000	41.87000	0.00000	0.0	0.0	0.0	0.0	d

Structure: 39-38 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	67.39000	41.87000	0.00000	0.0	0.0	0.0	0.0	d
1.0305	68.42050	41.86150	0.00000	0.0	0.0	0.0	0.0	d
2.0611	69.45100	41.85300	0.00000	0.0	0.0	0.0	0.0	d
3.0916	70.48150	41.84450	0.00000	0.0	0.0	0.0	0.0	d
4.1221	71.51200	41.83600	0.00000	0.0	0.0	0.0	0.0	d
5.1527	72.54250	41.82750	0.00000	0.0	0.0	0.0	0.0	d
6.1832	73.57300	41.81900	0.00000	0.0	0.0	0.0	0.0	d
7.2137	74.60350	41.81050	0.00000	0.0	0.0	0.0	0.0	d
8.2443	75.63400	41.80200	0.00000	0.0	0.0	0.0	0.0	d
9.2748	76.66450	41.79350	0.00000	0.0	0.0	0.0	0.0	d
10.305	77.69500	41.78500	0.00000	0.0	0.0	0.0	0.0	d
11.336	78.72550	41.77650	0.00000	0.0	0.0	0.0	0.0	d
12.366	79.75600	41.76800	0.00000	0.0	0.0	0.0	0.0	d
13.397	80.78650	41.75950	0.00000	0.0	0.0	0.0	0.0	d
14.427	81.81700	41.75100	0.00000	0.0	0.0	0.0	0.0	d
15.458	82.84750	41.74250	0.00000	0.0	0.0	0.0	0.0	d
16.489	83.87800	41.73400	0.00000	0.0	0.0	0.0	0.0	d
17.519	84.90850	41.72550	0.00000	0.0	0.0	0.0	0.0	d
18.550	85.93900	41.71700	0.00000	0.0	0.0	0.0	0.0	d
19.580	86.96950	41.70850	0.00000	0.0	0.0	0.0	0.0	d
20.611	88.00000	41.70000	0.00000	0.0	0.0	0.0	0.0	d

Structure: 38-25 | Sub-structure:

Dist.	Coordinates			Displacements		Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
	x	y	z	x	y		
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	88.00000	41.70000	0.00000	0.0	0.0	0.0	0.0 d
1.0176	88.00381	42.71762	0.00000	0.0	0.0	0.0	0.0 d
2.0353	88.00762	43.73524	0.00000	0.0	0.0	0.0	0.0 d
3.0529	88.01143	44.75286	0.00000	0.0	0.0	0.0	0.0 d
4.0705	88.01524	45.77048	0.00000	0.0	0.0	0.0	0.0 d
5.0881	88.01905	46.78810	0.00000	0.0	0.0	0.0	0.0 d
6.1058	88.02286	47.80571	0.00000	0.0	0.0	0.0	0.0 d
7.1234	88.02667	48.82333	0.00000	0.0	0.0	0.0	0.0 d
8.1410	88.03048	49.84095	0.00000	0.0	0.0	0.0	0.0 d
9.1586	88.03429	50.85857	0.00000	0.0	0.0	0.0	0.0 d
10.176	88.03810	51.87619	0.00000	0.0	0.0	0.0	0.0 d
11.194	88.04190	52.89381	0.00000	0.0	0.0	0.0	0.0 d
12.212	88.04571	53.91143	0.00000	0.0	0.0	0.0	0.0 d
13.229	88.04952	54.92905	0.00000	0.0	0.0	0.0	0.0 d
14.247	88.05333	55.94667	0.00000	0.0	0.0	0.0	0.0 d
15.264	88.05714	56.96429	0.00000	0.0	0.0	0.0	0.0 d
16.282	88.06095	57.98190	0.00000	0.0	0.0	0.0	0.0 d
17.300	88.06476	58.99952	0.00000	0.0	0.0	0.0	0.0 d
18.317	88.06857	60.01714	0.00000	0.0	0.0	0.0	0.0 d
19.335	88.07238	61.03476	0.00000	0.0	0.0	0.0	0.0 d
20.353	88.07619	62.05238	0.00000	0.0	0.0	0.0	0.0 d
21.370	88.08000	63.07000	0.00000	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: 20-22 | Sub-structure:

Dist.	Coordinates			Displacements		Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
	x	y	z	x	y		
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	55.96000	70.70000	0.00000	0.0	0.0	0.0	0.0 d
1.0170	56.97700	70.69900	0.00000	0.0	0.0	0.0	0.0 d
2.0340	57.99400	70.69800	0.00000	0.0	0.0	0.0	0.0 d
3.0510	59.01100	70.69700	0.00000	0.0	0.0	0.0	0.0 d
4.0680	60.02800	70.69600	0.00000	0.0	0.0	0.0	0.0 d
5.0850	61.04500	70.69500	0.00000	0.0	0.0	0.0	0.0 d
6.1020	62.06200	70.69400	0.00000	0.0	0.0	0.0	0.0 d
7.1190	63.07900	70.69300	0.00000	0.0	0.0	0.0	0.0 d
8.1360	64.09600	70.69200	0.00000	0.0	0.0	0.0	0.0 d
9.1530	65.11300	70.69100	0.00000	0.0	0.0	0.0	0.0 d
10.170	66.13000	70.69000	0.00000	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: 22-b | Sub-structure:

Dist.	Coordinates			Displacements		Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
	x	y	z	x	y		
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	66.13000	70.69000	0.00000	0.0	0.0	0.0	0.0 d
0.69360	66.14000	69.99647	0.00000	0.0	0.0	0.0	0.0 d
1.3872	66.15000	69.30294	0.00000	0.0	0.0	0.0	0.0 d
2.0808	66.16000	68.60941	0.00000	0.0	0.0	0.0	0.0 d
2.7744	66.17000	67.91588	0.00000	0.0	0.0	0.0	0.0 d
3.4680	66.18000	67.22235	0.00000	0.0	0.0	0.0	0.0 d
4.1616	66.19000	66.52882	0.00000	0.0	0.0	0.0	0.0 d
4.8552	66.20000	65.83529	0.00000	0.0	0.0	0.0	0.0 d
5.5488	66.21000	65.14176	0.00000	0.0	0.0	0.0	0.0 d
6.2424	66.22000	64.44824	0.00000	0.0	0.0	0.0	0.0 d
6.9360	66.23000	63.75471	0.00000	0.0	0.0	0.0	0.0 d
7.6296	66.24000	63.06118	0.00000	0.0	0.0	0.0	0.0 d
8.3232	66.25000	62.36765	0.00000	0.0	0.0	0.0	0.0 d
9.0168	66.26000	61.67412	0.00000	0.0	0.0	0.0	0.0 d

9.7104	66.27000	60.98059	0.00000	0.0	0.0	0.0	0.0	d
10.404	66.28000	60.28706	0.00000	0.0	0.0	0.0	0.0	d
11.098	66.29000	59.59353	0.00000	0.0	0.0	0.0	0.0	d
11.791	66.30000	58.90000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: e-45 | Sub-structure:

Dist.	Coordinates			Displacements		Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	x	y	z	x	y			
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	64.74000	51.60000	0.00000	0.0	0.0	0.0	0.0	d
0.98415	64.72267	50.61600	0.00000	0.0	0.0	0.0	0.0	d
1.9683	64.70533	49.63200	0.00000	0.0	0.0	0.0	0.0	d
2.9525	64.68800	48.64800	0.00000	0.0	0.0	0.0	0.0	d
3.9366	64.67067	47.66400	0.00000	0.0	0.0	0.0	0.0	d
4.9208	64.65333	46.68000	0.00000	0.0	0.0	0.0	0.0	d
5.9049	64.63600	45.69600	0.00000	0.0	0.0	0.0	0.0	d
6.8891	64.61867	44.71200	0.00000	0.0	0.0	0.0	0.0	d
7.8732	64.60133	43.72800	0.00000	0.0	0.0	0.0	0.0	d
8.8574	64.58400	42.74400	0.00000	0.0	0.0	0.0	0.0	d
9.8415	64.56667	41.76000	0.00000	0.0	0.0	0.0	0.0	d
10.826	64.54933	40.77600	0.00000	0.0	0.0	0.0	0.0	d
11.810	64.53200	39.79200	0.00000	0.0	0.0	0.0	0.0	d
12.794	64.51467	38.80800	0.00000	0.0	0.0	0.0	0.0	d
13.778	64.49733	37.82400	0.00000	0.0	0.0	0.0	0.0	d
14.762	64.48000	36.84000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 18-31 | Sub-structure:

Dist.	Coordinates			Displacements		Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	x	y	z	x	y			
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	59.17000	64.78000	0.00000	0.0	0.0	0.0	0.0	d
1.1384	60.30833	64.77333	0.00000	0.0	0.0	0.0	0.0	d
2.2767	61.44667	64.76667	0.00000	0.0	0.0	0.0	0.0	d
3.4151	62.58500	64.76000	0.00000	0.0	0.0	0.0	0.0	d
4.5534	63.72333	64.75333	0.00000	0.0	0.0	0.0	0.0	d
5.6918	64.86167	64.74667	0.00000	0.0	0.0	0.0	0.0	d
6.8301	66.00000	64.74000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 23-24 | Sub-structure:

Dist.	Coordinates			Displacements		Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	x	y	z	x	y			
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	66.00000	63.14000	0.00000	0.0	0.0	0.0	0.0	d
1.0683	67.06833	63.13667	0.00000	0.0	0.0	0.0	0.0	d
2.1367	68.13667	63.13333	0.00000	0.0	0.0	0.0	0.0	d
3.2050	69.20500	63.13000	0.00000	0.0	0.0	0.0	0.0	d
4.2734	70.27333	63.12667	0.00000	0.0	0.0	0.0	0.0	d
5.3417	71.34167	63.12333	0.00000	0.0	0.0	0.0	0.0	d
6.4100	72.41000	63.12000	0.00000	0.0	0.0	0.0	0.0	d
7.4784	73.47833	63.11667	0.00000	0.0	0.0	0.0	0.0	d
8.5467	74.54667	63.11333	0.00000	0.0	0.0	0.0	0.0	d
9.6150	75.61500	63.11000	0.00000	0.0	0.0	0.0	0.0	d
10.683	76.68333	63.10667	0.00000	0.0	0.0	0.0	0.0	d
11.752	77.75167	63.10333	0.00000	0.0	0.0	0.0	0.0	d
12.820	78.82000	63.10000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: b-27 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	66.10000	58.46000	0.00000	0.0	0.0	0.0	0.0	d
1.0645	67.16300	58.40400	0.00000	0.0	0.0	0.0	0.0	d
2.1289	68.22600	58.34800	0.00000	0.0	0.0	0.0	0.0	d
3.1934	69.28900	58.29200	0.00000	0.0	0.0	0.0	0.0	d
4.2579	70.35200	58.23600	0.00000	0.0	0.0	0.0	0.0	d
5.3224	71.41500	58.18000	0.00000	0.0	0.0	0.0	0.0	d
6.3868	72.47800	58.12400	0.00000	0.0	0.0	0.0	0.0	d
7.4513	73.54100	58.06800	0.00000	0.0	0.0	0.0	0.0	d
8.5158	74.60400	58.01200	0.00000	0.0	0.0	0.0	0.0	d
9.5803	75.66700	57.95600	0.00000	0.0	0.0	0.0	0.0	d
10.645	76.73000	57.90000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 42-37 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	64.54000	46.73000	0.00000	0.0	0.0	0.0	0.0	d
1.0183	65.55826	46.71783	0.00000	0.0	0.0	0.0	0.0	d
2.0367	66.57652	46.70565	0.00000	0.0	0.0	0.0	0.0	d
3.0550	67.59478	46.69348	0.00000	0.0	0.0	0.0	0.0	d
4.0733	68.61304	46.68130	0.00000	0.0	0.0	0.0	0.0	d
5.0917	69.63130	46.66913	0.00000	0.0	0.0	0.0	0.0	d
6.1100	70.64957	46.65696	0.00000	0.0	0.0	0.0	0.0	d
7.1283	71.66783	46.64478	0.00000	0.0	0.0	0.0	0.0	d
8.1467	72.68609	46.63261	0.00000	0.0	0.0	0.0	0.0	d
9.1650	73.70435	46.62043	0.00000	0.0	0.0	0.0	0.0	d
10.183	74.72261	46.60826	0.00000	0.0	0.0	0.0	0.0	d
11.202	75.74087	46.59609	0.00000	0.0	0.0	0.0	0.0	d
12.220	76.75913	46.58391	0.00000	0.0	0.0	0.0	0.0	d
13.238	77.77739	46.57174	0.00000	0.0	0.0	0.0	0.0	d
14.257	78.79565	46.55957	0.00000	0.0	0.0	0.0	0.0	d
15.275	79.81391	46.54739	0.00000	0.0	0.0	0.0	0.0	d
16.293	80.83217	46.53522	0.00000	0.0	0.0	0.0	0.0	d
17.312	81.85043	46.52304	0.00000	0.0	0.0	0.0	0.0	d
18.330	82.86870	46.51087	0.00000	0.0	0.0	0.0	0.0	d
19.348	83.88696	46.49870	0.00000	0.0	0.0	0.0	0.0	d
20.367	84.90522	46.48652	0.00000	0.0	0.0	0.0	0.0	d
21.385	85.92348	46.47435	0.00000	0.0	0.0	0.0	0.0	d
22.403	86.94174	46.46217	0.00000	0.0	0.0	0.0	0.0	d
23.422	87.96000	46.45000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 47-43 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	54.96000	44.83000	0.00000	0.0	0.0	0.0	0.0	d
1.0600	56.02000	44.83000	0.00000	0.0	0.0	0.0	0.0	d
2.1200	57.08000	44.83000	0.00000	0.0	0.0	0.0	0.0	d
3.1800	58.14000	44.83000	0.00000	0.0	0.0	0.0	0.0	d
4.2400	59.20000	44.83000	0.00000	0.0	0.0	0.0	0.0	d
5.3000	60.26000	44.83000	0.00000	0.0	0.0	0.0	0.0	d
6.3600	61.32000	44.83000	0.00000	0.0	0.0	0.0	0.0	d
7.4200	62.38000	44.83000	0.00000	0.0	0.0	0.0	0.0	d
8.4800	63.44000	44.83000	0.00000	0.0	0.0	0.0	0.0	d
9.5400	64.50000	44.83000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 44-39 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	64.44000	41.91000	0.00000	0.0	0.0	0.0	0.0	d
1.4751	65.91500	41.89000	0.00000	0.0	0.0	0.0	0.0	d
2.9503	67.39000	41.87000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 46-45 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	54.96000	36.71000	0.00000	0.0	0.0	0.0	0.0	d
1.0579	56.01778	36.72444	0.00000	0.0	0.0	0.0	0.0	d
2.1158	57.07556	36.73889	0.00000	0.0	0.0	0.0	0.0	d
3.1736	58.13333	36.75333	0.00000	0.0	0.0	0.0	0.0	d
4.2315	59.19111	36.76778	0.00000	0.0	0.0	0.0	0.0	d
5.2894	60.24889	36.78222	0.00000	0.0	0.0	0.0	0.0	d
6.3473	61.30667	36.79667	0.00000	0.0	0.0	0.0	0.0	d
7.4051	62.36444	36.81111	0.00000	0.0	0.0	0.0	0.0	d
8.4630	63.42222	36.82556	0.00000	0.0	0.0	0.0	0.0	d
9.5209	64.48000	36.84000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: a-12 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	44.06000	58.90000	0.00000	0.0	0.0	0.0	0.0	d
1.1151	42.95250	58.77000	0.00000	0.0	0.0	0.0	0.0	d
2.2302	41.84500	58.64000	0.00000	0.0	0.0	0.0	0.0	d
3.3453	40.73750	58.51000	0.00000	0.0	0.0	0.0	0.0	d
4.4604	39.63000	58.38000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 12-11 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	39.63000	58.38000	0.00000	0.0	0.0	0.0	0.0	d
1.1167	39.63000	57.26333	0.00000	0.0	0.0	0.0	0.0	d
2.2333	39.63000	56.14667	0.00000	0.0	0.0	0.0	0.0	d
3.3500	39.63000	55.03000	0.00000	0.0	0.0	0.0	0.0	d
4.4667	39.63000	53.91333	0.00000	0.0	0.0	0.0	0.0	d
5.5833	39.63000	52.79667	0.00000	0.0	0.0	0.0	0.0	d
6.7000	39.63000	51.68000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 11-f | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	

0.0	39.63000	51.68000	0.00000	0.0	0.0	0.0	0.0	d
0.55884	40.18875	51.67000	0.00000	0.0	0.0	0.0	0.0	d
1.1177	40.74750	51.66000	0.00000	0.0	0.0	0.0	0.0	d
1.6765	41.30625	51.65000	0.00000	0.0	0.0	0.0	0.0	d
2.2354	41.86500	51.64000	0.00000	0.0	0.0	0.0	0.0	d
2.7942	42.42375	51.63000	0.00000	0.0	0.0	0.0	0.0	d
3.3530	42.98250	51.62000	0.00000	0.0	0.0	0.0	0.0	d
3.9119	43.54125	51.61000	0.00000	0.0	0.0	0.0	0.0	d
4.4707	44.10000	51.60000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: ag | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	44.06000	58.90000	0.00000	0.0	0.0	0.0	0.0	d
1.0047	45.06364	58.85455	0.00000	0.0	0.0	0.0	0.0	d
2.0093	46.06727	58.80909	0.00000	0.0	0.0	0.0	0.0	d
3.0140	47.07091	58.76364	0.00000	0.0	0.0	0.0	0.0	d
4.0187	48.07455	58.71818	0.00000	0.0	0.0	0.0	0.0	d
5.0233	49.07818	58.67273	0.00000	0.0	0.0	0.0	0.0	d
6.0280	50.08182	58.62727	0.00000	0.0	0.0	0.0	0.0	d
7.0327	51.08545	58.58182	0.00000	0.0	0.0	0.0	0.0	d
8.0373	52.08909	58.53636	0.00000	0.0	0.0	0.0	0.0	d
9.0420	53.09273	58.49091	0.00000	0.0	0.0	0.0	0.0	d
10.047	54.09636	58.44545	0.00000	0.0	0.0	0.0	0.0	d
11.051	55.10000	58.40000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: gb | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	55.10000	58.40000	0.00000	0.0	0.0	0.0	0.0	d
0.57001	55.67000	58.40300	0.00000	0.0	0.0	0.0	0.0	d
1.1400	56.24000	58.40600	0.00000	0.0	0.0	0.0	0.0	d
1.7100	56.81000	58.40900	0.00000	0.0	0.0	0.0	0.0	d
2.2800	57.38000	58.41200	0.00000	0.0	0.0	0.0	0.0	d
2.8500	57.95000	58.41500	0.00000	0.0	0.0	0.0	0.0	d
3.4200	58.52000	58.41800	0.00000	0.0	0.0	0.0	0.0	d
3.9901	59.09000	58.42100	0.00000	0.0	0.0	0.0	0.0	d
4.5601	59.66000	58.42400	0.00000	0.0	0.0	0.0	0.0	d
5.1301	60.23000	58.42700	0.00000	0.0	0.0	0.0	0.0	d
5.7001	60.80000	58.43000	0.00000	0.0	0.0	0.0	0.0	d
6.2701	61.37000	58.43300	0.00000	0.0	0.0	0.0	0.0	d
6.8401	61.94000	58.43600	0.00000	0.0	0.0	0.0	0.0	d
7.4101	62.51000	58.43900	0.00000	0.0	0.0	0.0	0.0	d
7.9801	63.08000	58.44200	0.00000	0.0	0.0	0.0	0.0	d
8.5501	63.65000	58.44500	0.00000	0.0	0.0	0.0	0.0	d
9.1201	64.22000	58.44800	0.00000	0.0	0.0	0.0	0.0	d
9.6901	64.79000	58.45100	0.00000	0.0	0.0	0.0	0.0	d
10.260	65.36000	58.45400	0.00000	0.0	0.0	0.0	0.0	d
10.830	65.93000	58.45700	0.00000	0.0	0.0	0.0	0.0	d
11.400	66.50000	58.46000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: bc | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	66.50000	58.46000	0.00000	0.0	0.0	0.0	0.0	d
0.27800	66.50000	58.18200	0.00000	0.0	0.0	0.0	0.0	d

0.55600	66.50000	57.90400	0.00000	0.0	0.0	0.0	0.0	d
0.83400	66.50000	57.62600	0.00000	0.0	0.0	0.0	0.0	d
1.11200	66.50000	57.34800	0.00000	0.0	0.0	0.0	0.0	d
1.39000	66.50000	57.07000	0.00000	0.0	0.0	0.0	0.0	d
1.66800	66.50000	56.79200	0.00000	0.0	0.0	0.0	0.0	d
1.94600	66.50000	56.51400	0.00000	0.0	0.0	0.0	0.0	d
2.22400	66.50000	56.23600	0.00000	0.0	0.0	0.0	0.0	d
2.50200	66.50000	55.95800	0.00000	0.0	0.0	0.0	0.0	d
2.78000	66.50000	55.68000	0.00000	0.0	0.0	0.0	0.0	d
3.05800	66.50000	55.40200	0.00000	0.0	0.0	0.0	0.0	d
3.33600	66.50000	55.12400	0.00000	0.0	0.0	0.0	0.0	d
3.61400	66.50000	54.84600	0.00000	0.0	0.0	0.0	0.0	d
3.89200	66.50000	54.56800	0.00000	0.0	0.0	0.0	0.0	d
4.17000	66.50000	54.29000	0.00000	0.0	0.0	0.0	0.0	d
4.44800	66.50000	54.01200	0.00000	0.0	0.0	0.0	0.0	d
4.72600	66.50000	53.73400	0.00000	0.0	0.0	0.0	0.0	d
5.00400	66.50000	53.45600	0.00000	0.0	0.0	0.0	0.0	d
5.28200	66.50000	53.17800	0.00000	0.0	0.0	0.0	0.0	d
5.56000	66.50000	52.90000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: cd | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	66.50000	52.90000	0.00000	0.0	0.0	0.0	0.0	d
1.7493	65.00000	52.00000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: eh | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	64.74000	51.60000	0.00000	0.0	0.0	0.0	0.0	d
1.0844	63.65556	51.60000	0.00000	0.0	0.0	0.0	0.0	d
2.1689	62.57111	51.60000	0.00000	0.0	0.0	0.0	0.0	d
3.2533	61.48667	51.60000	0.00000	0.0	0.0	0.0	0.0	d
4.3378	60.40222	51.60000	0.00000	0.0	0.0	0.0	0.0	d
5.4222	59.31778	51.60000	0.00000	0.0	0.0	0.0	0.0	d
6.5067	58.23333	51.60000	0.00000	0.0	0.0	0.0	0.0	d
7.5911	57.14889	51.60000	0.00000	0.0	0.0	0.0	0.0	d
8.6756	56.06444	51.60000	0.00000	0.0	0.0	0.0	0.0	d
9.7600	54.98000	51.60000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: hf | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	54.98000	51.60000	0.00000	0.0	0.0	0.0	0.0	d
1.0880	53.89200	51.60000	0.00000	0.0	0.0	0.0	0.0	d
2.1760	52.80400	51.60000	0.00000	0.0	0.0	0.0	0.0	d
3.2640	51.71600	51.60000	0.00000	0.0	0.0	0.0	0.0	d
4.3520	50.62800	51.60000	0.00000	0.0	0.0	0.0	0.0	d
5.4400	49.54000	51.60000	0.00000	0.0	0.0	0.0	0.0	d
6.5280	48.45200	51.60000	0.00000	0.0	0.0	0.0	0.0	d
7.6160	47.36400	51.60000	0.00000	0.0	0.0	0.0	0.0	d
8.7040	46.27600	51.60000	0.00000	0.0	0.0	0.0	0.0	d
9.7920	45.18800	51.60000	0.00000	0.0	0.0	0.0	0.0	d
10.880	44.10000	51.60000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: de | Sub-structure:

Dist.	Coordinates			Displacements			
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	65.00000	52.00000	0.00000	0.0	0.0	0.0	0.0 d
0.11927	64.93500	51.90000	0.00000	0.0	0.0	0.0	0.0 d
0.23854	64.87000	51.80000	0.00000	0.0	0.0	0.0	0.0 d
0.35781	64.80500	51.70000	0.00000	0.0	0.0	0.0	0.0 d
0.47707	64.74000	51.60000	0.00000	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Specific Building Damage Results - Vertical Displacements

Structure: 21-20 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]
Vertical Offset 1				
0.0	55.96000	70.70000	0.00000	-0.21999 d
1.0682	54.89182	70.70182	0.00000	-0.21447 d
2.1364	53.82364	70.70364	0.00000	-0.20756 d
3.2046	52.75545	70.70545	0.00000	-0.19959 d
4.2727	51.68727	70.70727	0.00000	-0.19085 d
5.3409	50.61909	70.70909	0.00000	-0.18156 d
6.4091	49.55091	70.71091	0.00000	-0.17186 d
7.4773	48.48273	70.71273	0.00000	-0.16179 d
8.5455	47.41455	70.71455	0.00000	-0.15138 d
9.6137	46.34636	70.71636	0.00000	-0.14055 d
10.682	45.27818	70.71818	0.00000	-0.12925 d
11.750	44.21000	70.72000	0.00000	-0.11740 d

d - Displacements include imported displacements.

Structure: 19-20 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]
Vertical Offset 1				
0.0	59.14000	66.79000	0.00000	-0.65554 d
1.0080	58.50400	67.57200	0.00000	-0.53449 d
2.0160	57.86800	68.35400	0.00000	-0.43384 d
3.0239	57.23200	69.13600	0.00000	-0.34979 d
4.0319	56.59600	69.91800	0.00000	-0.27931 d
5.0399	55.96000	70.70000	0.00000	-0.21999 d

d - Displacements include imported displacements.

Structure: 19-18 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]
Vertical Offset 1				
0.0	59.14000	66.79000	0.00000	-0.65554 d
1.0051	59.15500	65.78500	0.00000	-0.84911 d
2.0102	59.17000	64.78000	0.00000	-1.1007 d

d - Displacements include imported displacements.

Structure: 18-13 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	59.17000	64.78000	0.00000	-1.1007	d
1.0686	58.10143	64.78143	0.00000	-1.0832	d
2.1371	57.03286	64.78286	0.00000	-1.0547	d
3.2057	55.96429	64.78429	0.00000	-1.0184	d
4.2743	54.89571	64.78571	0.00000	-0.97789	d
5.3429	53.82714	64.78714	0.00000	-0.93590	d
6.4114	52.75857	64.78857	0.00000	-0.89479	d
7.4800	51.69000	64.79000	0.00000	-0.85618	d
8.5486	50.62143	64.79143	0.00000	-0.82091	d
9.6172	49.55286	64.79286	0.00000	-0.78910	d
10.686	48.48429	64.79429	0.00000	-0.76025	d
11.754	47.41571	64.79571	0.00000	-0.73328	d
12.823	46.34714	64.79714	0.00000	-0.70663	d
13.891	45.27857	64.79857	0.00000	-0.67834	d
14.960	44.21000	64.80000	0.00000	-0.64628	d

d - Displacements include imported displacements.

Structure: 21-a | Sub-structure:

Dist.	Coordinates			Displacements	
	x	y	z	z	
[m]	[m]	[m]	[m]	[mm]	

Vertical Offset 1

0.0	44.21000	70.72000	0.00000	-0.11740	d
0.34768	44.20559	70.37235	0.00000	-0.13313	d
0.69535	44.20118	70.02471	0.00000	-0.15001	d
1.0430	44.19676	69.67706	0.00000	-0.16815	d
1.3907	44.19235	69.32941	0.00000	-0.18765	d
1.7384	44.18794	68.98176	0.00000	-0.20864	d
2.0861	44.18353	68.63412	0.00000	-0.23123	d
2.4337	44.17912	68.28647	0.00000	-0.25558	d
2.7814	44.17471	67.93882	0.00000	-0.28185	d
3.1291	44.17029	67.59118	0.00000	-0.31021	d
3.4768	44.16588	67.24353	0.00000	-0.34087	d
3.8244	44.16147	66.89588	0.00000	-0.37404	d
4.1721	44.15706	66.54824	0.00000	-0.40998	d
4.5198	44.15265	66.20059	0.00000	-0.44896	d
4.8675	44.14824	65.85294	0.00000	-0.49130	d
5.2151	44.14382	65.50529	0.00000	-0.53735	d
5.5628	44.13941	65.15765	0.00000	-0.58750	d
5.9105	44.13500	64.81000	0.00000	-0.64220	d
6.2582	44.13059	64.46235	0.00000	-0.70195	d
6.6058	44.12618	64.11471	0.00000	-0.76733	d
6.9535	44.12176	63.76706	0.00000	-0.83897	d
7.3012	44.11735	63.41941	0.00000	-0.91760	d
7.6489	44.11294	63.07176	0.00000	-1.0041	d
7.9965	44.10853	62.72412	0.00000	-1.0993	d
8.3442	44.10412	62.37647	0.00000	-1.2044	d
8.6919	44.09971	62.02882	0.00000	-1.3208	d
9.0396	44.09529	61.68118	0.00000	-1.4499	d
9.3872	44.09088	61.33353	0.00000	-1.5939	d
9.7349	44.08647	60.98588	0.00000	-1.7553	d
10.083	44.08206	60.63824	0.00000	-1.9380	d
10.430	44.07765	60.29059	0.00000	-2.1478	d
10.778	44.07324	59.94294	0.00000	-2.3947	d
11.126	44.06882	59.59529	0.00000	-2.6964	d
11.473	44.06441	59.24765	0.00000	-3.0879	d
11.821	44.06000	58.90000	0.00000	-3.6483	d

d - Displacements include imported displacements.

Structure: f-50 | Sub-structure:

Dist.	Coordinates			Displacements	
	x	y	z	z	
[m]	[m]	[m]	[m]	[mm]	

Vertical Offset 1

0.0	44.10000	51.60000	0.00000	-5.1292	d
0.99267	44.10400	50.60733	0.00000	-2.8598	d
1.9853	44.10800	49.61467	0.00000	-2.0595	d
2.9780	44.11200	48.62200	0.00000	-1.5545	d
3.9707	44.11600	47.62933	0.00000	-1.1907	d

4.9634	44.12000	46.63667	0.00000	-0.91834	d
5.9560	44.12400	45.64400	0.00000	-0.71072	d
6.9487	44.12800	44.65133	0.00000	-0.55032	d
7.9414	44.13200	43.65867	0.00000	-0.42490	d
8.9341	44.13600	42.66600	0.00000	-0.32575	d
9.9267	44.14000	41.67333	0.00000	-0.24659	d
10.919	44.14400	40.68067	0.00000	-0.18289	d
11.912	44.14800	39.68800	0.00000	-0.13128	d
12.905	44.15200	38.69533	0.00000	-0.089236	d
13.897	44.15600	37.70267	0.00000	-0.054868	d
14.890	44.16000	36.71000	0.00000	-0.026706	d

d - Displacements include imported displacements.

Structure: 14-15 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	55.00000	64.76000	0.00000	-0.98796	d
1.0700	55.00000	63.69000	0.00000	-1.2759	d
2.1400	55.00000	62.62000	0.00000	-1.6521	d

d - Displacements include imported displacements.

Structure: 15-16 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	55.00000	62.62000	0.00000	-1.6521	d
1.6907	56.23000	61.46000	0.00000	-2.3703	d

d - Displacements include imported displacements.

Structure: 16-17 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	56.23000	61.46000	0.00000	-2.3703	d
1.9000	56.22000	59.56000	0.00000	-4.1492	d

d - Displacements include imported displacements.

Structure: 17-g | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	56.22000	59.56000	0.00000	-4.1492	d
1.6125	55.10000	58.40000	0.00000	-6.4854	d

d - Displacements include imported displacements.

Structure: h-49 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	54.98000	51.60000	0.00000	-6.1930	d
1.0678	55.74000	50.85000	0.00000	-4.5253	d
2.1355	56.50000	50.10000	0.00000	-3.6214	d

d - Displacements include imported displacements.

Structure: 49-36 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	56.50000	50.10000	0.00000	-3.6214	d
1.1950	56.50000	48.90500	0.00000	-2.5230	d
2.3900	56.50000	47.71000	0.00000	-1.8262	d

d - Displacements include imported displacements.

Structure: 36-48 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	56.50000	47.71000	0.00000	-1.8262	d
1.1506	55.73000	46.85500	0.00000	-1.4290	d
2.3012	54.96000	46.00000	0.00000	-1.1275	d

d - Displacements include imported displacements.

Structure: 48-47 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	54.96000	46.00000	0.00000	-1.1275	d
1.1700	54.96000	44.83000	0.00000	-0.84909	d

d - Displacements include imported displacements.

Structure: 47-51 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	54.96000	44.83000	0.00000	-0.84909	d
1.0750	53.88500	44.83000	0.00000	-0.82113	d
2.1500	52.81000	44.83000	0.00000	-0.79161	d
3.2250	51.73500	44.83000	0.00000	-0.76223	d
4.3000	50.66000	44.83000	0.00000	-0.73412	d
5.3750	49.58500	44.83000	0.00000	-0.70771	d
6.4500	48.51000	44.83000	0.00000	-0.68287	d
7.5250	47.43500	44.83000	0.00000	-0.65888	d
8.6000	46.36000	44.83000	0.00000	-0.63458	d
9.6750	45.28500	44.83000	0.00000	-0.60844	d
10.750	44.21000	44.83000	0.00000	-0.57879	d

d - Displacements include imported displacements.

Structure: 50-46 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	44.16000	36.71000	0.00000	-0.026706	d
1.0800	45.24000	36.71000	0.00000	-0.033425	d
2.1600	46.32000	36.71000	0.00000	-0.039807	d
3.2400	47.40000	36.71000	0.00000	-0.045833	d
4.3200	48.48000	36.71000	0.00000	-0.051487	d
5.4000	49.56000	36.71000	0.00000	-0.056742	d
6.4800	50.64000	36.71000	0.00000	-0.061558	d
7.5600	51.72000	36.71000	0.00000	-0.065874	d
8.6400	52.80000	36.71000	0.00000	-0.069606	d
9.7200	53.88000	36.71000	0.00000	-0.072651	d
10.800	54.96000	36.71000	0.00000	-0.074891	d

d - Displacements include imported displacements.

Structure: 46-47 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	54.96000	36.71000	0.00000	-0.074891	d
1.0150	54.96000	37.72500	0.00000	-0.11579	d
2.0300	54.96000	38.74000	0.00000	-0.16600	d
3.0450	54.96000	39.75500	0.00000	-0.22777	d
4.0600	54.96000	40.77000	0.00000	-0.30398	d
5.0750	54.96000	41.78500	0.00000	-0.39839	d
6.0900	54.96000	42.80000	0.00000	-0.51593	d
7.1050	54.96000	43.81500	0.00000	-0.66320	d
8.1200	54.96000	44.83000	0.00000	-0.84909	d

d - Displacements include imported displacements.

Structure: 24-25 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	78.82000	63.10000	0.00000	-0.033213	d
1.0289	79.84889	63.09667	0.00000	-0.0093711	d
2.0578	80.87778	63.09333	0.00000	0.010011	d
3.0867	81.90667	63.09000	0.00000	0.025703	d
4.1156	82.93556	63.08667	0.00000	0.038340	d
5.1445	83.96444	63.08333	0.00000	0.048442	d
6.1734	84.99333	63.08000	0.00000	0.056442	d
7.2023	86.02222	63.07667	0.00000	0.062693	d
8.2312	87.05111	63.07333	0.00000	0.067493	d
9.2600	88.08000	63.07000	0.00000	0.071086	d

d - Displacements include imported displacements.

Structure: 25-26 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	88.08000	63.07000	0.00000	0.071086	d
1.0641	88.06400	62.00600	0.00000	0.070023	d
2.1282	88.04800	60.94200	0.00000	0.069021	d
3.1924	88.03200	59.87800	0.00000	0.068115	d
4.2565	88.01600	58.81400	0.00000	0.067338	d
5.3206	88.00000	57.75000	0.00000	0.066722	d

d - Displacements include imported displacements.

Structure: 26-27 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	88.00000	57.75000	0.00000	0.066722	d
1.0246	86.97545	57.76364	0.00000	0.061533	d
2.0493	85.95091	57.77727	0.00000	0.054700	d
3.0739	84.92636	57.79091	0.00000	0.045851	d
4.0985	83.90182	57.80455	0.00000	0.034519	d
5.1232	82.87727	57.81818	0.00000	0.020118	d
6.1478	81.85273	57.83182	0.00000	0.0019030	d
7.1725	80.82818	57.84545	0.00000	-0.021083	d
8.1971	79.80364	57.85909	0.00000	-0.050080	d
9.2217	78.77909	57.87273	0.00000	-0.086717	d
10.246	77.75455	57.88636	0.00000	-0.13316	d
11.271	76.73000	57.90000	0.00000	-0.19233	d

d - Displacements include imported displacements.

Structure: 27-28 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	76.73000	57.90000	0.00000	-0.19233 d
1.0567	76.72333	58.95667	0.00000	-0.17860 d
2.1134	76.71667	60.01333	0.00000	-0.16142 d
3.1701	76.71000	61.07000	0.00000	-0.14181 d

d - Displacements include imported displacements.

Structure: 28-29 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	76.71000	61.07000	0.00000	-0.14181 d
1.4640	77.76500	62.08500	0.00000	-0.079160 d
2.9280	78.82000	63.10000	0.00000	-0.033213 d

d - Displacements include imported displacements.

Structure: 27-32 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	76.73000	57.90000	0.00000	-0.19233 d
1.0300	76.73400	56.87000	0.00000	-0.20172 d
2.0600	76.73800	55.84000	0.00000	-0.20641 d
3.0900	76.74200	54.81000	0.00000	-0.20608 d
4.1200	76.74600	53.78000	0.00000	-0.20076 d
5.1500	76.75000	52.75000	0.00000	-0.19081 d

d - Displacements include imported displacements.

Structure: 33-31 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	87.93000	52.75000	0.00000	0.066521 d
1.0400	86.89000	52.75000	0.00000	0.061154 d
2.0800	85.85000	52.75000	0.00000	0.054066 d
3.1200	84.81000	52.75000	0.00000	0.044859 d
4.1600	83.77000	52.75000	0.00000	0.033032 d
5.2000	82.73000	52.75000	0.00000	0.017954 d
6.2400	81.69000	52.75000	0.00000	-0.0011823 d
7.2800	80.65000	52.75000	0.00000	-0.025418 d
8.3200	79.61000	52.75000	0.00000	-0.056113 d
9.3600	78.57000	52.75000	0.00000	-0.095063 d
10.400	77.53000	52.75000	0.00000	-0.14468 d
11.440	76.49000	52.75000	0.00000	-0.20823 d
12.480	75.45000	52.75000	0.00000	-0.29025 d
13.520	74.41000	52.75000	0.00000	-0.39712 d
14.560	73.37000	52.75000	0.00000	-0.53800 d
15.600	72.33000	52.75000	0.00000	-0.72634 d
16.640	71.29000	52.75000	0.00000	-0.98223 d
17.680	70.25000	52.75000	0.00000	-1.3365 d

d - Displacements include imported displacements.

