GROUND MOVEMENT ASSESSMENT REPORT

The Great Hall
Lincoln's Inn
Newman's Row
London
WC2A 3TL

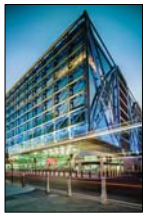
Client: The Honourable Society of Lincoln's Inn

Engineer: Eckersley O'Callaghan

J15050A

February 2016



GEA Geotechnical & Environmental Associates

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Report initially prepared by	Matthew Penfold MSci MSc DIC CGeol FGS		
Report updated and checked by	Martin Cooper BEng CEng MICE FGS		
Report approved for issue by	Steve Branch BSc MSc CGeol FGS FRGS		

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This report has been issued by the GEA office indicated below. Any enquiries regarding the report should be directed to the office indicated or to Steve Branch in our Herts office.

☐	Hertfordshire	tel 01727 824666	mail@gea-ltd.co.uk
☑	Nottinghamshire	tel 01509 674888	midlands@gea-ltd.co.uk

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1.0 INTRODUCTION

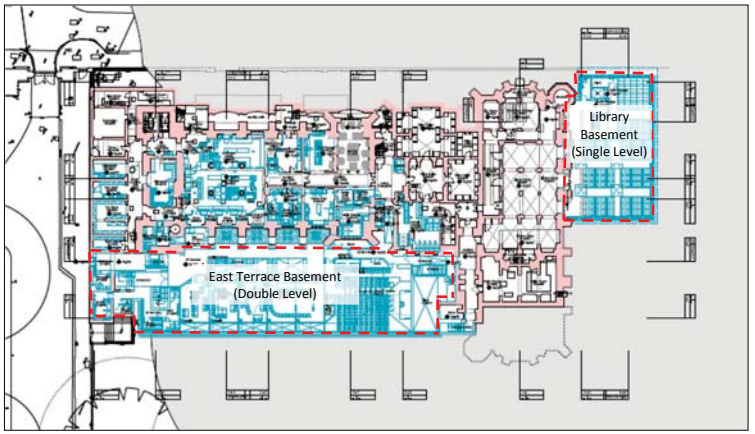
Geotechnical and Environmental Associates (GEA) has been commissioned by Eckersley O'Callaghan (EO'C), on behalf of The Honourable Society of Lincoln's Inn, to complete a ground movement assessment for the proposed redevelopment of The Great Hall, Lincoln's Inn, Newman's Row, London, WC2A 3TL, which is to include the construction of new single and double level basements adjacent to the existing structures.

A Site Investigation and Basement Impact Assessment Report has previously been carried out by GEA (report ref J15050, dated June 2015), the findings of which have been used in the derivation of parameters for use in this assessment. An initial ground movement assessment was previously carried out by GEA and this report enhances the analysis following design development.

The purpose of this assessment has been to determine the effects of the proposed basement construction upon the neighbouring structures.

1.1 Proposed Development

It is understood that it is proposed to extend the existing basement space beneath The Great Hall and adjoining Library through the construction of two new basement structures, as shown on the drawing below.



The main area will comprise a double level basement that will extend to a depth of approximately 6.5 m below the current East Terrace, to a formation level of 13.45 m OD, whilst the second smaller area will comprise a single level basement extending to depths of between 3.5 m (approx. 17.8 m OD) and 4.8 m (approx. 16.3 m OD) in the area of the existing Treasures House adjacent to the north-western corner of the Library, which will be demolished and replaced with a new two-storey structure. It is also understood that the development works will include refurbishment of the existing basement beneath the great hall, which is presently occupied by the kitchens. For both of the proposed structures a combination of underpinning and new retaining walls is to be used. For the deeper basement in the East Terrace a secant wall is proposed whilst for the library extension a contiguous

bored pile wall is deemed suitable since the maximum excavation does not extend below the measured groundwater table.

This report is specific to the proposed development and the advice herein should be reviewed if the proposals are amended.

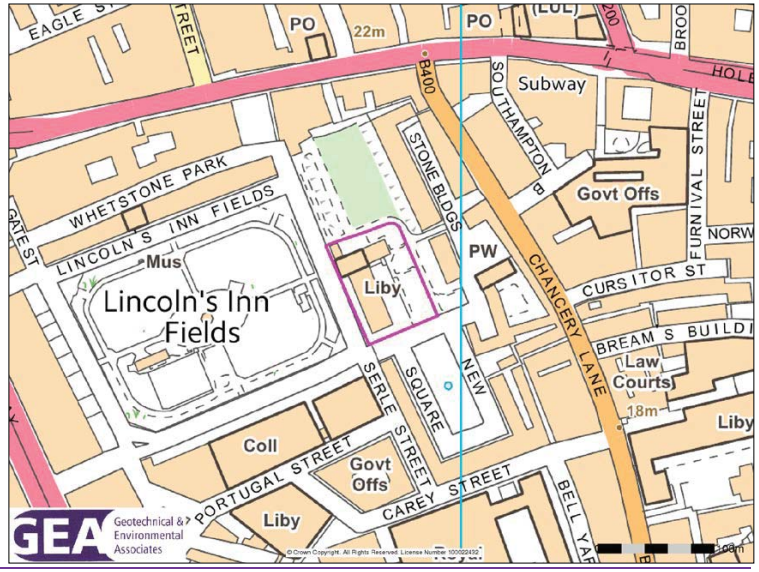
1.2 Limitations

The conclusions and recommendations made in this report are limited to those that can be made on the basis of the investigation. The results of the work should be viewed in the context of the range of data sources consulted, the number of locations where the ground was sampled and the number of soil, gas or groundwater samples tested; no liability can be accepted for information in other data sources or conditions not revealed by the sampling or testing. Any comments made on the basis of information obtained from the client or other third parties are given in good faith on the assumption that the information is accurate; no independent validation of such information has been made by GEA.