Structure: 31-34 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z

[m] [m] [m] [m] [mm]

Vertical Offset 1

0.0 70.25000 52.75000 0.00000 -1.3365 d
1.1236 70.22667 51.62667 0.00000 -1.1827 d
2.2472 70.20333 50.50333 0.00000 -1.0104 d
3.3707 70.18000 49.38000 0.00000 -0.84034 d
d - Displacements include imported displacements.

Structure: 34-35 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0 70.18000 49.38000 0.00000 -0.84034 d
1.3300 71.51000 49.37000 0.00000 -0.60726 d
d - Displacements include imported displacements.

Structure: 35-41 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0 71.51000 49.37000 0.00000 -0.60726 d
1.2000 71.50000 48.17000 0.00000 -0.49702 d
2.4001 71.49000 46.97000 0.00000 -0.39765 d
3.6001 71.48000 45.77000 0.00000 -0.31115 d
d - Displacements include imported displacements.

Structure: 41-40 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0 71.48000 45.77000 0.00000 -0.31115 d
1.0175 70.46250 45.77000 0.00000 -0.38445 d
2.0350 69.44500 45.77000 0.00000 -0.46636 d
3.0525 68.42750 45.77000 0.00000 -0.55565 d
4.0700 67.41000 45.77000 0.00000 -0.64999 d
d - Displacements include imported displacements.

Structure: 40-39 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0 67.41000 45.77000 0.00000 -0.64999 d
1.3000 67.40333 44.47000 0.00000 -0.47248 d
2.6000 67.39667 43.17000 0.00000 -0.33925 d
3.9001 67.39000 41.87000 0.00000 -0.23823 d
d - Displacements include imported displacements.

Structure: 39-38 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0 67.39000 41.87000 0.00000 -0.23823 d
1.0305 68.42050 41.86150 0.00000 -0.20442 d
2.0611 69.45100 41.85300 0.00000 -0.17127 d
3.0916 70.48150 41.84450 0.00000 -0.13953 d
4.1221 71.51200 41.83600 0.00000 -0.10978 d

5.1527	72.54250	41.82750	0.00000	-0.082391	d
6.1832	73.57300	41.81900	0.00000	-0.057577	d
7.2137	74.60350	41.81050	0.00000	-0.035408	d
8.2443	75.63400	41.80200	0.00000	-0.015848	d
9.2748	76.66450	41.79350	0.00000	0.0012175	d
10.305	77.69500	41.78500	0.00000	0.015950	d
11.336	78.72550	41.77650	0.00000	0.028540	d
12.366	79.75600	41.76800	0.00000	0.039190	d
13.397	80.78650	41.75950	0.00000	0.048102	d
14.427	81.81700	41.75100	0.00000	0.055471	d
15.458	82.84750	41.74250	0.00000	0.061480	d
16.489	83.87800	41.73400	0.00000	0.066299	d
17.519	84.90850	41.72550	0.00000	0.070082	d
18.550	85.93900	41.71700	0.00000	0.072968	d
19.580	86.96950	41.70850	0.00000	0.075079	d
20.611	88.00000	41.70000	0.00000	0.076526	d

d - Displacements include imported displacements.

Structure: 38-25 | Sub-structure:

Dist.	Coordinates			Displacements	
	x	y	z	z	
[m]	[m]	[m]	[m]	[mm]	

Vertical Offset 1

0.0	88.00000	41.70000	0.00000	0.076526	d
1.0176	88.00381	42.71762	0.00000	0.075721	d
2.0353	88.00762	43.73524	0.00000	0.074825	d
3.0529	88.01143	44.75286	0.00000	0.073860	d
4.0705	88.01524	45.77048	0.00000	0.072850	d
5.0881	88.01905	46.78810	0.00000	0.071821	d
6.1058	88.02286	47.80571	0.00000	0.070804	d
7.1234	88.02667	48.82333	0.00000	0.069830	d
8.1410	88.03048	49.84095	0.00000	0.068928	d
9.1586	88.03429	50.85857	0.00000	0.068129	d
10.176	88.03810	51.87619	0.00000	0.067460	d
11.194	88.04190	52.89381	0.00000	0.066945	d
12.212	88.04571	53.91143	0.00000	0.066601	d
13.229	88.04952	54.92905	0.00000	0.066441	d
14.247	88.05333	55.94667	0.00000	0.066472	d
15.264	88.05714	56.96429	0.00000	0.066690	d
16.282	88.06095	57.98190	0.00000	0.067088	d
17.300	88.06476	58.99952	0.00000	0.067652	d
18.317	88.06857	60.01714	0.00000	0.068360	d
19.335	88.07238	61.03476	0.00000	0.069188	d
20.353	88.07619	62.05238	0.00000	0.070106	d
21.370	88.08000	63.07000	0.00000	0.071086	d

d - Displacements include imported displacements.

Structure: 20-22 | Sub-structure:

Dist.	Coordinates			Displacements	
	x	y	z	z	
[m]	[m]	[m]	[m]	[mm]	

Vertical Offset 1

0.0	55.96000	70.70000	0.00000	-0.21999	d
1.0170	56.97700	70.69900	0.00000	-0.22355	d
2.0340	57.99400	70.69800	0.00000	-0.22518	d
3.0510	59.01100	70.69700	0.00000	-0.22457	d
4.0680	60.02800	70.69600	0.00000	-0.22147	d
5.0850	61.04500	70.69500	0.00000	-0.21571	d
6.1020	62.06200	70.69400	0.00000	-0.20724	d
7.1190	63.07900	70.69300	0.00000	-0.19612	d
8.1360	64.09600	70.69200	0.00000	-0.18254	d
9.1530	65.11300	70.69100	0.00000	-0.16684	d
10.170	66.13000	70.69000	0.00000	-0.14942	d

d - Displacements include imported displacements.

Structure: 22-b | Sub-structure:

Dist.	Coordinates			Displacements	
	x	y	z	z	
[m]	[m]	[m]	[m]	[mm]	

Vertical Offset 1

0.0	66.13000	70.69000	0.00000	-0.14942	d
0.69360	66.14000	69.99647	0.00000	-0.18757	d
1.3872	66.15000	69.30294	0.00000	-0.23178	d
2.0808	66.16000	68.60941	0.00000	-0.28314	d
2.7744	66.17000	67.91588	0.00000	-0.34298	d
3.4680	66.18000	67.22235	0.00000	-0.41297	d
4.1616	66.19000	66.52882	0.00000	-0.49514	d
4.8552	66.20000	65.83529	0.00000	-0.59206	d
5.5488	66.21000	65.14176	0.00000	-0.70696	d
6.2424	66.22000	64.44824	0.00000	-0.84394	d
6.9360	66.23000	63.75471	0.00000	-1.0083	d
7.6296	66.24000	63.06118	0.00000	-1.2067	d
8.3232	66.25000	62.36765	0.00000	-1.4481	d
9.0168	66.26000	61.67412	0.00000	-1.7439	d
9.7104	66.27000	60.98059	0.00000	-2.1093	d
10.404	66.28000	60.28706	0.00000	-2.5645	d
11.098	66.29000	59.59353	0.00000	-3.1389	d
11.791	66.30000	58.90000	0.00000	-3.8932	d

d - Displacements include imported displacements.

Structure: e-45 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	64.74000	51.60000	0.00000	-5.0485	d
0.98415	64.72267	50.61600	0.00000	-3.5522	d
1.9683	64.70533	49.63200	0.00000	-2.6083	d
2.9525	64.68800	48.64800	0.00000	-1.9563	d
3.9366	64.67067	47.66400	0.00000	-1.4887	d
4.9208	64.65333	46.68000	0.00000	-1.1444	d
5.9049	64.63600	45.69600	0.00000	-0.88528	d
6.8891	64.61867	44.71200	0.00000	-0.68684	d
7.8732	64.60133	43.72800	0.00000	-0.53260	d
8.8574	64.58400	42.74400	0.00000	-0.41124	d
9.8415	64.56667	41.76000	0.00000	-0.31479	d
10.826	64.54933	40.77600	0.00000	-0.23748	d
11.810	64.53200	39.79200	0.00000	-0.17510	d
12.794	64.51467	38.80800	0.00000	-0.12449	d
13.778	64.49733	37.82400	0.00000	-0.083278	d
14.762	64.48000	36.84000	0.00000	-0.049621	d

d - Displacements include imported displacements.

Structure: 18-31 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	59.17000	64.78000	0.00000	-1.1007	d
1.1384	60.30833	64.77333	0.00000	-1.1044	d
2.2767	61.44667	64.76667	0.00000	-1.0878	d
3.4151	62.58500	64.76000	0.00000	-1.0482	d
4.5534	63.72333	64.75333	0.00000	-0.98549	d
5.6918	64.86167	64.74667	0.00000	-0.90216	d
6.8301	66.00000	64.74000	0.00000	-0.80345	d

d - Displacements include imported displacements.

Structure: 23-24 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	66.00000	63.14000	0.00000	-1.2205	d
1.0683	67.06833	63.13667	0.00000	-1.0480	d
2.1367	68.13667	63.13333	0.00000	-0.87754	d
3.2050	69.20500	63.13000	0.00000	-0.71933	d

4.2734 70.27333 63.12667 0.00000 -0.57909 d
5.3417 71.34167 63.12333 0.00000 -0.45864 d
6.4100 72.41000 63.12000 0.00000 -0.35734 d
7.4784 73.47833 63.11667 0.00000 -0.27326 d
8.5467 74.54667 63.11333 0.00000 -0.20407 d
9.6150 75.61500 63.11000 0.00000 -0.14744 d
10.683 76.68333 63.10667 0.00000 -0.10126 d
11.752 77.75167 63.10333 0.00000 -0.063692 d
12.820 78.82000 63.10000 0.00000 -0.033213 d
d - Displacements include imported displacements.

Structure: b-27 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]
Vertical Offset 1				
0.0	66.10000	58.46000	0.00000	-4.9999 d
1.0645	67.16300	58.40400	0.00000	-3.3365 d
2.1289	68.22600	58.34800	0.00000	-2.3797 d
3.1934	69.28900	58.29200	0.00000	-1.7229 d
4.2579	70.35200	58.23600	0.00000	-1.2601 d
5.3224	71.41500	58.18000	0.00000	-0.92825 d
6.3868	72.47800	58.12400	0.00000	-0.68639 d
7.4513	73.54100	58.06800	0.00000	-0.50736 d
8.5158	74.60400	58.01200	0.00000	-0.37294 d
9.5803	75.66700	57.95600	0.00000	-0.27079 d
10.645	76.73000	57.90000	0.00000	-0.19233 d

d - Displacements include imported displacements.

Structure: 42-37 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]
Vertical Offset 1				
0.0	64.54000	46.73000	0.00000	-1.1722 d
1.0183	65.55826	46.71783	0.00000	-1.0502 d
2.0367	66.57652	46.70565	0.00000	-0.92044 d
3.0550	67.59478	46.69348	0.00000	-0.78991 d
4.0733	68.61304	46.68130	0.00000	-0.66494 d
5.0917	69.63130	46.66913	0.00000	-0.55000 d
6.1100	70.64957	46.65696	0.00000	-0.44751 d
7.1283	71.66783	46.64478	0.00000	-0.35819 d
8.1467	72.68609	46.63261	0.00000	-0.28164 d
9.1650	73.70435	46.62043	0.00000	-0.21679 d
10.183	74.72261	46.60826	0.00000	-0.16232 d
11.202	75.74087	46.59609	0.00000	-0.11683 d
12.220	76.75913	46.58391	0.00000	-0.079034 d
13.238	77.77739	46.57174	0.00000	-0.047742 d
14.257	78.79565	46.55957	0.00000	-0.021930 d
15.275	79.81391	46.54739	0.00000	-717.09E-6 d
16.293	80.83217	46.53522	0.00000	0.016642 d
17.312	81.85043	46.52304	0.00000	0.030774 d
18.330	82.86870	46.51087	0.00000	0.042207 d
19.348	83.88696	46.49870	0.00000	0.051380 d
20.367	84.90522	46.48652	0.00000	0.058663 d
21.385	85.92348	46.47435	0.00000	0.064363 d
22.403	86.94174	46.46217	0.00000	0.068739 d
23.422	87.96000	46.45000	0.00000	0.072008 d

d - Displacements include imported displacements.

Structure: 47-43 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]
Vertical Offset 1				
0.0	54.96000	44.83000	0.00000	-0.84909 d
1.0600	56.02000	44.83000	0.00000	-0.87299 d
2.1200	57.08000	44.83000	0.00000	-0.89092 d

Dist.	x	y	z	z
[m]	[m]	[m]	[m]	[mm]
3.1800	58.14000	44.83000	0.00000	-0.90062 d
4.2400	59.20000	44.83000	0.00000	-0.90015 d
5.3000	60.26000	44.83000	0.00000	-0.88801 d
6.3600	61.32000	44.83000	0.00000	-0.86329 d
7.4200	62.38000	44.83000	0.00000	-0.82575 d
8.4800	63.44000	44.83000	0.00000	-0.77598 d
9.5400	64.50000	44.83000	0.00000	-0.71550 d

d - Displacements include imported displacements.

Structure: 44-39 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]
Vertical Offset 1				
0.0	64.44000	41.91000	0.00000	-0.33172 d
1.4751	65.91500	41.89000	0.00000	-0.28660 d
2.9503	67.39000	41.87000	0.00000	-0.23823 d

d - Displacements include imported displacements.

Structure: 46-45 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]
Vertical Offset 1				
0.0	54.96000	36.71000	0.00000	-0.074891 d
1.0579	56.01778	36.72444	0.00000	-0.076714 d
2.1158	57.07556	36.73889	0.00000	-0.077536 d
3.1736	58.13333	36.75333	0.00000	-0.077244 d
4.2315	59.19111	36.76778	0.00000	-0.075746 d
5.2894	60.24889	36.78222	0.00000	-0.072984 d
6.3473	61.30667	36.79667	0.00000	-0.068938 d
7.4051	62.36444	36.81111	0.00000	-0.063638 d
8.4630	63.42222	36.82556	0.00000	-0.057158 d
9.5209	64.48000	36.84000	0.00000	-0.049621 d

d - Displacements include imported displacements.

Structure: a-12 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]
Vertical Offset 1				
0.0	44.06000	58.90000	0.00000	-3.6483 d
1.1151	42.95250	58.77000	0.00000	-4.0958 d
2.2302	41.84500	58.64000	0.00000	-4.3811 d
3.3453	40.73750	58.51000	0.00000	-4.5143 d
4.4604	39.63000	58.38000	0.00000	-3.5455 d

d - Displacements include imported displacements.

Structure: 12-11 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]
Vertical Offset 1				
0.0	39.63000	58.38000	0.00000	-3.5455 d
1.1167	39.63000	57.26333	0.00000	-5.1702 d
2.2333	39.63000	56.14667	0.00000	-5.6288 d
3.3500	39.63000	55.03000	0.00000	-5.7747 d
4.4667	39.63000	53.91333	0.00000	-5.6814 d
5.5833	39.63000	52.79667	0.00000	-5.2736 d
6.7000	39.63000	51.68000	0.00000	-3.6105 d

d - Displacements include imported displacements.

Structure: 11-f | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	39.63000	51.68000	0.00000	-3.6105 d
0.55884	40.18875	51.67000	0.00000	-4.7542 d
1.1177	40.74750	51.66000	0.00000	-5.2011 d
1.6765	41.30625	51.65000	0.00000	-5.4402 d
2.2354	41.86500	51.64000	0.00000	-5.5734 d
2.7942	42.42375	51.63000	0.00000	-5.6311 d
3.3530	42.98250	51.62000	0.00000	-5.6136 d
3.9119	43.54125	51.61000	0.00000	-5.4894 d
4.4707	44.10000	51.60000	0.00000	-5.1292 d

d - Displacements include imported displacements.

Structure: ag | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	44.06000	58.90000	0.00000	-3.6483 d
1.0047	45.06364	58.85455	0.00000	-3.4660 d
2.0093	46.06727	58.80909	0.00000	-3.4140 d
3.0140	47.07091	58.76364	0.00000	-3.4402 d
4.0187	48.07455	58.71818	0.00000	-3.5083 d
5.0233	49.07818	58.67273	0.00000	-3.6130 d
6.0280	50.08182	58.62727	0.00000	-3.7581 d
7.0327	51.08545	58.58182	0.00000	-3.9531 d
8.0373	52.08909	58.53636	0.00000	-4.2169 d
9.0420	53.09273	58.49091	0.00000	-4.5891 d
10.047	54.09636	58.44545	0.00000	-5.1725 d
11.051	55.10000	58.40000	0.00000	-6.4854 d

d - Displacements include imported displacements.

Structure: gb | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	55.10000	58.40000	0.00000	-6.4854 d
0.57001	55.67000	58.40300	0.00000	-7.1281 d
1.1400	56.24000	58.40600	0.00000	-7.4897 d
1.7100	56.81000	58.40900	0.00000	-7.7475 d
2.2800	57.38000	58.41200	0.00000	-7.9576 d
2.8500	57.95000	58.41500	0.00000	-8.1441 d
3.4200	58.52000	58.41800	0.00000	-8.3139 d
3.9901	59.09000	58.42100	0.00000	-8.4595 d
4.5601	59.66000	58.42400	0.00000	-8.5927 d
5.1301	60.23000	58.42700	0.00000	-8.7603 d
5.7001	60.80000	58.43000	0.00000	-8.8093 d
6.2701	61.37000	58.43300	0.00000	-8.8258 d
6.8401	61.94000	58.43600	0.00000	-8.7886 d
7.4101	62.51000	58.43900	0.00000	-8.6797 d
7.9801	63.08000	58.44200	0.00000	-8.4882 d
8.5501	63.65000	58.44500	0.00000	-8.2037 d
9.1201	64.22000	58.44800	0.00000	-7.8122 d
9.6901	64.79000	58.45100	0.00000	-7.2905 d
10.260	65.36000	58.45400	0.00000	-6.5822 d
10.830	65.93000	58.45700	0.00000	-5.4620 d
11.400	66.50000	58.46000	0.00000	-4.1854 d

d - Displacements include imported displacements.

Structure: bc | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1


```

0.0 66.50000 58.46000 0.00000 -4.1854 d
0.27800 66.50000 58.18200 0.00000 -4.5402 d
0.55600 66.50000 57.90400 0.00000 -4.8723 d
0.83400 66.50000 57.62600 0.00000 -5.1614 d
1.1120 66.50000 57.34800 0.00000 -5.4073 d
1.3900 66.50000 57.07000 0.00000 -5.6142 d
1.6680 66.50000 56.79200 0.00000 -5.7857 d
1.9460 66.50000 56.51400 0.00000 -5.9242 d
2.2240 66.50000 56.23600 0.00000 -6.0312 d
2.5020 66.50000 55.95800 0.00000 -6.1078 d
2.7800 66.50000 55.68000 0.00000 -6.1548 d
3.0580 66.50000 55.40200 0.00000 -6.1727 d
3.3360 66.50000 55.12400 0.00000 -6.1615 d
3.6140 66.50000 54.84600 0.00000 -6.1211 d
3.8920 66.50000 54.56800 0.00000 -6.0513 d
4.1700 66.50000 54.29000 0.00000 -5.9514 d
4.4480 66.50000 54.01200 0.00000 -5.8203 d
4.7260 66.50000 53.73400 0.00000 -5.6567 d
5.0040 66.50000 53.45600 0.00000 -5.4585 d
5.2820 66.50000 53.17800 0.00000 -5.2225 d
5.5600 66.50000 52.90000 0.00000 -4.9446 d
d - Displacements include imported displacements.

```

Structure: cd | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

```

0.0 66.50000 52.90000 0.00000 -4.9446 d
1.7493 65.00000 52.00000 0.00000 -5.8259 d
d - Displacements include imported displacements.

```

Structure: eh | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

```

0.0 64.74000 51.60000 0.00000 -5.0485 d
1.0844 63.65556 51.60000 0.00000 -5.7006 d
2.1689 62.57111 51.60000 0.00000 -6.0949 d
3.2533 61.48667 51.60000 0.00000 -6.3114 d
4.3378 60.40222 51.60000 0.00000 -6.5893 d
5.4222 59.31778 51.60000 0.00000 -7.9699 d
6.5067 58.23333 51.60000 0.00000 -8.0584 d
7.5911 57.14889 51.60000 0.00000 -7.7668 d
8.6756 56.06444 51.60000 0.00000 -7.2669 d
9.7600 54.98000 51.60000 0.00000 -6.1930 d
d - Displacements include imported displacements.

```

Structure: hf | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

```

0.0 54.98000 51.60000 0.00000 -6.1930 d
1.0880 53.89200 51.60000 0.00000 -5.1666 d
2.1760 52.80400 51.60000 0.00000 -4.7285 d
3.2640 51.71600 51.60000 0.00000 -4.4736 d
4.3520 50.62800 51.60000 0.00000 -4.3117 d
5.4400 49.54000 51.60000 0.00000 -4.2095 d
6.5280 48.45200 51.60000 0.00000 -4.1524 d
7.6160 47.36400 51.60000 0.00000 -4.1362 d
8.7040 46.27600 51.60000 0.00000 -4.1693 d
9.7920 45.18800 51.60000 0.00000 -4.3207 d
10.880 44.10000 51.60000 0.00000 -5.1292 d
d - Displacements include imported displacements.

```

Structure: de | Sub-structure:

Dist.	Coordinates			Displacements	
	x	y	z	z	
[m]	[m]	[m]	[m]	[mm]	
Vertical Offset 1					
0.0	65.00000	52.00000	0.10000	0.0	
0.11927	64.93500	51.90000	0.10000	0.0	
0.23854	64.87000	51.80000	0.10000	0.0	
0.35781	64.80500	51.70000	0.10000	0.0	
0.47707	64.74000	51.60000	0.10000	0.0	

Specific Building Damage Results - All Segments

Structure: 21-20 | Sub-structure:

Vertical Offset	Segment	Start Length	Curvature	Deflection	Average	Max	Max	
Gradient Max Gradient	Min	Damage		Ratio	Horizontal	Tensile	of	
from Line for	Radius of	Category			Strain	Strain		
of Vertical	Vertical	Horizontal Displacement	Curvature					
Vertical	Displacement	Movement	Curve					
Horizontal	Calculations							
Curve	Curve							
[m]	[m]	[m]	[m]	[%]	[%]	[%]		
0.0		1	0.0	11.749	Hogging	69.814E-6	0.0	65.625E-6
0.0	-11.090E-6	770410.		0				

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 19-20 | Sub-structure:

Vertical Offset	Segment	Start Length	Curvature	Deflection	Average	Max	Max	
Gradient Max Gradient	Min	Damage		Ratio	Horizontal	Tensile	of	
from Line for	Radius of	Category			Strain	Strain		
of Vertical	Vertical	Horizontal Displacement	Curvature					
Vertical	Displacement	Movement	Curve					
Horizontal	Calculations							
Curve	Curve							
[m]	[m]	[m]	[m]	[%]	[%]	[%]		
0.0		1	0.0	5.0389	Sagging	940.79E-6	0.0	0.0011520
0.0	-120.09E-6	47579.		0				

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 19-18 | Sub-structure:

Vertical Offset	Segment	Start Length	Curvature	Deflection	Average	Max	Max	
Gradient Max Gradient	Min	Damage		Ratio	Horizontal	Tensile	of	
from Line for	Radius of	Category			Strain	Strain		
of Vertical	Vertical	Horizontal Displacement	Curvature					
Vertical	Displacement	Movement	Curve					
Horizontal	Calculations							
Curve	Curve							
[m]	[m]	[m]	[m]	[%]	[%]	[%]		
0.0		1	0.0	2.0092	Sagging	0.0014283	0.0	0.0017490
0.0	250.27E-6	17415.		0				

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 18-13 | Sub-structure:

Vertical Offset	Segment	Start	Length	Curvature	Deflection	Average	Max	Max
Gradient Max Gradient	Min	Damage			Ratio	Horizontal	Tensile	
from Line for	of Vertical	Radius of	Category			Strain	Strain	
of Vertical	Radius of	Category						
Vertical								
Horizontal Displacement	Curvature							
Movement								
Displacement	Curve							
Calculations								
Curve								

[m]	[m]	[m]	[m]	[%]	[%]	[%]		
0.0	0.0	1	0.0	5.0135	Hogging	372.46E-6	0.0	369.82E-6
0.0	-39.294E-6	94704.	0					

(Negligible)

0.0	-39.294E-6	345250.	2	5.0135	6.8632	Sagging	223.40E-6	0.0	211.97E-6
			0						

(Negligible)

0.0	-30.003E-6	265620.	3	11.877	3.0824	Hogging	95.598E-6	0.0	95.308E-6
			0						

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 21-a | Sub-structure:

Vertical Offset	Segment	Start	Length	Curvature	Deflection	Average	Max	Max
Gradient Max Gradient	Min	Damage			Ratio	Horizontal	Tensile	
from Line for	of Vertical	Radius of	Category			Strain	Strain	
of Vertical	Radius of	Category						
Vertical								
Horizontal Displacement	Curvature							
Movement								
Displacement	Curve							
Calculations								
Curve								

[m]	[m]	[m]	[m]	[%]	[%]	[%]		
0.0	0.0	1	0.0	11.820	Sagging	0.011893	0.0	0.014563
0.0	0.0016120	639.59	0					

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: f-50 | Sub-structure:

Vertical Offset	Segment	Start	Length	Curvature	Deflection	Average	Max	Max
Gradient Max Gradient	Min	Damage			Ratio	Horizontal	Tensile	
from Line for	of Vertical	Radius of	Category			Strain	Strain	
of Vertical	Radius of	Category						
Vertical								
Horizontal Displacement	Curvature							
Movement								
Displacement	Curve							
Calculations								
Curve								

[m]	[m]	[m]	[m]	[%]	[%]	[%]		
0.0	0.0	1	0.0	11.912	Sagging	0.019506	0.0	0.020624
0.0	-0.0022862	559.04	0					

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 14-15 | Sub-structure:

Vertical Offset Segment Start Length Curvature Deflection Average Max Max
 Gradient Max Gradient Min Damage Ratio Horizontal Tensile of
 from Line for of Vertical Radius of Category Strain Strain
 of Vertical Vertical Horizontal Displacement Curvature
 Vertical Movement Displacement Curve
 Calculations
 Curve

[m] [m] [m] [m] [%] [%] [%]
 [m] 0.0 1 0.0 2.1390 Sagging 0.0020411 0.0 0.0024993
 0.0 351.58E-6 12973. 0

(Negligible)
 Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 15-16 | Sub-structure:

Vertical Offset Segment Start Length Curvature Deflection Average Max Max
 Gradient Max Gradient Min Damage Ratio Horizontal Tensile of
 from Line for of Vertical Radius of Category Strain Strain
 of Vertical Vertical Horizontal Displacement Curvature
 Vertical Movement Displacement Curve
 Calculations
 Curve

[m] [m] [m] [m] [%] [%] [%]
 [m] 0.0 1 0.0 1.6897 Hogging 0.0 0.0 0.0
 0.0 424.75E-6 - 0

(Negligible)
 Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 16-17 | Sub-structure:

Vertical Offset Segment Start Length Curvature Deflection Average Max Max
 Gradient Max Gradient Min Damage Ratio Horizontal Tensile of
 from Line for of Vertical Radius of Category Strain Strain
 of Vertical Vertical Horizontal Displacement Curvature
 Vertical Movement Displacement Curve
 Calculations
 Curve

[m] [m] [m] [m] [%] [%] [%]
 [m] 0.0 1 0.0 1.8990 Hogging 0.0 0.0 0.0
 0.0 936.27E-6 - 0

(Negligible)
 Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 17-g | Sub-structure:

Vertical Offset Segment Start Length Curvature Deflection Average Max Max
 Gradient Max Gradient Min Damage Ratio Horizontal Tensile of
 from Line for of Vertical Radius of Category Strain Strain
 of Vertical Vertical Horizontal Displacement Curvature
 Vertical Movement Displacement Curve
 Calculations
 Curve

[m] [m] [m] [m] [%] [%] [%]
 [m] 0.0 1 0.0 1.6115 Hogging 0.0 0.0 0.0
 0.0 0.0014488 - 0

(Negligible)
 Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

0.0 1 0.0 1.1690 Hogging 0.0 0.0 0.0
 0.0 -237.96E-6 - 0

(Negligible)
 Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 47-51 | Sub-structure:

Vertical Offset	Segment	Start	Length	Curvature	Deflection	Average	Max	Max
Gradient Max Gradient	Min	Damage			Ratio	Horizontal	Tensile	
from Line for	Radius of	Category				Strain	Strain	
of Vertical	of Vertical							
of Vertical	of Vertical							
Horizontal Displacement	Curvature							
Movement	Curve							
Displacement	Curve							
Calculations								
Curve								

[m]		[m]	[m]		[%]	[%]	[%]	
0.0		1	0.0	2.1515	Hogging	36.090E-6	0.0	36.013E-6
0.0	-27.465E-6	578770.		0				

(Negligible)

0.0	-27.323E-6	742170.		2	2.1515	4.9951	Sagging	80.138E-6	0.0	75.924E-6
						0				

(Negligible)

0.0	-27.587E-6	293760.		3	7.1467	3.6023	Hogging	89.808E-6	0.0	89.157E-6
						0				

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 50-46 | Sub-structure:

Vertical Offset	Segment	Start	Length	Curvature	Deflection	Average	Max	Max
Gradient Max Gradient	Min	Damage			Ratio	Horizontal	Tensile	
from Line for	Radius of	Category				Strain	Strain	of
of Vertical	of Vertical							
of Vertical	of Vertical							
Horizontal Displacement	Curvature							
Movement	Curve							
Displacement	Curve							
Calculations								
Curve								

[m]		[m]	[m]		[%]	[%]	[%]	
0.0								

All settlements are less than the Settlement Trough Limit Sensitivity.
 Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 46-47 | Sub-structure:

Vertical Offset	Segment	Start	Length	Curvature	Deflection	Average	Max	Max
Gradient Max Gradient	Min	Damage			Ratio	Horizontal	Tensile	
from Line for	Radius of	Category				Strain	Strain	
of Vertical	of Vertical							
of Vertical	of Vertical							
Horizontal Displacement	Curvature							
Movement	Curve							
Displacement	Curve							
Calculations								
Curve								

[m]		[m]	[m]		[%]	[%]	[%]	
0.0		1	1.0150	7.1040	Sagging	0.0019144	0.0	0.0021542
0.0	183.14E-6	25204.		0				

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 24-25 | Sub-structure:

Vertical Offset **Segment** **Start Length Curvature Deflection** **Average** **Max** **Max**
Gradient Max Gradient **Min** **Damage** **Ratio** **Horizontal** **Tensile** **of**
from Line for **Radius of Category** **Vertical** **Strain** **Strain**
of Vertical **Displacement Curvature** **Horizontal** **Displacement Curvature**
Vertical **Movement** **Displacement** **Curve**
Calculations
Curve
[m] [m] [m] [m] [%] [%] [%]
[m] 0.0 All settlements are less than the Settlement Trough Limit Sensitivity.
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 25-26 | Sub-structure:

Vertical Offset **Segment** **Start Length Curvature Deflection** **Average** **Max** **Max**
Gradient Max Gradient **Min** **Damage** **Ratio** **Horizontal** **Tensile** **of**
from Line for **Radius of Category** **Vertical** **Strain** **Strain**
of Vertical **Displacement Curvature** **Horizontal** **Displacement Curvature**
Vertical **Movement** **Displacement** **Curve**
Calculations
Curve
[m] [m] [m] [m] [%] [%] [%]
[m] 0.0 All settlements are less than the Settlement Trough Limit Sensitivity.
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 26-27 | Sub-structure:

Vertical Offset **Segment** **Start Length Curvature Deflection** **Average** **Max** **Max**
Gradient Max Gradient **Min** **Damage** **Ratio** **Horizontal** **Tensile** **of**
from Line for **Radius of Category** **Vertical** **Strain** **Strain**
of Vertical **Displacement Curvature** **Horizontal** **Displacement Curvature**
Vertical **Movement** **Displacement** **Curve**
Calculations **Curve**
[m] [m] [m] [m] [%] [%] [%] **Curve**
[m] 0.0 1 10.246 1.0236 None 0.0 0.0 0.0
0.0 57.746E-6 77972. 0

(Negligible)
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 27-28 | Sub-structure:

Vertical Offset **Segment** **Start Length Curvature Deflection** **Average** **Max** **Max**
Gradient Max Gradient **Min** **Damage** **Ratio** **Horizontal** **Tensile** **of**
from Line for **Radius of Category** **Vertical** **Strain** **Strain**
of Vertical **Displacement Curvature** **Horizontal** **Displacement Curvature**
Vertical **Movement** **Displacement** **Curve**
Calculations
Curve
[m] [m] [m] [m] [%] [%] [%]
[m] 0.0 1 0.0 3.1691 Hogging 98.106E-6 0.0 92.161E-6
0.0 -18.565E-6 302290. 0

(Negligible)
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 28-29 | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Vertical Horizontal Displacement Movement Displacement Calculations	Segment Min Radius of Category	Start Damage	Length [m]	Curvature [m]	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of Curve
[m]			[m]	[m]	[%]	[%]	[%]	
0.0	1	0.0	0.0	None	0.0	0.0	0.0	
0.0	128300.	0						

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 27-32 | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Vertical Horizontal Displacement Movement Displacement Calculations Curve	Segment Min Radius of Category	Start Damage	Length [m]	Curvature [m]	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of
[m]			[m]	[m]	[%]	[%]	[%]	
0.0	1	0.0	5.1490	Hogging	285.24E-6	0.0	268.04E-6	
0.0	215020.	0						

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 33-31 | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of of Vertical Vertical Horizontal Displacement Movement Displacement Calculations Curve	Segment Min Radius of Category	Start Damage	Length [m]	Curvature [m]	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max
[m]			[m]	[m]	[%]	[%]	[%]	
0.0	1	10.400	7.2790	Sagging	0.0039440	0.0	0.0037797	
0.0	10188.	0						

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 31-34 | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of of Vertical Vertical Horizontal Displacement Movement Displacement Calculations Curve	Segment Min Radius of Category	Start Damage	Length [m]	Curvature [m]	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max
[m]			[m]	[m]	[%]	[%]	[%]	
0.0	1	0.0	2.5715	Hogging	391.56E-6	0.0	377.48E-6	
0.0	53399.	0						

(Negligible)
 0.0 -151.39E-6 171970. 2 2.5715 0.79824 Hogging 0.0 0.0 0.0

(Negligible)
 Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 34-35 | Sub-structure:

Vertical Offset Gradient Max from Line for of Vertical Horizontal Displacement Calculations	Segment Max Gradient Radius of Vertical Displacement Curve	Start Min Category	Length Damage	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of Curve
[m]	[m]	[m]	[m]	[m]	[%]	[%]	[%]	
0.0	-175.24E-6 -	1	0.0	1.3290	None	0.0	0.0	0.0
0.0			0					

(Negligible)
 Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 35-41 | Sub-structure:

Vertical Offset Gradient Max from Line for of Vertical Horizontal Displacement Calculations	Segment Max Gradient Radius of Vertical Displacement Curve	Start Min Category	Length Damage	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of Curve
[m]	[m]	[m]	[m]	[m]	[%]	[%]	[%]	
0.0	-91.860E-6	107730.	1	0.0	3.5991	Sagging	338.70E-6	0.0
0.0				0			414.74E-6	

(Negligible)
 Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 41-40 | Sub-structure:

Vertical Offset Gradient Max from Line for of Vertical Horizontal Displacement Calculations	Segment Max Gradient Radius of Vertical Displacement Curve	Start Min Category	Length Damage	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of Curve
[m]	[m]	[m]	[m]	[m]	[%]	[%]	[%]	
0.0	92.714E-6	116120.	1	0.0	4.0690	Sagging	347.66E-6	0.0
0.0				0			425.68E-6	

(Negligible)
 Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 40-39 | Sub-structure:

Vertical Offset Gradient Max from Line for of Vertical Horizontal Displacement Calculations	Segment Max Gradient Radius of Vertical Displacement Curve	Start Min Category	Length Damage	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of Curve
[m]	[m]	[m]	[m]	[m]	[%]	[%]	[%]	

Vertical Horizontal Displacement Movement Displacement Calculations Curve	Displacement	Curvature	Start	Length	Curvature	Deflection	Average	Max	Max
	[m]	[m]	[m]	[m]	[%]	[%]	[%]	[%]	[%]
	0.0	1	0.0	3.8991	Sagging	0.0010321	0.0	0.0012638	
	0.0	-136.55E-6	35721.	0					

(Negligible)
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 39-38 | Sub-structure:

Vertical Offset Gradient Max from Line for of Vertical Vertical Horizontal Displacement Movement Displacement Calculations Curve	Segment Max Gradient Radius of Category	Start Min	Length Damage	Curvature	Deflection	Average	Max	Max	
					Ratio	Horizontal	Tensile	of	
						Strain	Strain		
		1	0.0	4.1221	Sagging	66.243E-6	0.0	65.553E-6	
				0					

(Negligible)
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 38-25 | Sub-structure:

Vertical Offset Gradient Max from Line for of Vertical Vertical Horizontal Displacement Movement Displacement Calculations Curve	Segment Max Gradient Radius of Category	Start Min	Length Damage	Curvature	Deflection	Average	Max	Max	
					Ratio	Horizontal	Tensile	of	
						Strain	Strain		

All settlements are less than the Settlement Trough Limit Sensitivity.

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 20-22 | Sub-structure:

Vertical Offset Gradient Max from Line for of Vertical Vertical Horizontal Displacement Movement Displacement Calculations Curve	Segment Max Gradient Radius of Category	Start Min	Length Damage	Curvature	Deflection	Average	Max	Max	
					Ratio	Horizontal	Tensile	of	
						Strain	Strain		
		1	0.0	10.169	Hogging	304.22E-6	0.0	285.92E-6	
				0					

(Negligible)
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 22-b | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Vertical Horizontal Displacement Movement Displacement Calculations	Segment Min Radius of Category	Start Damage	Length [m]	Curvature [m]	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of Curve
[m]			[m]	[m]	[%]	[%]	[%]	
0.0	1	0.0	11.790	Sagging	0.011572	0.0	0.014170	
0.0	0.0010875	2463.4	0					

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: e-45 | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Vertical Horizontal Displacement Movement Displacement Calculations	Segment Min Radius of Category	Start Damage	Length [m]	Curvature [m]	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of Curve
[m]			[m]	[m]	[%]	[%]	[%]	
0.0	1	0.0	12.794	Sagging	0.015963	0.0	0.017847	
0.0	-0.0015204	1568.6	0					

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 18-31 | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Vertical Horizontal Displacement Movement Displacement Calculations Curve	Segment Min Radius of Category	Start Damage	Length [m]	Curvature [m]	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of Curve
[m]			[m]	[m]	[%]	[%]	[%]	
0.0	1	0.0	6.8291	Hogging	0.0014032	0.0	0.0013187	
0.0	-86.711E-6	57717.	0					

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 23-24 | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Vertical Horizontal Displacement Movement Displacement Calculations Curve	Segment Min Radius of Category	Start Damage	Length [m]	Curvature [m]	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of Curve
[m]			[m]	[m]	[%]	[%]	[%]	
0.0	1	0.0	0.11340	None	0.0	0.0	0.0	
0.0	-161.45E-6	2.1006E+6	0					

(Negligible)

0.0 -161.45E-6 59521. 2 0.11340 10.570 Sagging 0.0018823 0.0 0.0020333
0

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: b-27 | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Vertical Horizontal Displacement Movement Displacement Calculations Curve	Segment Min Radius of Category	Start Length Damage	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of Curve
[m]	[m]	[m]	[m]	[%]	[%]	[%]	
0.0	1	0.0	10.644	Sagging	0.017231	0.0	0.021100
0.0	-0.0015627	1402.0	0				

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 42-37 | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Vertical Horizontal Displacement Movement Displacement Calculations Curve	Segment Min Radius of Category	Start Length Damage	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of Curve
[m]	[m]	[m]	[m]	[%]	[%]	[%]	
0.0	1	0.0	2.1935	Hogging	193.97E-6	0.0	193.87E-6
0.0	-128.18E-6	107630.	0				

(Negligible)

0.0	2	2.1935	9.0081	Sagging	0.0012534	0.0	0.0012076
0.0	-128.18E-6	80468.	0				

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 47-43 | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Vertical Horizontal Displacement Movement Displacement Calculations Curve	Segment Min Radius of Category	Start Length Damage	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of Curve
[m]	[m]	[m]	[m]	[%]	[%]	[%]	
0.0	1	0.0	9.5390	Hogging	0.0011858	0.0	0.0011143
0.0	-57.058E-6	89112.	0				

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 44-39 | Sub-structure:

Vertical Offset Gradient Max Gradient	Segment Min	Start Length Damage	Curvature	Deflection	Average	Max	Max
--	----------------	------------------------	-----------	------------	---------	-----	-----

from Line for of Vertical Vertical Horizontal Displacement Movement Displacement Calculations Curve	Radius of Category	Segment Min	Start Damage	Length [m]	Curvature [m]	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of
[m]				[m]	[m]	[%]	[%]	[%]	
0.0		1	0.0	2.9493	Hogging	54.384E-6	0.0	51.105E-6	
0.0	-32.787E-6	671260.		0					

(Negligible)
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 46-45 | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Vertical Horizontal Displacement Movement Displacement Calculations Curve	Segment Min	Start Damage	Length [m]	Curvature [m]	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of
[m]			[m]	[m]	[%]	[%]	[%]	
0.0								
0.0								

All settlements are less than the Settlement Trough Limit Sensitivity.
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: a-12 | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Vertical Horizontal Displacement Movement Displacement Calculations Curve	Segment Min	Start Damage	Length [m]	Curvature [m]	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of
[m]			[m]	[m]	[%]	[%]	[%]	
0.0		1	0.0	4.4594	Hogging	0.021096	0.0	0.019825
0.0	-868.84E-6	927.91		0				

(Negligible)
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 12-11 | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Vertical Horizontal Displacement Movement Displacement Calculations Curve	Segment Min	Start Damage	Length [m]	Curvature [m]	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of
[m]			[m]	[m]	[%]	[%]	[%]	
0.0		1	0.0	6.6990	Hogging	0.032735	0.0	0.030763
0.0	-0.0014893	836.39		0				

(Negligible)
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 11-f | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Vertical Horizontal Displacement Movement Displacement Calculations	Segment Min Radius of Category	Start Length Damage	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max	of	
Curvature	Curve							Curve	
[m]		[m]	[m]	[%]	[%]	[%]			
0.0	0.0020465	381.32	1	0.0	4.4697	Hogging	0.028173	0.0	0.026475

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: ag | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Vertical Horizontal Displacement Movement Displacement Calculations	Segment Min Radius of Category	Start Length Damage	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max	of	
Curvature	Curve							Curve	
[m]		[m]	[m]	[%]	[%]	[%]			
0.0	0.0013068	1174.4	1	0.0	11.050	Sagging	0.013574	0.0	0.016621

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: gb | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Vertical Horizontal Displacement Movement Displacement Calculations	Segment Min Radius of Category	Start Length Damage	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max	of	
Curvature	Curve							Curve	
[m]		[m]	[m]	[%]	[%]	[%]			
0.0	-0.0022397	998.35	1	0.0	11.399	Hogging	0.032350	0.0	0.030401

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: bc | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Vertical Horizontal Displacement Movement Displacement Calculations	Segment Min Radius of Category	Start Length Damage	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max	of	
Curvature	Curve							Curve	
[m]		[m]	[m]	[%]	[%]	[%]			
0.0	0.0012762	1792.3	1	0.0	5.5590	Hogging	0.028572	0.0	0.026851

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Vertical Strain Strain
Horizontal Displacement Curvature
Movement
Displacement Curve
Calculations
Curve

[m] [m] [m] [%] [%] [%]
[m] 0.10000 All settlements are less than the Settlement Trough Limit Sensitivity.
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Specific Building Damage Results - Critical Values for All Segments within Each Sub-Structure

Structure: 21-20 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[%]	[%]		[mm]	[%]		
[m] 0.0 770410.	[m] 69.814E-6 - 0 (Negligible)	0.0	-11.090E-6	0.21999	65.625E-6	0.0	-11.090E-6

Structure: 19-20 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[%]	[%]		[mm]	[%]		
[m] 0.0 - 47579.0	[m] 940.79E-6 (Negligible)	0.0	-120.09E-6	0.65554	0.0011520	0.0	-120.09E-6

Structure: 19-18 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[%]	[%]		[mm]	[%]		
[m] 0.0 - 17415.0	[m] 0.0014283 (Negligible)	0.0	250.27E-6	1.1004	0.0017490	0.0	250.27E-6

Structure: 18-13 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[%]	[%]		[mm]	[%]		

Calculations

[m]	[m]	[%]	[%]		[mm]	[%]		
0.0	0.0	0.0	0.0	424.75E-6	2.3698	0.0	0.0	424.75E-6
-	-	0	(Negligible)					

Structure: 16-17 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve	
[m]	[m]	[%]	[%]	[mm]	[%]			
0.0	0.0	0.0	0.0	936.27E-6	4.1483	0.0	0.0	936.27E-6
-	-	0	(Negligible)					

Structure: 17-g | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve	
[m]	[m]	[%]	[%]	[mm]	[%]			
0.0	0.0	0.0	0.0	0.0014488	6.4839	0.0	0.0	0.0014488
-	-	0	(Negligible)					

Structure: h-49 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve	
[m]	[m]	[%]	[%]	[mm]	[%]			
0.0	1492.0	0.017711	0.0	-0.0015619	6.1930	0.021687	0.0	-0.0015619
-	-	0	(Negligible)					

Structure: 49-36 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve	
[m]	[m]	[%]	[%]	[mm]	[%]			
0.0	3553.4	0.0083224	0.0	-919.21E-6	3.6214	0.010191	0.0	-919.21E-6
-	-	0	(Negligible)					

Structure: 36-48 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0	0.0020599	0.0	-345.22E-6	1.8262	0.0025223	0.0	-345.22E-6
- 13823.0	(Negligible)						

Structure: 48-47 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0	0.0	0.0	-237.96E-6	1.1275	0.0	0.0	-237.96E-6
- 0	(Negligible)						

Structure: 47-51 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0	89.808E-6	0.0	-27.587E-6	0.84909	89.157E-6	0.0	-27.587E-6
293760.	742170.0	(Negligible)					

Structure: 50-46 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve	Min Radius
[m]	[m]	[%]	[%]	[mm]	[%]			[m]

Structure: 46-47 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		

[m]	[m]	[%]	[%]		[mm]	[%]		
0.0	302290.	98.106E-6	0.0	-18.565E-6	0.19233	92.161E-6	0.0	-18.565E-6
		- 0 (Negligible)						

Structure: 28-29 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0	-	0.0	0.0	-42.792E-6	0.14181	0.0	-42.792E-6
		- 0 (Negligible)					

Structure: 27-32 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0	215020.	285.24E-6	0.0	-9.6584E-6	0.20641	268.04E-6	0.0
		- 0 (Negligible)					

Structure: 33-31 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0	-	0.0039440	0.0	340.66E-6	1.3362	0.0037797	0.0
		10188. 0 (Negligible)					

Structure: 31-34 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0	53399.	391.56E-6	0.0	-153.33E-6	1.3365	377.48E-6	0.0
		- 0 (Negligible)					

Structure: 34-35 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0	0.0	0.0	0.0	-175.24E-6	0.84034	0.0	-175.24E-6
- 0 (Negligible)							

Structure: 35-41 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0	107730.0	338.70E-6	0.0	-91.860E-6	0.60726	414.74E-6	-91.860E-6
- 0 (Negligible)							

Structure: 41-40 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0	116120.0	347.66E-6	0.0	92.714E-6	0.64990	425.68E-6	92.714E-6
- 0 (Negligible)							

Structure: 40-39 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0	35721.0	0.0010321	0.0	-136.55E-6	0.64999	0.0012638	-136.55E-6
- 0 (Negligible)							

Structure: 39-38 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
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Offset from Radius of Curvature Vertical (Hogging) Movement Calculations	Ratio of Radius of Curvature Vertical (Sagging) Movement Calculations	Horizontal Strain	Average Damage Category	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve	Min Radius
[m]	[m]	[%]	[%]		[mm]	[%]			[m]
0.0	66.243E-6	0.0	-32.812E-6	0.23823	65.553E-6	0.0	-32.812E-6		
- 457540.0	0 (Negligible)								

Structure: 38-25 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio Curvature Vertical (Sagging) Movement Calculations	Average Damage Category	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve	Min Radius
[m]	[m]	[%]	[%]	[mm]	[%]			[m]
0.0	304.22E-6	0.0	-17.125E-6	0.22517	285.92E-6	0.0	-17.125E-6	
385720.	- 0 (Negligible)							

Structure: 20-22 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio Curvature Vertical (Sagging) Movement Calculations	Average Damage Category	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve	Min Radius
[m]	[m]	[%]	[%]	[mm]	[%]			[m]
0.0	0.011572	0.0	0.0010875	3.8921	0.014170	0.0	0.0010875	
- 2463.4	0 (Negligible)							

Structure: 22-b | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio Curvature Vertical (Sagging) Movement Calculations	Average Damage Category	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve	Min Radius
[m]	[m]	[%]	[%]	[mm]	[%]			[m]
0.0	0.011572	0.0	0.0010875	3.8921	0.014170	0.0	0.0010875	
- 2463.4	0 (Negligible)							

Structure: e-45 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio Curvature Vertical (Sagging) Movement Calculations	Average Damage Category	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve	Min Radius
[m]	[m]	[%]	[%]	[mm]	[%]			[m]
0.0	0.011572	0.0	0.0010875	3.8921	0.014170	0.0	0.0010875	
- 2463.4	0 (Negligible)							

Calculations

[m]	[m]	[%]	[%]		[mm]	[%]		
0.0	0.015963	0.0	-0.0015204	5.0485	0.017847	0.0	-0.0015204	
-	1568.6	0	(Negligible)					

Structure: 18-31 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
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[m]	[m]	[%]	[%]	[mm]	[%]		
0.0	0.0014032	0.0	-86.711E-6	1.1043	0.0013187	0.0	-86.711E-6
57717.	-	0	(Negligible)				

Structure: 23-24 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
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[m]	[m]	[%]	[%]	[mm]	[%]		
0.0	0.0018823	0.0	-161.45E-6	1.2205	0.0020333	0.0	-161.45E-6
-	59521.	0	(Negligible)				

Structure: b-27 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
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[m]	[m]	[%]	[%]	[mm]	[%]		
0.0	0.017231	0.0	-0.0015627	4.9999	0.021100	0.0	-0.0015627
-	1402.0	0	(Negligible)				

Structure: 42-37 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
---	----------------------	---	-----------	----------------	--------------------	---	---

[m]	[m]	[%]	[%]	[mm]	[%]		
0.0	0.0012534	0.0	-128.18E-6	1.1722	0.0012076	0.0	-128.18E-6
107630.	80468.	0	(Negligible)				

Structure: 47-43 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[%]	[%]		[mm]	[%]		
0.0 89112.	0.0011858 - 0 (Negligible)	0.0	-57.058E-6	0.90062	0.0011143	0.0	-57.058E-6

Structure: 44-39 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[%]	[%]		[mm]	[%]		
0.0 671260.	54.384E-6 - 0 (Negligible)	0.0	-32.787E-6	0.33172	51.105E-6	0.0	-32.787E-6

Structure: 46-45 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve	Min Radius
[m]	[%]	[%]		[mm]	[%]			[m]

Structure: a-12 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[%]	[%]		[mm]	[%]		
0.0 927.91	0.021096 - 0 (Negligible)	0.0	-868.84E-6	4.5129	0.019825	0.0	-868.84E-6

Structure: 12-11 | Sub-structure:

Vertical Min	Deflection Min	Average Damage Category	Max Slope	Max	Max	Max Gradient	Max Gradient
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Offset from Radius of Curvature Vertical (Hogging) Movement Calculations	Ratio of Radius of Curvature	Horizontal Strain	Average Damage Category	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]		[mm]	[%]		
0.0 836.39	0.032735 - 0 (Negligible)	0.0	-0.0014893	5.7720	0.030763	0.0	-0.0014893	

Structure: 11-f | Sub-structure:

Vertical Min Offset from Radius of Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0 381.32	0.028173 - 0 (Negligible)	0.0	0.0020465	5.6309	0.026475	0.0	0.0020465

Structure: ag | Sub-structure:

Vertical Min Offset from Radius of Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0 - 1174.4 0 (Negligible)	0.013574	0.0	0.0013068	6.4841	0.016621	0.0	0.0013068

Structure: gb | Sub-structure:

Vertical Min Offset from Radius of Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0 998.35	0.032350 - 0 (Negligible)	0.0	-0.0022397	8.8243	0.030401	0.0	-0.0022397

Structure: bc | Sub-structure:

Vertical Min Offset from Radius of Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0 998.35	0.032350 - 0 (Negligible)	0.0	-0.0022397	8.8243	0.030401	0.0	-0.0022397

Vertical (Hogging) (Sagging) Displacement Curve
 Movement Curve
 Calculations

[m]	[m]	[%]	[%]	[mm]	[%]		
0.0	1792.3	0.028572	0.0	0.0012762	6.1714	0.026851	0.0 0.0012762
- 0 (Negligible)							

Structure: cd | Sub-structure:

Vertical Deflection Average Max Slope Max Max Max Gradient Max Gradient
 Min Min Damage Category
 Offset from Ratio Horizontal Settlement Tensile of of Vertical
 Radius of Radius of Strain Strain Horizontal Displacement
 Line for Curvature Curvature
 Vertical Displacement Curve
 (Hogging) (Sagging)
 Movement Curve
 Calculations

[m]	[m]	[%]	[%]	[mm]	[%]		
0.0	-	0.0	0.0	503.81E-6	5.8254	0.0	0.0 503.81E-6
- 0 (Negligible)							

Structure: eh | Sub-structure:

Vertical Deflection Average Max Slope Max Max Max Gradient Max Gradient
 Min Min Damage Category
 Offset from Ratio Horizontal Settlement Tensile of of Vertical
 Radius of Radius of Strain Strain Horizontal Displacement
 Line for Curvature Curvature
 Vertical Displacement Curve
 (Hogging) (Sagging)
 Movement Curve
 Calculations

[m]	[m]	[%]	[%]	[mm]	[%]		
0.0	1766.8	0.025773	0.0	0.0012730	8.0575	0.025339	0.0 0.0012730
4493.2 0 (Negligible)							

Structure: hf | Sub-structure:

Vertical Deflection Average Max Slope Max Max Max Gradient Max Gradient
 Min Min Damage Category
 Offset from Ratio Horizontal Settlement Tensile of of Vertical
 Radius of Radius of Strain Strain Horizontal Displacement
 Line for Curvature Curvature
 Vertical Displacement Curve
 (Hogging) (Sagging)
 Movement Curve
 Calculations

[m]	[m]	[%]	[%]	[mm]	[%]		
0.0	-	0.013377	0.0	-943.39E-6	6.1930	0.016380	0.0 -943.39E-6
1494.2 0 (Negligible)							

Structure: de | Sub-structure:

Vertical Deflection Average Max Max Max Max Gradient Max Gradient Min
 Min Damage Category
 Offset from Ratio Horizontal Slope Settlement Tensile of of Vertical Radius
 of Radius of Strain Strain Horizontal Displacement
 Line for Curvature Curvature
 Vertical Displacement Curve
 (Hogging) (Sagging)
 Movement Curve
 Calculations

[m] [%] [%] [mm] [%] [m]

Specific Building Damage Results - Critical Segments within Each Structure

Structure Name	Parameter	Critical	Critical	Start	End	Curvature	Max Slope	
Max	Max	Min	Min	Damage Category	Segment			
Settlement	Tensile	Radius of	Radius of					
Strain	Curvature	Curvature						
(Hogging)	(Sagging)							
[mm]	[%]	[m]	[m]		[m]	[m]		
21-20		Max Slope		1	0.0	11.749	Hogging	11.090E-6
0.21999	65.625E-6	770410.	- 0 (Negligible)					
		Max Settlement		1	0.0	11.749	Hogging	11.090E-6
0.21999	65.625E-6	770410.	- 0 (Negligible)					
		Max Tensile		1	0.0	11.749	Hogging	11.090E-6
0.21999	65.625E-6	770410.	- 0 (Negligible)					
		Strain						
		Min Radius of		1	0.0	11.749	Hogging	11.090E-6
0.21999	65.625E-6	770410.	- 0 (Negligible)					
		Curvature (Hogging)						
		Min Radius of		-	-	-	-	-
-	-	-	- -					
		Curvature (Sagging)						
19-20		Max Slope		1	0.0	5.0389	Sagging	120.09E-6
0.65554	0.0011520	-	47579. 0 (Negligible)					
		Max Settlement		1	0.0	5.0389	Sagging	120.09E-6
0.65554	0.0011520	-	47579. 0 (Negligible)					
		Max Tensile		1	0.0	5.0389	Sagging	120.09E-6
0.65554	0.0011520	-	47579. 0 (Negligible)					
		Strain						
		Min Radius of		-	-	-	-	-
-	-	-	- -					
		Curvature (Hogging)						
		Min Radius of		1	0.0	5.0389	Sagging	120.09E-6
0.65554	0.0011520	-	47579. 0 (Negligible)					
		Curvature (Sagging)						
19-18		Max Slope		1	0.0	2.0092	Sagging	250.27E-6
1.1004	0.0017490	-	17415. 0 (Negligible)					
		Max Settlement		1	0.0	2.0092	Sagging	250.27E-6
1.1004	0.0017490	-	17415. 0 (Negligible)					
		Max Tensile		1	0.0	2.0092	Sagging	250.27E-6
1.1004	0.0017490	-	17415. 0 (Negligible)					
		Strain						
		Min Radius of		-	-	-	-	-
-	-	-	- -					
		Curvature (Hogging)						
		Min Radius of		1	0.0	2.0092	Sagging	250.27E-6
1.1004	0.0017490	-	17415. 0 (Negligible)					
		Curvature (Sagging)						
18-13		Max Slope		1	0.0	5.0135	Hogging	39.294E-6
1.1007	369.82E-6	94704.	- 0 (Negligible)					
		Max Settlement		1	0.0	5.0135	Hogging	39.294E-6
1.1007	369.82E-6	94704.	- 0 (Negligible)					
		Max Tensile		1	0.0	5.0135	Hogging	39.294E-6
1.1007	369.82E-6	94704.	- 0 (Negligible)					
		Strain						
		Min Radius of		1	0.0	5.0135	Hogging	39.294E-6
1.1007	369.82E-6	94704.	- 0 (Negligible)					
		Curvature (Hogging)						
		Min Radius of		2	5.0135	11.877	Sagging	39.294E-6
0.94884	211.97E-6	-	345250. 0 (Negligible)					
		Curvature (Sagging)						

21-a		Max Slope			1	0.0	11.820	Sagging	0.0016120	
3.6467	0.014563	-	639.59	0 (Negligible)	1	0.0	11.820	Sagging	0.0016120	
3.6467	0.014563	Max Settlement	-	639.59	0 (Negligible)	1	0.0	11.820	Sagging	0.0016120
3.6467	0.014563	Max Tensile	-	639.59	0 (Negligible)	1	0.0	11.820	Sagging	0.0016120
-	-	Strain	-	-	-	-	-	-	-	
-	-	Min Radius of	-	-	-	-	-	-	-	
3.6467	0.014563	Curvature (Hogging)	-	639.59	0 (Negligible)	1	0.0	11.820	Sagging	0.0016120
f-50		Max Slope			1	0.0	11.912	Sagging	0.0022862	
5.1292	0.020624	-	559.04	0 (Negligible)	1	0.0	11.912	Sagging	0.0022862	
5.1292	0.020624	Max Settlement	-	559.04	0 (Negligible)	1	0.0	11.912	Sagging	0.0022862
5.1292	0.020624	Max Tensile	-	559.04	0 (Negligible)	1	0.0	11.912	Sagging	0.0022862
-	-	Strain	-	-	-	-	-	-	-	
-	-	Min Radius of	-	-	-	-	-	-	-	
5.1292	0.020624	Curvature (Hogging)	-	559.04	0 (Negligible)	1	0.0	11.912	Sagging	0.0022862
14-15		Max Slope			1	0.0	2.1390	Sagging	351.58E-6	
1.6518	0.0024993	-	12973.0	0 (Negligible)	1	0.0	2.1390	Sagging	351.58E-6	
1.6518	0.0024993	Max Settlement	-	12973.0	0 (Negligible)	1	0.0	2.1390	Sagging	351.58E-6
1.6518	0.0024993	Max Tensile	-	12973.0	0 (Negligible)	1	0.0	2.1390	Sagging	351.58E-6
-	-	Strain	-	-	-	-	-	-	-	
-	-	Min Radius of	-	-	-	-	-	-	-	
1.6518	0.0024993	Curvature (Hogging)	-	12973.0	0 (Negligible)	1	0.0	2.1390	Sagging	351.58E-6
15-16		Max Slope			1	0.0	1.6897	Hogging	424.75E-6	
2.3698	0.0	-	-	0 (Negligible)	1	0.0	1.6897	Hogging	424.75E-6	
2.3698	0.0	Max Settlement	-	-	0 (Negligible)	1	0.0	1.6897	Hogging	424.75E-6
2.3698	0.0	Max Tensile	-	-	0 (Negligible)	1	0.0	1.6897	Hogging	424.75E-6
-	-	Strain	-	-	-	-	-	-	-	
-	-	Min Radius of	-	-	-	-	-	-	-	
-	-	Curvature (Hogging)	-	-	-	-	-	-	-	
-	-	Min Radius of	-	-	-	-	-	-	-	
16-17		Max Slope			1	0.0	1.8990	Hogging	936.27E-6	
4.1483	0.0	-	-	0 (Negligible)	1	0.0	1.8990	Hogging	936.27E-6	
4.1483	0.0	Max Settlement	-	-	0 (Negligible)	1	0.0	1.8990	Hogging	936.27E-6
4.1483	0.0	Max Tensile	-	-	0 (Negligible)	1	0.0	1.8990	Hogging	936.27E-6
-	-	Strain	-	-	-	-	-	-	-	
-	-	Min Radius of	-	-	-	-	-	-	-	
-	-	Curvature (Hogging)	-	-	-	-	-	-	-	
-	-	Min Radius of	-	-	-	-	-	-	-	
17-g		Max Slope			1	0.0	1.6115	Hogging	0.0014488	
6.4839	0.0	-	-	0 (Negligible)	1	0.0	1.6115	Hogging	0.0014488	

			Max Settlement		1	0.0	1.6115	Hogging	0.0014488
6.4839	0.0	-	- 0 (Negligible)		1	0.0	1.6115	Hogging	0.0014488
6.4839	0.0	-	- 0 (Negligible)						
			Strain		-	-	-	-	-
			Min Radius of						
			Curvature						
			(Hogging)						
			Min Radius of						
			Curvature						
			(Sagging)						
h-49			Max Slope		1	0.0	2.1345	Sagging	0.0015619
6.1930	0.021687	-	1492.0 0 (Negligible)		1	0.0	2.1345	Sagging	0.0015619
6.1930	0.021687	-	1492.0 0 (Negligible)		1	0.0	2.1345	Sagging	0.0015619
6.1930	0.021687	-	1492.0 0 (Negligible)		1	0.0	2.1345	Sagging	0.0015619
			Strain		-	-	-	-	-
			Min Radius of						
			Curvature						
			(Hogging)						
6.1930	0.021687	-	1492.0 0 (Negligible)		1	0.0	2.1345	Sagging	0.0015619
			Curvature						
			(Sagging)						
49-36			Max Slope		1	0.0	2.3890	Sagging	919.21E-6
3.6214	0.010191	-	3553.4 0 (Negligible)		1	0.0	2.3890	Sagging	919.21E-6
3.6214	0.010191	-	3553.4 0 (Negligible)		1	0.0	2.3890	Sagging	919.21E-6
3.6214	0.010191	-	3553.4 0 (Negligible)		1	0.0	2.3890	Sagging	919.21E-6
			Strain		-	-	-	-	-
			Min Radius of						
			Curvature						
			(Hogging)						
3.6214	0.010191	-	3553.4 0 (Negligible)		1	0.0	2.3890	Sagging	919.21E-6
			Curvature						
			(Sagging)						
36-48			Max Slope		1	0.0	2.3002	Sagging	345.22E-6
1.8262	0.0025223	-	13823. 0 (Negligible)		1	0.0	2.3002	Sagging	345.22E-6
1.8262	0.0025223	-	13823. 0 (Negligible)		1	0.0	2.3002	Sagging	345.22E-6
1.8262	0.0025223	-	13823. 0 (Negligible)		1	0.0	2.3002	Sagging	345.22E-6
			Strain		-	-	-	-	-
			Min Radius of						
			Curvature						
			(Hogging)						
1.8262	0.0025223	-	13823. 0 (Negligible)		1	0.0	2.3002	Sagging	345.22E-6
			Curvature						
			(Sagging)						
48-47			Max Slope		1	0.0	1.1690	Hogging	237.96E-6
1.1275	0.0	-	- 0 (Negligible)		1	0.0	1.1690	Hogging	237.96E-6
1.1275	0.0	-	- 0 (Negligible)		1	0.0	1.1690	Hogging	237.96E-6
1.1275	0.0	-	- 0 (Negligible)		1	0.0	1.1690	Hogging	237.96E-6
			Strain		-	-	-	-	-
			Min Radius of						
			Curvature						
			(Hogging)						
			Min Radius of						
			Curvature						
			(Sagging)						
47-51			Max Slope		3	7.1467	10.749	Hogging	27.587E-6
0.66732	89.157E-6	293760.	- 0 (Negligible)		1	0.0	2.1515	Hogging	27.465E-6
0.84909	36.013E-6	578770.	- 0 (Negligible)						

0.66732	89.157E-6	Max Tensile 293760.	- 0 (Negligible)	3	7.1467	10.749	Hogging	27.587E-6
0.66732	89.157E-6	Strain Min Radius of 293760.	- 0 (Negligible)	3	7.1467	10.749	Hogging	27.587E-6
0.79157	75.924E-6	Curvature (Hogging) Min Radius of 742170.	0 (Negligible)	2	2.1515	7.1467	Sagging	27.323E-6
50-46		Curvature (Sagging) All settlements are less than the Settlement Trough Limit Sensitivity. All settlements are less than the Settlement Trough Limit Sensitivity. All settlements are less than the Settlement Trough Limit Sensitivity. All settlements are less than the Settlement Trough Limit Sensitivity. All settlements are less than the Settlement Trough Limit Sensitivity.						
46-47		Max Slope		1	1.0150	8.1190	Sagging	183.14E-6
0.84891	0.0021542	Max Settlement	- 25204. 0 (Negligible)	1	1.0150	8.1190	Sagging	183.14E-6
0.84891	0.0021542	Max Tensile	- 25204. 0 (Negligible)	1	1.0150	8.1190	Sagging	183.14E-6
0.84891	0.0021542	Strain Min Radius of	- 25204. 0 (Negligible)	1	1.0150	8.1190	Sagging	183.14E-6
-	-	Curvature (Hogging) Min Radius of	- -	-	-	-	-	-
0.84891	0.0021542	Curvature (Sagging) All settlements are less than the Settlement Trough Limit Sensitivity. All settlements are less than the Settlement Trough Limit Sensitivity. All settlements are less than the Settlement Trough Limit Sensitivity. All settlements are less than the Settlement Trough Limit Sensitivity. All settlements are less than the Settlement Trough Limit Sensitivity.	- 25204. 0 (Negligible)	1	1.0150	8.1190	Sagging	183.14E-6
24-25		Max Slope		1	10.246	11.270	Sagging	57.746E-6
25-26		Max Settlement	- 77972. 0 (Negligible)	1	10.246	11.270	Sagging	57.746E-6
26-27		Max Tensile	- 77972. 0 (Negligible)	1	10.246	11.270	Sagging	57.746E-6
0.19227	0.0	Strain Min Radius of	- 77972. 0 (Negligible)	-	-	-	-	-
0.19227	0.0	Curvature (Hogging) Min Radius of	- 77972. 0 (Negligible)	-	-	-	-	-
0.19227	0.0	Curvature (Sagging) Max Slope	- 77972. 0 (Negligible)	1	0.0	3.1691	Hogging	18.565E-6
0.19233	92.161E-6	Max Settlement	- 0 (Negligible)	1	0.0	3.1691	Hogging	18.565E-6
0.19233	92.161E-6	Max Tensile	- 0 (Negligible)	1	0.0	3.1691	Hogging	18.565E-6
0.19233	92.161E-6	Strain Min Radius of 302290.	- 0 (Negligible)	1	0.0	3.1691	Hogging	18.565E-6
0.19233	92.161E-6	Curvature (Hogging) Min Radius of	- 0 (Negligible)	1	0.0	3.1691	Hogging	18.565E-6
-	-	Curvature (Sagging) Max Slope	- -	-	-	-	-	-
28-29		Max Settlement	- 128300. 0 (Negligible)	1	0.0	0.0	Sagging	42.792E-6
0.14181	0.0	Max Tensile	- 128300. 0 (Negligible)	1	0.0	0.0	Sagging	42.792E-6
0.14181	0.0	Strain Min Radius of	- 128300. 0 (Negligible)	1	0.0	0.0	Sagging	42.792E-6
0.14181	0.0	Curvature (Sagging) Max Slope	- 128300. 0 (Negligible)	1	0.0	0.0	Sagging	42.792E-6

-	-	Min Radius of	-	-	-	-	-	-
-	-	Curvature (Hogging)	-	-	-	-	-	-
0.60726	414.74E-6	Min Radius of	1	0.0	3.5991	Sagging	91.860E-6	
		Curvature (Sagging)						
41-40		Max Slope	1	0.0	4.0690	Sagging	92.714E-6	
0.64990	425.68E-6	Max Settlement	1	0.0	4.0690	Sagging	92.714E-6	
0.64990	425.68E-6	Max Tensile	1	0.0	4.0690	Sagging	92.714E-6	
0.64990	425.68E-6	Strain	1	0.0	4.0690	Sagging	92.714E-6	
-	-	Min Radius of	-	-	-	-	-	-
-	-	Curvature (Hogging)	-	-	-	-	-	-
0.64990	425.68E-6	Min Radius of	1	0.0	4.0690	Sagging	92.714E-6	
		Curvature (Sagging)						
40-39		Max Slope	1	0.0	3.8991	Sagging	136.55E-6	
0.64999	0.0012638	Max Settlement	1	0.0	3.8991	Sagging	136.55E-6	
0.64999	0.0012638	Max Tensile	1	0.0	3.8991	Sagging	136.55E-6	
0.64999	0.0012638	Strain	1	0.0	3.8991	Sagging	136.55E-6	
-	-	Min Radius of	-	-	-	-	-	-
-	-	Curvature (Hogging)	-	-	-	-	-	-
0.64999	0.0012638	Min Radius of	1	0.0	3.8991	Sagging	136.55E-6	
		Curvature (Sagging)						
39-38		Max Slope	1	0.0	4.1221	Sagging	32.812E-6	
0.23823	65.553E-6	Max Settlement	1	0.0	4.1221	Sagging	32.812E-6	
0.23823	65.553E-6	Max Tensile	1	0.0	4.1221	Sagging	32.812E-6	
0.23823	65.553E-6	Strain	1	0.0	4.1221	Sagging	32.812E-6	
-	-	Min Radius of	-	-	-	-	-	-
-	-	Curvature (Hogging)	-	-	-	-	-	-
0.23823	65.553E-6	Min Radius of	1	0.0	4.1221	Sagging	32.812E-6	
		Curvature (Sagging)						
38-25		All settlements are less than the Settlement Trough Limit Sensitivity.						
		All settlements are less than the Settlement Trough Limit Sensitivity.						
		All settlements are less than the Settlement Trough Limit Sensitivity.						
		All settlements are less than the Settlement Trough Limit Sensitivity.						
20-22		All settlements are less than the Settlement Trough Limit Sensitivity.						
0.22517	285.92E-6	Max Slope	1	0.0	10.169	Hogging	17.125E-6	
		385720. - 0 (Negligible)						
		Max Settlement	1	0.0	10.169	Hogging	17.125E-6	
0.22517	285.92E-6	385720. - 0 (Negligible)						
		Max Tensile	1	0.0	10.169	Hogging	17.125E-6	
0.22517	285.92E-6	385720. - 0 (Negligible)						
		Strain						
0.22517	285.92E-6	Min Radius of	1	0.0	10.169	Hogging	17.125E-6	
		385720. - 0 (Negligible)						
-	-	Curvature (Hogging)	-	-	-	-	-	-
-	-	Min Radius of	-	-	-	-	-	-
-	-	Curvature (Sagging)	-	-	-	-	-	-
22-b		Max Slope	1	0.0	11.790	Sagging	0.0010875	
3.8921	0.014170	2463.4 0 (Negligible)						
		Max Settlement	1	0.0	11.790	Sagging	0.0010875	
3.8921	0.014170	2463.4 0 (Negligible)						

3.8921	0.014170	Max Tensile	-	2463.4	0 (Negligible)	1	0.0	11.790	Sagging	0.0010875
-	-	Strain	-	-	-	-	-	-	-	-
-	-	Min Radius of	-	-	-	-	-	-	-	-
-	-	Curvature	-	-	-	-	-	-	-	-
-	-	(Hogging)	-	-	-	-	-	-	-	-
3.8921	0.014170	Min Radius of	-	2463.4	0 (Negligible)	1	0.0	11.790	Sagging	0.0010875
-	-	Curvature	-	-	-	-	-	-	-	-
-	-	(Sagging)	-	-	-	-	-	-	-	-
e-45		Max Slope	-	1568.6	0 (Negligible)	1	0.0	12.794	Sagging	0.0015204
5.0485	0.017847	Max Settlement	-	1568.6	0 (Negligible)	1	0.0	12.794	Sagging	0.0015204
5.0485	0.017847	Max Tensile	-	1568.6	0 (Negligible)	1	0.0	12.794	Sagging	0.0015204
5.0485	0.017847	Strain	-	1568.6	0 (Negligible)	1	0.0	12.794	Sagging	0.0015204
-	-	Min Radius of	-	-	-	-	-	-	-	-
-	-	Curvature	-	-	-	-	-	-	-	-
-	-	(Hogging)	-	-	-	-	-	-	-	-
5.0485	0.017847	Min Radius of	-	1568.6	0 (Negligible)	1	0.0	12.794	Sagging	0.0015204
-	-	Curvature	-	-	-	-	-	-	-	-
-	-	(Sagging)	-	-	-	-	-	-	-	-
18-31		Max Slope	-	6.8291	0 (Negligible)	1	0.0	6.8291	Hogging	86.711E-6
1.1043	0.0013187	57717.	-	6.8291	0 (Negligible)	1	0.0	6.8291	Hogging	86.711E-6
1.1043	0.0013187	Max Settlement	-	6.8291	0 (Negligible)	1	0.0	6.8291	Hogging	86.711E-6
1.1043	0.0013187	Max Tensile	-	6.8291	0 (Negligible)	1	0.0	6.8291	Hogging	86.711E-6
1.1043	0.0013187	57717.	-	6.8291	0 (Negligible)	1	0.0	6.8291	Hogging	86.711E-6
-	-	Strain	-	-	-	-	-	-	-	-
-	-	Min Radius of	-	-	-	-	-	-	-	-
-	-	Curvature	-	-	-	-	-	-	-	-
-	-	(Hogging)	-	-	-	-	-	-	-	-
23-24		Max Slope	-	0.11340	0 (Negligible)	1	0.0	0.11340	Sagging	161.45E-6
1.2205	0.0	2.1006E+6	-	0.11340	0 (Negligible)	1	0.0	0.11340	Sagging	161.45E-6
1.2205	0.0	Max Settlement	-	0.11340	0 (Negligible)	1	0.0	0.11340	Sagging	161.45E-6
1.2205	0.0	2.1006E+6	-	0.11340	0 (Negligible)	2	0.11340	10.683	Sagging	161.45E-6
1.2022	0.0020333	Max Tensile	-	59521.	0 (Negligible)	2	0.11340	10.683	Sagging	161.45E-6
-	-	Strain	-	-	-	-	-	-	-	-
-	-	Min Radius of	-	-	-	-	-	-	-	-
-	-	Curvature	-	-	-	-	-	-	-	-
-	-	(Hogging)	-	-	-	-	-	-	-	-
1.2022	0.0020333	Min Radius of	-	59521.	0 (Negligible)	2	0.11340	10.683	Sagging	161.45E-6
-	-	Curvature	-	-	-	-	-	-	-	-
-	-	(Sagging)	-	-	-	-	-	-	-	-
b-27		Max Slope	-	10.644	0 (Negligible)	1	0.0	10.644	Sagging	0.0015627
4.9999	0.021100	1402.0	-	10.644	0 (Negligible)	1	0.0	10.644	Sagging	0.0015627
4.9999	0.021100	Max Settlement	-	10.644	0 (Negligible)	1	0.0	10.644	Sagging	0.0015627
4.9999	0.021100	Max Tensile	-	10.644	0 (Negligible)	1	0.0	10.644	Sagging	0.0015627
-	-	Strain	-	-	-	-	-	-	-	-
-	-	Min Radius of	-	-	-	-	-	-	-	-
-	-	Curvature	-	-	-	-	-	-	-	-
-	-	(Hogging)	-	-	-	-	-	-	-	-
4.9999	0.021100	Min Radius of	-	1402.0	0 (Negligible)	1	0.0	10.644	Sagging	0.0015627
-	-	Curvature	-	-	-	-	-	-	-	-
-	-	(Sagging)	-	-	-	-	-	-	-	-
42-37		Max Slope	-	2.1935	0 (Negligible)	1	0.0	2.1935	Hogging	128.18E-6
1.1722	193.87E-6	107630.	-	2.1935	0 (Negligible)	1	0.0	2.1935	Hogging	128.18E-6
1.1722	193.87E-6	Max Settlement	-	2.1935	0 (Negligible)	1	0.0	2.1935	Hogging	128.18E-6
0.90033	0.0012076	Max Tensile	-	11.202	0 (Negligible)	2	2.1935	11.202	Sagging	128.18E-6
-	-	Strain	-	80468.	0 (Negligible)	2	2.1935	11.202	Sagging	128.18E-6

		Max Settlement			1	0.0	4.4697	Hogging	0.0020465
5.6309	0.026475	381.32	- 0 (Negligible)		1	0.0	4.4697	Hogging	0.0020465
		Max Tensile							
5.6309	0.026475	381.32	- 0 (Negligible)		1	0.0	4.4697	Hogging	0.0020465
		Strain							
		Min Radius of							
5.6309	0.026475	381.32	- 0 (Negligible)		1	0.0	4.4697	Hogging	0.0020465
		Curvature (Hogging)							
-	-	Min Radius of			-	-	-	-	-
		Curvature (Sagging)							
ag		Max Slope			1	0.0	11.050	Sagging	0.0013068
6.4841	0.016621	- 1174.4	0 (Negligible)		1	0.0	11.050	Sagging	0.0013068
		Max Settlement							
6.4841	0.016621	- 1174.4	0 (Negligible)		1	0.0	11.050	Sagging	0.0013068
		Max Tensile							
6.4841	0.016621	- 1174.4	0 (Negligible)		1	0.0	11.050	Sagging	0.0013068
		Strain							
		Min Radius of			-	-	-	-	-
-	-	Curvature (Hogging)							
		Min Radius of			1	0.0	11.050	Sagging	0.0013068
6.4841	0.016621	- 1174.4	0 (Negligible)		1	0.0	11.050	Sagging	0.0013068
		Curvature (Sagging)							
gb		Max Slope			1	0.0	11.399	Hogging	0.0022397
8.8243	0.030401	998.35	- 0 (Negligible)		1	0.0	11.399	Hogging	0.0022397
		Max Settlement							
8.8243	0.030401	998.35	- 0 (Negligible)		1	0.0	11.399	Hogging	0.0022397
		Max Tensile							
8.8243	0.030401	998.35	- 0 (Negligible)		1	0.0	11.399	Hogging	0.0022397
		Strain							
		Min Radius of			1	0.0	11.399	Hogging	0.0022397
8.8243	0.030401	998.35	- 0 (Negligible)		1	0.0	11.399	Hogging	0.0022397
		Curvature (Hogging)							
		Min Radius of			-	-	-	-	-
-	-	Curvature (Sagging)							
bc		Max Slope			1	0.0	5.5590	Hogging	0.0012762
6.1714	0.026851	1792.3	- 0 (Negligible)		1	0.0	5.5590	Hogging	0.0012762
		Max Settlement							
6.1714	0.026851	1792.3	- 0 (Negligible)		1	0.0	5.5590	Hogging	0.0012762
		Max Tensile							
6.1714	0.026851	1792.3	- 0 (Negligible)		1	0.0	5.5590	Hogging	0.0012762
		Strain							
		Min Radius of			1	0.0	5.5590	Hogging	0.0012762
6.1714	0.026851	1792.3	- 0 (Negligible)		1	0.0	5.5590	Hogging	0.0012762
		Curvature (Hogging)							
		Min Radius of			-	-	-	-	-
-	-	Curvature (Sagging)							
cd		Max Slope			1	0.0	1.7483	Sagging	503.81E-6
5.8254	0.0	-	- 0 (Negligible)		1	0.0	1.7483	Sagging	503.81E-6
		Max Settlement							
5.8254	0.0	-	- 0 (Negligible)		1	0.0	1.7483	Sagging	503.81E-6
		Max Tensile							
5.8254	0.0	-	- 0 (Negligible)		1	0.0	1.7483	Sagging	503.81E-6
		Strain							
		Min Radius of			-	-	-	-	-
-	-	Curvature (Hogging)							
		Min Radius of			-	-	-	-	-
-	-	Curvature (Sagging)							
eh		Max Slope			2	2.5431	4.7104	Sagging	0.0012730
7.0638	0.014592	- 4493.2	0 (Negligible)		3	4.7104	9.7590	Hogging	0.0012730
		Max Settlement							
8.0575	0.025339	1766.8	- 0 (Negligible)		3	4.7104	9.7590	Hogging	0.0012730

Line for Vertical Movement Calculations	Strain	Strain
[m] [m] [m]	[%]	[%]

No structures have segments combined.