2.0 THE SITE

2.1 Site Description

The site is located in the London Borough of Camden, at the eastern end of Lincoln's Inn Fields, approximately 225 m to the southwest of Chancery Lane London Underground station. It fronts onto Newman's Row to the west and is bounded by New Square to the south, Old Buildings to the east, Stone Buildings to the northeast, and an area of open space to the north, all of which form part of Lincoln's Inn. The site may be additionally located by National Grid Reference 530930, 181420 and is shown on the map extract below.



The site is essentially rectangular in shape, measuring approximately 100 m by 60 m and slopes down at a very gentle angle towards the south, with a reduction in elevation of approximately 1.5 m.

The site is located on the central western part of Lincoln's Inn and is principally occupied by the Great (or New) Hall and adjoining Library building, located at the northern end of the Great Hall, both of which were constructed in the mid-1800s, although the Library was extended eastwards to give the building its present L-Shaped form in the early 1870s. An additional building, comprising the two-storey Treasurer's House, is situated adjacent to the north-western corner of the Library Building.

A single level of basement accommodation extends beneath both the Great Hall and the adjoining Library, although there is no linked access at this level between the two buildings. The basement beneath the Library is principally used as archive and storage space, whilst the basement beneath the Great Hall is occupied by the existing kitchens, wine cellar and laundry rooms. The basement beneath the Great Hall also includes a number of vaults that extend beneath the southern part of the East Terrace, which comprises an elevated platform that runs along the eastern side of the Great Hall.

Whilst the existing buildings, East Terrace and service area along the western side of the Great Hall occupy the majority of the site, the eastern part comprises an area of landscaping known as Benchers Lawn, the eastern boundary of which is lined with a number of mature deciduous trees.

3.0 SUMMARY OF GROUND CONDITIONS

The investigation has confirmed the expected ground conditions in that, below a moderate to significant thickness of made ground, Hackney Gravel was encountered overlying the London Clay, which was proved to the full depth investigated.

The made ground extended to depths of between 2.9 m (18.3 m OD) and 5.4 m (15.9 m OD). The Hackney Gravel typically comprised dense to dense becoming medium dense brown sand and gravel and extended to depths of between 6.2 m (13.8 m OD) and 8.3 m (13.0 m OD), although in a number of locations an initial layer of firm to stiff brown sandy clay with occasional gravel was present to depths of between 4.6 m (16.6 m OD) and 5.7 m (15.6 m OD).

The London Clay comprises an upper weathered horizon of generally firm to stiff brown clay, which extended to depths of between 6.8 m (13.2 m OD) and 8.7 m (12.6 m OD) and was underlain by stiff high strength becoming very stiff very high strength brownish grey fissured clay with occasional partings of silt to the maximum depth investigated of 29.0 m (-8.9 m OD).

Groundwater inflows were encountered within the Hackney Gravel at depths of between 5.0 m (15.0 m OD) and 7.0 m (14.3 m OD) and within the London Clay in Borehole No 2 at a depth of 13.2 m (6.9 m OD). All of the inflows comprised either slow seepages or inflows, with no observable rise.

Standpipes were installed to the base of the Hackney Gravel in each of the boreholes and the results of the monitoring visits conducted so far are shown in the table below.

Borehole No	Standpipe depth (m) (Level m OD)	Depth to groundwater (m) (Level m OD)			
		28/03/2015	14/04/2014	27/04/2015	13/05/2015
1	6.50 (13.50)	5.76 (14.24)	5.82 (14.18)	5.83 (14.17)	5.82 (14.18)
2	8.00 (12.10)	5.80 (14.30)	5.86 (14.24)	5.87 (14.23)	5.85 (14.25)
3	8.00 (13.20)	6.87 (14.33)	6.93 (14.27)	6.93 (14.27)	6.93 (14.27)
4	8.00 (13.30)	6.83 (14.47)	6.90 (14.40)	6.90 (14.40)	6.92 (14.38)

A review of borehole records held on the British Geological Society (BGS) database, has yielded records of a number of boreholes, drilled to depths of between 140 m and 180 m in the early part of the 20th Century, approximately 150 m to the southwest of the site. These boreholes show the London Clay extending to depths of between 40.0 m and 41.0 m, whereupon the Lambeth Group was encountered to depths of between 58.0 m and 59.0 m. The Thanet Sands were then proved to depths of between 66.5 m and 67.0 m, below which the Upper Chalk was proved to the maximum depth investigated.

4.0 CONSTRUCTION SEQUENCE

The following sequence of operations has been provided by EO'C to enable analysis of the ground movements around the basement both during and after construction.

Essentially the sequence may be considered as three groups of activities, the first two comprising the short and medium term temporary works whilst the third represents the construction of the permanent works.

4.1 Temporary Support to Underpinned Sections

The current proposals include limited sections of underpinning, including part of the existing boundary wall with Newman's Row to form part of the single level basement beneath the existing Treasurers House. Underpinning will also be carried out within the south-western parts of the proposed double level basement, where it abuts existing structures including the vaults that extend beneath these parts of the East Terrace.