Structure: 21-a | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Start Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]	[m] [m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: f-50 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Start Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]	[m] [m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 14-15 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Start Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]	[m] [m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 15-16 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Start Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]	[m] [m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 16-17 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Start Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]	[m] [m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 17-g | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Start Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]	[m] [m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: h-49 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 49-36 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 36-48 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 48-47 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 47-51 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 50-46 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 46-47 | Sub-structure:

Calculations

[m] [m] [m] [%] [%] [%]
No structures have segments combined.

Structure: 33-31 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
--	------------------	--------------	-----------	------------------	---------------------------	--------------------	-----------------

[m] [m] [m] [%] [%] [%]
No structures have segments combined.

Structure: 31-34 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
--	------------------	--------------	-----------	------------------	---------------------------	--------------------	-----------------

[m] [m] [m] [%] [%] [%]
No structures have segments combined.

Structure: 34-35 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
--	------------------	--------------	-----------	------------------	---------------------------	--------------------	-----------------

[m] [m] [m] [%] [%] [%]
No structures have segments combined.

Structure: 35-41 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
--	------------------	--------------	-----------	------------------	---------------------------	--------------------	-----------------

[m] [m] [m] [%] [%] [%]
No structures have segments combined.

Structure: 41-40 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
--	------------------	--------------	-----------	------------------	---------------------------	--------------------	-----------------

[m] [m] [m] [%] [%] [%]
No structures have segments combined.

Structure: 40-39 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
--	------------------	--------------	-----------	------------------	---------------------------	--------------------	-----------------

[m] [m] [m] [%] [%] [%]
No structures have segments combined.

Structure: 39-38 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: 38-25 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: 20-22 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: 22-b | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: e-45 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: 18-31 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: 23-24 | Sub-structure:

Vertical Offset from Line for	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
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Vertical Movement Calculations
 [m] [m] [m] [%] [%] [%]
 No structures have segments combined.

Structure: b-27 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 42-37 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 47-43 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 44-39 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 46-45 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: a-12 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 12-11 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: 11-f | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: ag | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: gb | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: bc | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: cd | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: eh | Sub-structure:

Vertical	Combined	Start	Length	Curvature	Deflection	Average	Max	Damage Category
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Offset from Segment Ratio Horizontal Tensile
 Line for Vertical Strain Strain
 Movement
 Calculations
 [m] [m] [m] [%] [%] [%]
 No structures have segments combined.

Structure: hf | Sub-structure:

Vertical Combined Start Length Curvature Deflection Average Max Damage Category
 Offset from Segment Ratio Horizontal Tensile
 Line for Strain Strain
 Vertical
 Movement
 Calculations
 [m] [m] [m] [%] [%] [%]
 No structures have segments combined.

Structure: de | Sub-structure:

Vertical Combined Start Length Curvature Deflection Average Max Damage Category
 Offset from Segment Ratio Horizontal Tensile
 Line for Strain Strain
 Vertical
 Movement
 Calculations
 [m] [m] [m] [%] [%] [%]
 No structures have segments combined.

DEMOLITION + EXCAVATION + LOADING (LONG TERM)

Analysis Options

Analysis: Boussinesq
 Global Poisson's ratio: 0.20
 Maximum allowable ratio between values of E: 10.0
 Horizontal rigid boundary level: -45.40 [m OD]
 Displacements at area centroids calculated.

Soil Profiles Soil Profile 1

Layer	Level at top [mOD]	Number of intermediate displacement levels	Youngs Modulus		Poissons ratio	Non-linear curve
			Top [kN/m ²]	Btm [kN/m ²]		
1	0.0	8	10000.	10000.	0.20000	None
2	-4.2000	4	8640.0	8640.0	0.20000	None
3	-5.2000	4	24000.	24000.	0.20000	None
4	-8.3500	5	24000.	24000.	0.20000	None
5	-9.0000	61	16000.	75328.	0.20000	None
6	-39.600	11	300000.	300000.	0.20000	None

Soil Zones

Zone	Name	X coordinates		Y coordinates		Profile
		min [m]	max [m]	min [m]	max [m]	
1	demo	0.0	110.00	0.0	110.00	Soil Profile 1

Load Data

Load Name	Load value		Load position					
ref.	Shape	Orientation	Centre of load			Angle of	Width x	Length
y	Polygon	of	Number	Normal	Tangential	or		
Coordinates	Rectangle	of	(local z)	(local x)	(local y)	from	Radius	
tolerance rectangles		Plane	X	Y	Z			
			(level)					
[m]			[m]	[m]	[m]	[Degrees]	[m]	[m]
			[kN/m ²]	[kN/m ²]	[kN/m ²]			
1	basement A	Polygonal	Horizontal	N/A	N/A	-0.60000	N/A	N/A
N/A	(66,58.3)	(66,53.2)	10.000	2	-10.000	N/A	N/A	
	(59.8,51.7)	(55,51.6)						
	(55,58.4)							
2	vault A	Polygonal	Horizontal	N/A	N/A	-3.1300	N/A	N/A
N/A	(55,58.4)	(59.8,58.4)	10.000	1	-20.000	N/A	N/A	
	(59.8,51.6)	(55,51.6)						
3	vault B	Polygonal	Horizontal	N/A	N/A	-3.1300	N/A	N/A
N/A	(44.3,58.4)	(44.3,51.6)	10.000	1	-20.000	N/A	N/A	
	(39.6,51.7)	(39.6,58.4)						
4	basement B	Polygonal	Horizontal	N/A	N/A	-3.1300	N/A	N/A
N/A	(55,58.4)	(55,51.6)	10.000	1	-10.000	N/A	N/A	
	(39.6,51.7)	(39.6,58.4)						
5	exc (3.6m)	Polygonal	Horizontal	N/A	N/A	-4.2000	N/A	N/A
N/A	(66,58.3)	(66,53.2)	10.000	1	-72.000	N/A	N/A	
	(59.8,51.7)	(59.8,58.3)						
6	exc (1.07m)	Polygonal	Horizontal	N/A	N/A	-4.2000	N/A	N/A
N/A	(59.8,58.3)	(59.8,51.7)	10.000	1	-21.400	N/A	N/A	
	(39.6,51.7)	(39.6,58.4)						
7	new basement	Polygonal	Horizontal	N/A	N/A	-4.2000	N/A	N/A
N/A	(66,58.3)	(66,53.2)	10.000	2	10.000	N/A	N/A	
	(59.8,51.7)	(39.6,51.7)						
	(39.6,58.4)							

Displacement Data

intrvls	Direction		Line/Line for extrusion						No. of
Ref.	Type	Name	of	Show			Second point		
across	Extrusion	along	Extrusion	First point			Second point		
extrusion/line	Depth	extrusion	X	Y	Z(level)	X	Y	Z(level)	
			[m]	[m]	[m]	[m]	[m]	[m]	
1	Grid	Grid 1	Global X	30.000	35.000	0.0	N/A	80.000	0.0
99	70.000	99	Yes	Yes					
2	Line	21-20	N/A	55.960	70.700	0.0	44.210	70.720	0.0
11	N/A	N/A	Yes	Yes					
3	Line	19-20	N/A	59.140	66.790	0.0	55.960	70.700	0.0
5	N/A	N/A	Yes	Yes					
4	Line	19-18	N/A	59.140	66.790	0.0	59.170	64.780	0.0
2	N/A	N/A	Yes	Yes					
5	Line	18-13	N/A	59.170	64.780	0.0	44.210	64.800	0.0
14	N/A	N/A	Yes	Yes					
6	Line	21-a	N/A	44.210	70.720	0.0	44.060	58.900	0.0
34	N/A	N/A	Yes	Yes					
7	Line	f-50	N/A	44.100	51.600	0.0	44.160	36.710	0.0
15	N/A	N/A	Yes	Yes					
8	Line	14-15	N/A	55.000	64.760	0.0	55.000	62.620	0.0
2	N/A	N/A	Yes	Yes					
9	Line	15-16	N/A	55.000	62.620	0.0	56.230	61.460	0.0
1	N/A	N/A	Yes	Yes					
10	Line	16-17	N/A	56.230	61.460	0.0	56.220	59.560	0.0
1	N/A	N/A	Yes	Yes					
11	Line	17-g	N/A	56.220	59.560	0.0	55.100	58.400	0.0
1	N/A	N/A	Yes	Yes					

50	Line	eh	N/A	64.740	51.600	0.0	54.980	51.600	0.0
9	N/A	N/A	Yes	Yes					
51	Line	hf	N/A	54.980	51.600	0.0	44.100	51.600	0.0
10	N/A	N/A	Yes	Yes					
52	Line	de	N/A	65.000	52.000	0.0	64.740	51.600	0.0
4	N/A	N/A	Yes	Yes					

Problem Type

Problem Type : Tunnelling and Embedded Wall Excavations

Displacement Data

Type of intervals across extrusion/line	Name of Extrusion	Direction No. of intervals of extrusion along	Calculate Surface of extrusion	Point/Line/Line for extrusion type for	No.				
				tunnels					
				First point	Second point				
				X	Y	Z(level)	X	Y	Z(level)
				[m]	[m]	[m]	[m]	[m]	[m]
Grid	Grid 1	Global X	30.00000	35.00000	0.00000	-	80.00000	0.00000	
99	70.00000	99 Yes	Surface						
Line	21-20	-	55.96000	70.70000	0.00000	44.21000	70.72000	0.00000	
11	-	-	Yes	Surface					
Line	19-20	-	59.14000	66.79000	0.00000	55.96000	70.70000	0.00000	
5	-	-	Yes	Surface					
Line	19-18	-	59.14000	66.79000	0.00000	59.17000	64.78000	0.00000	
2	-	-	Yes	Surface					
Line	18-13	-	59.17000	64.78000	0.00000	44.21000	64.80000	0.00000	
14	-	-	Yes	Surface					
Line	21-a	-	44.21000	70.72000	0.00000	44.06000	58.90000	0.00000	
34	-	-	Yes	Surface					
Line	f-50	-	44.10000	51.60000	0.00000	44.16000	36.71000	0.00000	
15	-	-	Yes	Surface					
Line	14-15	-	55.00000	64.76000	0.00000	55.00000	62.62000	0.00000	
2	-	-	Yes	Surface					
Line	15-16	-	55.00000	62.62000	0.00000	56.23000	61.46000	0.00000	
1	-	-	Yes	Surface					
Line	16-17	-	56.23000	61.46000	0.00000	56.22000	59.56000	0.00000	
1	-	-	Yes	Surface					
Line	17-g	-	56.22000	59.56000	0.00000	55.10000	58.40000	0.00000	
1	-	-	Yes	Surface					
Line	h-49	-	54.98000	51.60000	0.00000	56.50000	50.10000	0.00000	
2	-	-	Yes	Surface					
Line	49-36	-	56.50000	50.10000	0.00000	56.50000	47.71000	0.00000	
2	-	-	Yes	Surface					
Line	36-48	-	56.50000	47.71000	0.00000	54.96000	46.00000	0.00000	
2	-	-	Yes	Surface					
Line	48-47	-	54.96000	46.00000	0.00000	54.96000	44.83000	0.00000	
1	-	-	Yes	Surface					
Line	47-51	-	54.96000	44.83000	0.00000	44.21000	44.83000	0.00000	
10	-	-	Yes	Surface					
Line	50-46	-	44.16000	36.71000	0.00000	54.96000	36.71000	0.00000	
10	-	-	Yes	Surface					
Line	46-47	-	54.96000	36.71000	0.00000	54.96000	44.83000	0.00000	
8	-	-	Yes	Surface					
Line	24-25	-	78.82000	63.10000	0.00000	88.08000	63.07000	0.00000	
9	-	-	Yes	Surface					
Line	25-26	-	88.08000	63.07000	0.00000	88.00000	57.75000	0.00000	
5	-	-	Yes	Surface					
Line	26-27	-	88.00000	57.75000	0.00000	76.73000	57.90000	0.00000	
11	-	-	Yes	Surface					
Line	27-28	-	76.73000	57.90000	0.00000	76.71000	61.07000	0.00000	
3	-	-	Yes	Surface					

Line 28-29	-	-	76.71000	61.07000	0.00000	78.82000	63.10000	0.00000
2	-	Yes	Surface					
Line 27-32	-	-	76.73000	57.90000	0.00000	76.75000	52.75000	0.00000
5	-	Yes	Surface					
Line 33-31	-	-	87.93000	52.75000	0.00000	70.25000	52.75000	0.00000
17	-	Yes	Surface					
Line 31-34	-	-	70.25000	52.75000	0.00000	70.18000	49.38000	0.00000
3	-	Yes	Surface					
Line 34-35	-	-	70.18000	49.38000	0.00000	71.51000	49.37000	0.00000
1	-	Yes	Surface					
Line 35-41	-	-	71.51000	49.37000	0.00000	71.48000	45.77000	0.00000
3	-	Yes	Surface					
Line 41-40	-	-	71.48000	45.77000	0.00000	67.41000	45.77000	0.00000
4	-	Yes	Surface					
Line 40-39	-	-	67.41000	45.77000	0.00000	67.39000	41.87000	0.00000
3	-	Yes	Surface					
Line 39-38	-	-	67.39000	41.87000	0.00000	88.00000	41.70000	0.00000
20	-	Yes	Surface					
Line 38-25	-	-	88.00000	41.70000	0.00000	88.08000	63.07000	0.00000
21	-	Yes	Surface					
Line 20-22	-	-	55.96000	70.70000	0.00000	66.13000	70.69000	0.00000
10	-	Yes	Surface					
Line 22-b	-	-	66.13000	70.69000	0.00000	66.30000	58.90000	0.00000
17	-	Yes	Surface					
Line e-45	-	-	64.74000	51.60000	0.00000	64.48000	36.84000	0.00000
15	-	Yes	Surface					
Line 18-31	-	-	59.17000	64.78000	0.00000	66.00000	64.74000	0.00000
6	-	Yes	Surface					
Line 23-24	-	-	66.00000	63.14000	0.00000	78.82000	63.10000	0.00000
12	-	Yes	Surface					
Line b-27	-	-	66.10000	58.46000	0.00000	76.73000	57.90000	0.00000
10	-	Yes	Surface					
Line 42-37	-	-	64.54000	46.73000	0.00000	87.96000	46.45000	0.00000
23	-	Yes	Surface					
Line 47-43	-	-	54.96000	44.83000	0.00000	64.50000	44.83000	0.00000
9	-	Yes	Surface					
Line 44-39	-	-	64.44000	41.91000	0.00000	67.39000	41.87000	0.00000
2	-	Yes	Surface					
Line 46-45	-	-	54.96000	36.71000	0.00000	64.48000	36.84000	0.00000
9	-	Yes	Surface					
Line a-12	-	-	44.06000	58.90000	0.00000	39.63000	58.38000	0.00000
4	-	Yes	Surface					
Line 12-11	-	-	39.63000	58.38000	0.00000	39.63000	51.68000	0.00000
6	-	Yes	Surface					
Line 11-f	-	-	39.63000	51.68000	0.00000	44.10000	51.60000	0.00000
8	-	Yes	Surface					
Line ag	-	-	44.06000	58.90000	0.00000	55.10000	58.40000	0.00000
11	-	Yes	Surface					
Line gb	-	-	55.10000	58.40000	0.00000	66.50000	58.46000	0.00000
20	-	Yes	Surface					
Line bc	-	-	66.50000	58.46000	0.00000	66.50000	52.90000	0.00000
20	-	Yes	Surface					
Line cd	-	-	66.50000	52.90000	0.00000	65.00000	52.00000	0.00000
1	-	Yes	Surface					
Line eh	-	-	64.74000	51.60000	0.00000	54.98000	51.60000	0.00000
9	-	Yes	Surface					
Line hf	-	-	54.98000	51.60000	0.00000	44.10000	51.60000	0.00000
10	-	Yes	Surface					
Line de	-	-	65.00000	52.00000	0.00000	64.74000	51.60000	0.00000
4	-	Yes	Surface					

Vertical Ground Movement Curves

Curve Name: No vertical ground movement

Coordinates: [Distance from wall / wall depth or max. excavation depth (x), Depth / wall depth or max. excavation depth (y), Settlement / wall depth or max. excavation depth (z) (%)]

[0.000,0.000,0.000] [1.000,0.000,0.000] [0.000,1.000,0.000] [1.000,1.000,0.000]

Curve Fitting Method: Polynomial

Method:

x Order: 1

y Order: 0

Polynomial: $z = 0.0x + 0.0$

Coeff. of Determination: -2147483648.E+2147483647

Curve Name: Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11 (b))

Coordinates: [Distance from wall / wall depth or max. excavation depth (x), Depth / wall depth or max. excavation depth (y), Settlement / wall depth or max. excavation depth (z) (%)]

[0.000,0.000,0.039] [0.100,0.000,0.049] [0.200,0.000,0.056] [0.300,0.000,0.062] [0.400,0.000,0.067] [0.500,0.000,0.070] [0.600,0.000,0.072] [0.700,0.000,0.073] [0.800,0.000,0.073] [0.900,0.000,0.072] [1.000,0.000,0.070] [1.100,0.000,0.068] [1.200,0.000,0.065] [1.300,0.000,0.061] [1.400,0.000,0.058] [1.500,0.000,0.054] [1.600,0.000,0.050] [1.700,0.000,0.046] [1.800,0.000,0.042] [1.900,0.000,0.038] [2.000,0.000,0.034] [2.100,0.000,0.030] [2.200,0.000,0.027] [2.300,0.000,0.023] [2.400,0.000,0.020] [2.500,0.000,0.017] [2.600,0.000,0.014] [2.700,0.000,0.012] [2.800,0.000,0.010] [2.900,0.000,0.008] [3.000,0.000,0.007] [3.100,0.000,0.005] [3.200,0.000,0.004] [3.300,0.000,0.004] [3.400,0.000,0.003] [3.500,0.000,0.002] [3.600,0.000,0.002] [3.700,0.000,0.002] [3.800,0.000,0.001] [3.900,0.000,0.001] [4.000,0.000,0.000]

Curve Fitting Method: Polynomial

Method:

x Order: 4

y Order: 0

Polynomial: $z = -2.6455E-3x^4 + 2.8495E-2x^3 - 1.0051E-1x^2 + 1.0569E-1x + 3.8990E-2$

Coeff. of Determination: 9.9991E-1

Determination:

Horizontal Ground Movement Curves

Curve Name: No horizontal ground movement

Coordinates: [Distance from wall / wall depth or max. excavation depth (x), Depth / wall depth or max. excavation depth (y), Horizontal movement / wall depth or max. excavation depth (z) (%)]

[0.000,0.000,0.000] [1.000,0.000,0.000] [0.000,1.000,0.000] [1.000,1.000,0.000]

Curve Fitting Method: Polynomial

Method:

x Order: 0

y Order: 0

Polynomial: $z = 0.0$

Coeff. of Determination: -2147483648.E+2147483647

Determination:

Curve Name: Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11 (a))

Coordinates: [Distance from wall / wall depth or max. excavation depth (x), Depth / wall depth or max. excavation depth (y), Horizontal movement / wall depth or max. excavation depth (z) (%)]

[0.000,0.000,0.150] [4.000,0.000,0.000]

Curve Fitting Method: Polynomial

Method:

x Order: 1

y Order: 0

Polynomial: $z = -3.75E-2x + 1.50E-1$

Coeff. of Determination: 1.00

Determination:

Polygonal Excavations

Excavation Name: Excavation 1

Surface level [m]: 0.0

Contribution: Positive

Enabled: No

Surface movement curves which are selected are applied between surface and [m]: -10.000

surface and [m]:

Corner	x	y	Base Level	Stiffened	Previous Side			Next Side		
					d	p1	p2*	d	p1	p2*
	[m]	[m]	[m]		[m]	[%]	[%]	[m]	[%]	[%]
1	66.020	58.310	-1.0700	No	-	-	-	-	-	-
2	66.000	53.200	-1.0700	No	-	-	-	-	-	-
3	59.820	51.680	-1.0700	No	-	-	-	-	-	-
4	39.630	51.680	-1.0700	No	-	-	-	-	-	-

5 39.630 58.380 -1.0700 No - - - - - -

Side	Corner 1		Corner 2		Ground Movement Curve	
	x [m]	y [m]	x [m]	y [m]	Vertical	Horizontal
1 of high stiff clay 2.11(a)	66.020	58.310	66.000	53.200	Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(b))	Excavation in front stiffness wall in (CIRIA 580 Fig.
2 of high stiff clay 2.11(a)	66.000	53.200	59.820	51.680	Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(b))	Excavation in front stiffness wall in (CIRIA 580 Fig.
3 of high stiff clay 2.11(a)	59.820	51.680	39.630	51.680	Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(b))	Excavation in front stiffness wall in (CIRIA 580 Fig.
4 of high stiff clay 2.11(a)	39.630	51.680	39.630	58.380	Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(b))	Excavation in front stiffness wall in (CIRIA 580 Fig.
5 of high stiff clay 2.11(a)	39.630	58.380	66.020	58.310	Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(b))	Excavation in front stiffness wall in (CIRIA 580 Fig.

Excavation Name: Excavation 2
 Surface level [m]: 0.0
 Contribution: Positive
 Enabled: No
 Surface movement curves which are selected are applied between surface and [m]: -5.0000

Corner	x	y	Base Level	Stiffened	Previous d	Side p1 p2*	Next Side d p1 p2*
	[m]	[m]	[m]		[m]	[%] [%]	[m] [%] [%]
1	59.820	58.310	-3.6000	No	-	- -	- - -
2	66.020	58.310	-3.6000	No	-	- -	- - -
3	66.000	53.200	-3.6000	No	-	- -	- - -
4	59.820	51.680	-3.6000	No	-	- -	- - -

Side	Corner 1		Corner 2		Ground Movement Curve	
	x [m]	y [m]	x [m]	y [m]	Vertical	Horizontal
1 of high stiff clay 2.11(a)	59.820	58.310	66.020	58.310	Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(b))	Excavation in front stiffness wall in (CIRIA 580 Fig.
2 of high stiff clay 2.11(a)	66.020	58.310	66.000	53.200	Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(b))	Excavation in front stiffness wall in (CIRIA 580 Fig.
3 of high stiff clay 2.11(a)	66.000	53.200	59.820	51.680	Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(b))	Excavation in front stiffness wall in (CIRIA 580 Fig.
4 movement 2.11(a)	59.820	51.680	59.820	58.310	No vertical ground movement	No horizontal ground

Excavation Name: Excavation 3
Surface level [m]: 0.0
Contribution: Negative
Enabled: No
Surface movement curves which are selected are applied between surface and [m]: -5.0000

Corner	x	y	Base Level	Stiffened	Previous Side	Next Side				
	[m]	[m]	[m]		d	p1	p2*	d	p1	p2*
					[m]	[%]	[%]	[m]	[%]	[%]
1	59.820	58.310	-1.0700	No	-	-	-	-	-	-
2	66.020	58.310	-1.0700	No	-	-	-	-	-	-
3	66.000	53.200	-1.0700	No	-	-	-	-	-	-
4	59.820	51.680	-1.0700	No	-	-	-	-	-	-

Side	Corner 1		Corner 2		Ground Movement Curve	
	x	y	x	y	Vertical	Horizontal
	[m]	[m]	[m]	[m]		
1	59.820	58.310	66.020	58.310	Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(b))	Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(b))
2.11(a)						
2	66.020	58.310	66.000	53.200	Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(b))	Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(b))
2.11(a)						
3	66.000	53.200	59.820	51.680	Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(b))	Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(b))
2.11(a)						
4	59.820	51.680	59.820	58.310	No vertical ground movement	No horizontal ground movement

Damage Category Strains

Name	0 (Negligible) to 1 (Very Slight)	1 (Very Slight) to 2 (Slight)	2 (Slight) to 3 (Moderate)	3 (Moderate) to 4 (Severe)
Burland Strain Limits	0.0	500.00E-6	750.00E-6	0.0015000

Specific Structures - Geometry

Structure Name	Sub-Structure Name	Displacement Poisson's E/G	Start Distance	End Distance	Vertical Offsets from Line for Vertical Movement Calculations	Vertical Displacement Limit Sensitivity
		Line	[m]	[m]	[m]	[mm]
21-20		21-20	0.00000	11.74902	0.0	0.10000
Burland Strain Limits		0.20000 2.6000				
19-20		19-20	0.00000	5.03889	0.0	0.10000
Burland Strain Limits		0.20000 2.6000				
19-18		19-18	0.00000	2.00922	0.0	0.10000
Burland Strain Limits		0.20000 2.6000				
18-13		18-13	0.00000	14.95901	0.0	0.10000
Burland Strain Limits		0.20000 2.6000				
21-a		21-a	0.00000	11.81995	0.0	0.10000
Burland Strain Limits		0.20000 2.6000				
f-50		f-50	0.00000	14.88912	0.0	0.10000
Burland Strain Limits		0.20000 2.6000				
14-15		14-15	0.00000	2.13900	0.0	0.10000
Burland Strain Limits		0.20000 2.6000				

15-16	15-16	0.00000	1.68971	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
16-17	16-17	0.00000	1.89903	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
17-g	17-g	0.00000	1.61145	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
h-49	h-49	0.00000	2.13451	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
49-36	49-36	0.00000	2.38900	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
36-48	36-48	0.00000	2.30024	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
48-47	48-47	0.00000	1.16900	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
47-51	47-51	0.00000	10.74900	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
50-46	50-46	0.00000	10.79900	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
46-47	46-47	0.00000	8.11900	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
24-25	24-25	0.00000	9.25905	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
25-26	25-26	0.00000	5.31960	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
26-27	26-27	0.00000	11.27000	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
27-28	27-28	0.00000	3.16906	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
28-29	28-29	0.00000	2.92697	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
27-32	27-32	0.00000	5.14904	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
33-31	33-31	0.00000	17.67900	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
31-34	31-34	0.00000	3.36973	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
34-35	34-35	0.00000	1.32904	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
35-41	35-41	0.00000	3.59912	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
41-40	41-40	0.00000	4.06900	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
40-39	40-39	0.00000	3.89905	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
39-38	39-38	0.00000	20.60970	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
38-25	38-25	0.00000	21.36915	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
20-22	20-22	0.00000	10.16900	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
22-b	22-b	0.00000	11.79023	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
e-45	e-45	0.00000	14.76129	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
18-31	18-31	0.00000	6.82912	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
23-24	23-24	0.00000	12.81906	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
b-27	b-27	0.00000	10.64374	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
42-37	42-37	0.00000	23.42067	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
47-43	47-43	0.00000	9.53900	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
44-39	44-39	0.00000	2.94927	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
46-45	46-45	0.00000	9.51989	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
a-12	a-12	0.00000	4.45941	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
12-11	12-11	0.00000	6.69900	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
11-f	11-f	0.00000	4.46972	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
ag	ag	0.00000	11.05032	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				

gb	gb	0.00000	11.39916	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
bc	bc	0.00000	5.55900	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
cd	cd	0.00000	1.74829	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
eh	eh	0.00000	9.75900	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
hf	hf	0.00000	10.87900	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				
de	de	0.00000	0.47607	0.0	0.10000
Burland Strain Limits	0.20000 2.6000				

Specific Structures - Bending Parameters

Structure Name	Sub-Structure	Height	Default	Hogging			
Sagging	Name	Properties		2nd Moment	Distance	Distance	2nd Moment
Distance	Distance			of Area	of Bending	of N.A.	of Area
of Bending	of N.A.			(per unit	Strain	from Edge	(per unit
Strain	from Edge			width)	from N.A.	of Beam in	width)
from N.A.	of Beam in					Tension	
Tension		[m]		[m ³]	[m]	[m]	[m ³]
21-20		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
19-20		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
19-18		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
18-13		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
21-a		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
f-50		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
14-15		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
15-16		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
16-17		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
17-g		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
h-49		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
49-36		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
36-48		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
48-47		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
47-51		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
50-46		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
46-47		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
24-25		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
25-26		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
26-27		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
27-28		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
28-29		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						

27-32		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
33-31		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
31-34		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
34-35		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
35-41		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
41-40		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
40-39		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
39-38		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
38-25		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
20-22		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						
22-b		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						
e-45		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						
18-31		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						
23-24		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						
b-27		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						
42-37		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						
47-43		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						
44-39		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						
46-45		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						
a-12		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						
12-11		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						
11-f		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						
ag		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
gb		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						
bc		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						
cd		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						
eh		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						
hf		13.000	Yes	732.33	13.000	13.000	183.08
6.5000	6.5000						
de		3.0000	Yes	9.0000	3.0000	3.0000	2.2500
1.5000	1.5000						

Building Segment Combinations

Structure Name	Sub-Structure Name	Vertical Offset from Line for Vertical Movement Calculations	Segment Start	Length	Curvature	Combined Segment
		[m]	[m]	[m]		
No structures have segments combined.						

Utility Strain Calculation Options

Neglect beneficial contribution of axial strains : No

Specific Building Damage Results - Horizontal Displacements

Structure: 21-20 | Sub-structure:

Dist.	Coordinates			Displacements		Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
	x	y	z	x	y		
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	55.96000	70.70000	0.00000	0.0	0.0	0.0	0.0 d
1.0682	54.89182	70.70182	0.00000	0.0	0.0	0.0	0.0 d
2.1364	53.82364	70.70364	0.00000	0.0	0.0	0.0	0.0 d
3.2046	52.75545	70.70545	0.00000	0.0	0.0	0.0	0.0 d
4.2727	51.68727	70.70727	0.00000	0.0	0.0	0.0	0.0 d
5.3409	50.61909	70.70909	0.00000	0.0	0.0	0.0	0.0 d
6.4091	49.55091	70.71091	0.00000	0.0	0.0	0.0	0.0 d
7.4773	48.48273	70.71273	0.00000	0.0	0.0	0.0	0.0 d
8.5455	47.41455	70.71455	0.00000	0.0	0.0	0.0	0.0 d
9.6137	46.34636	70.71636	0.00000	0.0	0.0	0.0	0.0 d
10.682	45.27818	70.71818	0.00000	0.0	0.0	0.0	0.0 d
11.750	44.21000	70.72000	0.00000	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: 19-20 | Sub-structure:

Dist.	Coordinates			Displacements		Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
	x	y	z	x	y		
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	59.14000	66.79000	0.00000	0.0	0.0	0.0	0.0 d
1.0080	58.50400	67.57200	0.00000	0.0	0.0	0.0	0.0 d
2.0160	57.86800	68.35400	0.00000	0.0	0.0	0.0	0.0 d
3.0239	57.23200	69.13600	0.00000	0.0	0.0	0.0	0.0 d
4.0319	56.59600	69.91800	0.00000	0.0	0.0	0.0	0.0 d
5.0399	55.96000	70.70000	0.00000	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: 19-18 | Sub-structure:

Dist.	Coordinates			Displacements		Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
	x	y	z	x	y		
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	59.14000	66.79000	0.00000	0.0	0.0	0.0	0.0 d
1.0051	59.15500	65.78500	0.00000	0.0	0.0	0.0	0.0 d
2.0102	59.17000	64.78000	0.00000	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: 18-13 | Sub-structure:

Dist.	Coordinates			Displacements		Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
	x	y	z	x	y		
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	59.17000	64.78000	0.00000	0.0	0.0	0.0	0.0 d
1.0686	58.10143	64.78143	0.00000	0.0	0.0	0.0	0.0 d
2.1371	57.03286	64.78286	0.00000	0.0	0.0	0.0	0.0 d
3.2057	55.96429	64.78429	0.00000	0.0	0.0	0.0	0.0 d
4.2743	54.89571	64.78571	0.00000	0.0	0.0	0.0	0.0 d
5.3429	53.82714	64.78714	0.00000	0.0	0.0	0.0	0.0 d
6.4114	52.75857	64.78857	0.00000	0.0	0.0	0.0	0.0 d
7.4800	51.69000	64.79000	0.00000	0.0	0.0	0.0	0.0 d
8.5486	50.62143	64.79143	0.00000	0.0	0.0	0.0	0.0 d
9.6172	49.55286	64.79286	0.00000	0.0	0.0	0.0	0.0 d

10.686	48.48429	64.79429	0.00000	0.0	0.0	0.0	0.0	d
11.754	47.41571	64.79571	0.00000	0.0	0.0	0.0	0.0	d
12.823	46.34714	64.79714	0.00000	0.0	0.0	0.0	0.0	d
13.891	45.27857	64.79857	0.00000	0.0	0.0	0.0	0.0	d
14.960	44.21000	64.80000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 21-a | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	44.21000	70.72000	0.00000	0.0	0.0	0.0	0.0	d
0.34768	44.20559	70.37235	0.00000	0.0	0.0	0.0	0.0	d
0.69535	44.20118	70.02471	0.00000	0.0	0.0	0.0	0.0	d
1.0430	44.19676	69.67706	0.00000	0.0	0.0	0.0	0.0	d
1.3907	44.19235	69.32941	0.00000	0.0	0.0	0.0	0.0	d
1.7384	44.18794	68.98176	0.00000	0.0	0.0	0.0	0.0	d
2.0861	44.18353	68.63412	0.00000	0.0	0.0	0.0	0.0	d
2.4337	44.17912	68.28647	0.00000	0.0	0.0	0.0	0.0	d
2.7814	44.17471	67.93882	0.00000	0.0	0.0	0.0	0.0	d
3.1291	44.17029	67.59118	0.00000	0.0	0.0	0.0	0.0	d
3.4768	44.16588	67.24353	0.00000	0.0	0.0	0.0	0.0	d
3.8244	44.16147	66.89588	0.00000	0.0	0.0	0.0	0.0	d
4.1721	44.15706	66.54824	0.00000	0.0	0.0	0.0	0.0	d
4.5198	44.15265	66.20059	0.00000	0.0	0.0	0.0	0.0	d
4.8675	44.14824	65.85294	0.00000	0.0	0.0	0.0	0.0	d
5.2151	44.14382	65.50529	0.00000	0.0	0.0	0.0	0.0	d
5.5628	44.13941	65.15765	0.00000	0.0	0.0	0.0	0.0	d
5.9105	44.13500	64.81000	0.00000	0.0	0.0	0.0	0.0	d
6.2582	44.13059	64.46235	0.00000	0.0	0.0	0.0	0.0	d
6.6058	44.12618	64.11471	0.00000	0.0	0.0	0.0	0.0	d
6.9535	44.12176	63.76706	0.00000	0.0	0.0	0.0	0.0	d
7.3012	44.11735	63.41941	0.00000	0.0	0.0	0.0	0.0	d
7.6489	44.11294	63.07176	0.00000	0.0	0.0	0.0	0.0	d
7.9965	44.10853	62.72412	0.00000	0.0	0.0	0.0	0.0	d
8.3442	44.10412	62.37647	0.00000	0.0	0.0	0.0	0.0	d
8.6919	44.09971	62.02882	0.00000	0.0	0.0	0.0	0.0	d
9.0396	44.09529	61.68118	0.00000	0.0	0.0	0.0	0.0	d
9.3872	44.09088	61.33353	0.00000	0.0	0.0	0.0	0.0	d
9.7349	44.08647	60.98588	0.00000	0.0	0.0	0.0	0.0	d
10.083	44.08206	60.63824	0.00000	0.0	0.0	0.0	0.0	d
10.430	44.07765	60.29059	0.00000	0.0	0.0	0.0	0.0	d
10.778	44.07324	59.94294	0.00000	0.0	0.0	0.0	0.0	d
11.126	44.06882	59.59529	0.00000	0.0	0.0	0.0	0.0	d
11.473	44.06441	59.24765	0.00000	0.0	0.0	0.0	0.0	d
11.821	44.06000	58.90000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: f-50 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	44.10000	51.60000	0.00000	0.0	0.0	0.0	0.0	d
0.99267	44.10400	50.60733	0.00000	0.0	0.0	0.0	0.0	d
1.9853	44.10800	49.61467	0.00000	0.0	0.0	0.0	0.0	d
2.9780	44.11200	48.62200	0.00000	0.0	0.0	0.0	0.0	d
3.9707	44.11600	47.62933	0.00000	0.0	0.0	0.0	0.0	d
4.9634	44.12000	46.63667	0.00000	0.0	0.0	0.0	0.0	d
5.9560	44.12400	45.64400	0.00000	0.0	0.0	0.0	0.0	d
6.9487	44.12800	44.65133	0.00000	0.0	0.0	0.0	0.0	d
7.9414	44.13200	43.65867	0.00000	0.0	0.0	0.0	0.0	d
8.9341	44.13600	42.66600	0.00000	0.0	0.0	0.0	0.0	d
9.9267	44.14000	41.67333	0.00000	0.0	0.0	0.0	0.0	d
10.919	44.14400	40.68067	0.00000	0.0	0.0	0.0	0.0	d
11.912	44.14800	39.68800	0.00000	0.0	0.0	0.0	0.0	d
12.905	44.15200	38.69533	0.00000	0.0	0.0	0.0	0.0	d
13.897	44.15600	37.70267	0.00000	0.0	0.0	0.0	0.0	d

	[m]	[m]	[m]	[m]	[mm]	[mm]	Line [mm]	to Line [mm]	
	0.0	56.50000	50.10000	0.00000	0.0	0.0	0.0	0.0	0.0 d
	1.1950	56.50000	48.90500	0.00000	0.0	0.0	0.0	0.0	0.0 d
	2.3900	56.50000	47.71000	0.00000	0.0	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: 36-48 | Sub-structure:

Dist.	Coordinates			Displacements		Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	x	y	z	x	y			
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
	0.0	56.50000	47.71000	0.00000	0.0	0.0	0.0	0.0 d
	1.1506	55.73000	46.85500	0.00000	0.0	0.0	0.0	0.0 d
	2.3012	54.96000	46.00000	0.00000	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: 48-47 | Sub-structure:

Dist.	Coordinates			Displacements		Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	x	y	z	x	y			
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
	0.0	54.96000	46.00000	0.00000	0.0	0.0	0.0	0.0 d
	1.1700	54.96000	44.83000	0.00000	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: 47-51 | Sub-structure:

Dist.	Coordinates			Displacements		Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	x	y	z	x	y			
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
	0.0	54.96000	44.83000	0.00000	0.0	0.0	0.0	0.0 d
	1.0750	53.88500	44.83000	0.00000	0.0	0.0	0.0	0.0 d
	2.1500	52.81000	44.83000	0.00000	0.0	0.0	0.0	0.0 d
	3.2250	51.73500	44.83000	0.00000	0.0	0.0	0.0	0.0 d
	4.3000	50.66000	44.83000	0.00000	0.0	0.0	0.0	0.0 d
	5.3750	49.58500	44.83000	0.00000	0.0	0.0	0.0	0.0 d
	6.4500	48.51000	44.83000	0.00000	0.0	0.0	0.0	0.0 d
	7.5250	47.43500	44.83000	0.00000	0.0	0.0	0.0	0.0 d
	8.6000	46.36000	44.83000	0.00000	0.0	0.0	0.0	0.0 d
	9.6750	45.28500	44.83000	0.00000	0.0	0.0	0.0	0.0 d
	10.750	44.21000	44.83000	0.00000	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: 50-46 | Sub-structure:

Dist.	Coordinates			Displacements		Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	x	y	z	x	y			
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
	0.0	44.16000	36.71000	0.00000	0.0	0.0	0.0	0.0 d
	1.0800	45.24000	36.71000	0.00000	0.0	0.0	0.0	0.0 d
	2.1600	46.32000	36.71000	0.00000	0.0	0.0	0.0	0.0 d
	3.2400	47.40000	36.71000	0.00000	0.0	0.0	0.0	0.0 d
	4.3200	48.48000	36.71000	0.00000	0.0	0.0	0.0	0.0 d
	5.4000	49.56000	36.71000	0.00000	0.0	0.0	0.0	0.0 d
	6.4800	50.64000	36.71000	0.00000	0.0	0.0	0.0	0.0 d
	7.5600	51.72000	36.71000	0.00000	0.0	0.0	0.0	0.0 d
	8.6400	52.80000	36.71000	0.00000	0.0	0.0	0.0	0.0 d
	9.7200	53.88000	36.71000	0.00000	0.0	0.0	0.0	0.0 d
	10.800	54.96000	36.71000	0.00000	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: 46-47 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
	0.0	54.96000	36.71000	0.00000	0.0	0.0	0.0	0.0 d
1.0150	54.96000	37.72500	0.00000	0.0	0.0	0.0	0.0	0.0 d
2.0300	54.96000	38.74000	0.00000	0.0	0.0	0.0	0.0	0.0 d
3.0450	54.96000	39.75500	0.00000	0.0	0.0	0.0	0.0	0.0 d
4.0600	54.96000	40.77000	0.00000	0.0	0.0	0.0	0.0	0.0 d
5.0750	54.96000	41.78500	0.00000	0.0	0.0	0.0	0.0	0.0 d
6.0900	54.96000	42.80000	0.00000	0.0	0.0	0.0	0.0	0.0 d
7.1050	54.96000	43.81500	0.00000	0.0	0.0	0.0	0.0	0.0 d
8.1200	54.96000	44.83000	0.00000	0.0	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: 24-25 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
	0.0	78.82000	63.10000	0.00000	0.0	0.0	0.0	0.0 d
1.0289	79.84889	63.09667	0.00000	0.0	0.0	0.0	0.0	0.0 d
2.0578	80.87778	63.09333	0.00000	0.0	0.0	0.0	0.0	0.0 d
3.0867	81.90667	63.09000	0.00000	0.0	0.0	0.0	0.0	0.0 d
4.1156	82.93556	63.08667	0.00000	0.0	0.0	0.0	0.0	0.0 d
5.1445	83.96444	63.08333	0.00000	0.0	0.0	0.0	0.0	0.0 d
6.1734	84.99333	63.08000	0.00000	0.0	0.0	0.0	0.0	0.0 d
7.2023	86.02222	63.07667	0.00000	0.0	0.0	0.0	0.0	0.0 d
8.2312	87.05111	63.07333	0.00000	0.0	0.0	0.0	0.0	0.0 d
9.2600	88.08000	63.07000	0.00000	0.0	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: 25-26 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
	0.0	88.08000	63.07000	0.00000	0.0	0.0	0.0	0.0 d
1.0641	88.06400	62.00600	0.00000	0.0	0.0	0.0	0.0	0.0 d
2.1282	88.04800	60.94200	0.00000	0.0	0.0	0.0	0.0	0.0 d
3.1924	88.03200	59.87800	0.00000	0.0	0.0	0.0	0.0	0.0 d
4.2565	88.01600	58.81400	0.00000	0.0	0.0	0.0	0.0	0.0 d
5.3206	88.00000	57.75000	0.00000	0.0	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: 26-27 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
	0.0	88.00000	57.75000	0.00000	0.0	0.0	0.0	0.0 d
1.0246	86.97545	57.76364	0.00000	0.0	0.0	0.0	0.0	0.0 d
2.0493	85.95091	57.77727	0.00000	0.0	0.0	0.0	0.0	0.0 d
3.0739	84.92636	57.79091	0.00000	0.0	0.0	0.0	0.0	0.0 d
4.0985	83.90182	57.80455	0.00000	0.0	0.0	0.0	0.0	0.0 d
5.1232	82.87727	57.81818	0.00000	0.0	0.0	0.0	0.0	0.0 d
6.1478	81.85273	57.83182	0.00000	0.0	0.0	0.0	0.0	0.0 d
7.1725	80.82818	57.84545	0.00000	0.0	0.0	0.0	0.0	0.0 d
8.1971	79.80364	57.85909	0.00000	0.0	0.0	0.0	0.0	0.0 d

Dist.	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
9.2217	78.77909	57.87273	0.00000	0.0	0.0	0.0	0.0	d
10.246	77.75455	57.88636	0.00000	0.0	0.0	0.0	0.0	d
11.271	76.73000	57.90000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 27-28 | Sub-structure:

Dist.	Coordinates					Displacements		
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	76.73000	57.90000	0.00000	0.0	0.0	0.0	0.0	d
1.0567	76.72333	58.95667	0.00000	0.0	0.0	0.0	0.0	d
2.1134	76.71667	60.01333	0.00000	0.0	0.0	0.0	0.0	d
3.1701	76.71000	61.07000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 28-29 | Sub-structure:

Dist.	Coordinates					Displacements		
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	76.71000	61.07000	0.00000	0.0	0.0	0.0	0.0	d
1.4640	77.76500	62.08500	0.00000	0.0	0.0	0.0	0.0	d
2.9280	78.82000	63.10000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 27-32 | Sub-structure:

Dist.	Coordinates					Displacements		
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	76.73000	57.90000	0.00000	0.0	0.0	0.0	0.0	d
1.0300	76.73400	56.87000	0.00000	0.0	0.0	0.0	0.0	d
2.0600	76.73800	55.84000	0.00000	0.0	0.0	0.0	0.0	d
3.0900	76.74200	54.81000	0.00000	0.0	0.0	0.0	0.0	d
4.1200	76.74600	53.78000	0.00000	0.0	0.0	0.0	0.0	d
5.1500	76.75000	52.75000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 33-31 | Sub-structure:

Dist.	Coordinates					Displacements		
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	87.93000	52.75000	0.00000	0.0	0.0	0.0	0.0	d
1.0400	86.89000	52.75000	0.00000	0.0	0.0	0.0	0.0	d
2.0800	85.85000	52.75000	0.00000	0.0	0.0	0.0	0.0	d
3.1200	84.81000	52.75000	0.00000	0.0	0.0	0.0	0.0	d
4.1600	83.77000	52.75000	0.00000	0.0	0.0	0.0	0.0	d
5.2000	82.73000	52.75000	0.00000	0.0	0.0	0.0	0.0	d
6.2400	81.69000	52.75000	0.00000	0.0	0.0	0.0	0.0	d
7.2800	80.65000	52.75000	0.00000	0.0	0.0	0.0	0.0	d
8.3200	79.61000	52.75000	0.00000	0.0	0.0	0.0	0.0	d
9.3600	78.57000	52.75000	0.00000	0.0	0.0	0.0	0.0	d
10.4000	77.53000	52.75000	0.00000	0.0	0.0	0.0	0.0	d
11.4400	76.49000	52.75000	0.00000	0.0	0.0	0.0	0.0	d
12.4800	75.45000	52.75000	0.00000	0.0	0.0	0.0	0.0	d
13.5200	74.41000	52.75000	0.00000	0.0	0.0	0.0	0.0	d
14.5600	73.37000	52.75000	0.00000	0.0	0.0	0.0	0.0	d
15.6000	72.33000	52.75000	0.00000	0.0	0.0	0.0	0.0	d
16.6400	71.29000	52.75000	0.00000	0.0	0.0	0.0	0.0	d

17.680 70.25000 52.75000 0.00000 0.0 0.0 0.0 0.0 d
d - Displacements include imported displacements.

Structure: 31-34 | Sub-structure:

Dist.	Coordinates			Displacements			
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	70.25000	52.75000	0.00000	0.0	0.0	0.0	0.0 d
1.1236	70.22667	51.62667	0.00000	0.0	0.0	0.0	0.0 d
2.2472	70.20333	50.50333	0.00000	0.0	0.0	0.0	0.0 d
3.3707	70.18000	49.38000	0.00000	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: 34-35 | Sub-structure:

Dist.	Coordinates			Displacements			
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	70.18000	49.38000	0.00000	0.0	0.0	0.0	0.0 d
1.3300	71.51000	49.37000	0.00000	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: 35-41 | Sub-structure:

Dist.	Coordinates			Displacements			
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	71.51000	49.37000	0.00000	0.0	0.0	0.0	0.0 d
1.2000	71.50000	48.17000	0.00000	0.0	0.0	0.0	0.0 d
2.4001	71.49000	46.97000	0.00000	0.0	0.0	0.0	0.0 d
3.6001	71.48000	45.77000	0.00000	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: 41-40 | Sub-structure:

Dist.	Coordinates			Displacements			
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	71.48000	45.77000	0.00000	0.0	0.0	0.0	0.0 d
1.0175	70.46250	45.77000	0.00000	0.0	0.0	0.0	0.0 d
2.0350	69.44500	45.77000	0.00000	0.0	0.0	0.0	0.0 d
3.0525	68.42750	45.77000	0.00000	0.0	0.0	0.0	0.0 d
4.0700	67.41000	45.77000	0.00000	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: 40-39 | Sub-structure:

Dist.	Coordinates			Displacements			
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	67.41000	45.77000	0.00000	0.0	0.0	0.0	0.0 d
1.3000	67.40333	44.47000	0.00000	0.0	0.0	0.0	0.0 d
2.6000	67.39667	43.17000	0.00000	0.0	0.0	0.0	0.0 d
3.9001	67.39000	41.87000	0.00000	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: 39-38 | Sub-structure:

Dist.	Coordinates			Displacements		Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	x	y	z	x	y			
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	67.39000	41.87000	0.00000	0.0	0.0	0.0	0.0	d
1.0305	68.42050	41.86150	0.00000	0.0	0.0	0.0	0.0	d
2.0611	69.45100	41.85300	0.00000	0.0	0.0	0.0	0.0	d
3.0916	70.48150	41.84450	0.00000	0.0	0.0	0.0	0.0	d
4.1221	71.51200	41.83600	0.00000	0.0	0.0	0.0	0.0	d
5.1527	72.54250	41.82750	0.00000	0.0	0.0	0.0	0.0	d
6.1832	73.57300	41.81900	0.00000	0.0	0.0	0.0	0.0	d
7.2137	74.60350	41.81050	0.00000	0.0	0.0	0.0	0.0	d
8.2443	75.63400	41.80200	0.00000	0.0	0.0	0.0	0.0	d
9.2748	76.66450	41.79350	0.00000	0.0	0.0	0.0	0.0	d
10.305	77.69500	41.78500	0.00000	0.0	0.0	0.0	0.0	d
11.336	78.72550	41.77650	0.00000	0.0	0.0	0.0	0.0	d
12.366	79.75600	41.76800	0.00000	0.0	0.0	0.0	0.0	d
13.397	80.78650	41.75950	0.00000	0.0	0.0	0.0	0.0	d
14.427	81.81700	41.75100	0.00000	0.0	0.0	0.0	0.0	d
15.458	82.84750	41.74250	0.00000	0.0	0.0	0.0	0.0	d
16.489	83.87800	41.73400	0.00000	0.0	0.0	0.0	0.0	d
17.519	84.90850	41.72550	0.00000	0.0	0.0	0.0	0.0	d
18.550	85.93900	41.71700	0.00000	0.0	0.0	0.0	0.0	d
19.580	86.96950	41.70850	0.00000	0.0	0.0	0.0	0.0	d
20.611	88.00000	41.70000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 38-25 | Sub-structure:

Dist.	Coordinates			Displacements		Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	x	y	z	x	y			
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	88.00000	41.70000	0.00000	0.0	0.0	0.0	0.0	d
1.0176	88.00381	42.71762	0.00000	0.0	0.0	0.0	0.0	d
2.0353	88.00762	43.73524	0.00000	0.0	0.0	0.0	0.0	d
3.0529	88.01143	44.75286	0.00000	0.0	0.0	0.0	0.0	d
4.0705	88.01524	45.77048	0.00000	0.0	0.0	0.0	0.0	d
5.0881	88.01905	46.78810	0.00000	0.0	0.0	0.0	0.0	d
6.1058	88.02286	47.80571	0.00000	0.0	0.0	0.0	0.0	d
7.1234	88.02667	48.82333	0.00000	0.0	0.0	0.0	0.0	d
8.1410	88.03048	49.84095	0.00000	0.0	0.0	0.0	0.0	d
9.1586	88.03429	50.85857	0.00000	0.0	0.0	0.0	0.0	d
10.176	88.03810	51.87619	0.00000	0.0	0.0	0.0	0.0	d
11.194	88.04190	52.89381	0.00000	0.0	0.0	0.0	0.0	d
12.212	88.04571	53.91143	0.00000	0.0	0.0	0.0	0.0	d
13.229	88.04952	54.92905	0.00000	0.0	0.0	0.0	0.0	d
14.247	88.05333	55.94667	0.00000	0.0	0.0	0.0	0.0	d
15.264	88.05714	56.96429	0.00000	0.0	0.0	0.0	0.0	d
16.282	88.06095	57.98190	0.00000	0.0	0.0	0.0	0.0	d
17.300	88.06476	58.99952	0.00000	0.0	0.0	0.0	0.0	d
18.317	88.06857	60.01714	0.00000	0.0	0.0	0.0	0.0	d
19.335	88.07238	61.03476	0.00000	0.0	0.0	0.0	0.0	d
20.353	88.07619	62.05238	0.00000	0.0	0.0	0.0	0.0	d
21.370	88.08000	63.07000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 20-22 | Sub-structure:

Dist.	Coordinates			Displacements		Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	x	y	z	x	y			
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	55.96000	70.70000	0.00000	0.0	0.0	0.0	0.0	d
1.0170	56.97700	70.69900	0.00000	0.0	0.0	0.0	0.0	d
2.0340	57.99400	70.69800	0.00000	0.0	0.0	0.0	0.0	d

3.0510	59.01100	70.69700	0.00000	0.0	0.0	0.0	0.0	d
4.0680	60.02800	70.69600	0.00000	0.0	0.0	0.0	0.0	d
5.0850	61.04500	70.69500	0.00000	0.0	0.0	0.0	0.0	d
6.1020	62.06200	70.69400	0.00000	0.0	0.0	0.0	0.0	d
7.1190	63.07900	70.69300	0.00000	0.0	0.0	0.0	0.0	d
8.1360	64.09600	70.69200	0.00000	0.0	0.0	0.0	0.0	d
9.1530	65.11300	70.69100	0.00000	0.0	0.0	0.0	0.0	d
10.170	66.13000	70.69000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 22-b | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	66.13000	70.69000	0.00000	0.0	0.0	0.0	0.0	d
0.69360	66.14000	69.99647	0.00000	0.0	0.0	0.0	0.0	d
1.3872	66.15000	69.30294	0.00000	0.0	0.0	0.0	0.0	d
2.0808	66.16000	68.60941	0.00000	0.0	0.0	0.0	0.0	d
2.7744	66.17000	67.91588	0.00000	0.0	0.0	0.0	0.0	d
3.4680	66.18000	67.22235	0.00000	0.0	0.0	0.0	0.0	d
4.1616	66.19000	66.52882	0.00000	0.0	0.0	0.0	0.0	d
4.8552	66.20000	65.83529	0.00000	0.0	0.0	0.0	0.0	d
5.5488	66.21000	65.14176	0.00000	0.0	0.0	0.0	0.0	d
6.2424	66.22000	64.44824	0.00000	0.0	0.0	0.0	0.0	d
6.9360	66.23000	63.75471	0.00000	0.0	0.0	0.0	0.0	d
7.6296	66.24000	63.06118	0.00000	0.0	0.0	0.0	0.0	d
8.3232	66.25000	62.36765	0.00000	0.0	0.0	0.0	0.0	d
9.0168	66.26000	61.67412	0.00000	0.0	0.0	0.0	0.0	d
9.7104	66.27000	60.98059	0.00000	0.0	0.0	0.0	0.0	d
10.404	66.28000	60.28706	0.00000	0.0	0.0	0.0	0.0	d
11.098	66.29000	59.59353	0.00000	0.0	0.0	0.0	0.0	d
11.791	66.30000	58.90000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: e-45 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	64.74000	51.60000	0.00000	0.0	0.0	0.0	0.0	d
0.98415	64.72267	50.61600	0.00000	0.0	0.0	0.0	0.0	d
1.9683	64.70533	49.63200	0.00000	0.0	0.0	0.0	0.0	d
2.9525	64.68800	48.64800	0.00000	0.0	0.0	0.0	0.0	d
3.9366	64.67067	47.66400	0.00000	0.0	0.0	0.0	0.0	d
4.9208	64.65333	46.68000	0.00000	0.0	0.0	0.0	0.0	d
5.9049	64.63600	45.69600	0.00000	0.0	0.0	0.0	0.0	d
6.8891	64.61867	44.71200	0.00000	0.0	0.0	0.0	0.0	d
7.8732	64.60133	43.72800	0.00000	0.0	0.0	0.0	0.0	d
8.8574	64.58400	42.74400	0.00000	0.0	0.0	0.0	0.0	d
9.8415	64.56667	41.76000	0.00000	0.0	0.0	0.0	0.0	d
10.826	64.54933	40.77600	0.00000	0.0	0.0	0.0	0.0	d
11.810	64.53200	39.79200	0.00000	0.0	0.0	0.0	0.0	d
12.794	64.51467	38.80800	0.00000	0.0	0.0	0.0	0.0	d
13.778	64.49733	37.82400	0.00000	0.0	0.0	0.0	0.0	d
14.762	64.48000	36.84000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 18-31 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	59.17000	64.78000	0.00000	0.0	0.0	0.0	0.0	d
1.1384	60.30833	64.77333	0.00000	0.0	0.0	0.0	0.0	d

2.2767	61.44667	64.76667	0.00000	0.0	0.0	0.0	0.0	d
3.4151	62.58500	64.76000	0.00000	0.0	0.0	0.0	0.0	d
4.5534	63.72333	64.75333	0.00000	0.0	0.0	0.0	0.0	d
5.6918	64.86167	64.74667	0.00000	0.0	0.0	0.0	0.0	d
6.8301	66.00000	64.74000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 23-24 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	66.00000	63.14000	0.00000	0.0	0.0	0.0	0.0	d
1.0683	67.06833	63.13667	0.00000	0.0	0.0	0.0	0.0	d
2.1367	68.13667	63.13333	0.00000	0.0	0.0	0.0	0.0	d
3.2050	69.20500	63.13000	0.00000	0.0	0.0	0.0	0.0	d
4.2734	70.27333	63.12667	0.00000	0.0	0.0	0.0	0.0	d
5.3417	71.34167	63.12333	0.00000	0.0	0.0	0.0	0.0	d
6.4100	72.41000	63.12000	0.00000	0.0	0.0	0.0	0.0	d
7.4784	73.47833	63.11667	0.00000	0.0	0.0	0.0	0.0	d
8.5467	74.54667	63.11333	0.00000	0.0	0.0	0.0	0.0	d
9.6150	75.61500	63.11000	0.00000	0.0	0.0	0.0	0.0	d
10.683	76.68333	63.10667	0.00000	0.0	0.0	0.0	0.0	d
11.752	77.75167	63.10333	0.00000	0.0	0.0	0.0	0.0	d
12.820	78.82000	63.10000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: b-27 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	66.10000	58.46000	0.00000	0.0	0.0	0.0	0.0	d
1.0645	67.16300	58.40400	0.00000	0.0	0.0	0.0	0.0	d
2.1289	68.22600	58.34800	0.00000	0.0	0.0	0.0	0.0	d
3.1934	69.28900	58.29200	0.00000	0.0	0.0	0.0	0.0	d
4.2579	70.35200	58.23600	0.00000	0.0	0.0	0.0	0.0	d
5.3224	71.41500	58.18000	0.00000	0.0	0.0	0.0	0.0	d
6.3868	72.47800	58.12400	0.00000	0.0	0.0	0.0	0.0	d
7.4513	73.54100	58.06800	0.00000	0.0	0.0	0.0	0.0	d
8.5158	74.60400	58.01200	0.00000	0.0	0.0	0.0	0.0	d
9.5803	75.66700	57.95600	0.00000	0.0	0.0	0.0	0.0	d
10.645	76.73000	57.90000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 42-37 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	64.54000	46.73000	0.00000	0.0	0.0	0.0	0.0	d
1.0183	65.55826	46.71783	0.00000	0.0	0.0	0.0	0.0	d
2.0367	66.57652	46.70565	0.00000	0.0	0.0	0.0	0.0	d
3.0550	67.59478	46.69348	0.00000	0.0	0.0	0.0	0.0	d
4.0733	68.61304	46.68130	0.00000	0.0	0.0	0.0	0.0	d
5.0917	69.63130	46.66913	0.00000	0.0	0.0	0.0	0.0	d
6.1100	70.64957	46.65696	0.00000	0.0	0.0	0.0	0.0	d
7.1283	71.66783	46.64478	0.00000	0.0	0.0	0.0	0.0	d
8.1467	72.68609	46.63261	0.00000	0.0	0.0	0.0	0.0	d
9.1650	73.70435	46.62043	0.00000	0.0	0.0	0.0	0.0	d
10.183	74.72261	46.60826	0.00000	0.0	0.0	0.0	0.0	d
11.202	75.74087	46.59609	0.00000	0.0	0.0	0.0	0.0	d
12.220	76.75913	46.58391	0.00000	0.0	0.0	0.0	0.0	d
13.238	77.77739	46.57174	0.00000	0.0	0.0	0.0	0.0	d
14.257	78.79565	46.55957	0.00000	0.0	0.0	0.0	0.0	d

15.275	79.81391	46.54739	0.00000	0.0	0.0	0.0	0.0	d
16.293	80.83217	46.53522	0.00000	0.0	0.0	0.0	0.0	d
17.312	81.85043	46.52304	0.00000	0.0	0.0	0.0	0.0	d
18.330	82.86870	46.51087	0.00000	0.0	0.0	0.0	0.0	d
19.348	83.88696	46.49870	0.00000	0.0	0.0	0.0	0.0	d
20.367	84.90522	46.48652	0.00000	0.0	0.0	0.0	0.0	d
21.385	85.92348	46.47435	0.00000	0.0	0.0	0.0	0.0	d
22.403	86.94174	46.46217	0.00000	0.0	0.0	0.0	0.0	d
23.422	87.96000	46.45000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 47-43 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	54.96000	44.83000	0.00000	0.0	0.0	0.0	0.0	d
1.0600	56.02000	44.83000	0.00000	0.0	0.0	0.0	0.0	d
2.1200	57.08000	44.83000	0.00000	0.0	0.0	0.0	0.0	d
3.1800	58.14000	44.83000	0.00000	0.0	0.0	0.0	0.0	d
4.2400	59.20000	44.83000	0.00000	0.0	0.0	0.0	0.0	d
5.3000	60.26000	44.83000	0.00000	0.0	0.0	0.0	0.0	d
6.3600	61.32000	44.83000	0.00000	0.0	0.0	0.0	0.0	d
7.4200	62.38000	44.83000	0.00000	0.0	0.0	0.0	0.0	d
8.4800	63.44000	44.83000	0.00000	0.0	0.0	0.0	0.0	d
9.5400	64.50000	44.83000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 44-39 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	64.44000	41.91000	0.00000	0.0	0.0	0.0	0.0	d
1.4751	65.91500	41.89000	0.00000	0.0	0.0	0.0	0.0	d
2.9503	67.39000	41.87000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 46-45 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	54.96000	36.71000	0.00000	0.0	0.0	0.0	0.0	d
1.0579	56.01778	36.72444	0.00000	0.0	0.0	0.0	0.0	d
2.1158	57.07556	36.73889	0.00000	0.0	0.0	0.0	0.0	d
3.1736	58.13333	36.75333	0.00000	0.0	0.0	0.0	0.0	d
4.2315	59.19111	36.76778	0.00000	0.0	0.0	0.0	0.0	d
5.2894	60.24889	36.78222	0.00000	0.0	0.0	0.0	0.0	d
6.3473	61.30667	36.79667	0.00000	0.0	0.0	0.0	0.0	d
7.4051	62.36444	36.81111	0.00000	0.0	0.0	0.0	0.0	d
8.4630	63.42222	36.82556	0.00000	0.0	0.0	0.0	0.0	d
9.5209	64.48000	36.84000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: a-12 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	44.06000	58.90000	0.00000	0.0	0.0	0.0	0.0	d

1.1151	42.95250	58.77000	0.00000	0.0	0.0	0.0	0.0	d
2.2302	41.84500	58.64000	0.00000	0.0	0.0	0.0	0.0	d
3.3453	40.73750	58.51000	0.00000	0.0	0.0	0.0	0.0	d
4.4604	39.63000	58.38000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 12-11 | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	39.63000	58.38000	0.00000	0.0	0.0	0.0	0.0	d
1.1167	39.63000	57.26333	0.00000	0.0	0.0	0.0	0.0	d
2.2333	39.63000	56.14667	0.00000	0.0	0.0	0.0	0.0	d
3.3500	39.63000	55.03000	0.00000	0.0	0.0	0.0	0.0	d
4.4667	39.63000	53.91333	0.00000	0.0	0.0	0.0	0.0	d
5.5833	39.63000	52.79667	0.00000	0.0	0.0	0.0	0.0	d
6.7000	39.63000	51.68000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: 11-f | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	39.63000	51.68000	0.00000	0.0	0.0	0.0	0.0	d
0.55884	40.18875	51.67000	0.00000	0.0	0.0	0.0	0.0	d
1.1177	40.74750	51.66000	0.00000	0.0	0.0	0.0	0.0	d
1.6765	41.30625	51.65000	0.00000	0.0	0.0	0.0	0.0	d
2.2354	41.86500	51.64000	0.00000	0.0	0.0	0.0	0.0	d
2.7942	42.42375	51.63000	0.00000	0.0	0.0	0.0	0.0	d
3.3530	42.98250	51.62000	0.00000	0.0	0.0	0.0	0.0	d
3.9119	43.54125	51.61000	0.00000	0.0	0.0	0.0	0.0	d
4.4707	44.10000	51.60000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: ag | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	44.06000	58.90000	0.00000	0.0	0.0	0.0	0.0	d
1.0047	45.06364	58.85455	0.00000	0.0	0.0	0.0	0.0	d
2.0093	46.06727	58.80909	0.00000	0.0	0.0	0.0	0.0	d
3.0140	47.07091	58.76364	0.00000	0.0	0.0	0.0	0.0	d
4.0187	48.07455	58.71818	0.00000	0.0	0.0	0.0	0.0	d
5.0233	49.07818	58.67273	0.00000	0.0	0.0	0.0	0.0	d
6.0280	50.08182	58.62727	0.00000	0.0	0.0	0.0	0.0	d
7.0327	51.08545	58.58182	0.00000	0.0	0.0	0.0	0.0	d
8.0373	52.08909	58.53636	0.00000	0.0	0.0	0.0	0.0	d
9.0420	53.09273	58.49091	0.00000	0.0	0.0	0.0	0.0	d
10.047	54.09636	58.44545	0.00000	0.0	0.0	0.0	0.0	d
11.051	55.10000	58.40000	0.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: gb | Sub-structure:

Dist.	Coordinates			Displacements				
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	55.10000	58.40000	0.00000	0.0	0.0	0.0	0.0	d

0.57001	55.67000	58.40300	0.00000	0.0	0.0	0.0	0.0	0.0	d
1.1400	56.24000	58.40600	0.00000	0.0	0.0	0.0	0.0	0.0	d
1.7100	56.81000	58.40900	0.00000	0.0	0.0	0.0	0.0	0.0	d
2.2800	57.38000	58.41200	0.00000	0.0	0.0	0.0	0.0	0.0	d
2.8500	57.95000	58.41500	0.00000	0.0	0.0	0.0	0.0	0.0	d
3.4200	58.52000	58.41800	0.00000	0.0	0.0	0.0	0.0	0.0	d
3.9901	59.09000	58.42100	0.00000	0.0	0.0	0.0	0.0	0.0	d
4.5601	59.66000	58.42400	0.00000	0.0	0.0	0.0	0.0	0.0	d
5.1301	60.23000	58.42700	0.00000	0.0	0.0	0.0	0.0	0.0	d
5.7001	60.80000	58.43000	0.00000	0.0	0.0	0.0	0.0	0.0	d
6.2701	61.37000	58.43300	0.00000	0.0	0.0	0.0	0.0	0.0	d
6.8401	61.94000	58.43600	0.00000	0.0	0.0	0.0	0.0	0.0	d
7.4101	62.51000	58.43900	0.00000	0.0	0.0	0.0	0.0	0.0	d
7.9801	63.08000	58.44200	0.00000	0.0	0.0	0.0	0.0	0.0	d
8.5501	63.65000	58.44500	0.00000	0.0	0.0	0.0	0.0	0.0	d
9.1201	64.22000	58.44800	0.00000	0.0	0.0	0.0	0.0	0.0	d
9.6901	64.79000	58.45100	0.00000	0.0	0.0	0.0	0.0	0.0	d
10.260	65.36000	58.45400	0.00000	0.0	0.0	0.0	0.0	0.0	d
10.830	65.93000	58.45700	0.00000	0.0	0.0	0.0	0.0	0.0	d
11.400	66.50000	58.46000	0.00000	0.0	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: bc | Sub-structure:

Dist.	Coordinates			Displacements					
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line		
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]		
0.0	66.50000	58.46000	0.00000	0.0	0.0	0.0	0.0	0.0	d
0.27800	66.50000	58.18200	0.00000	0.0	0.0	0.0	0.0	0.0	d
0.55600	66.50000	57.90400	0.00000	0.0	0.0	0.0	0.0	0.0	d
0.83400	66.50000	57.62600	0.00000	0.0	0.0	0.0	0.0	0.0	d
1.1120	66.50000	57.34800	0.00000	0.0	0.0	0.0	0.0	0.0	d
1.3900	66.50000	57.07000	0.00000	0.0	0.0	0.0	0.0	0.0	d
1.6680	66.50000	56.79200	0.00000	0.0	0.0	0.0	0.0	0.0	d
1.9460	66.50000	56.51400	0.00000	0.0	0.0	0.0	0.0	0.0	d
2.2240	66.50000	56.23600	0.00000	0.0	0.0	0.0	0.0	0.0	d
2.5020	66.50000	55.95800	0.00000	0.0	0.0	0.0	0.0	0.0	d
2.7800	66.50000	55.68000	0.00000	0.0	0.0	0.0	0.0	0.0	d
3.0580	66.50000	55.40200	0.00000	0.0	0.0	0.0	0.0	0.0	d
3.3360	66.50000	55.12400	0.00000	0.0	0.0	0.0	0.0	0.0	d
3.6140	66.50000	54.84600	0.00000	0.0	0.0	0.0	0.0	0.0	d
3.8920	66.50000	54.56800	0.00000	0.0	0.0	0.0	0.0	0.0	d
4.1700	66.50000	54.29000	0.00000	0.0	0.0	0.0	0.0	0.0	d
4.4480	66.50000	54.01200	0.00000	0.0	0.0	0.0	0.0	0.0	d
4.7260	66.50000	53.73400	0.00000	0.0	0.0	0.0	0.0	0.0	d
5.0040	66.50000	53.45600	0.00000	0.0	0.0	0.0	0.0	0.0	d
5.2820	66.50000	53.17800	0.00000	0.0	0.0	0.0	0.0	0.0	d
5.5600	66.50000	52.90000	0.00000	0.0	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: cd | Sub-structure:

Dist.	Coordinates			Displacements					
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line		
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]		
0.0	66.50000	52.90000	0.00000	0.0	0.0	0.0	0.0	0.0	d
1.7493	65.00000	52.00000	0.00000	0.0	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: eh | Sub-structure:

Dist.	Coordinates			Displacements					
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line		
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]		
0.0	64.74000	51.60000	0.00000	0.0	0.0	0.0	0.0	0.0	d

1.0844	63.65556	51.60000	0.00000	0.0	0.0	0.0	0.0	0.0	d
2.1689	62.57111	51.60000	0.00000	0.0	0.0	0.0	0.0	0.0	d
3.2533	61.48667	51.60000	0.00000	0.0	0.0	0.0	0.0	0.0	d
4.3378	60.40222	51.60000	0.00000	0.0	0.0	0.0	0.0	0.0	d
5.4222	59.31778	51.60000	0.00000	0.0	0.0	0.0	0.0	0.0	d
6.5067	58.23333	51.60000	0.00000	0.0	0.0	0.0	0.0	0.0	d
7.5911	57.14889	51.60000	0.00000	0.0	0.0	0.0	0.0	0.0	d
8.6756	56.06444	51.60000	0.00000	0.0	0.0	0.0	0.0	0.0	d
9.7600	54.98000	51.60000	0.00000	0.0	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: hf | Sub-structure:

Dist.	Coordinates			Displacements					
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line		
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]		
0.0	54.98000	51.60000	0.00000	0.0	0.0	0.0	0.0	0.0	d
1.0880	53.89200	51.60000	0.00000	0.0	0.0	0.0	0.0	0.0	d
2.1760	52.80400	51.60000	0.00000	0.0	0.0	0.0	0.0	0.0	d
3.2640	51.71600	51.60000	0.00000	0.0	0.0	0.0	0.0	0.0	d
4.3520	50.62800	51.60000	0.00000	0.0	0.0	0.0	0.0	0.0	d
5.4400	49.54000	51.60000	0.00000	0.0	0.0	0.0	0.0	0.0	d
6.5280	48.45200	51.60000	0.00000	0.0	0.0	0.0	0.0	0.0	d
7.6160	47.36400	51.60000	0.00000	0.0	0.0	0.0	0.0	0.0	d
8.7040	46.27600	51.60000	0.00000	0.0	0.0	0.0	0.0	0.0	d
9.7920	45.18800	51.60000	0.00000	0.0	0.0	0.0	0.0	0.0	d
10.880	44.10000	51.60000	0.00000	0.0	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: de | Sub-structure:

Dist.	Coordinates			Displacements					
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line		
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]		
0.0	65.00000	52.00000	0.00000	0.0	0.0	0.0	0.0	0.0	d
0.11927	64.93500	51.90000	0.00000	0.0	0.0	0.0	0.0	0.0	d
0.23854	64.87000	51.80000	0.00000	0.0	0.0	0.0	0.0	0.0	d
0.35781	64.80500	51.70000	0.00000	0.0	0.0	0.0	0.0	0.0	d
0.47707	64.74000	51.60000	0.00000	0.0	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Specific Building Damage Results - Vertical Displacements

Structure: 21-20 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	55.96000	70.70000	0.00000	-0.93103	d
1.0682	54.89182	70.70182	0.00000	-0.92150	d
2.1364	53.82364	70.70364	0.00000	-0.90826	d
3.2046	52.75545	70.70545	0.00000	-0.89191	d
4.2727	51.68727	70.70727	0.00000	-0.87297	d
5.3409	50.61909	70.70909	0.00000	-0.85186	d
6.4091	49.55091	70.71091	0.00000	-0.82888	d
7.4773	48.48273	70.71273	0.00000	-0.80419	d
8.5455	47.41455	70.71455	0.00000	-0.77788	d
9.6137	46.34636	70.71636	0.00000	-0.74995	d
10.682	45.27818	70.71818	0.00000	-0.72036	d
11.750	44.21000	70.72000	0.00000	-0.68909	d

d - Displacements include imported displacements.