Underpinning of the existing foundations will be undertaken on a 'hit and miss' basis as set out by EO'C. with short sections not exceeding 1.0 m in length, with no adjacent pin to be excavated until a minimum of 48 hours after the adjacent pin has been cast and dry-packed placed, with the sides of the excavation adequately shored and propped.

4.2 Temporary Support to Piled Walls

Following installation of the bored pile wall and the lowering of the site by roughly 1.0 m, capping beams will be cast to tie the piles together and to provide load spread from vertical loads that will be supported by the piled walls. Temporary steel props will be installed and bear against steel 'king-post' upstands roughly 0.3 m above the top of the capping beam and basement excavation will proceed. The detail of section sizes and spacings will be finalised by the contractor but the general philosophy adopted will be for diagonal braces to be used across the corners or returns of the basement walls whilst props will be positioned between the two

wall at 5.0 m intervals along the long walls of the basement.

Steel temporary props will be used with strut forces spread along the 5.0 m sections of wall by a stiff reinforced concrete capping beam. Given that the buildings of Lincoln's Inn are listed, hydraulic or mechanical 'active' props will be used so that the design propping force can be applied prior to excavation in order to minimise movement at critical locations.

4.3 Permanent Works

When the final excavation depths have been reached the permanent works will be formed, which will comprise a 0.3 m thick basement slab cast upon a 0.20 m thick layer of heave protection and 50 mm of blinding concrete. The basement walls are to be cast from the 'bottom- up' and will be formed of reinforced concrete walls with a drained cavity lining that is cast against the inside of the bored pile wall. A series of 'fin' walls are to cast at 5 m centres along the east wall of the East Terrace basement and will provide full height support through diaphragm action. Reinforced concrete will be used for floor slabs which will be cast on top of sections of lining wall. Following the curing of the ground floor slab, the temporary steel prop bearing against the upstands will be released and removed.

5.0 PRELIMINARY RETAINING WALL DESIGN

It is recognised that the final retaining wall design will be undertaken by the successful piling contractor and that it will be tied into elements of both temporary and permanent works undertaken by the principal contractor appointed for the construction. A contractor has not yet been appointed so a preliminary geotechnical design of the piled retaining walls has been undertaken by GEA. The design has been carried out to establish the most likely pile diameter and depths required for the basement and to estimate the movement of the retaining walls both in the short term during construction and also in the long term when different soil properties will govern wall behaviour. The design outputs have also been used by EO'C to develop a preliminary propping arrangement.

5.1 Basis of Design

The design has been undertaken using the Wallap software (Version 6.05 Revision A42.B57.R48) produced and licensed by Geosolve and commonly used for the design of multi-propped pile retaining walls. This analysis has adopted the BS EN 1997 Eurocode 7 method of analysis although it is understood that some piling contractors may prefer to use the approach set out in CIRIA Report C580[1].

Observation of groundwater during the drilling of the boreholes and the subsequent monitoring has indicated that the groundwater level is expected to be at around 14.2 m OD in the East Terrace and 14.4 m OD in the library area. This is above the proposed formation level for the East Terrace basement of 13.45 m OD. It is therefore expected that the basement will need to be sealed against groundwater ingress from within the Hackney Gravel. In order to prevent the possible ingress of groundwater it is proposed that the piled retaining walls will be of secant construction and at this stage it is thought likely that a hard / soft wall will be suitable to restrict groundwater ingress. In such a wall the 'female' piles are constructed from a weak grout made from cement, sand and bentonite.

1 Gaba, A, Simpson, B, Powrie, W and Beadman, D (2003) *Embedded retaining walls – guidance for economic design* CIRIA Report C580.

The female piles have been assumed to provide no contribution to the structural strength of the wall and are present only to limit ingress of groundwater and to prevent the ingress of fine materials. These piles do not therefore need to extend to the full depth of the male piles and may be terminated within non-productive strata below the basement formation level. At this site the London Clay, assumed to be a non-productive stratum is present at around 13.2 m OD. Good practice would suggest that female piles should extend to a level no shallower than 12.2 m OD. At such a toe level, all piles will be formed with a roughly 1.0 m penetration into the London Clay which is considered sufficient to provide a 'seal' against significant groundwater ingress.

The soil parameters adopted are those set out in the GEA Site Investigation Report reference J15050 dated June 2015.

Details of the foundations and loadings of the surrounding buildings have been provided by EO'C in their Structural Report and Basement Impact Assessment. Existing walls have been modelled as buried surcharges and the proposed ramped ground level outside the basement of the East Terrace has been modelled as a sloping surcharge that is in continuity with the strata beneath. Two sections have been analysed for the eastern and western walls of the East Terrace along with two sections of the library extension structure. These are considered to provide a sufficiently broad view of the proposed basement as to satisfy this assessment whilst acknowledging that a number of further piled wall cases will need to be considered by the piling contractor in due course.

Props have been adopted at levels equivalent to the mid-points of the slabs noted on the EO'C drawings. The ground floor and basement floor concrete slabs have been taken as 250 mm and 300 mm thick in accordance with EO'C drawings.

At this stage in the process, the retaining walls have only been designed for the Serviceability Limit State (SLS) and the maximum bending moments shown to confirm the suitability of the proposed pile diameter. The various load factors, soil parameter factors and output factors are indicated within the results of each of the four design cases.

The detailed design within each case has been based on undrained soil parameters during temporary works and construction with long term drained soil parameters adopted for the long term permanent case with a reversion to at-rest earth pressures. At this stage drained cohesion c' has been ignored and an at-rest earth pressure K_0 of 1.0 has been adopted. The results of these runs are appended and confirm that 450 mm diameter piles at 600 mm centre to centre spacing are acceptable. It is assumed that the outline pile wall design will be developed by the piling contractor at a later stage.

5.2 Summary Results and Bored Pile Wall Proposals

The proposed secant piled wall for the East Terrace comprises 450 mm diameter piles installed at 600 mm male to male and female to female centre to centre spacings; the contiguous wall piles will be of a similar diameter and spacing. These spacings would allow each male pile to cut roughly 150 mm into the adjacent female piles and would allow for the piles to still intersect at excavation formation level if they were installed at the limits of 1 in 100 verticality tolerance and the potential depth to the impermeable barrier of 6 m. The toe level of the female piles is proposed as 12.2 m OD (5.9 m long piles) and the male piles would extend to 7.0 m OD in the eastern wall (11.1 m long piles) and 8.5 m OD in the western wall of the East Terrace basement.

A summary of the retaining wall designs and predicted movements is shown below.

Wall Section	Pile Toe Level (m OD)	Pile Length (m)	Maximum Unfactored Bending Moment (kNm/pile)	Maximum Predicted Wall Deflection (mm)	Maximum Predicted U/F Load per Strut (kN)
East Terrace East Wall	7.0	11.0	34	11	120
East Terrace West Wall	8.5	9.5	30	6	116
Library East Wall	12.0	9.2	21	5	103
Library North Wall	12.0	9.2	38	8	137

The maximum unfactored bending moment is given as 38 kNm per pile; detailed reinforcement design will be undertaken by the piling contractor but at this stage these values are deemed sufficient to confirm that the 450 mm diameter scheme is appropriate.

6.0 GROUND MOVEMENTS

An assessment of ground movements within and surrounding the excavation has been undertaken using the X-Disp and P-Disp computer programs licensed from the OASYS suite of geotechnical modelling software from Arup. These programs are commonly used within the ground engineering industry and are considered to be appropriate tools for this analysis.

The X-Disp program has been used to predict ground movements likely to arise from the construction of the proposed basement. This includes the settlement of the ground (vertical movement) and the lateral movement of soil behind the proposed retaining walls (horizontal movement).

The analysis of potential ground movements within the excavation, as a result of unloading of the underlying soils, has been carried out using the Oasys P-Disp (Version 19.2 – Build 12) software package and is based on the assumption that the soils behave elastically, which provides a reasonable approximation to soil behaviour at small strains.

For the purpose of these analyses, the corners have been defined by x and y coordinates, with the x-direction parallel with the orientation north-south, whilst the y-direction is parallel with the orientation of east-west. Vertical movement is in the z-direction. The full outputs of all the analyses can be provided on request but samples of the output movement contour plots are included within the appendix.

6.1 Ground Movements – Surrounding the Basement

6.1.1 Model Used

For the X-Disp analysis, the soil movement relationships used for the embedded retaining walls are based on the default values within CIRIA report C580[2] but have been adjusted in the light of the movement predictions from the Wallap analysis summarised above. The C580 movements were derived from a number of historic case studies of the short term movements that result from wall installation and basement excavation. The ground movement curves for 'installation of contiguous bored pile wall in stiff clay' has been adopted as appropriate for

[2] Gaba, A, Simpson, B, Powrie, W and Beadman, D (2003) *Embedded retaining walls – guidance for economic design* .CIRIA Report C580.

both the contiguous wall at the library as well as the secant wall at the East Terrace. This is because the movement predictions for the secant wall are based on a very limited dataset and provided careful sequencing of the pile installation takes place then the contiguous curve is more realistic.

Temporary works drawings provided by EO'C indicate that the mass concrete underpinning to form the new basement structure will be supported or propped in the temporary condition to maintain its stability during the excavation and that reinforced concrete retaining walls will be cast at a later stage in the appropriate areas. It would seem reasonable to adopt the ground movement curves for 'no horizontal and vertical movement' for this analysis but in practice there will always be a potential for a small degree of movement to take place, typically 2 mm to 5 mm and a more conservative approach using the same ground movement curves as the bored pile wall has been adopted.

6.1.2 Results

The X-Disp analysis has been used to estimate the movements behind the walls resulting from pile installation and basement excavation. This includes the settlement of the ground (vertical movement) and the lateral movement of soil behind the wall (horizontal movement). The contour graphs of these movement predictions are appended for the piling phase together with the total movement prediction which combined the effects.

In each of the four design cases, the ground movement predictions using the C580 relationships have been compared with the predictions from the Wallap designs; the latter having been based on the greatest movements which in all cases relate to the long term drained conditions. The C580 correlations have been amended as set out below.

Table 2.4 of C580 indicates that horizontal movement should be around 0.15 % of the maximum excavation depth (Column 2 in the table below) for a stiff wall embedded in stiff clay and no horizontal movement for a wall wholly embedded in sand. With the benefit of the Wallap runs a revised wall deflection has been derived (Column 3) since at this site a combination of sand and gravel over clay is present. This has been used with the excavation depth to derive a new horizontal movement factor (Column 4). This value has been used in the X-Disp program to produce wall movement contours that correlate with the Wallap data. The proportionate decrease in horizontal movement has then been applied to the vertical movement profile to produce a new movement curve for vertical movements (Column 5).

The predicted movements are summarised in the table below; the results are presented to the degree of accuracy required to allow predicted variations in ground movements around the structure to be illustrated, but may not reflect the anticipated accuracy of the predictions.