Structure: 19-20 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	59.14000	66.79000	0.00000	-1.7390 d
1.0080	58.50400	67.57200	0.00000	-1.5266 d
2.0160	57.86800	68.35400	0.00000	-1.3443 d
3.0239	57.23200	69.13600	0.00000	-1.1868 d
4.0319	56.59600	69.91800	0.00000	-1.0502 d
5.0399	55.96000	70.70000	0.00000	-0.93103 d

d - Displacements include imported displacements.

Structure: 19-18 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	59.14000	66.79000	0.00000	-1.7390 d
1.0051	59.15500	65.78500	0.00000	-2.0731 d
2.0102	59.17000	64.78000	0.00000	-2.4923 d

d - Displacements include imported displacements.

Structure: 18-13 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	59.17000	64.78000	0.00000	-2.4923 d
1.0686	58.10143	64.78143	0.00000	-2.4733 d
2.1371	57.03286	64.78286	0.00000	-2.4342 d
3.2057	55.96429	64.78429	0.00000	-2.3803 d
4.2743	54.89571	64.78571	0.00000	-2.3167 d
5.3429	53.82714	64.78714	0.00000	-2.2481 d
6.4114	52.75857	64.78857	0.00000	-2.1783 d
7.4800	51.69000	64.79000	0.00000	-2.1099 d
8.5486	50.62143	64.79143	0.00000	-2.0445 d
9.6172	49.55286	64.79286	0.00000	-1.9824 d
10.686	48.48429	64.79429	0.00000	-1.9230 d
11.754	47.41571	64.79571	0.00000	-1.8649 d
12.823	46.34714	64.79714	0.00000	-1.8057 d
13.891	45.27857	64.79857	0.00000	-1.7427 d
14.960	44.21000	64.80000	0.00000	-1.6727 d

d - Displacements include imported displacements.

Structure: 21-a | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	44.21000	70.72000	0.00000	-0.68909 d
0.34768	44.20559	70.37235	0.00000	-0.72277 d
0.69535	44.20118	70.02471	0.00000	-0.75837 d
1.0430	44.19676	69.67706	0.00000	-0.79602 d
1.3907	44.19235	69.32941	0.00000	-0.83589 d
1.7384	44.18794	68.98176	0.00000	-0.87813 d
2.0861	44.18353	68.63412	0.00000	-0.92294 d
2.4337	44.17912	68.28647	0.00000	-0.97052 d
2.7814	44.17471	67.93882	0.00000	-1.0211 d
3.1291	44.17029	67.59118	0.00000	-1.0749 d
3.4768	44.16588	67.24353	0.00000	-1.1323 d
3.8244	44.16147	66.89588	0.00000	-1.1935 d
4.1721	44.15706	66.54824	0.00000	-1.2590 d
4.5198	44.15265	66.20059	0.00000	-1.3290 d
4.8675	44.14824	65.85294	0.00000	-1.4040 d
5.2151	44.14382	65.50529	0.00000	-1.4846 d
5.5628	44.13941	65.15765	0.00000	-1.5713 d

5.9105	44.13500	64.81000	0.00000	-1.6647	d
6.2582	44.13059	64.46235	0.00000	-1.7656	d
6.6058	44.12618	64.11471	0.00000	-1.8748	d
6.9535	44.12176	63.76706	0.00000	-1.9932	d
7.3012	44.11735	63.41941	0.00000	-2.1220	d
7.6489	44.11294	63.07176	0.00000	-2.2624	d
7.9965	44.10853	62.72412	0.00000	-2.4161	d
8.3442	44.10412	62.37647	0.00000	-2.5847	d
8.6919	44.09971	62.02882	0.00000	-2.7706	d
9.0396	44.09529	61.68118	0.00000	-2.9765	d
9.3872	44.09088	61.33353	0.00000	-3.2059	d
9.7349	44.08647	60.98588	0.00000	-3.4635	d
10.083	44.08206	60.63824	0.00000	-3.7560	d
10.430	44.07765	60.29059	0.00000	-4.0931	d
10.778	44.07324	59.94294	0.00000	-4.4899	d
11.126	44.06882	59.59529	0.00000	-4.9721	d
11.473	44.06441	59.24765	0.00000	-5.5864	d
11.821	44.06000	58.90000	0.00000	-6.4319	d

d - Displacements include imported displacements.

Structure: f-50 | Sub-structure:

Dist.	Coordinates			Displacements	
	x	y	z	z	
[m]	[m]	[m]	[m]	[mm]	
Vertical Offset 1					
0.0	44.10000	51.60000	0.00000	-8.4392	d
0.99267	44.10400	50.60733	0.00000	-5.2278	d
1.9853	44.10800	49.61467	0.00000	-3.9498	d
2.9780	44.11200	48.62200	0.00000	-3.1414	d
3.9707	44.11600	47.62933	0.00000	-2.5605	d
4.9634	44.12000	46.63667	0.00000	-2.1205	d
5.9560	44.12400	45.64400	0.00000	-1.7774	d
6.9487	44.12800	44.65133	0.00000	-1.5041	d
7.9414	44.13200	43.65867	0.00000	-1.2828	d
8.9341	44.13600	42.66600	0.00000	-1.1010	d
9.9267	44.14000	41.67333	0.00000	-0.95004	d
10.919	44.14400	40.68067	0.00000	-0.82331	d
11.912	44.14800	39.68800	0.00000	-0.71604	d
12.905	44.15200	38.69533	0.00000	-0.62459	d
13.897	44.15600	37.70267	0.00000	-0.54616	d
14.890	44.16000	36.71000	0.00000	-0.47854	d

d - Displacements include imported displacements.

Structure: 14-15 | Sub-structure:

Dist.	Coordinates			Displacements	
	x	y	z	z	
[m]	[m]	[m]	[m]	[mm]	
Vertical Offset 1					
0.0	55.00000	64.76000	0.00000	-2.3333	d
1.0700	55.00000	63.69000	0.00000	-2.8097	d
2.1400	55.00000	62.62000	0.00000	-3.4136	d

d - Displacements include imported displacements.

Structure: 15-16 | Sub-structure:

Dist.	Coordinates			Displacements	
	x	y	z	z	
[m]	[m]	[m]	[m]	[mm]	
Vertical Offset 1					
0.0	55.00000	62.62000	0.00000	-3.4136	d
1.6907	56.23000	61.46000	0.00000	-4.5196	d

d - Displacements include imported displacements.

Structure: 16-17 | Sub-structure:

Dist.	Coordinates			Displacements	
	x	y	z	z	
[m]	[m]	[m]	[m]	[mm]	

Vertical Offset 1

0.0 56.23000 61.46000 0.00000 -4.5196 d
1.9000 56.22000 59.56000 0.00000 -7.1755 d
d - Displacements include imported displacements.

Structure: 17-g | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0 56.22000 59.56000 0.00000 -7.1755 d
1.6125 55.10000 58.40000 0.00000 -10.411 d
d - Displacements include imported displacements.

Structure: h-49 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0 54.98000 51.60000 0.00000 -10.057 d
1.0678 55.74000 50.85000 0.00000 -7.7251 d
2.1355 56.50000 50.10000 0.00000 -6.3921 d
d - Displacements include imported displacements.

Structure: 49-36 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0 56.50000 50.10000 0.00000 -6.3921 d
1.1950 56.50000 48.90500 0.00000 -4.7454 d
2.3900 56.50000 47.71000 0.00000 -3.6729 d
d - Displacements include imported displacements.

Structure: 36-48 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0 56.50000 47.71000 0.00000 -3.6729 d
1.1506 55.73000 46.85500 0.00000 -3.0493 d
2.3012 54.96000 46.00000 0.00000 -2.5618 d
d - Displacements include imported displacements.

Structure: 48-47 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0 54.96000 46.00000 0.00000 -2.5618 d
1.1700 54.96000 44.83000 0.00000 -2.0940 d
d - Displacements include imported displacements.

Structure: 47-51 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

Dist.	x	y	z	z
[m]	[m]	[m]	[m]	[mm]
0.0	54.96000	44.83000	0.00000	-2.0940 d
1.0750	53.88500	44.83000	0.00000	-2.0477 d
2.1500	52.81000	44.83000	0.00000	-1.9966 d
3.2250	51.73500	44.83000	0.00000	-1.9435 d
4.3000	50.66000	44.83000	0.00000	-1.8901 d
5.3750	49.58500	44.83000	0.00000	-1.8375 d
6.4500	48.51000	44.83000	0.00000	-1.7854 d
7.5250	47.43500	44.83000	0.00000	-1.7329 d
8.6000	46.36000	44.83000	0.00000	-1.6784 d
9.6750	45.28500	44.83000	0.00000	-1.6197 d
10.750	44.21000	44.83000	0.00000	-1.5544 d

d - Displacements include imported displacements.

Structure: 50-46 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]
Vertical Offset 1				
0.0	44.16000	36.71000	0.00000	-0.47854 d
1.0800	45.24000	36.71000	0.00000	-0.49905 d
2.1600	46.32000	36.71000	0.00000	-0.51830 d
3.2400	47.40000	36.71000	0.00000	-0.53620 d
4.3200	48.48000	36.71000	0.00000	-0.55265 d
5.4000	49.56000	36.71000	0.00000	-0.56756 d
6.4800	50.64000	36.71000	0.00000	-0.58079 d
7.5600	51.72000	36.71000	0.00000	-0.59221 d
8.6400	52.80000	36.71000	0.00000	-0.60161 d
9.7200	53.88000	36.71000	0.00000	-0.60879 d
10.800	54.96000	36.71000	0.00000	-0.61353 d

d - Displacements include imported displacements.

Structure: 46-47 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]
Vertical Offset 1				
0.0	54.96000	36.71000	0.00000	-0.61353 d
1.0150	54.96000	37.72500	0.00000	-0.70756 d
2.0300	54.96000	38.74000	0.00000	-0.81785 d
3.0450	54.96000	39.75500	0.00000	-0.94778 d
4.0600	54.96000	40.77000	0.00000	-1.1017 d
5.0750	54.96000	41.78500	0.00000	-1.2850 d
6.0900	54.96000	42.80000	0.00000	-1.5047 d
7.1050	54.96000	43.81500	0.00000	-1.7703 d
8.1200	54.96000	44.83000	0.00000	-2.0940 d

d - Displacements include imported displacements.

Structure: 24-25 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]
Vertical Offset 1				
0.0	78.82000	63.10000	0.00000	-0.45218 d
1.0289	79.84889	63.09667	0.00000	-0.39255 d
2.0578	80.87778	63.09333	0.00000	-0.34115 d
3.0867	81.90667	63.09000	0.00000	-0.29676 d
4.1156	82.93556	63.08667	0.00000	-0.25835 d
5.1445	83.96444	63.08333	0.00000	-0.22504 d
6.1734	84.99333	63.08000	0.00000	-0.19611 d
7.2023	86.02222	63.07667	0.00000	-0.17094 d
8.2312	87.05111	63.07333	0.00000	-0.14900 d
9.2600	88.08000	63.07000	0.00000	-0.12985 d

d - Displacements include imported displacements.

Structure: 25-26 | Sub-structure:

Dist.	Coordinates			Displacements
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	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	88.08000	63.07000	0.00000	-0.12985	d
1.0641	88.06400	62.00600	0.00000	-0.13522	d
2.1282	88.04800	60.94200	0.00000	-0.14007	d
3.1924	88.03200	59.87800	0.00000	-0.14431	d
4.2565	88.01600	58.81400	0.00000	-0.14786	d
5.3206	88.00000	57.75000	0.00000	-0.15064	d

d - Displacements include imported displacements.

Structure: 26-27 | Sub-structure:

Dist.	Coordinates			Displacements	
	x	y	z	z	
[m]	[m]	[m]	[m]	[mm]	

Vertical Offset 1

0.0	88.00000	57.75000	0.00000	-0.15064	d
1.0246	86.97545	57.76364	0.00000	-0.17373	d
2.0493	85.95091	57.77727	0.00000	-0.20047	d
3.0739	84.92636	57.79091	0.00000	-0.23154	d
4.0985	83.90182	57.80455	0.00000	-0.26777	d
5.1232	82.87727	57.81818	0.00000	-0.31015	d
6.1478	81.85273	57.83182	0.00000	-0.35996	d
7.1725	80.82818	57.84545	0.00000	-0.41876	d
8.1971	79.80364	57.85909	0.00000	-0.48856	d
9.2217	78.77909	57.87273	0.00000	-0.57193	d
10.246	77.75455	57.88636	0.00000	-0.67221	d
11.271	76.73000	57.90000	0.00000	-0.79381	d

d - Displacements include imported displacements.

Structure: 27-28 | Sub-structure:

Dist.	Coordinates			Displacements	
	x	y	z	z	
[m]	[m]	[m]	[m]	[mm]	

Vertical Offset 1

0.0	76.73000	57.90000	0.00000	-0.79381	d
1.0567	76.72333	58.95667	0.00000	-0.76677	d
2.1134	76.71667	60.01333	0.00000	-0.73260	d
3.1701	76.71000	61.07000	0.00000	-0.69300	d

d - Displacements include imported displacements.

Structure: 28-29 | Sub-structure:

Dist.	Coordinates			Displacements	
	x	y	z	z	
[m]	[m]	[m]	[m]	[mm]	

Vertical Offset 1

0.0	76.71000	61.07000	0.00000	-0.69300	d
1.4640	77.76500	62.08500	0.00000	-0.55831	d
2.9280	78.82000	63.10000	0.00000	-0.45218	d

d - Displacements include imported displacements.

Structure: 27-32 | Sub-structure:

Dist.	Coordinates			Displacements	
	x	y	z	z	
[m]	[m]	[m]	[m]	[mm]	

Vertical Offset 1

0.0	76.73000	57.90000	0.00000	-0.79381	d
1.0300	76.73400	56.87000	0.00000	-0.81221	d
2.0600	76.73800	55.84000	0.00000	-0.82142	d
3.0900	76.74200	54.81000	0.00000	-0.82090	d
4.1200	76.74600	53.78000	0.00000	-0.81071	d
5.1500	76.75000	52.75000	0.00000	-0.79144	d

d - Displacements include imported displacements.

Structure: 33-31 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	87.93000	52.75000	0.00000	-0.15195	d
1.0400	86.89000	52.75000	0.00000	-0.17563	d
2.0800	85.85000	52.75000	0.00000	-0.20314	d
3.1200	84.81000	52.75000	0.00000	-0.23519	d
4.1600	83.77000	52.75000	0.00000	-0.27266	d
5.2000	82.73000	52.75000	0.00000	-0.31664	d
6.2400	81.69000	52.75000	0.00000	-0.36848	d
7.2800	80.65000	52.75000	0.00000	-0.42990	d
8.3200	79.61000	52.75000	0.00000	-0.50309	d
9.3600	78.57000	52.75000	0.00000	-0.59087	d
10.400	77.53000	52.75000	0.00000	-0.69696	d
11.440	76.49000	52.75000	0.00000	-0.82627	d
12.480	75.45000	52.75000	0.00000	-0.98546	d
13.520	74.41000	52.75000	0.00000	-1.1837	d
14.560	73.37000	52.75000	0.00000	-1.4339	d
15.600	72.33000	52.75000	0.00000	-1.7544	d
16.640	71.29000	52.75000	0.00000	-2.1728	d
17.680	70.25000	52.75000	0.00000	-2.7308	d

d - Displacements include imported displacements.

Structure: 31-34 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	70.25000	52.75000	0.00000	-2.7308	d
1.1236	70.22667	51.62667	0.00000	-2.4952	d
2.2472	70.20333	50.50333	0.00000	-2.2273	d
3.3707	70.18000	49.38000	0.00000	-1.9571	d

d - Displacements include imported displacements.

Structure: 34-35 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	70.18000	49.38000	0.00000	-1.9571	d
1.3300	71.51000	49.37000	0.00000	-1.5635	d

d - Displacements include imported displacements.

Structure: 35-41 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	71.51000	49.37000	0.00000	-1.5635	d
1.2000	71.50000	48.17000	0.00000	-1.3759	d
2.4001	71.49000	46.97000	0.00000	-1.2015	d
3.6001	71.48000	45.77000	0.00000	-1.0443	d

d - Displacements include imported displacements.

Structure: 41-40 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	71.48000	45.77000	0.00000	-1.0443	d
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1.0175 70.46250 45.77000 0.00000 -1.1840 d
 2.0350 69.44500 45.77000 0.00000 -1.3364 d
 3.0525 68.42750 45.77000 0.00000 -1.4992 d
 4.0700 67.41000 45.77000 0.00000 -1.6686 d
 d - Displacements include imported displacements.

Structure: 40-39 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0 67.41000 45.77000 0.00000 -1.6686 d
 1.3000 67.40333 44.47000 0.00000 -1.3612 d
 2.6000 67.39667 43.17000 0.00000 -1.1191 d
 3.9001 67.39000 41.87000 0.00000 -0.92607 d
 d - Displacements include imported displacements.

Structure: 39-38 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0 67.39000 41.87000 0.00000 -0.92607 d
 1.0305 68.42050 41.86150 0.00000 -0.85443 d
 2.0611 69.45100 41.85300 0.00000 -0.78318 d
 3.0916 70.48150 41.84450 0.00000 -0.71369 d
 4.1221 71.51200 41.83600 0.00000 -0.64708 d
 5.1527 72.54250 41.82750 0.00000 -0.58413 d
 6.1832 73.57300 41.81900 0.00000 -0.52536 d
 7.2137 74.60350 41.81050 0.00000 -0.47102 d
 8.2443 75.63400 41.80200 0.00000 -0.42120 d
 9.2748 76.66450 41.79350 0.00000 -0.37581 d
 10.305 77.69500 41.78500 0.00000 -0.33468 d
 11.336 78.72550 41.77650 0.00000 -0.29758 d
 12.366 79.75600 41.76800 0.00000 -0.26421 d
 13.397 80.78650 41.75950 0.00000 -0.23429 d
 14.427 81.81700 41.75100 0.00000 -0.20751 d
 15.458 82.84750 41.74250 0.00000 -0.18359 d
 16.489 83.87800 41.73400 0.00000 -0.16225 d
 17.519 84.90850 41.72550 0.00000 -0.14322 d
 18.550 85.93900 41.71700 0.00000 -0.12628 d
 19.580 86.96950 41.70850 0.00000 -0.11120 d
 20.611 88.00000 41.70000 0.00000 -0.097788 d
 d - Displacements include imported displacements.

Structure: 38-25 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0 88.00000 41.70000 0.00000 -0.097788 d
 1.0176 88.00381 42.71762 0.00000 -0.10392 d
 2.0353 88.00762 43.73524 0.00000 -0.11000 d
 3.0529 88.01143 44.75286 0.00000 -0.11596 d
 4.0705 88.01524 45.77048 0.00000 -0.12172 d
 5.0881 88.01905 46.78810 0.00000 -0.12721 d
 6.1058 88.02286 47.80571 0.00000 -0.13235 d
 7.1234 88.02667 48.82333 0.00000 -0.13704 d
 8.1410 88.03048 49.84095 0.00000 -0.14121 d
 9.1586 88.03429 50.85857 0.00000 -0.14478 d
 10.176 88.03810 51.87619 0.00000 -0.14769 d
 11.194 88.04190 52.89381 0.00000 -0.14988 d
 12.212 88.04571 53.91143 0.00000 -0.15129 d
 13.229 88.04952 54.92905 0.00000 -0.15191 d
 14.247 88.05333 55.94667 0.00000 -0.15171 d
 15.264 88.05714 56.96429 0.00000 -0.15070 d
 16.282 88.06095 57.98190 0.00000 -0.14891 d
 17.300 88.06476 58.99952 0.00000 -0.14636 d

18.317 88.06857 60.01714 0.00000 -0.14312 d
 19.335 88.07238 61.03476 0.00000 -0.13923 d
 20.353 88.07619 62.05238 0.00000 -0.13479 d
 21.370 88.08000 63.07000 0.00000 -0.12985 d
 d - Displacements include imported displacements.

Structure: 20-22 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0 55.96000 70.70000 0.00000 -0.93103 d
 1.0170 56.97700 70.69900 0.00000 -0.93596 d
 2.0340 57.99400 70.69800 0.00000 -0.93637 d
 3.0510 59.01100 70.69700 0.00000 -0.93177 d
 4.0680 60.02800 70.69600 0.00000 -0.92175 d
 5.0850 61.04500 70.69500 0.00000 -0.90607 d
 6.1020 62.06200 70.69400 0.00000 -0.88468 d
 7.1190 63.07900 70.69300 0.00000 -0.85774 d
 8.1360 64.09600 70.69200 0.00000 -0.82564 d
 9.1530 65.11300 70.69100 0.00000 -0.78899 d
 10.170 66.13000 70.69000 0.00000 -0.74857 d
 d - Displacements include imported displacements.

Structure: 22-b | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0 66.13000 70.69000 0.00000 -0.74857 d
 0.69360 66.14000 69.99647 0.00000 -0.82733 d
 1.3872 66.15000 69.30294 0.00000 -0.91592 d
 2.0808 66.16000 68.60941 0.00000 -1.0159 d
 2.7744 66.17000 67.91588 0.00000 -1.1292 d
 3.4680 66.18000 67.22235 0.00000 -1.2581 d
 4.1616 66.19000 66.52882 0.00000 -1.4054 d
 4.8552 66.20000 65.83529 0.00000 -1.5745 d
 5.5488 66.21000 65.14176 0.00000 -1.7699 d
 6.2424 66.22000 64.44824 0.00000 -1.9968 d
 6.9360 66.23000 63.75471 0.00000 -2.2624 d
 7.6296 66.24000 63.06118 0.00000 -2.5755 d
 8.3232 66.25000 62.36765 0.00000 -2.9478 d
 9.0168 66.26000 61.67412 0.00000 -3.3950 d
 9.7104 66.27000 60.98059 0.00000 -3.9389 d
 10.404 66.28000 60.28706 0.00000 -4.6117 d
 11.098 66.29000 59.59353 0.00000 -5.4682 d
 11.791 66.30000 58.90000 0.00000 -6.6344 d
 d - Displacements include imported displacements.

Structure: e-45 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0 64.74000 51.60000 0.00000 -8.4124 d
 0.98415 64.72267 50.61600 0.00000 -6.1059 d
 1.9683 64.70533 49.63200 0.00000 -4.7156 d
 2.9525 64.68800 48.64800 0.00000 -3.7513 d
 3.9366 64.67067 47.66400 0.00000 -3.0434 d
 4.9208 64.65333 46.68000 0.00000 -2.5059 d
 5.9049 64.63600 45.69600 0.00000 -2.0873 d
 6.8891 64.61867 44.71200 0.00000 -1.7552 d
 7.8732 64.60133 43.72800 0.00000 -1.4874 d
 8.8574 64.58400 42.74400 0.00000 -1.2687 d
 9.8415 64.56667 41.76000 0.00000 -1.0881 d
 10.826 64.54933 40.77600 0.00000 -0.93755 d
 11.810 64.53200 39.79200 0.00000 -0.81101 d
 12.794 64.51467 38.80800 0.00000 -0.70391 d

13.778 64.49733 37.82400 0.00000 -0.61270 d
14.762 64.48000 36.84000 0.00000 -0.53462 d
d - Displacements include imported displacements.

Structure: 18-31 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	59.17000	64.78000	0.00000	-2.4923	d
1.1384	60.30833	64.77333	0.00000	-2.4868	d
2.2767	61.44667	64.76667	0.00000	-2.4471	d
3.4151	62.58500	64.76000	0.00000	-2.3698	d
4.5534	63.72333	64.75333	0.00000	-2.2549	d
5.6918	64.86167	64.74667	0.00000	-2.1064	d
6.8301	66.00000	64.74000	0.00000	-1.9325	d

d - Displacements include imported displacements.

Structure: 23-24 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	66.00000	63.14000	0.00000	-2.6002	d
1.0683	67.06833	63.13667	0.00000	-2.3157	d
2.1367	68.13667	63.13333	0.00000	-2.0319	d
3.2050	69.20500	63.13000	0.00000	-1.7641	d
4.2734	70.27333	63.12667	0.00000	-1.5212	d
5.3417	71.34167	63.12333	0.00000	-1.3069	d
6.4100	72.41000	63.12000	0.00000	-1.1209	d
7.4784	73.47833	63.11667	0.00000	-0.96106	d
8.5467	74.54667	63.11333	0.00000	-0.82450	d
9.6150	75.61500	63.11000	0.00000	-0.70809	d
10.683	76.68333	63.10667	0.00000	-0.60892	d
11.752	77.75167	63.10333	0.00000	-0.52437	d
12.820	78.82000	63.10000	0.00000	-0.45218	d

d - Displacements include imported displacements.

Structure: b-27 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	66.10000	58.46000	0.00000	-8.4387	d
1.0645	67.16300	58.40400	0.00000	-5.7526	d
2.1289	68.22600	58.34800	0.00000	-4.3061	d
3.1934	69.28900	58.29200	0.00000	-3.3202	d
4.2579	70.35200	58.23600	0.00000	-2.6104	d
5.3224	71.41500	58.18000	0.00000	-2.0845	d
6.3868	72.47800	58.12400	0.00000	-1.6864	d
7.4513	73.54100	58.06800	0.00000	-1.3793	d
8.5158	74.60400	58.01200	0.00000	-1.1387	d
9.5803	75.66700	57.95600	0.00000	-0.94757	d
10.645	76.73000	57.90000	0.00000	-0.79381	d

d - Displacements include imported displacements.

Structure: 42-37 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	64.54000	46.73000	0.00000	-2.5515	d
1.0183	65.55826	46.71783	0.00000	-2.3444	d
2.0367	66.57652	46.70565	0.00000	-2.1238	d
3.0550	67.59478	46.69348	0.00000	-1.9002	d

4.0733	68.61304	46.68130	0.00000	-1.6834	d
5.0917	69.63130	46.66913	0.00000	-1.4804	d
6.1100	70.64957	46.65696	0.00000	-1.2952	d
7.1283	71.66783	46.64478	0.00000	-1.1294	d
8.1467	72.68609	46.63261	0.00000	-0.98307	d
9.1650	73.70435	46.62043	0.00000	-0.85494	d
10.183	74.72261	46.60826	0.00000	-0.74338	d
11.202	75.74087	46.59609	0.00000	-0.64656	d
12.220	76.75913	46.58391	0.00000	-0.56265	d
13.238	77.77739	46.57174	0.00000	-0.48996	d
14.257	78.79565	46.55957	0.00000	-0.42698	d
15.275	79.81391	46.54739	0.00000	-0.37237	d
16.293	80.83217	46.53522	0.00000	-0.32496	d
17.312	81.85043	46.52304	0.00000	-0.28376	d
18.330	82.86870	46.51087	0.00000	-0.24789	d
19.348	83.88696	46.49870	0.00000	-0.21664	d
20.367	84.90522	46.48652	0.00000	-0.18936	d
21.385	85.92348	46.47435	0.00000	-0.16552	d
22.403	86.94174	46.46217	0.00000	-0.14466	d
23.422	87.96000	46.45000	0.00000	-0.12639	d

d - Displacements include imported displacements.

Structure: 47-43 | Sub-structure:

Dist.	Coordinates			Displacements	
	x	y	z	z	
[m]	[m]	[m]	[m]	[mm]	

Vertical Offset 1

0.0	54.96000	44.83000	0.00000	-2.0940	d
1.0600	56.02000	44.83000	0.00000	-2.1315	d
2.1200	57.08000	44.83000	0.00000	-2.1574	d
3.1800	58.14000	44.83000	0.00000	-2.1680	d
4.2400	59.20000	44.83000	0.00000	-2.1603	d
5.3000	60.26000	44.83000	0.00000	-2.1321	d
6.3600	61.32000	44.83000	0.00000	-2.0820	d
7.4200	62.38000	44.83000	0.00000	-2.0098	d
8.4800	63.44000	44.83000	0.00000	-1.9167	d
9.5400	64.50000	44.83000	0.00000	-1.8050	d

d - Displacements include imported displacements.

Structure: 44-39 | Sub-structure:

Dist.	Coordinates			Displacements	
	x	y	z	z	
[m]	[m]	[m]	[m]	[mm]	

Vertical Offset 1

0.0	64.44000	41.91000	0.00000	-1.1210	d
1.4751	65.91500	41.89000	0.00000	-1.0272	d
2.9503	67.39000	41.87000	0.00000	-0.92607	d

d - Displacements include imported displacements.

Structure: 46-45 | Sub-structure:

Dist.	Coordinates			Displacements	
	x	y	z	z	
[m]	[m]	[m]	[m]	[mm]	

Vertical Offset 1

0.0	54.96000	36.71000	0.00000	-0.61353	d
1.0579	56.01778	36.72444	0.00000	-0.61682	d
2.1158	57.07556	36.73889	0.00000	-0.61733	d
3.1736	58.13333	36.75333	0.00000	-0.61488	d
4.2315	59.19111	36.76778	0.00000	-0.60931	d
5.2894	60.24889	36.78222	0.00000	-0.60054	d
6.3473	61.30667	36.79667	0.00000	-0.58855	d
7.4051	62.36444	36.81111	0.00000	-0.57344	d
8.4630	63.42222	36.82556	0.00000	-0.55537	d
9.5209	64.48000	36.84000	0.00000	-0.53462	d

d - Displacements include imported displacements.

Structure: a-12 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	44.06000	58.90000	0.00000	-6.4319 d
1.1151	42.95250	58.77000	0.00000	-7.0479 d
2.2302	41.84500	58.64000	0.00000	-7.3951 d
3.3453	40.73750	58.51000	0.00000	-7.4256 d
4.4604	39.63000	58.38000	0.00000	-5.9510 d

d - Displacements include imported displacements.

Structure: 12-11 | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	39.63000	58.38000	0.00000	-5.9510 d
1.1167	39.63000	57.26333	0.00000	-8.2352 d
2.2333	39.63000	56.14667	0.00000	-8.9662 d
3.3500	39.63000	55.03000	0.00000	-9.1965 d
4.4667	39.63000	53.91333	0.00000	-9.0377 d
5.5833	39.63000	52.79667	0.00000	-8.3735 d
6.7000	39.63000	51.68000	0.00000	-6.0213 d

d - Displacements include imported displacements.

Structure: 11-f | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	39.63000	51.68000	0.00000	-6.0213 d
0.55884	40.18875	51.67000	0.00000	-7.5740 d
1.1177	40.74750	51.66000	0.00000	-8.2759 d
1.6765	41.30625	51.65000	0.00000	-8.6829 d
2.2354	41.86500	51.64000	0.00000	-8.9234 d
2.7942	42.42375	51.63000	0.00000	-9.0399 d
3.3530	42.98250	51.62000	0.00000	-9.0368 d
3.9119	43.54125	51.61000	0.00000	-8.8808 d
4.4707	44.10000	51.60000	0.00000	-8.4392 d

d - Displacements include imported displacements.

Structure: ag | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	44.06000	58.90000	0.00000	-6.4319 d
1.0047	45.06364	58.85455	0.00000	-6.2070 d
2.0093	46.06727	58.80909	0.00000	-6.1423 d
3.0140	47.07091	58.76364	0.00000	-6.1945 d
4.0187	48.07455	58.71818	0.00000	-6.3148 d
5.0233	49.07818	58.67273	0.00000	-6.4913 d
6.0280	50.08182	58.62727	0.00000	-6.7262 d
7.0327	51.08545	58.58182	0.00000	-7.0312 d
8.0373	52.08909	58.53636	0.00000	-7.4301 d
9.0420	53.09273	58.49091	0.00000	-7.9721 d
10.047	54.09636	58.44545	0.00000	-8.7784 d
11.051	55.10000	58.40000	0.00000	-10.411 d

d - Displacements include imported displacements.

Structure: gb | Sub-structure:

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	55.10000	58.40000	0.00000	-10.411	d
0.57001	55.67000	58.40300	0.00000	-11.204	d
1.1400	56.24000	58.40600	0.00000	-11.683	d
1.7100	56.81000	58.40900	0.00000	-12.038	d
2.2800	57.38000	58.41200	0.00000	-12.332	d
2.8500	57.95000	58.41500	0.00000	-12.599	d
3.4200	58.52000	58.41800	0.00000	-12.859	d
3.9901	59.09000	58.42100	0.00000	-13.142	d
4.5601	59.66000	58.42400	0.00000	-13.592	d
5.1301	60.23000	58.42700	0.00000	-14.224	d
5.7001	60.80000	58.43000	0.00000	-14.437	d
6.2701	61.37000	58.43300	0.00000	-14.487	d
6.8401	61.94000	58.43600	0.00000	-14.424	d
7.4101	62.51000	58.43900	0.00000	-14.249	d
7.9801	63.08000	58.44200	0.00000	-13.953	d
8.5501	63.65000	58.44500	0.00000	-13.523	d
9.1201	64.22000	58.44800	0.00000	-12.934	d
9.6901	64.79000	58.45100	0.00000	-12.141	d
10.260	65.36000	58.45400	0.00000	-11.027	d
10.830	65.93000	58.45700	0.00000	-9.1861	d
11.400	66.50000	58.46000	0.00000	-7.0969	d

d - Displacements include imported displacements.

Structure: bc | Sub-structure:

Dist.	Coordinates			Displacements	
	x	y	z	z	
[m]	[m]	[m]	[m]	[mm]	

Vertical Offset 1

0.0	66.50000	58.46000	0.00000	-7.0969	d
0.27800	66.50000	58.18200	0.00000	-7.6635	d
0.55600	66.50000	57.90400	0.00000	-8.1917	d
0.83400	66.50000	57.62600	0.00000	-8.6459	d
1.1120	66.50000	57.34800	0.00000	-9.0257	d
1.3900	66.50000	57.07000	0.00000	-9.3401	d
1.6680	66.50000	56.79200	0.00000	-9.5971	d
1.9460	66.50000	56.51400	0.00000	-9.8025	d
2.2240	66.50000	56.23600	0.00000	-9.9601	d
2.5020	66.50000	55.95800	0.00000	-10.072	d
2.7800	66.50000	55.68000	0.00000	-10.142	d
3.0580	66.50000	55.40200	0.00000	-10.168	d
3.3360	66.50000	55.12400	0.00000	-10.153	d
3.6140	66.50000	54.84600	0.00000	-10.095	d
3.8920	66.50000	54.56800	0.00000	-9.9937	d
4.1700	66.50000	54.29000	0.00000	-9.8480	d
4.4480	66.50000	54.01200	0.00000	-9.6551	d
4.7260	66.50000	53.73400	0.00000	-9.4115	d
5.0040	66.50000	53.45600	0.00000	-9.1120	d
5.2820	66.50000	53.17800	0.00000	-8.7491	d
5.5600	66.50000	52.90000	0.00000	-8.3136	d

d - Displacements include imported displacements.

Structure: cd | Sub-structure:

Dist.	Coordinates			Displacements	
	x	y	z	z	
[m]	[m]	[m]	[m]	[mm]	

Vertical Offset 1

0.0	66.50000	52.90000	0.00000	-8.3136	d
1.7493	65.00000	52.00000	0.00000	-9.7192	d

d - Displacements include imported displacements.

Structure: eh | Sub-structure:

Dist.	Coordinates			Displacements	
	x	y	z	z	
[m]	[m]	[m]	[m]	[mm]	

Vertical Offset 1

0.0	64.74000	51.60000	0.00000	-8.4124	d
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1.0844 63.65556 51.60000 0.00000 -9.3965 d
 2.1689 62.57111 51.60000 0.00000 -10.003 d
 3.2533 61.48667 51.60000 0.00000 -10.351 d
 4.3378 60.40222 51.60000 0.00000 -10.725 d
 5.4222 59.31778 51.60000 0.00000 -12.353 d
 6.5067 58.23333 51.60000 0.00000 -12.444 d
 7.5911 57.14889 51.60000 0.00000 -12.057 d
 8.6756 56.06444 51.60000 0.00000 -11.392 d
 9.7600 54.98000 51.60000 0.00000 -10.057 d
 d - Displacements include imported displacements.

Structure: hf | Sub-structure:

Dist.	Coordinates			Displacements	
	x	y	z	z	
[m]	[m]	[m]	[m]	[mm]	

Vertical Offset 1

0.0	54.98000	51.60000	0.00000	-10.057	d
1.0880	53.89200	51.60000	0.00000	-8.7686	d
2.1760	52.80400	51.60000	0.00000	-8.1565	d
3.2640	51.71600	51.60000	0.00000	-7.7781	d
4.3520	50.62800	51.60000	0.00000	-7.5251	d
5.4400	49.54000	51.60000	0.00000	-7.3552	d
6.5280	48.45200	51.60000	0.00000	-7.2505	d
7.6160	47.36400	51.60000	0.00000	-7.2083	d
8.7040	46.27600	51.60000	0.00000	-7.2475	d
9.7920	45.18800	51.60000	0.00000	-7.4650	d
10.880	44.10000	51.60000	0.00000	-8.4392	d

d - Displacements include imported displacements.

Structure: de | Sub-structure:

Dist.	Coordinates			Displacements	
	x	y	z	z	
[m]	[m]	[m]	[m]	[mm]	

Vertical Offset 1

0.0	65.00000	52.00000	0.00000	-9.7192	d
0.11927	64.93500	51.90000	0.00000	-9.3260	d
0.23854	64.87000	51.80000	0.00000	-8.9854	d
0.35781	64.80500	51.70000	0.00000	-8.6840	d
0.47707	64.74000	51.60000	0.00000	-8.4124	d

d - Displacements include imported displacements.

Specific Building Damage Results - All Segments

Structure: 21-20 | Sub-structure:

Vertical Offset	Segment	Start Length	Curvature	Deflection	Average	Max	Max	
								Gradient Max Gradient
from Line for	of Vertical	Radius of	Category		Strain	Strain		
Vertical	Vertical	Displacement	Curvature					
Movement	Displacement	Curve	Calculations	Curve				
[m]	[m]	[m]	[m]	[m]	[%]	[%]	[%]	
0.0		1	0.0	11.749	Hogging	262.16E-6	0.0	249.09E-6
0.0	-29.272E-6	295190.		0				

(Negligible)
 Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 19-20 | Sub-structure:

Vertical Offset	Segment	Start Length	Curvature	Deflection	Average	Max	Max

Vertical Gradient	Max Gradient	Segment Min	Start Length	Curvature	Deflection	Average Ratio	Max Horizontal Strain	Max Tensile Strain	Max of
of Vertical	of Vertical	Radius of	Category						
Horizontal Displacement	Horizontal Displacement	Horizontal Displacement	Horizontal Displacement	Horizontal Displacement	Horizontal Displacement	Horizontal Displacement	Horizontal Displacement	Horizontal Displacement	Horizontal Displacement
Movement	Movement	Movement	Movement	Movement	Movement	Movement	Movement	Movement	Movement
Displacement	Displacement	Displacement	Displacement	Displacement	Displacement	Displacement	Displacement	Displacement	Displacement
Calculations	Calculations	Calculations	Calculations	Calculations	Calculations	Calculations	Calculations	Calculations	Calculations
Curve	Curve	Curve	Curve	Curve	Curve	Curve	Curve	Curve	Curve
[m]	[m]	[m]	[m]	[m]	[m]	[%]	[%]	[%]	[%]
0.0	-210.68E-6	32514.	1	0.0	5.0389	Sagging	0.0014181	0.0	0.0013655
0.0				0					

(Negligible)
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 19-18 | Sub-structure:

Vertical Gradient	Max Gradient	Segment Min	Start Length	Curvature	Deflection	Average Ratio	Max Horizontal Strain	Max Tensile Strain	Max of
of Vertical	of Vertical	Radius of	Category						
Horizontal Displacement	Horizontal Displacement	Horizontal Displacement	Horizontal Displacement	Horizontal Displacement	Horizontal Displacement	Horizontal Displacement	Horizontal Displacement	Horizontal Displacement	Horizontal Displacement
Movement	Movement	Movement	Movement	Movement	Movement	Movement	Movement	Movement	Movement
Displacement	Displacement	Displacement	Displacement	Displacement	Displacement	Displacement	Displacement	Displacement	Displacement
Calculations	Calculations	Calculations	Calculations	Calculations	Calculations	Calculations	Calculations	Calculations	Calculations
Curve	Curve	Curve	Curve	Curve	Curve	Curve	Curve	Curve	Curve
[m]	[m]	[m]	[m]	[m]	[m]	[%]	[%]	[%]	[%]
0.0	417.08E-6	11861.	1	0.0	2.0092	Sagging	0.0020972	0.0	0.0020844
0.0				0					

(Negligible)
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 18-13 | Sub-structure:

Vertical Gradient	Max Gradient	Segment Min	Start Length	Curvature	Deflection	Average Ratio	Max Horizontal Strain	Max Tensile Strain	Max of
of Vertical	of Vertical	Radius of	Category						
Horizontal Displacement	Horizontal Displacement	Horizontal Displacement	Horizontal Displacement	Horizontal Displacement	Horizontal Displacement	Horizontal Displacement	Horizontal Displacement	Horizontal Displacement	Horizontal Displacement
Movement	Movement	Movement	Movement	Movement	Movement	Movement	Movement	Movement	Movement
Displacement	Displacement	Displacement	Displacement	Displacement	Displacement	Displacement	Displacement	Displacement	Displacement
Calculations	Calculations	Calculations	Calculations	Calculations	Calculations	Calculations	Calculations	Calculations	Calculations
Curve	Curve	Curve	Curve	Curve	Curve	Curve	Curve	Curve	Curve
[m]	[m]	[m]	[m]	[m]	[m]	[%]	[%]	[%]	[%]
0.0	-65.337E-6	53028.	1	0.0	5.9534	Hogging	735.32E-6	0.0	725.59E-6
0.0				0					
(Negligible)			2	5.9534	5.2383	Sagging	167.72E-6	0.0	161.04E-6
0.0	-65.337E-6	370690.		0					
(Negligible)			3	11.192	3.7673	Hogging	179.98E-6	0.0	178.99E-6
0.0	-65.467E-6	148040.		0					

(Negligible)
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 21-a | Sub-structure:

Vertical Gradient	Max Gradient	Segment Min	Start Length	Curvature	Deflection	Average Ratio	Max Horizontal Strain	Max Tensile Strain	Max of
of Vertical	of Vertical	Radius of	Category						
Horizontal Displacement	Horizontal Displacement	Horizontal Displacement	Horizontal Displacement	Horizontal Displacement	Horizontal Displacement	Horizontal Displacement	Horizontal Displacement	Horizontal Displacement	Horizontal Displacement
Movement	Movement	Movement	Movement	Movement	Movement	Movement	Movement	Movement	Movement
Displacement	Displacement	Displacement	Displacement	Displacement	Displacement	Displacement	Displacement	Displacement	Displacement
Calculations	Calculations	Calculations	Calculations	Calculations	Calculations	Calculations	Calculations	Calculations	Calculations
Curve	Curve	Curve	Curve	Curve	Curve	Curve	Curve	Curve	Curve
[m]	[m]	[m]	[m]	[m]	[m]	[%]	[%]	[%]	[%]

Calculations								Curve	
[m]	[m]	[m]	[m]	[m]	[m]	[%]	[%]	[%]	
0.0	0.0	1	0.0	11.820	Sagging	0.018246	0.0	0.021059	
0.0	0.0024318	471.53		0					

(Negligible)
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: f-50 | Sub-structure:

Vertical Offset	Segment	Start Length	Curvature	Deflection	Average	Max	Max	
Gradient Max Gradient	Min	Damage		Ratio	Horizontal	Tensile		of
from Line for	Radius of	Category			Strain	Strain		
of Vertical	Vertical	Displacement	Curvature					
Vertical	Movement	Horizontal	Displacement	Curvature				
Calculations	Curve	Calculations						Curve
[m]	[m]	[m]	[m]	[m]	[%]	[%]	[%]	
0.0	1	0.0	14.889	Sagging	0.025204	0.0	0.033233	
0.0	-0.0032351	428.57		0				

(Negligible)
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 14-15 | Sub-structure:

Vertical Offset	Segment	Start Length	Curvature	Deflection	Average	Max	Max	
Gradient Max Gradient	Min	Damage		Ratio	Horizontal	Tensile		of
from Line for	Radius of	Category			Strain	Strain		
of Vertical	Vertical	Displacement	Curvature					
Vertical	Movement	Horizontal	Displacement	Curvature				
Calculations	Curve	Calculations						Curve
[m]	[m]	[m]	[m]	[m]	[%]	[%]	[%]	
0.0	1	0.0	2.1390	Sagging	0.0029487	0.0	0.0029284	
0.0	564.35E-6	8980.1		0				

(Negligible)
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 15-16 | Sub-structure:

Vertical Offset	Segment	Start Length	Curvature	Deflection	Average	Max	Max	
Gradient Max Gradient	Min	Damage		Ratio	Horizontal	Tensile		of
from Line for	Radius of	Category			Strain	Strain		
of Vertical	Vertical	Displacement	Curvature					
Vertical	Movement	Horizontal	Displacement	Curvature				
Calculations	Curve	Calculations						Curve
[m]	[m]	[m]	[m]	[m]	[%]	[%]	[%]	
0.0	1	0.0	1.6897	None	0.0	0.0	0.0	
0.0	654.15E-6	-		0				

(Negligible)
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 16-17 | Sub-structure:

Vertical Offset	Segment	Start Length	Curvature	Deflection	Average	Max	Max	
Gradient Max Gradient	Min	Damage		Ratio	Horizontal	Tensile		of
from Line for	Radius of	Category			Strain	Strain		
of Vertical	Vertical	Displacement	Curvature					

Vertical Movement Displacement Calculations	Horizontal Displacement Curve	Curvature	Strain	Strain	Strain	Curve			
[m]	[m]	[m]	[m]	[%]	[%]	[%]			
0.0	0.0013978	-	1	0.0	1.8990	None	0.0	0.0	0.0

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 17-g | Sub-structure:

Vertical Offset Gradient Max from Line for of Vertical Vertical Horizontal Movement Displacement Calculations	Segment Max Gradient Radius of Category	Start Length Min Damage	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of	Curve	
[m]	[m]	[m]	[m]	[%]	[%]	[%]			
0.0	0.0020069	-	1	0.0	1.6115	None	0.0	0.0	0.0

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: h-49 | Sub-structure:

Vertical Offset Gradient Max from Line for of Vertical Vertical Horizontal Movement Displacement Calculations	Segment Max Gradient Radius of Category	Start Length Min Damage	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of	Curve	
[m]	[m]	[m]	[m]	[%]	[%]	[%]			
0.0	-0.0021838	1141.0	1	0.0	2.1345	Sagging	0.023160	0.0	0.023001

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 49-36 | Sub-structure:

Vertical Offset Gradient Max from Line for of Vertical Vertical Horizontal Movement Displacement Calculations	Segment Max Gradient Radius of Category	Start Length Min Damage	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of	Curve	
[m]	[m]	[m]	[m]	[%]	[%]	[%]			
0.0	-0.0013780	2485.8	1	0.0	2.3890	Sagging	0.011897	0.0	0.011795

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 36-48 | Sub-structure:

Vertical Offset Gradient	Max Gradient	Segment Min	Start Length	Curvature	Deflection	Average	Max	Max
from Line for	of Vertical	Radius of	Damage		Ratio	Horizontal	Tensile	of
of Vertical	Vertical	Category				Strain	Strain	
[m]	[m]		[m]	[m]	[%]	[%]	[%]	
0.0	0.0	1	0.0	2.3002	Sagging	0.0029303	0.0	0.0029069
0.0	-542.01E-6	9717.5		0				

(Negligible)
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 48-47 | Sub-structure:

Vertical Offset Gradient	Max Gradient	Segment Min	Start Length	Curvature	Deflection	Average	Max	Max
from Line for	of Vertical	Radius of	Damage		Ratio	Horizontal	Tensile	of
of Vertical	Vertical	Category				Strain	Strain	
[m]	[m]		[m]	[m]	[%]	[%]	[%]	Curve
0.0	0.0	1	0.0	1.1690	None	0.0	0.0	0.0
0.0	-399.83E-6	-		0				

(Negligible)
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 47-51 | Sub-structure:

Vertical Offset Gradient	Max Gradient	Segment Min	Start Length	Curvature	Deflection	Average	Max	Max
from Line for	of Vertical	Radius of	Damage		Ratio	Horizontal	Tensile	
of Vertical	Vertical	Category				Strain	Strain	
[m]	[m]		[m]	[m]	[%]	[%]	[%]	
0.0	0.0	1	0.0	3.7686	Hogging	114.46E-6	0.0	113.83E-6
0.0	-49.594E-6	210330.		0				
(Negligible)								
0.0	-49.594E-6	2.7255E+6	2	3.7686	2.0259	Sagging	14.705E-6	0.0
				0				14.627E-6
(Negligible)								
0.0	-60.786E-6	159820.	3	5.7945	4.9545	Hogging	202.65E-6	0.0
				0				200.81E-6

(Negligible)
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 50-46 | Sub-structure:

Vertical Offset Gradient	Max Gradient	Segment Min	Start Length	Curvature	Deflection	Average	Max	Max
from Line for	of Vertical	Radius of	Damage		Ratio	Horizontal	Tensile	of
of Vertical	Vertical	Category				Strain	Strain	
[m]	[m]		[m]	[m]	[%]	[%]	[%]	

Movement Displacement Calculations Curve

[m]	[m]	[m]	[m]	[%]	[%]	[%]
0.0	18.985E-6	465000.	1	0.0	10.799	Hogging
0.0				0		
					199.13E-6	0.0
						190.72E-6

(Negligible)
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 46-47 | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Vertical Horizontal Displacement Movement Displacement Calculations Curve

[m]	Segment Min	Start Length Damage	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of
0.0	16804.	1	8.1190	Sagging	0.0031242	0.0	0.0028401
0.0							

0.0	318.93E-6	16804.	1	0.0	8.1190	Sagging
0.0				0		
					0.0031242	0.0
						0.0028401

(Negligible)
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 24-25 | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Vertical Horizontal Displacement Movement Displacement Calculations Curve

[m]	Segment Min	Start Length Damage	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of
0.0	124000.	1	9.2590	Sagging	546.17E-6	0.0	529.61E-6
0.0							

0.0	-57.955E-6	124000.	1	0.0	9.2590	Sagging
0.0				0		
					546.17E-6	0.0
						529.61E-6

(Negligible)
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 25-26 | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Vertical Horizontal Displacement Movement Displacement Calculations Curve

[m]	Segment Min	Start Length Damage	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of
0.0	1.4340E+6	1	5.3196	Hogging	37.338E-6	0.0	36.943E-6
0.0							

0.0	5.0429E-6	1.4340E+6	1	0.0	5.3196	Hogging
0.0				0		
					37.338E-6	0.0
						36.943E-6

(Negligible)
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 26-27 | Sub-structure:

Vertical Offset Segment Start Length Curvature Deflection Average Max Max
 Gradient Max Gradient Min Damage Ratio Horizontal Tensile of
 from Line for Category
 of Vertical Radius of
 Vertical
 Horizontal Displacement Curvature
 Movement
 Displacement Curve
 Calculations
 Curve

[m] [m] [m] [m] [%] [%] [%]
 [m] 0.0 1 0.0 11.270 Sagging 0.0012552 0.0 0.0014037
 0.0 118.68E-6 46796. 0

(Negligible)
 Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 27-28 | Sub-structure:

Vertical Offset Segment Start Length Curvature Deflection Average Max Max
 Gradient Max Gradient Min Damage Ratio Horizontal Tensile of
 from Line for Category
 of Vertical Radius of
 Vertical
 Horizontal Displacement Curvature
 Movement
 Displacement Curve
 Calculations
 Curve

[m] [m] [m] [m] [%] [%] [%]
 [m] 0.0 1 0.0 3.1691 Hogging 207.03E-6 0.0 206.24E-6
 0.0 -37.472E-6 147640. 0

(Negligible)
 Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 28-29 | Sub-structure:

Vertical Offset Segment Start Length Curvature Deflection Average Max Max
 Gradient Max Gradient Min Damage Ratio Horizontal Tensile of
 from Line for Category
 of Vertical Radius of
 Vertical
 Horizontal Displacement Curvature
 Movement
 Displacement Curve
 Calculations
 Curve

[m] [m] [m] [m] [%] [%] [%]
 [m] 0.0 1 0.0 2.9270 Sagging 483.13E-6 0.0 476.90E-6
 0.0 -92.007E-6 74990. 0

(Negligible)
 Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 27-32 | Sub-structure:

Vertical Offset Segment Start Length Curvature Deflection Average Max Max
 Gradient Max Gradient Min Damage Ratio Horizontal Tensile of
 from Line for Category
 of Vertical Radius of
 Vertical
 Horizontal Displacement Curvature
 Movement
 Displacement Curve
 Calculations
 Curve

[m] [m] [m] [m] [%] [%] [%]
 [m]

0.0 1 0.0 5.1490 Hogging 554.44E-6 0.0 548.92E-6
 0.0 -18.705E-6 110750. 0

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 33-31 | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Radius of Vertical Horizontal Displacement Movement Displacement Calculations Curve	Segment Min Category	Start Damage	Length [m]	Curvature [m]	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of
[m]			[m]	[m]	[%]	[%]	[%]	
0.0	1	0.0	17.679	Sagging	0.0056215	0.0	0.0079780	
0.0								

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 31-34 | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Radius of Vertical Horizontal Displacement Movement Displacement Calculations Curve	Segment Min Category	Start Damage	Length [m]	Curvature [m]	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of
[m]			[m]	[m]	[%]	[%]	[%]	
0.0	1	0.0	2.9772	Hogging	690.10E-6	0.0	687.75E-6	
0.0								
0.0	2	2.9772	0.39253	None	0.0	0.0	0.0	
0.0								

(Negligible)

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 34-35 | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Radius of Vertical Horizontal Displacement Movement Displacement Calculations Curve	Segment Min Category	Start Damage	Length [m]	Curvature [m]	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of
[m]			[m]	[m]	[%]	[%]	[%]	
0.0	1	0.0	1.3290	None	0.0	0.0	0.0	
0.0								

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 35-41 | Sub-structure:

Vertical Offset Gradient Max Gradient	Segment Min	Start Damage	Length	Curvature	Deflection	Average	Max	Max
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from Line for of Vertical Vertical Horizontal Displacement Movement Displacement Calculations Curve	Radius of Curvature	Category	Start	Length	Curvature	Deflection	Average	Max	Max
			Damage			Ratio	Horizontal	Tensile	of
							Strain	Strain	
[m]	[m]		[m]	[m]	[%]		[%]	[%]	
0.0	0.0	1	0.0	3.5991	Sagging	439.76E-6	0.0	431.26E-6	
0.0	-156.29E-6	79067.	0						

(Negligible)
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 41-40 | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Vertical Horizontal Displacement Movement Displacement Calculations Curve	Segment Min	Start	Length	Curvature	Deflection	Average	Max	Max	
		Damage				Ratio	Horizontal	Tensile	
							Strain	Strain	of
[m]		[m]	[m]	[%]			[%]	[%]	
0.0	1	0.0	4.0690	Sagging	490.50E-6	0.0	478.47E-6		
0.0	166.46E-6	78039.	0						

(Negligible)
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 40-39 | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Vertical Horizontal Displacement Movement Displacement Calculations Curve	Segment Min	Start	Length	Curvature	Deflection	Average	Max	Max	
		Damage				Ratio	Horizontal	Tensile	
							Strain	Strain	of
[m]		[m]	[m]	[%]			[%]	[%]	
0.0	1	0.0	3.8991	Sagging	0.0015348	0.0	0.0015002		
0.0	-236.45E-6	24385.	0						

(Negligible)
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 39-38 | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Vertical Horizontal Displacement Movement Displacement Calculations Curve	Segment Min	Start	Length	Curvature	Deflection	Average	Max	Max	
		Damage				Ratio	Horizontal	Tensile	
							Strain	Strain	of
[m]		[m]	[m]	[%]			[%]	[%]	
0.0	1	0.0	19.580	Sagging	838.79E-6	0.0	0.0012288		
0.0	-69.519E-6	237690.	0						

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 38-25 | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Vertical Horizontal Displacement Movement Displacement Calculations Curve	Segment Min Radius of Curvature	Start Damage Category	Length [m]	Curvature [m]	Deflection Ratio [m]	Average Horizontal Strain [%]	Max Tensile Strain [%]	Max
0.0	6.0243E-6	1.2817E+6	1	1.0176	20.352 Hogging	162.61E-6	0.0	169.27E-6

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 20-22 | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Vertical Horizontal Displacement Movement Displacement Calculations Curve	Segment Min Radius of Curvature	Start Damage Category	Length [m]	Curvature [m]	Deflection Ratio [m]	Average Horizontal Strain [%]	Max Tensile Strain [%]	Max	of
0.0	-39.745E-6	182800.	1	0.0	10.169 Hogging	650.34E-6	0.0	976.50E-6	

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 22-b | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Vertical Horizontal Displacement Movement Displacement Calculations Curve	Segment Min Radius of Curvature	Start Damage Category	Length [m]	Curvature [m]	Deflection Ratio [m]	Average Horizontal Strain [%]	Max Tensile Strain [%]	Max	of
0.0	0.0016814	1408.7	1	0.0	11.790 Sagging	0.016797	0.0	0.020474	

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: e-45 | Sub-structure:

Vertical Offset Gradient Max Gradient from Line for of Vertical Vertical Horizontal Displacement Movement Displacement Calculations Curve	Segment Min Radius of Curvature	Start Damage Category	Length [m]	Curvature [m]	Deflection Ratio [m]	Average Horizontal Strain [%]	Max Tensile Strain [%]	Max	of
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[m]	[m]	[m]	[m]	[m]	[m]	[%]	[%]	[%]
0.0	0.0	1	0.0	14.761	Sagging	0.022223	0.0	0.023340
0.0	-0.0023436	932.38	0					

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 18-31 | Sub-structure:

Vertical Offset Gradient	Max Gradient	Segment Min	Start Damage	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of
from Line for of Vertical Vertical	Radius of	Category							
Horizontal Movement	Displacement	Curvature							
Displacement Calculations	Curve								
Curve									

[m]	[m]	[m]	[m]	[m]	[m]	[%]	[%]	[%]
0.0	0.0	1	0.0	6.8291	Hogging	0.0022973	0.0	0.0030196
0.0	-152.77E-6	35236.	0					

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 23-24 | Sub-structure:

Vertical Offset Gradient	Max Gradient	Segment Min	Start Damage	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max
from Line for of Vertical Vertical	Radius of	Category							
Horizontal Movement	Displacement	Curvature							
Displacement Calculations	Curve								
Curve									

[m]	[m]	[m]	[m]	[m]	[m]	[%]	[%]	[%]
0.0	0.0	1	0.0	0.44043	Sagging	0.0	0.0	0.0
0.0	-266.30E-6	361380.	0					

(Negligible)

0.0	-266.30E-6	41011.	2	0.44043	12.379	Sagging	0.0030884	0.0	0.0036539
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(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: b-27 | Sub-structure:

Vertical Offset Gradient	Max Gradient	Segment Min	Start Damage	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of
from Line for of Vertical Vertical	Radius of	Category							
Horizontal Movement	Displacement	Curvature							
Displacement Calculations	Curve								
Curve									

[m]	[m]	[m]	[m]	[m]	[m]	[%]	[%]	[%]
0.0	0.0	1	0.0	10.644	Sagging	0.026525	0.0	0.034247
0.0	-0.0025235	789.94	0					

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 42-37 | Sub-structure:

Vertical Offset Segment Start Length Curvature Deflection Average Max Max
 Gradient Max Gradient Min Damage
 from Line for Ratio Horizontal Tensile
 of Vertical Radius of Category
 Vertical Strain Strain
 Horizontal Displacement Curvature
 Movement
 Displacement Curve
 Calculations
 Curve

[m]	[m]	[m]	[m]	[m]	[m]	[%]	[%]	[%]	
0.0	0.0	1	0.0	2.3831	Hogging	340.90E-6	0.0	327.62E-6	
0.0	-219.49E-6	63835.	0						
(Negligible)									
0.0	-219.49E-6	54266.	2	2.3831	21.038	Sagging	0.0028301	0.0	0.0022435
(Negligible)									

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 47-43 | Sub-structure:

Vertical Offset Segment Start Length Curvature Deflection Average Max Max
 Gradient Max Gradient Min Damage
 from Line for Ratio Horizontal Tensile of
 of Vertical Radius of Category
 Vertical Strain Strain
 Horizontal Displacement Curvature
 Movement
 Displacement Curve
 Calculations
 Curve

[m]	[m]	[m]	[m]	[m]	[m]	[%]	[%]	[%]
0.0	0.0	1	0.0	9.5390	Hogging	0.0020820	0.0	0.0030898
0.0	-105.34E-6	51657.	0					

(Negligible)
 Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 44-39 | Sub-structure:

Vertical Offset Segment Start Length Curvature Deflection Average Max Max
 Gradient Max Gradient Min Damage
 from Line for Ratio Horizontal Tensile of
 of Vertical Radius of Category
 Vertical Strain Strain
 Horizontal Displacement Curvature
 Movement
 Displacement Curve
 Calculations
 Curve

[m]	[m]	[m]	[m]	[m]	[m]	[%]	[%]	[%]
0.0	0.0	1	0.0	2.9493	Hogging	123.93E-6	0.0	116.69E-6
0.0	-68.579E-6	294570.	0					

(Negligible)
 Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 46-45 | Sub-structure:

Vertical Offset Segment Start Length Curvature Deflection Average Max Max
 Gradient Max Gradient Min Damage
 from Line for Ratio Horizontal Tensile of
 of Vertical Radius of Category
 Vertical Strain Strain
 Horizontal Displacement Curvature
 Movement
 Displacement Curve
 Calculations
 Curve

[m]	[m]		[m]	[m]		[%]	[%]	[%]
0.0	0.0	1	0.0	9.5199	Hogging	324.04E-6	0.0	480.69E-6
0.0	-19.620E-6	350960.		0				

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: a-12 | Sub-structure:

Vertical Offset Gradient	Max Gradient	Segment Min	Start Damage	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of Curve
from Line for of Vertical Vertical Horizontal Movement Displacement Calculations	Radius of	Category		[m]	[m]	[%]	[%]	[%]	
[m]				[m]	[m]	[%]	[%]	[%]	
0.0	0.0	1	0.0	4.4594	Hogging	0.030314	0.0	0.030362	
0.0	-0.0013224	689.75		0					

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 12-11 | Sub-structure:

Vertical Offset Gradient	Max Gradient	Segment Min	Start Damage	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of Curve
from Line for of Vertical Vertical Horizontal Movement Displacement Calculations	Radius of	Category		[m]	[m]	[%]	[%]	[%]	
[m]				[m]	[m]	[%]	[%]	[%]	
0.0	0.0	1	0.0	6.6990	Hogging	0.047830	0.0	0.062257	
0.0	-0.0021064	628.33	1	(Very					

Slight)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 11-f | Sub-structure:

Vertical Offset Gradient	Max Gradient	Segment Min	Start Damage	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of Curve
from Line for of Vertical Vertical Horizontal Movement Displacement Calculations	Radius of	Category		[m]	[m]	[%]	[%]	[%]	
[m]				[m]	[m]	[%]	[%]	[%]	
0.0	0.0	1	0.0	4.4697	Hogging	0.039224	0.0	0.039354	
0.0	0.0027783	315.56		0					

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: ag | Sub-structure:

Vertical Offset Gradient	Max Gradient	Segment Min	Start Damage	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max of Curve
from Line for of Vertical Vertical Horizontal Movement Displacement Calculations	Radius of	Category		[m]	[m]	[%]	[%]	[%]	
[m]				[m]	[m]	[%]	[%]	[%]	

Movement Displacement Calculations	Curve									Curve
[m]			[m]	[m]		[%]	[%]	[%]		
0.0	0.0016254	1042.9	1	0.0	11.050	Sagging	0.017486	0.0	0.019293	

(Negligible)
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: gb | Sub-structure:

Vertical Offset Gradient from Line of Vertical Movement Displacement Calculations	Segment Max Gradient	Min	Start Length Damage	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max	Max	
of Vertical Movement Displacement Calculations	Radius of Category								of	
0.0	0.0013897	902.45	1	0.0	2.8976	Hogging	0.013867	0.0	0.013085	

(Negligible)			2	2.8976	1.7310	Sagging	0.0080128	0.0	0.0073825	
(Negligible)			3	4.6287	6.7705	Hogging	0.053995	0.0	0.070665	
0.0	-0.0036651	648.67	1	(Very						

Slight)
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: bc | Sub-structure:

Vertical Offset Gradient from Line of Vertical Movement Displacement Calculations	Segment Max Gradient	Min	Start Length Damage	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max	Max	
of Vertical Movement Displacement Calculations	Radius of Category								of	
0.0	0.0020379	1030.9	1	0.0	5.5590	Hogging	0.043794	0.0	0.051162	

Slight)
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: cd | Sub-structure:

Vertical Offset Gradient from Line of Vertical Movement Displacement Calculations	Segment Max Gradient	Min	Start Length Damage	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max	Max	
of Vertical Movement Displacement Calculations	Radius of Category								of	
0.0	803.52E-6	-	1	0.0	1.7483	Hogging	0.0	0.0	0.0	

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: eh | Sub-structure:

Vertical Offset	Segment	Start Length	Curvature	Deflection	Average	Max	Max
Gradient Max Gradient	Min	Damage		Ratio	Horizontal	Tensile	
from Line for	of Vertical	Radius of	Category		Strain	Strain	
of Vertical	Vertical	Curvature					
Horizontal Displacement	Curve						
Movement							
Displacement	Calculations						
Curve							

[m]	[m]	[m]	[m]	[%]	[%]	[%]	
0.0	0.0	1	0.0 2.6608	Hogging	0.010135	0.0	0.0096483
0.0	907.48E-6	2888.6	0				

(Negligible)

0.0	0.0015015	4496.2	2 2.6608	2.0052	Sagging	0.015804	0.0	0.014581
			0					

(Negligible)

0.0	0.0015015	1529.8	3 4.6660	5.0930	Hogging	0.032275	0.0	0.035575
			0					

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: hf | Sub-structure:

Vertical Offset	Segment	Start Length	Curvature	Deflection	Average	Max	Max
Gradient Max Gradient	Min	Damage		Ratio	Horizontal	Tensile	
from Line for	of Vertical	Radius of	Category		Strain	Strain	
of Vertical	Vertical	Curvature					
Horizontal Displacement	Curve						
Movement							
Displacement	Calculations						
Curve							

[m]	[m]	[m]	[m]	[%]	[%]	[%]	
0.0	0.0	1	0.0 10.879	Sagging	0.017391	0.0	0.018981
0.0	-0.0011841	1312.9	0				

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: de | Sub-structure:

Vertical Offset	Segment	Start Length	Curvature	Deflection	Average	Max	Max
Gradient Max Gradient	Min	Damage		Ratio	Horizontal	Tensile	
from Line for	of Vertical	Radius of	Category		Strain	Strain	
of Vertical	Vertical	Curvature					
Horizontal Displacement	Curve						
Movement							
Displacement	Calculations						
Curve							

[m]	[m]	[m]	[m]	[%]	[%]	[%]	
0.0	0.0	1	0.0 0.47607	Sagging	0.016765	0.0	0.016658
0.0	-0.0032965	254.48	0				

(Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Specific Building Damage Results - Critical Values for All Segments within Each Sub-Structure

Structure: 21-20 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0 295190.	262.16E-6 - 0 (Negligible)	0.0	-29.272E-6	0.93103	249.09E-6	0.0	-29.272E-6

Structure: 19-20 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0 - 32514.0	0.0014181 (Negligible)	0.0	-210.68E-6	1.7390	0.0013655	0.0	-210.68E-6

Structure: 19-18 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0 - 11861.0	0.0020972 (Negligible)	0.0	417.08E-6	2.4919	0.0020844	0.0	417.08E-6

Structure: 18-13 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0 53028.	735.32E-6 370690.0 (Negligible)	0.0	-65.467E-6	2.4923	725.59E-6	0.0	-65.467E-6

Structure: 21-a | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[%]	[%]		[mm]	[%]		
0.0	0.018246	0.0	0.0024318	6.4294	0.021059	0.0	0.0024318
- 471.53 0	(Negligible)						

Structure: f-50 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[%]	[%]		[mm]	[%]		
0.0	0.025204	0.0	-0.0032351	8.4392	0.033233	0.0	-0.0032351
- 428.57 0	(Negligible)						

Structure: 14-15 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[%]	[%]		[mm]	[%]		
0.0	0.0029487	0.0	564.35E-6	3.4130	0.0029284	0.0	564.35E-6
- 8980.1 0	(Negligible)						

Structure: 15-16 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[%]	[%]		[mm]	[%]		
0.0	0.0	0.0	654.15E-6	4.5189	0.0	0.0	654.15E-6
- - 0	(Negligible)						

Structure: 16-17 | Sub-structure:

Vertical Min Offset from Radius of	Deflection Min Ratio	Average Damage Category Horizontal	Max Slope	Max Settlement	Max Tensile	Max Gradient of	Max Gradient of Vertical
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Line for	Strain	Strain	Horizontal	Displacement
Curvature Curvature			Displacement	Curve
Vertical			Curve	
(Hogging) (Sagging)				
Movement				
Calculations				
[m] [m] [%] [%] [mm] [%]				
0.0 0.0 0.0 0.0 0.0013978 7.1741 0.0 0.0 0.0013978				
- 0 (Negligible)				

Structure: 17-g | Sub-structure:

Vertical	Deflection	Average	Max Slope	Max	Max	Max Gradient	Max Gradient
Min	Min	Damage	Category	Settlement	Tensile	of	of Vertical
Offset from	Ratio	Horizontal				Horizontal	Displacement
Radius of	Radius of					Displacement	Curve
Line for	Strain						
Curvature Curvature							
Vertical							
(Hogging) (Sagging)							
Movement							
Calculations							
[m] [m] [%] [%] [mm] [%]							
0.0 0.0 0.0 0.0 0.0020069 10.409 0.0 0.0 0.0020069							
- 0 (Negligible)							

Structure: h-49 | Sub-structure:

Vertical	Deflection	Average	Max Slope	Max	Max	Max Gradient	Max Gradient
Min	Min	Damage	Category	Settlement	Tensile	of	of Vertical
Offset from	Ratio	Horizontal				Horizontal	Displacement
Radius of	Radius of					Displacement	Curve
Line for	Strain						
Curvature Curvature							
Vertical							
(Hogging) (Sagging)							
Movement							
Calculations							
[m] [m] [%] [%] [mm] [%]							
0.0 0.023160 0.0 -0.0021838 10.057 0.023001 0.0 -0.0021838							
- 1141.0 0 (Negligible)							

Structure: 49-36 | Sub-structure:

Vertical	Deflection	Average	Max Slope	Max	Max	Max Gradient	Max Gradient
Min	Min	Damage	Category	Settlement	Tensile	of	of Vertical
Offset from	Ratio	Horizontal				Horizontal	Displacement
Radius of	Radius of					Displacement	Curve
Line for	Strain						
Curvature Curvature							
Vertical							
(Hogging) (Sagging)							
Movement							
Calculations							
[m] [m] [%] [%] [mm] [%]							
0.0 0.011897 0.0 -0.0013780 6.3921 0.011795 0.0 -0.0013780							
- 2485.8 0 (Negligible)							

Structure: 36-48 | Sub-structure:

Vertical	Deflection	Average	Max Slope	Max	Max	Max Gradient	Max Gradient
Min	Min	Damage	Category	Settlement	Tensile	of	of Vertical
Offset from	Ratio	Horizontal				Horizontal	Displacement
Radius of	Radius of					Displacement	Curve
Line for	Strain						
Curvature Curvature							
Vertical							
(Hogging) (Sagging)							
Movement							
Calculations							
[m] [m] [%] [%] [mm] [%]							

Calculations

[m]	[m]	[%]	[%]		[mm]	[%]		
[m]	[m]							
0.0	0.0029303	0.0	-542.01E-6	3.6729	0.0029069	0.0	-542.01E-6	
-	9717.5	0 (Negligible)						

Structure: 48-47 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
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[m]	[m]	[%]	[%]	[mm]	[%]		
[m]	[m]						
0.0	0.0	0.0	-399.83E-6	2.5618	0.0	0.0	-399.83E-6
-	-	0 (Negligible)					

Structure: 47-51 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
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[m]	[m]	[%]	[%]	[mm]	[%]		
[m]	[m]						
0.0	202.65E-6	0.0	-60.786E-6	2.0940	200.81E-6	0.0	-60.786E-6
159820.	2.7255E+6	0 (Negligible)					

Structure: 50-46 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
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[m]	[m]	[%]	[%]	[mm]	[%]		
[m]	[m]						
0.0	199.13E-6	0.0	18.985E-6	0.61352	190.72E-6	0.0	18.985E-6
465000.	-	0 (Negligible)					

Structure: 46-47 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
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[m]	[m]	[%]	[%]	[mm]	[%]		
[m]	[m]						
0.0	0.0031242	0.0	318.93E-6	2.0937	0.0028401	0.0	318.93E-6
-	16804.	0 (Negligible)					

Structure: 24-25 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0	546.17E-6	0.0	-57.955E-6	0.45218	529.61E-6	0.0	-57.955E-6
- 124000.0	(Negligible)						

Structure: 25-26 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0	37.338E-6	0.0	5.0429E-6	0.15064	36.943E-6	0.0	5.0429E-6
1.4340E+6	- 0	(Negligible)					

Structure: 26-27 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0	0.0012552	0.0	118.68E-6	0.79369	0.0014037	0.0	118.68E-6
- 46796.0	(Negligible)						

Structure: 27-28 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0	207.03E-6	0.0	-37.472E-6	0.79381	206.24E-6	0.0	-37.472E-6
147640.	- 0	(Negligible)					

Structure: 28-29 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0	483.13E-6	0.0	-92.007E-6	0.69300	476.90E-6	0.0	-92.007E-6
- 74990.0	0 (Negligible)						

Structure: 27-32 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0	554.44E-6	0.0	-18.705E-6	0.82141	548.92E-6	0.0	-18.705E-6
110750.	- 0 (Negligible)						

Structure: 33-31 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0	0.0056215	0.0	536.48E-6	2.7302	0.0079780	0.0	536.48E-6
- 7206.3	0 (Negligible)						

Structure: 31-34 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0	690.10E-6	0.0	-240.50E-6	2.7308	687.75E-6	0.0	-240.50E-6
31586.	- 0 (Negligible)						

Structure: 34-35 | Sub-structure:

Vertical Min Offset from Radius of	Deflection Min Ratio	Average Damage Category Horizontal	Max Slope	Max Settlement	Max Tensile	Max Gradient of	Max Gradient of Vertical
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Line for Curvature Vertical (Hogging) Movement Calculations	Curvature	Strain	Strain	Horizontal Displacement	Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]
0.0	0.0	0.0	0.0	-295.93E-6	1.9571
-	-	0 (Negligible)		0.0	-295.93E-6

Structure: 35-41 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0	0.0	439.76E-6	0.0	-156.29E-6	1.5635	431.26E-6	0.0
-	-	79067.0 (Negligible)					-156.29E-6

Structure: 41-40 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0	0.0	490.50E-6	0.0	166.46E-6	1.6685	478.47E-6	0.0
-	-	78039.0 (Negligible)					166.46E-6

Structure: 40-39 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0	0.0	0.0015348	0.0	-236.45E-6	1.6686	0.0015002	0.0
-	-	24385.0 (Negligible)					-236.45E-6

Structure: 39-38 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0	0.0	0.0015348	0.0	-236.45E-6	1.6686	0.0015002	0.0
-	-	24385.0 (Negligible)					-236.45E-6

Calculations

[m]	[m]	[%]	[%]		[mm]	[%]		
[m]	[m]							
0.0		838.79E-6	0.0	-69.519E-6	0.92607	0.0012288	0.0	-69.519E-6
-	237690.0	(Negligible)						

Structure: 38-25 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve	
[m]	[m]	[%]	[%]	[mm]	[%]			
[m]	[m]							
0.0		162.61E-6	0.0	6.0243E-6	0.15188	169.27E-6	0.0	6.0243E-6
1.2817E+6		- 0 (Negligible)						

Structure: 20-22 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve	
[m]	[m]	[%]	[%]	[mm]	[%]			
[m]	[m]							
0.0		650.34E-6	0.0	-39.745E-6	0.93634	976.50E-6	0.0	-39.745E-6
182800.		- 0 (Negligible)						