Design Case	Stiff Wall Horizontal Movement Factor d/h (%)	Average Wall Deflection Wallap (mm)	Adopted Stiff Wall Horizontal Movement Factor d/h (%)	Vertical Movement Reduction Factor (%)
East Terrace East Wall	0.15	5	0.12	80
East Terrace West Wall	0.15	4	0.12	80
Library East Wall	0.15	4	0.12	80
Library North Wall	0.15	7	0.14	93

The above data has been used in an X-Disp analysis and the contours and results are appended. These are based on the full Wallap movements which may be considered highly conservative since the added stiffness of the lining wall and the entire basement box have not been taken into account.

Phase of Works	Maximum Movement at 17.0 m OD – sensibly average foundation level	
	Vertical Settlement (mm)	Horizontal Movement (mm)
Piling	Up to 5	Up to 5
Combined Piling and Basement Excavation	5 to 10	10 to 15

The movements set out in the table above are the maximum movements and generally occur immediately or just outside the line of the piled walls; the effects of the excavation reduce with distance away from the piled wall.

6.2 Movements within the Excavation (Heave)

6.2.1 Model Used

Unloading of the London Clay and underlying Lambeth Group will take place as a result of the basement excavation and the reduction in vertical stress will cause heave to take place. Undrained soil parameters have been used to estimate the potential short term movements, which include the "immediate" or elastic movements as a result of the basement excavation. Drained parameters have been used to provide an estimate of the total long-term movement.

The elastic analysis requires values of soil stiffness at various levels to calculate displacements. Values of stiffness for the soils at this site are readily available from published data and we have used a well-established method to provide our estimates. This relates values of E_u and E', the drained and undrained stiffness respectively, to values of undrained cohesion, as described by Padfield and Sharrock[3] and Butler[4] and more recently by O'Brien and Sharp[5]. Relationships of $E_u = 500\ C_u$ and $E' = 300\ C_u$ for the cohesive soils and 2000 x SPT 'N' for granular soils have been used to obtain values of Young's modulus. More recent published data[6] indicates stiffness values of 750 x Cu for the London Clay and a ratio of E' to Cu of 0.75, but it is considered that the use of the more conservative values provides a sensible approach for this stage in the design.

The proposed construction of the 4.00 m to 5.0 m deep basement on the north-western part of the site will result in an approximate unloading of about 70 kN/m² to 90 kN/m², whilst the deeper excavations beneath the East Terrace are likely to result in an approximate unloading of about 125 kN/m².

A rigid boundary for the analysis has been set at a depth of about 60 m below existing ground level, where nearby BGS records indicate that the base of the Lambeth Group is likely to be present. Below this depth the essentially incompressible soils of the Thanet Sand should be present.

3 Padfield CJ and Sharrock MJ (1983) *Settlement of structures on clay soils.* CIRIA Special Publication 27
4 Butler FG (1974) *Heavily overconsolidated clays: a state of the art review.* Proc Conf Settlement of Structures, Cambridge, 531-578, Pentech Press, Lond
5 O'Brien AS and Sharp P (2001) *Settlement and heave of overconsolidated clays - a simplified non-linear method.* Part Two, Ground Engineering, Nov 2001, 48-53
6 Burland JB, Standing, JR, and Jardine, FM (2001) Building response to tunnelling, case studies from construction of the Jubilee Line Extension.. CIRIA Special Publication 200

6.2.2 Results

The P-Disp analysis indicates that, by the time the basement construction is complete, up to 22 mm of heave is likely to have taken place at the centre of the proposed double level, reducing to less than 14 mm at the edges, whilst for the proposed single level basement the movements range from 14 mm at the centre of the excavations to less than 10 mm at the edges.

In the long term, following completion of each of the proposed double level basement, a further 18 mm of heave is estimated as a result of long term swelling of the underlying London Clay, whilst a further 10 mm is estimate at the centre of the single level basement on the north-western part of the site.

The results of the P-Disp analysis also indicate the likely impact of the proposed basement constructions beyond the extent of the excavations. On the basis of the analysis, total vertical heave movements outside the proposed basement are unlikely to exceed 12 mm for the proposed double level basement and less than 6 mm for the proposed single level basement, at a distance of approximately 5 m.

The potential movements are summarised in the tables below.

6.2.2.1 East Terrace – Double Level Basement

Location	Movement (mm)		
	Short-term Heave (Excavation Phase)	Long-term Heave (post construction)	Total Heave
Centre of excavations	22	18	40
Edge of excavations	12 to 14	8 to 12	20 to 26
At 5 m from edge of excavations	4 to 6	2 to 6	6 to 12

6.2.2.2 Library & Treasurer's House – Single Level Basement

Location	Movement (mm)		
	Short-term Heave (Excavation Phase)	Long-term Heave (post construction)	Total Heave
Centre of excavations	14	10	24
Edge of excavations	4 to 8	6 to 8	10 to 16
At 5 m from edge of excavations	<4	<2	4 to 6

In order to mitigate the effects of heave on the new building, a layer of compressible material has been incorporated into the design to accommodate these potential long term movements. This material will need to be designed to be able to resist the potential uplift forces generated by the ground movements. In this respect potential heave pressures are typically taken to equate to around 50 % to 60 % of the total unloading pressure.