Structure: 22-b | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve	
[m]	[m]	[%]	[%]	[mm]	[%]			
[m]	[m]							
0.0		0.016797	0.0	0.0016814	6.6327	0.020474	0.0	0.0016814
-	1408.7	0 (Negligible)						

Structure: e-45 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve	
[m]	[m]	[%]	[%]	[mm]	[%]			
[m]	[m]							
0.0		0.022223	0.0	-0.0023436	8.4124	0.023340	0.0	-0.0023436
-	932.38	0 (Negligible)						

Structure: 18-31 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0 35236.	0.0022973 - 0 (Negligible)	0.0	-152.77E-6	2.4923	0.0030196	0.0	-152.77E-6

Structure: 23-24 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0 - 41011. 0	0.0030884 0 (Negligible)	0.0	-266.30E-6	2.6002	0.0036539	0.0	-266.30E-6

Structure: b-27 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0 - 789.94 0	0.026525 0 (Negligible)	0.0	-0.0025235	8.4387	0.034247	0.0	-0.0025235

Structure: 42-37 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0 63835.	0.0028301 54266. 0 (Negligible)	0.0	-219.49E-6	2.5515	0.0022435	0.0	-219.49E-6

Structure: 47-43 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature (Hogging) Movement Calculations	Deflection Min Ratio of Radius of Curvature (Sagging) Movement Calculations	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0	0.0020820	0.0	-105.34E-6	2.1680	0.0030898	0.0	-105.34E-6
51657.	- 0 (Negligible)						

Structure: 44-39 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature (Hogging) Movement Calculations	Deflection Min Ratio of Radius of Curvature (Sagging) Movement Calculations	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0	123.93E-6	0.0	-68.579E-6	1.1210	116.69E-6	0.0	-68.579E-6
294570.	- 0 (Negligible)						

Structure: 46-45 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature (Hogging) Movement Calculations	Deflection Min Ratio of Radius of Curvature (Sagging) Movement Calculations	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0	324.04E-6	0.0	-19.620E-6	0.61733	480.69E-6	0.0	-19.620E-6
350960.	- 0 (Negligible)						

Structure: a-12 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature (Hogging) Movement Calculations	Deflection Min Ratio of Radius of Curvature (Sagging) Movement Calculations	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0	0.030314	0.0	-0.0013224	7.4252	0.030362	0.0	-0.0013224
689.75	- 0 (Negligible)						

Structure: 12-11 | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature (Hogging) Movement Calculations	Deflection Min Ratio of Radius of Curvature (Sagging) Movement Calculations	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		

Line for Curvature Vertical (Hogging) Movement Calculations	Curvature	Strain	Strain	Horizontal Displacement	Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]
0.0	0.047830	0.0	-0.0021064	9.1917	0.062257
628.33	- 1 (Very Slight)				0.0 -0.0021064

Structure: 11-f | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0	0.039224	0.0	0.0027783	9.0398	0.039354	0.0	0.0027783
315.56	- 0 (Negligible)						

Structure: ag | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0	0.017486	0.0	0.0016254	10.410	0.019293	0.0	0.0016254
- 1042.9	0 (Negligible)						

Structure: gb | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement Calculations	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		
0.0	0.053995	0.0	-0.0036651	14.487	0.070665	0.0	-0.0036651
648.67	2434.1	1 (Very Slight)					

Structure: bc | Sub-structure:

Vertical Min Offset from Radius of Line for Curvature Vertical (Hogging) Movement	Deflection Min Ratio	Average Damage Category Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve
[m]	[m]	[%]	[%]	[mm]	[%]		

Specific Building Damage Results - Critical Segments within Each Structure

Structure Name	Parameter	Critical	Critical	Start	End	Curvature	Max Slope	
Max	Max	Min	Min					
Settlement	Tensile	Radius of	Radius of					
Strain	Curvature	Curvature						
(Hogging)	(Sagging)							
[mm]	[%]	[m]	[m]	[m]	[m]			
21-20		Max Slope		1	0.0	11.749	Hogging	29.272E-6
0.93103	249.09E-6	295190.	- 0 (Negligible)					
		Max Settlement		1	0.0	11.749	Hogging	29.272E-6
0.93103	249.09E-6	295190.	- 0 (Negligible)					
		Max Tensile		1	0.0	11.749	Hogging	29.272E-6
0.93103	249.09E-6	295190.	- 0 (Negligible)					
		Strain						
		Min Radius of		1	0.0	11.749	Hogging	29.272E-6
0.93103	249.09E-6	295190.	- 0 (Negligible)					
		Curvature (Hogging)						
		Min Radius of		-	-	-	-	-
-	-	-	-					
		Curvature (Sagging)						
19-20		Max Slope		1	0.0	5.0389	Sagging	210.68E-6
1.7390	0.0013655	-	32514. 0 (Negligible)					
		Max Settlement		1	0.0	5.0389	Sagging	210.68E-6
1.7390	0.0013655	-	32514. 0 (Negligible)					
		Max Tensile		1	0.0	5.0389	Sagging	210.68E-6
1.7390	0.0013655	-	32514. 0 (Negligible)					
		Strain						
		Min Radius of		-	-	-	-	-
-	-	-	-					
		Curvature (Hogging)						
		Min Radius of		1	0.0	5.0389	Sagging	210.68E-6
1.7390	0.0013655	-	32514. 0 (Negligible)					
		Curvature (Sagging)						
19-18		Max Slope		1	0.0	2.0092	Sagging	417.08E-6
2.4919	0.0020844	-	11861. 0 (Negligible)					
		Max Settlement		1	0.0	2.0092	Sagging	417.08E-6
2.4919	0.0020844	-	11861. 0 (Negligible)					
		Max Tensile		1	0.0	2.0092	Sagging	417.08E-6
2.4919	0.0020844	-	11861. 0 (Negligible)					
		Strain						
		Min Radius of		-	-	-	-	-
-	-	-	-					
		Curvature (Hogging)						
		Min Radius of		1	0.0	2.0092	Sagging	417.08E-6
2.4919	0.0020844	-	11861. 0 (Negligible)					
		Curvature (Sagging)						
18-13		Max Slope		3	11.192	14.959	Hogging	65.467E-6
1.8955	178.99E-6	148040.	- 0 (Negligible)					
		Max Settlement		1	0.0	5.9534	Hogging	65.337E-6
2.4923	725.59E-6	53028.	- 0 (Negligible)					
		Max Tensile		1	0.0	5.9534	Hogging	65.337E-6
2.4923	725.59E-6	53028.	- 0 (Negligible)					
		Strain						
		Min Radius of		1	0.0	5.9534	Hogging	65.337E-6
2.4923	725.59E-6	53028.	- 0 (Negligible)					
		Curvature (Hogging)						
		Min Radius of		2	5.9534	11.192	Sagging	65.337E-6
2.2083	161.04E-6	-	370690. 0 (Negligible)					
		Curvature (Sagging)						
21-a		Max Slope		1	0.0	11.820	Sagging	0.0024318
6.4294	0.021059	-	471.53 0 (Negligible)					

			Max Settlement		1	0.0	11.820	Sagging	0.0024318
6.4294	0.021059	-	471.53 0 (Negligible)		1	0.0	11.820	Sagging	0.0024318
6.4294	0.021059	-	471.53 0 (Negligible)		1	0.0	11.820	Sagging	0.0024318
-	-	-	Strain		-	-	-	-	-
-	-	-	Min Radius of		-	-	-	-	-
			Curvature						
			(Hogging)						
6.4294	0.021059	-	471.53 0 (Negligible)		1	0.0	11.820	Sagging	0.0024318
			Min Radius of						
			Curvature						
			(Sagging)						
f-50			Max Slope		1	0.0	14.889	Sagging	0.0032351
8.4392	0.033233	-	428.57 0 (Negligible)		1	0.0	14.889	Sagging	0.0032351
8.4392	0.033233	-	428.57 0 (Negligible)		1	0.0	14.889	Sagging	0.0032351
8.4392	0.033233	-	428.57 0 (Negligible)		1	0.0	14.889	Sagging	0.0032351
-	-	-	Strain		-	-	-	-	-
-	-	-	Min Radius of		-	-	-	-	-
			Curvature						
			(Hogging)						
8.4392	0.033233	-	428.57 0 (Negligible)		1	0.0	14.889	Sagging	0.0032351
			Min Radius of						
			Curvature						
			(Sagging)						
14-15			Max Slope		1	0.0	2.1390	Sagging	564.35E-6
3.4130	0.0029284	-	8980.1 0 (Negligible)		1	0.0	2.1390	Sagging	564.35E-6
3.4130	0.0029284	-	8980.1 0 (Negligible)		1	0.0	2.1390	Sagging	564.35E-6
3.4130	0.0029284	-	8980.1 0 (Negligible)		1	0.0	2.1390	Sagging	564.35E-6
-	-	-	Strain		-	-	-	-	-
-	-	-	Min Radius of		-	-	-	-	-
			Curvature						
			(Hogging)						
3.4130	0.0029284	-	8980.1 0 (Negligible)		1	0.0	2.1390	Sagging	564.35E-6
			Min Radius of						
			Curvature						
			(Sagging)						
15-16			Max Slope		1	0.0	1.6897	Sagging	654.15E-6
4.5189	0.0	-	- 0 (Negligible)		1	0.0	1.6897	Sagging	654.15E-6
4.5189	0.0	-	- 0 (Negligible)		1	0.0	1.6897	Sagging	654.15E-6
4.5189	0.0	-	- 0 (Negligible)		1	0.0	1.6897	Sagging	654.15E-6
-	-	-	Strain		-	-	-	-	-
-	-	-	Min Radius of		-	-	-	-	-
			Curvature						
			(Hogging)						
-	-	-	Min Radius of		-	-	-	-	-
			Curvature						
			(Sagging)						
16-17			Max Slope		1	0.0	1.8990	Sagging	0.0013978
7.1741	0.0	-	- 0 (Negligible)		1	0.0	1.8990	Sagging	0.0013978
7.1741	0.0	-	- 0 (Negligible)		1	0.0	1.8990	Sagging	0.0013978
7.1741	0.0	-	- 0 (Negligible)		1	0.0	1.8990	Sagging	0.0013978
-	-	-	Strain		-	-	-	-	-
-	-	-	Min Radius of		-	-	-	-	-
			Curvature						
			(Hogging)						
-	-	-	Min Radius of		-	-	-	-	-
			Curvature						
			(Sagging)						
17-g			Max Slope		1	0.0	1.6115	Sagging	0.0020069
10.409	0.0	-	- 0 (Negligible)		1	0.0	1.6115	Sagging	0.0020069
10.409	0.0	-	- 0 (Negligible)		1	0.0	1.6115	Sagging	0.0020069

10.409	0.0	Max Tensile	-	-	0 (Negligible)	1	0.0	1.6115	Sagging	0.0020069
-	-	Strain	-	-	-	-	-	-	-	-
-	-	Min Radius of	-	-	-	-	-	-	-	-
-	-	Curvature (Hogging)	-	-	-	-	-	-	-	-
-	-	Min Radius of	-	-	-	-	-	-	-	-
-	-	Curvature (Sagging)	-	-	-	-	-	-	-	-
h-49		Max Slope	-	-	-	1	0.0	2.1345	Sagging	0.0021838
10.057	0.023001	Max Settlement	-	1141.0	0 (Negligible)	1	0.0	2.1345	Sagging	0.0021838
10.057	0.023001	Max Tensile	-	1141.0	0 (Negligible)	1	0.0	2.1345	Sagging	0.0021838
10.057	0.023001	Strain	-	1141.0	0 (Negligible)	1	0.0	2.1345	Sagging	0.0021838
-	-	Min Radius of	-	-	-	-	-	-	-	-
-	-	Curvature (Hogging)	-	-	-	-	-	-	-	-
-	-	Min Radius of	-	-	-	-	-	-	-	-
10.057	0.023001	Curvature (Sagging)	-	1141.0	0 (Negligible)	1	0.0	2.1345	Sagging	0.0021838
49-36		Max Slope	-	-	-	1	0.0	2.3890	Sagging	0.0013780
6.3921	0.011795	Max Settlement	-	2485.8	0 (Negligible)	1	0.0	2.3890	Sagging	0.0013780
6.3921	0.011795	Max Tensile	-	2485.8	0 (Negligible)	1	0.0	2.3890	Sagging	0.0013780
6.3921	0.011795	Strain	-	2485.8	0 (Negligible)	1	0.0	2.3890	Sagging	0.0013780
-	-	Min Radius of	-	-	-	-	-	-	-	-
-	-	Curvature (Hogging)	-	-	-	-	-	-	-	-
-	-	Min Radius of	-	-	-	-	-	-	-	-
6.3921	0.011795	Curvature (Sagging)	-	2485.8	0 (Negligible)	1	0.0	2.3890	Sagging	0.0013780
36-48		Max Slope	-	-	-	1	0.0	2.3002	Sagging	542.01E-6
3.6729	0.0029069	Max Settlement	-	9717.5	0 (Negligible)	1	0.0	2.3002	Sagging	542.01E-6
3.6729	0.0029069	Max Tensile	-	9717.5	0 (Negligible)	1	0.0	2.3002	Sagging	542.01E-6
3.6729	0.0029069	Strain	-	9717.5	0 (Negligible)	1	0.0	2.3002	Sagging	542.01E-6
-	-	Min Radius of	-	-	-	-	-	-	-	-
-	-	Curvature (Hogging)	-	-	-	-	-	-	-	-
-	-	Min Radius of	-	-	-	-	-	-	-	-
3.6729	0.0029069	Curvature (Sagging)	-	9717.5	0 (Negligible)	1	0.0	2.3002	Sagging	542.01E-6
48-47		Max Slope	-	-	-	1	0.0	1.1690	Sagging	399.83E-6
2.5618	0.0	Max Settlement	-	-	-	1	0.0	1.1690	Sagging	399.83E-6
2.5618	0.0	Max Tensile	-	-	-	1	0.0	1.1690	Sagging	399.83E-6
2.5618	0.0	Strain	-	-	-	1	0.0	1.1690	Sagging	399.83E-6
-	-	Min Radius of	-	-	-	-	-	-	-	-
-	-	Curvature (Hogging)	-	-	-	-	-	-	-	-
-	-	Min Radius of	-	-	-	-	-	-	-	-
-	-	Curvature (Sagging)	-	-	-	-	-	-	-	-
47-51		Max Slope	-	-	-	3	5.7945	10.749	Hogging	60.786E-6
1.8172	200.81E-6	Max Settlement	-	159820.	0 (Negligible)	1	0.0	3.7686	Hogging	49.594E-6
2.0940	113.83E-6	Max Tensile	-	210330.	0 (Negligible)	3	5.7945	10.749	Hogging	60.786E-6
1.8172	200.81E-6	Strain	-	159820.	0 (Negligible)	3	5.7945	10.749	Hogging	60.786E-6

-	-	Min Radius of	-	-	-	-	-	-
-	-	Curvature	-	-	-	-	-	-
		(Hogging)						
0.79369	0.0014037	Min Radius of	1	0.0	11.270	Sagging	118.68E-6	
		Curvature						
		(Sagging)						
27-28		Max Slope	1	0.0	3.1691	Hogging	37.472E-6	
0.79381	206.24E-6	147640.						- 0 (Negligible)
		Max Settlement	1	0.0	3.1691	Hogging	37.472E-6	
0.79381	206.24E-6	147640.						- 0 (Negligible)
		Max Tensile	1	0.0	3.1691	Hogging	37.472E-6	
0.79381	206.24E-6	147640.						- 0 (Negligible)
		Strain						
		Min Radius of	1	0.0	3.1691	Hogging	37.472E-6	
0.79381	206.24E-6	147640.						- 0 (Negligible)
		Curvature						
		(Hogging)						
-	-	Min Radius of	-	-	-	-	-	-
-	-	Curvature	-	-	-	-	-	-
-	-	(Sagging)	-	-	-	-	-	-
28-29		Max Slope	1	0.0	2.9270	Sagging	92.007E-6	
0.69300	476.90E-6	-						74990.0 (Negligible)
		Max Settlement	1	0.0	2.9270	Sagging	92.007E-6	
0.69300	476.90E-6	-						74990.0 (Negligible)
		Max Tensile	1	0.0	2.9270	Sagging	92.007E-6	
0.69300	476.90E-6	-						74990.0 (Negligible)
		Strain						
-	-	Min Radius of	-	-	-	-	-	-
-	-	Curvature	-	-	-	-	-	-
-	-	(Hogging)	-	-	-	-	-	-
		Min Radius of	1	0.0	2.9270	Sagging	92.007E-6	
0.69300	476.90E-6	-						74990.0 (Negligible)
		Curvature						
		(Sagging)						
27-32		Max Slope	1	0.0	5.1490	Hogging	18.705E-6	
0.82141	548.92E-6	110750.						- 0 (Negligible)
		Max Settlement	1	0.0	5.1490	Hogging	18.705E-6	
0.82141	548.92E-6	110750.						- 0 (Negligible)
		Max Tensile	1	0.0	5.1490	Hogging	18.705E-6	
0.82141	548.92E-6	110750.						- 0 (Negligible)
		Strain						
		Min Radius of	1	0.0	5.1490	Hogging	18.705E-6	
0.82141	548.92E-6	110750.						- 0 (Negligible)
		Curvature						
		(Hogging)						
-	-	Min Radius of	-	-	-	-	-	-
-	-	Curvature	-	-	-	-	-	-
-	-	(Sagging)	-	-	-	-	-	-
33-31		Max Slope	1	0.0	17.679	Sagging	536.48E-6	
2.7302	0.0079780	-						7206.3 0 (Negligible)
		Max Settlement	1	0.0	17.679	Sagging	536.48E-6	
2.7302	0.0079780	-						7206.3 0 (Negligible)
		Max Tensile	1	0.0	17.679	Sagging	536.48E-6	
2.7302	0.0079780	-						7206.3 0 (Negligible)
		Strain						
-	-	Min Radius of	-	-	-	-	-	-
-	-	Curvature	-	-	-	-	-	-
-	-	(Hogging)	-	-	-	-	-	-
		Min Radius of	1	0.0	17.679	Sagging	536.48E-6	
2.7302	0.0079780	-						7206.3 0 (Negligible)
		Curvature						
		(Sagging)						
31-34		Max Slope	1	0.0	2.9772	Hogging	240.50E-6	
2.7308	687.75E-6	31586.						- 0 (Negligible)
		Max Settlement	1	0.0	2.9772	Hogging	240.50E-6	
2.7308	687.75E-6	31586.						- 0 (Negligible)
		Max Tensile	1	0.0	2.9772	Hogging	240.50E-6	
2.7308	687.75E-6	31586.						- 0 (Negligible)
		Strain						
		Min Radius of	1	0.0	2.9772	Hogging	240.50E-6	
2.7308	687.75E-6	31586.						- 0 (Negligible)

			Curvature (Hogging) Min Radius of	-	-	-	-	-
			Curvature (Sagging) Max Slope	1	0.0	1.3290	Sagging	295.93E-6
34-35	1.9571	0.0	- 0 (Negligible)	1	0.0	1.3290	Sagging	295.93E-6
			Max Settlement	1	0.0	1.3290	Sagging	295.93E-6
1.9571		0.0	- 0 (Negligible)	1	0.0	1.3290	Sagging	295.93E-6
			Max Tensile	1	0.0	1.3290	Sagging	295.93E-6
1.9571	0.0		- 0 (Negligible)					
			Strain Min Radius of	-	-	-	-	-
			Curvature (Hogging) Min Radius of	-	-	-	-	-
			Curvature (Sagging) Max Slope	1	0.0	3.5991	Sagging	156.29E-6
35-41	1.5635	431.26E-6	- 79067. 0 (Negligible)	1	0.0	3.5991	Sagging	156.29E-6
			Max Settlement	1	0.0	3.5991	Sagging	156.29E-6
1.5635		431.26E-6	- 79067. 0 (Negligible)	1	0.0	3.5991	Sagging	156.29E-6
			Max Tensile	1	0.0	3.5991	Sagging	156.29E-6
1.5635	431.26E-6		- 79067. 0 (Negligible)					
			Strain Min Radius of	-	-	-	-	-
			Curvature (Hogging) Min Radius of	1	0.0	3.5991	Sagging	156.29E-6
1.5635	431.26E-6		- 79067. 0 (Negligible)					
			Curvature (Sagging) Max Slope	1	0.0	4.0690	Sagging	166.46E-6
41-40	1.6685	478.47E-6	- 78039. 0 (Negligible)	1	0.0	4.0690	Sagging	166.46E-6
			Max Settlement	1	0.0	4.0690	Sagging	166.46E-6
1.6685		478.47E-6	- 78039. 0 (Negligible)	1	0.0	4.0690	Sagging	166.46E-6
			Max Tensile	1	0.0	4.0690	Sagging	166.46E-6
1.6685	478.47E-6		- 78039. 0 (Negligible)					
			Strain Min Radius of	-	-	-	-	-
			Curvature (Hogging) Min Radius of	1	0.0	4.0690	Sagging	166.46E-6
1.6685	478.47E-6		- 78039. 0 (Negligible)					
			Curvature (Sagging) Max Slope	1	0.0	3.8991	Sagging	236.45E-6
40-39	1.6686	0.0015002	- 24385. 0 (Negligible)	1	0.0	3.8991	Sagging	236.45E-6
			Max Settlement	1	0.0	3.8991	Sagging	236.45E-6
1.6686		0.0015002	- 24385. 0 (Negligible)	1	0.0	3.8991	Sagging	236.45E-6
			Max Tensile	1	0.0	3.8991	Sagging	236.45E-6
1.6686	0.0015002		- 24385. 0 (Negligible)					
			Strain Min Radius of	-	-	-	-	-
			Curvature (Hogging) Min Radius of	1	0.0	3.8991	Sagging	236.45E-6
1.6686	0.0015002		- 24385. 0 (Negligible)					
			Curvature (Sagging) Max Slope	1	0.0	19.580	Sagging	69.519E-6
39-38	0.92607	0.0012288	- 237690. 0 (Negligible)	1	0.0	19.580	Sagging	69.519E-6
			Max Settlement	1	0.0	19.580	Sagging	69.519E-6
0.92607		0.0012288	- 237690. 0 (Negligible)	1	0.0	19.580	Sagging	69.519E-6
			Max Tensile	1	0.0	19.580	Sagging	69.519E-6
0.92607	0.0012288		- 237690. 0 (Negligible)					
			Strain Min Radius of	-	-	-	-	-
			Curvature (Hogging)					

23-24		Curvature (Sagging)			1	0.0	0.44043	Sagging	266.30E-6
2.6002	0.0	Max Slope	- 361380. 0 (Negligible)		1	0.0	0.44043	Sagging	266.30E-6
2.6002	0.0	Max Settlement	- 361380. 0 (Negligible)		1	0.0	0.44043	Sagging	266.30E-6
2.4829	0.0036539	Max Tensile	- 41011. 0 (Negligible)		2	0.44043	12.819	Sagging	266.30E-6
-	-	Strain	- - -		-	-	- -	-	-
-	-	Min Radius of	- - -		-	-	- -	-	-
2.4829	0.0036539	Curvature (Hogging)	- 41011. 0 (Negligible)		2	0.44043	12.819	Sagging	266.30E-6
b-27		Min Radius of	- 41011. 0 (Negligible)		2	0.44043	12.819	Sagging	266.30E-6
8.4387	0.034247	Curvature (Sagging)	- 789.94 0 (Negligible)		1	0.0	10.644	Sagging	0.0025235
8.4387	0.034247	Max Slope	- 789.94 0 (Negligible)		1	0.0	10.644	Sagging	0.0025235
8.4387	0.034247	Max Settlement	- 789.94 0 (Negligible)		1	0.0	10.644	Sagging	0.0025235
8.4387	0.034247	Max Tensile	- 789.94 0 (Negligible)		1	0.0	10.644	Sagging	0.0025235
-	-	Strain	- - -		-	-	- -	-	-
-	-	Min Radius of	- - -		-	-	- -	-	-
8.4387	0.034247	Curvature (Hogging)	- 789.94 0 (Negligible)		1	0.0	10.644	Sagging	0.0025235
42-37		Min Radius of	- 789.94 0 (Negligible)		1	0.0	10.644	Sagging	0.0025235
2.5515	327.62E-6	Curvature (Sagging)	- 63835. - 0 (Negligible)		1	0.0	2.3831	Hogging	219.49E-6
2.5515	327.62E-6	Max Slope	- 63835. - 0 (Negligible)		1	0.0	2.3831	Hogging	219.49E-6
2.0477	0.0022435	Max Settlement	- 54266. 0 (Negligible)		2	2.3831	23.421	Sagging	219.49E-6
2.0477	0.0022435	Max Tensile	- 54266. 0 (Negligible)		2	2.3831	23.421	Sagging	219.49E-6
2.5515	327.62E-6	Strain	- 63835. - 0 (Negligible)		1	0.0	2.3831	Hogging	219.49E-6
2.0477	0.0022435	Min Radius of	- 54266. 0 (Negligible)		2	2.3831	23.421	Sagging	219.49E-6
47-43		Curvature (Hogging)	- 54266. 0 (Negligible)		2	2.3831	23.421	Sagging	219.49E-6
2.1680	0.0030898	Min Radius of	- 54266. 0 (Negligible)		2	2.3831	23.421	Sagging	219.49E-6
2.1680	0.0030898	Curvature (Sagging)	- 51657. - 0 (Negligible)		1	0.0	9.5390	Hogging	105.34E-6
2.1680	0.0030898	Max Slope	- 51657. - 0 (Negligible)		1	0.0	9.5390	Hogging	105.34E-6
2.1680	0.0030898	Max Settlement	- 51657. - 0 (Negligible)		1	0.0	9.5390	Hogging	105.34E-6
2.1680	0.0030898	Max Tensile	- 51657. - 0 (Negligible)		1	0.0	9.5390	Hogging	105.34E-6
2.1680	0.0030898	Strain	- 51657. - 0 (Negligible)		1	0.0	9.5390	Hogging	105.34E-6
2.1680	0.0030898	Min Radius of	- 51657. - 0 (Negligible)		1	0.0	9.5390	Hogging	105.34E-6
-	-	Curvature (Hogging)	- - -		-	-	- -	-	-
-	-	Min Radius of	- - -		-	-	- -	-	-
44-39		Curvature (Sagging)	- - -		1	0.0	2.9493	Hogging	68.579E-6
1.1210	116.69E-6	Max Slope	- 294570. - 0 (Negligible)		1	0.0	2.9493	Hogging	68.579E-6
1.1210	116.69E-6	Max Settlement	- 294570. - 0 (Negligible)		1	0.0	2.9493	Hogging	68.579E-6
1.1210	116.69E-6	Max Tensile	- 294570. - 0 (Negligible)		1	0.0	2.9493	Hogging	68.579E-6
1.1210	116.69E-6	Strain	- 294570. - 0 (Negligible)		1	0.0	2.9493	Hogging	68.579E-6
1.1210	116.69E-6	Min Radius of	- 294570. - 0 (Negligible)		1	0.0	2.9493	Hogging	68.579E-6
-	-	Curvature (Hogging)	- - -		-	-	- -	-	-
-	-	Min Radius of	- - -		-	-	- -	-	-
		Curvature (Sagging)	- - -						

46-45		Max Slope		1	0.0	9.5199	Hogging	19.620E-6
0.61733	480.69E-6	350960.	- 0 (Negligible)	1	0.0	9.5199	Hogging	19.620E-6
0.61733	480.69E-6	Max Settlement		1	0.0	9.5199	Hogging	19.620E-6
		350960.	- 0 (Negligible)	1	0.0	9.5199	Hogging	19.620E-6
0.61733	480.69E-6	Max Tensile		1	0.0	9.5199	Hogging	19.620E-6
		350960.	- 0 (Negligible)	1	0.0	9.5199	Hogging	19.620E-6
		Strain		1	0.0	9.5199	Hogging	19.620E-6
0.61733	480.69E-6	Min Radius of		1	0.0	9.5199	Hogging	19.620E-6
		350960.	- 0 (Negligible)	1	0.0	9.5199	Hogging	19.620E-6
		Curvature		-	-	-	-	-
		(Hogging)		-	-	-	-	-
		Min Radius of		-	-	-	-	-
		Curvature		-	-	-	-	-
		(Sagging)		-	-	-	-	-
a-12		Max Slope		1	0.0	4.4594	Hogging	0.0013224
7.4252	0.030362	689.75	- 0 (Negligible)	1	0.0	4.4594	Hogging	0.0013224
7.4252	0.030362	Max Settlement		1	0.0	4.4594	Hogging	0.0013224
		689.75	- 0 (Negligible)	1	0.0	4.4594	Hogging	0.0013224
7.4252	0.030362	Max Tensile		1	0.0	4.4594	Hogging	0.0013224
		689.75	- 0 (Negligible)	1	0.0	4.4594	Hogging	0.0013224
		Strain		1	0.0	4.4594	Hogging	0.0013224
7.4252	0.030362	Min Radius of		1	0.0	4.4594	Hogging	0.0013224
		689.75	- 0 (Negligible)	1	0.0	4.4594	Hogging	0.0013224
		Curvature		-	-	-	-	-
		(Hogging)		-	-	-	-	-
		Min Radius of		-	-	-	-	-
		Curvature		-	-	-	-	-
		(Sagging)		-	-	-	-	-
12-11		Max Slope		1	0.0	6.6990	Hogging	0.0021064
9.1917	0.062257	628.33	- 1 (Very Slight)	1	0.0	6.6990	Hogging	0.0021064
9.1917	0.062257	Max Settlement		1	0.0	6.6990	Hogging	0.0021064
		628.33	- 1 (Very Slight)	1	0.0	6.6990	Hogging	0.0021064
9.1917	0.062257	Max Tensile		1	0.0	6.6990	Hogging	0.0021064
		628.33	- 1 (Very Slight)	1	0.0	6.6990	Hogging	0.0021064
		Strain		1	0.0	6.6990	Hogging	0.0021064
9.1917	0.062257	Min Radius of		1	0.0	6.6990	Hogging	0.0021064
		628.33	- 1 (Very Slight)	1	0.0	6.6990	Hogging	0.0021064
		Curvature		-	-	-	-	-
		(Hogging)		-	-	-	-	-
		Min Radius of		-	-	-	-	-
		Curvature		-	-	-	-	-
		(Sagging)		-	-	-	-	-
11-f		Max Slope		1	0.0	4.4697	Hogging	0.0027783
9.0398	0.039354	315.56	- 0 (Negligible)	1	0.0	4.4697	Hogging	0.0027783
9.0398	0.039354	Max Settlement		1	0.0	4.4697	Hogging	0.0027783
		315.56	- 0 (Negligible)	1	0.0	4.4697	Hogging	0.0027783
9.0398	0.039354	Max Tensile		1	0.0	4.4697	Hogging	0.0027783
		315.56	- 0 (Negligible)	1	0.0	4.4697	Hogging	0.0027783
		Strain		1	0.0	4.4697	Hogging	0.0027783
9.0398	0.039354	Min Radius of		1	0.0	4.4697	Hogging	0.0027783
		315.56	- 0 (Negligible)	1	0.0	4.4697	Hogging	0.0027783
		Curvature		-	-	-	-	-
		(Hogging)		-	-	-	-	-
		Min Radius of		-	-	-	-	-
		Curvature		-	-	-	-	-
		(Sagging)		-	-	-	-	-
ag		Max Slope		1	0.0	11.050	Sagging	0.0016254
10.410	0.019293	- 1042.9 0	(Negligible)	1	0.0	11.050	Sagging	0.0016254
10.410	0.019293	Max Settlement		1	0.0	11.050	Sagging	0.0016254
		- 1042.9 0	(Negligible)	1	0.0	11.050	Sagging	0.0016254
10.410	0.019293	Max Tensile		1	0.0	11.050	Sagging	0.0016254
		- 1042.9 0	(Negligible)	1	0.0	11.050	Sagging	0.0016254
		Strain		1	0.0	11.050	Sagging	0.0016254
		Min Radius of		-	-	-	-	-
		Curvature		-	-	-	-	-
		(Hogging)		-	-	-	-	-
10.410	0.019293	Min Radius of		1	0.0	11.050	Sagging	0.0016254
		- 1042.9 0	(Negligible)	1	0.0	11.050	Sagging	0.0016254
		Curvature		-	-	-	-	-
		(Sagging)		-	-	-	-	-
gb		Max Slope		3	4.6287	11.399	Hogging	0.0036651
14.487	0.070665	648.67	- 1 (Very Slight)	3	4.6287	11.399	Hogging	0.0036651

			Max Settlement		3	4.6287	11.399	Hogging	0.0036651
14.487	0.070665		648.67	- 1 (Very Slight)					
			Max Tensile		3	4.6287	11.399	Hogging	0.0036651
14.487	0.070665		648.67	- 1 (Very Slight)					
			Strain		3	4.6287	11.399	Hogging	0.0036651
14.487	0.070665		Min Radius of						
			648.67	- 1 (Very Slight)					
			Curvature		2	2.8976	4.6287	Sagging	0.0011085
13.668	0.0073825		(Hogging)						
			Min Radius of						
			-	2434.1 0 (Negligible)					
			Curvature		1	0.0	5.5590	Hogging	0.0020379
bc			(Sagging)						
			Max Slope		1	0.0	5.5590	Hogging	0.0020379
10.166	0.051162		1030.9	- 1 (Very Slight)					
			Max Settlement		1	0.0	5.5590	Hogging	0.0020379
10.166	0.051162		1030.9	- 1 (Very Slight)					
			Max Tensile		1	0.0	5.5590	Hogging	0.0020379
10.166	0.051162		1030.9	- 1 (Very Slight)					
			Strain		1	0.0	5.5590	Hogging	0.0020379
10.166	0.051162		Min Radius of						
			1030.9	- 1 (Very Slight)					
			Curvature		-	-	-	-	-
			(Hogging)						
			Min Radius of						
-	-		-	-					
			Curvature		1	0.0	1.7483	Hogging	803.52E-6
cd			(Sagging)						
			Max Slope		1	0.0	1.7483	Hogging	803.52E-6
9.7184	0.0		-	- 0 (Negligible)					
			Max Settlement		1	0.0	1.7483	Hogging	803.52E-6
9.7184	0.0		-	- 0 (Negligible)					
			Max Tensile		1	0.0	1.7483	Hogging	803.52E-6
9.7184	0.0		-	- 0 (Negligible)					
			Strain		-	-	-	-	-
			Min Radius of						
-	-		-	-					
			Curvature		-	-	-	-	-
			(Hogging)						
			Min Radius of						
-	-		-	-					
			Curvature		2	2.6608	4.6660	Sagging	0.0015015
eh			(Sagging)						
			Max Slope		2	2.6608	4.6660	Sagging	0.0015015
11.218	0.014581		-	4496.2 0 (Negligible)					
			Max Settlement		3	4.6660	9.7590	Hogging	0.0015015
12.440	0.035575		1529.8	- 0 (Negligible)					
			Max Tensile		3	4.6660	9.7590	Hogging	0.0015015
12.440	0.035575		1529.8	- 0 (Negligible)					
			Strain		3	4.6660	9.7590	Hogging	0.0015015
12.440	0.035575		Min Radius of						
			1529.8	- 0 (Negligible)					
			Curvature		2	2.6608	4.6660	Sagging	0.0015015
11.218	0.014581		(Hogging)						
			Min Radius of						
			-	4496.2 0 (Negligible)					
			Curvature		1	0.0	10.879	Sagging	0.0011841
hf			(Sagging)						
			Max Slope		1	0.0	10.879	Sagging	0.0011841
10.057	0.018981		-	1312.9 0 (Negligible)					
			Max Settlement		1	0.0	10.879	Sagging	0.0011841
10.057	0.018981		-	1312.9 0 (Negligible)					
			Max Tensile		1	0.0	10.879	Sagging	0.0011841
10.057	0.018981		-	1312.9 0 (Negligible)					
			Strain		-	-	-	-	-
			Min Radius of						
-	-		-	-					
			Curvature		1	0.0	10.879	Sagging	0.0011841
10.057	0.018981		(Hogging)						
			Min Radius of						
			-	1312.9 0 (Negligible)					
			Curvature		1	0.0	0.47607	Sagging	0.0032965
de			(Sagging)						
			Max Slope		1	0.0	0.47607	Sagging	0.0032965
9.7192	0.016658		-	254.48 0 (Negligible)					
			Max Settlement		1	0.0	0.47607	Sagging	0.0032965
9.7192	0.016658		-	254.48 0 (Negligible)					

9.7192	0.016658	Max Tensile Strain	-	254.48	0 (Negligible)	1	0.0	0.47607	Sagging	0.0032965
-	-	Min Radius of Curvature (Hogging)	-	-	-	-	-	-	-	-
9.7192	0.016658	Min Radius of Curvature (Sagging)	-	254.48	0 (Negligible)	1	0.0	0.47607	Sagging	0.0032965

Specific Building Damage Results - All Combined Segments

Structure: 21-20 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: 19-20 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: 19-18 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: 18-13 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: 21-a | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: f-50 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: 14-15 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: 15-16 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: 16-17 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: 17-g | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: h-49 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: 49-36 | Sub-structure:

Vertical Offset from Line for	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
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Vertical Movement Calculations
 [m] [m] [m] [%] [%] [%]
 No structures have segments combined.

Structure: 36-48 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 48-47 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 47-51 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 50-46 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 46-47 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 24-25 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 25-26 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 26-27 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 27-28 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 28-29 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 27-32 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 33-31 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 31-34 | Sub-structure:

Vertical	Combined	Start	Length	Curvature	Deflection	Average	Max	Damage
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Offset from Line for Vertical Movement Calculations	Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: 34-35 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: 35-41 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: 41-40 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: 40-39 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: 39-38 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: 38-25 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

[m] [m] [m] [%] [%] [%]
No structures have segments combined.

Structure: 20-22 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]	[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 22-b | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]	[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: e-45 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]	[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 18-31 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]	[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 23-24 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]	[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: b-27 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]	[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 42-37 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: 47-43 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: 44-39 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: 46-45 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: a-12 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: 12-11 | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

Structure: 11-f | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
No structures have segments combined.								

**Movement
Calculations**

[m] [m] [m] [%] [%] [%]
No structures have segments combined.

Structure: ag | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
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[m] [m] [m] [%] [%] [%]
No structures have segments combined.

Structure: gb | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
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[m] [m] [m] [%] [%] [%]
No structures have segments combined.

Structure: bc | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
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[m] [m] [m] [%] [%] [%]
No structures have segments combined.

Structure: cd | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
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[m] [m] [m] [%] [%] [%]
No structures have segments combined.

Structure: eh | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
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[m] [m] [m] [%] [%] [%]
No structures have segments combined.

Structure: hf | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
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[m] [m] [m] [%] [%] [%]
No structures have segments combined.

Structure: de | Sub-structure:

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.