6.3 Differential Movements

The piled walls will in places be adjacent to underpins and different mechanisms of load

transmittal to the underlying soils could be a cause of differential settlement. Both are understood to be subject to vertical load with the wall piles being more slender will be more likely to move under lateral earth pressure. However the construction sequence will allow for some form of waterproof movement joint to be cast between the two. Both piles and pins will be also be subject to propping by the basement and floor slabs and with movement restricted the effect of differential lateral movement is considered to be limited.

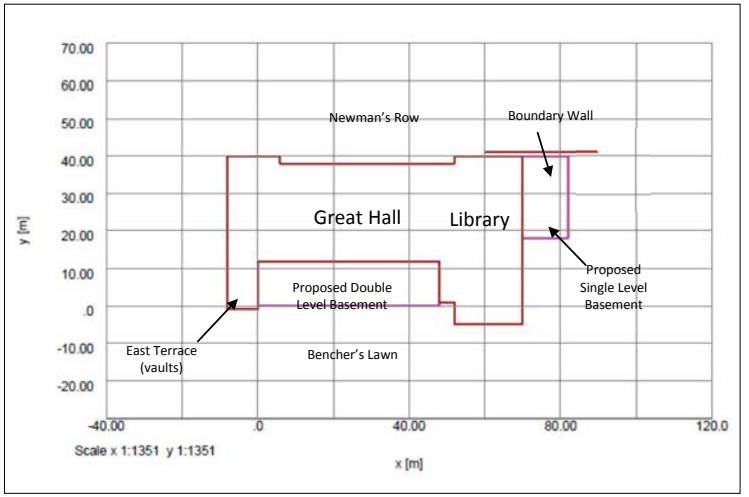
Both underpins and wall piles will also be subject to vertical loading. The underpins will bear within the Hackney Gravel which will support the load as a spread foundation and settlement of typically 2 mm to 5 mm could be anticipated. The piles will transfer the vertical loading into the underlying clay through the shaft friction of the front and rear faces of the embedded portion of the wall. Assuming that a factor of safety of 3.0 will be applied to such loading then settlement under working load is likely to be less than 5 mm; that is in the same order as may be expected for the underpins.

7.0 DAMAGE ASSESSMENT

In addition to the above assessment of the likely movements that will result from the proposed development, some of the neighbouring structures have been considered as sensitive structures, requiring Building Damage Assessments, on the basis of the classification given in Table 2.5 of C580[1]. These include:

- The existing structures of the Great Hall (incl East Terrace) and adjoining Library Building;
- The boundary wall with Newman's Row.

The sensitive structures outlined above have been modelled as lines in the analysis and are those along which the damage assessment has been undertaken, as shown on the plan below.



For the analyses it has been assumed that the average foundation depths of the adjoining buildings, which include existing basement structures, can be taken to be around 18 m OD to 17 m OD. Trial Pit excavations have also shown that the foundations of the boundary wall with Newman's Row also extend to a similar depth of approximately 18 m OD.

7.1 Damage to Neighbouring Structures

The combined movements resulting from both pile installation and basement excavation calculated using the X-Disp modelling software have been used to carry out an assessment of the likely damage to adjacent properties and the results are summarised in the table below.
The potential heave movements predicted by P-Disp have not been included in this assessment, which can therefore be considered as conservative, as these movements are likely to have a mitigating effect on the downward settlement predicted by X-Disp.

Building Damage Assessment		
Sensitive Structure	**Elevation**	**Category of Damage***
The Great Hall	East Terrace – Existing Vaults	Category 0 (Negligible) to Category 1 (Very Slight)
	Eastern - East Terrace Frontage	Category 0 (Negligible) to Category 1 (Very Slight)
	Western	Less than the limit of detection
	Southern	Category 0 (Negligible)
Library Building	Southern – East Terrace Frontage	Category 0 (Negligible) to Category 1 (Very Slight)
	Eastern	Category 0 (Negligible)
	Northern	Category 1 (Very Slight)
	Western	Less than the limit of detection
Boundary Wall with Newman's Row (Section close to proposed single level basement on north-western part of the site)	Western	Category 0 (Negligible)

**From Table 2.5 of C580[1]: Classification of visible damage to walls.*

The building damage reports for sensitive structures highlighted in the above table and shown graphically on the appended plan predict that the damage to the adjoining and nearby structures would generally be Category 0 (negligible), with a limited areas of Category 1 (Very Slight), along the elevations of the Great Hall closest to the proposed double level basement.

On this basis, the damage that would inevitably occur as a result of such an excavation would fall within acceptable limits.

7.2 Monitoring of Ground Movements

The predictions of ground movement based on the ground movement analysis should be checked by monitoring of adjacent properties and structures. The structures to be monitored during the construction stages include:

- The elevations of the Great Hall (incl East Terrace) and adjoining Library Building that bound the East Terrace;
- The boundary wall with Newman's Row adjacent to the proposed single level basement on the north-western part of the site.

Condition surveys of the above existing structures will be carried out before and after the proposed works.

The precise monitoring strategy will be developed at a later stage but EO'C have indicated the potential target locations on their drawings whilst remaining subject to discussions and agreements with the owners of the adjacent properties and structures before construction takes place. It is, however, expected that monthly monitoring would take place throughout the construction and that the frequency would increase to at least weekly during the groundworks elements and daily where excavation against critical areas is underway.

7.3 Mitigation

Reference to the detailed results indicates that the predicted damage to the existing structures is within Categories 0 and 1.

The sections of wall that are identified as being susceptible to 'very slight' damage will be identified and subject to close scrutiny during the monitoring process. Each of the piled walls that relate to these locations will be designed in detail in due course and will be subject to a specific propping arrangement which will be adjustable to that greater or lesser load can be applied depending on the performance of the piles at each location.

8.0 CONCLUSIONS

The analysis has concluded that the predicted damage to the neighbouring properties would generally be 'Negligible', with some limited areas of 'Very Slight' along sections of the existing structures that adjoin the East Terrace. On this basis, the damage that would inevitably occur as a result of such an excavation would fall within the acceptable limits.

The separate phases of work, including piling / underpinning and subsequent excavation of the proposed basement structures, will in practice be separated by a number of weeks during which time construction of capping beams and pile curing will take place. This will provide an opportunity for the ground movements during and immediately after piling to be measured and the data acquired can be fed back into the design and compared with the predicted values. Such a comparison will allow the ground model to be reviewed and the predicted wall movements to be reassessed prior to the main excavation taking place so that propping arrangements can be adjusted if required.

APPENDICES

WALLAP RETAINING WALL DESIGN RUNS

SOIL DISPLACEMENT MODEL RESULTS

X-DISP ANALYSIS

Pile Installation

Contour Plots of Vertical Movements and Horizontal Movements

Pile Installation and Basement Excavation

Contour Plots of Combined Vertical Movements and Horizontal Movements

P-DISP ANALYSIS

Short Term Movement

Total Movement

BUILDING DAMAGE ASSESSMENT (X-DISP)

Tabular Output of Results

Damage Category Plan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GEOTECHNICAL & ENVIRONMENTAL ASSOCIATES                        | Sheet No.
Program: WALLAP  Version 6.05  Revision A45.B58.R48            | Job No.  J15050
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Data filename/Run ID: East Terrace S2.1 S2 East SLS1_SLS       |
Lincoln's Inn Fields, London WC2A 3TL                          | Date: 4-02-2016
East Terrace S2.1 Section 2 East                               | Checked :
-------------------------------------------------------------------------------
                                                          Units: kN,m
```

INPUT DATA

SOIL PROFILE

Stratum no.	Elevation of top of stratum	Soil types Active side	Passive side
1	18.02	1 Made Ground	1 Made Ground
2	16.50	2 Hackney Gravel	2 Hackney Gravel
3	13.20	3 London Clay	3 London Clay
4	3.50	4 London Clay	4 London Clay

SOIL PROPERTIES

No.	Soil type / Description	Bulk density kN/m3	Young's Modulus Eh,kN/m2 (dEh/dy)	At rest coeff. Ko (dKo/dy)	Consol state. NC/OC Nu	Active limit Ka Kac	Passive limit Kp Kpc	Cohesion kN/m2 dc/dy
	(Datum elev.)							
1	Made Ground	17.00	15000	0.500	NC	1.000	1.000	30.00u
					(0.490)	(2.000)	(2.000)	
2	Hackney Gravel	18.00	60000	1.000	OC	0.260	3.852	
					(0.200)	(0.000)	(0.000)	
3	London Clay	19.50	35000	1.000	OC	1.000	1.000	70.00u
	(13.20)		(5412)		(0.490)	(1.000)	(1.000)	(10.80)
4	London Clay	19.50	87500	1.000	OC	1.000	1.000	175.0u
					(0.490)	(1.000)	(1.000)	
5	Made Ground Drained	17.00	9000	0.500	NC	0.490	2.040	0.0d
					(0.200)	(1.400)	(2.856)	
6	Hackney Gravel	18.00	60000	1.000	OC	0.260	3.852	
					(0.200)	(0.000)	(0.000)	
7	London Cl..	19.50	21000	1.000	OC	0.585	1.247	5.000d
	(13.20)		(3247)		(0.200)	(0.978)	(0.583)	
8	London Clay Drained	19.50	52500	1.000	OC	0.585	1.247	5.000d
					(0.200)	(0.978)	(0.583)	

Additional soil parameters associated with Ka and Kp

No.	Soil type / Description	parameters for Ka: Soil friction angle	Wall adhesion coeff.	Back-fill angle	parameters for Kp: Soil friction angle	Wall adhesion coeff.	Back-fill angle
1	Made Ground	0.00	0.000	0.00	0.00	0.000	0.00
2	Hackney Gravel	36.00	0.000	0.00	36.00	0.000	0.00
3	London Clay	0.00	-0.674	0.00	0.00	-0.674	0.00
4	London Clay	0.00	-0.674	0.00	0.00	-0.674	0.00
5	Made Ground Drained	20.00	0.000	0.00	20.00	0.000	0.00
6	Hackney Gravel	36.00	0.000	0.00	36.00	0.000	0.00
7	London Clay Drained	23.00	-0.674	0.00	23.00	-0.674	0.00
8	London Clay Drained	23.00	-0.674	0.00	23.00	-0.674	0.00

GROUND WATER CONDITIONS

Density of water = 10.00 kN/m3

	Active side	Passive side
Initial water table elevation	14.20	14.20

Automatic water pressure balancing at toe of wall : No

Water press. profile no.	Point no.	Active side Elev. m	Piezo elev. m	Water press. kN/m2	Point no.	Passive side Elev. m	Piezo elev. m	Water press. kN/m2	
1	1	14.20	14.20	0.0	1	14.20	14.20	0.0	WC
2	1	14.20	14.20	0.0	1	13.45	13.45	0.0	MC

WALL PROPERTIES

Type of structure = Fully Embedded Wall
Elevation of toe of wall = 7.00
Maximum finite element length = 0.60 m
Youngs modulus of wall E = 2.0000E+07 kN/m2
Moment of inertia of wall I = 3.2000E-03 m4/m run
E.I = 64000 kN.m2/m run
Yield Moment of wall = Not defined

STRUTS and ANCHORS

Strut/ anchor no.	Elev.	Strut spacing m	X-section area of strut sq.m	Youngs modulus kN/m2	Free length m	Inclin -ation (degs)	Pre- stress /strut kN	Tension allowed
1	18.32	5.00	0.100000	2.000E+08	5.00	0.00	50.00	Yes
2	13.85	1.00	0.300000	2.000E+07	5.00	0.00	0	No
3	17.98	1.00	0.250000	2.000E+07	5.00	0.00	0	No

SURCHARGE LOADS

Surch -arge no.	Elev.	Distance from wall	Length parallel to wall	Width perpend. to wall	Surcharge kN/m2 Near edge	Surcharge kN/m2 Far edge	Equiv. soil type	Partial factor/ Category
1	18.02	1.00(A)	20.00	1.99	0.00	33.70	1	N/A
2	18.02	2.99(A)	20.00	20.00	33.70	=	1	N/A
3	13.45	-0.00(P)	20.00	20.00	7.50	=	0	1.00 -
4	18.02	2.99(A)	20.00	20.00	5.00	=	0	1.00 Var

Note: A = Active side, P = Passive side
A trapezoidal surcharge is defined by two values:
N = at edge near to wall, F = at edge far from wall
Limit State Categories P/U = Permanent Unfavourable
P/F = Permanent Favourable
Var = Variable (unfavourable)

CONSTRUCTION STAGES

Construction stage no.	Stage description
1	Apply surcharge no.1 at elevation 18.02 No analysis at this stage
2	Apply surcharge no.2 at elevation 18.02 No analysis at this stage
3	Apply surcharge no.4 at elevation 18.02
4	Excavate to elevation 17.11 on PASSIVE side
5	Install strut or anchor no.1 at elevation 18.32
6	Apply surcharge no.3 at elevation 13.45 No analysis at this stage
7	Apply water pressure profile no.2 (Mod. Conserv.) No analysis at this stage
8	Excavate to elevation 13.45 on PASSIVE side
9	Install strut or anchor no.2 at elevation 13.85
10	Install strut or anchor no.3 at elevation 17.98
11	Remove strut or anchor no.1 at elevation 18.32
12	Change properties of soil type 1 to soil type 5 No analysis at this stage Ko pressures will not be reset
13	Change properties of soil type 2 to soil type 6 No analysis at this stage Ko pressures will not be reset
14	Change properties of soil type 3 to soil type 7 No analysis at this stage Ko pressures will not be reset
15	Change properties of soil type 4 to soil type 8 Ko pressures will be reset

FACTORS OF SAFETY and ANALYSIS OPTIONS

Limit State options: Serviceability Limit State
All loads and soil strengths are unfactored

Stability analysis:
Method of analysis - Burland-Potts
Factor on passive for calculating wall depth = 1.00
Active limit pressures calculated by Wedge Stability
Passive limit pressures calculated by Wedge Stability

Parameters for undrained strata:
Minimum equivalent fluid density = 5.00 kN/m3
Maximum depth of water filled tension crack = 0.00 m

Bending moment and displacement calculation:
Method - Subgrade reaction model using Influence Coefficients
Open Tension Crack analysis? - No
Non-linear Modulus Parameter (L) = 0 m

Boundary conditions:
Length of wall (normal to plane of analysis) = 1000.00 m

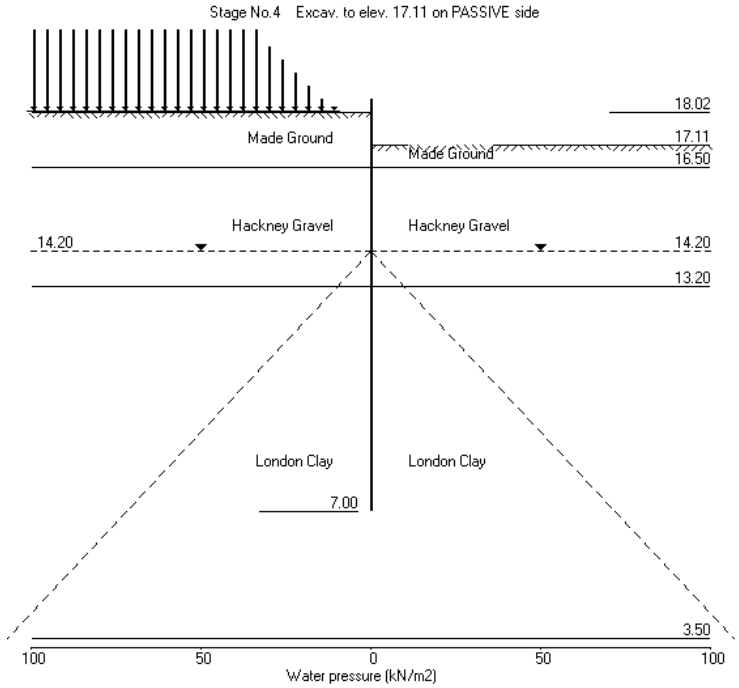
Width of excavation on active side of wall = 20.00 m
Width of excavation on passive side of wall = 20.00 m

Distance to rigid boundary on active side = 20.00 m
Distance to rigid boundary on passive side = 20.00 m

OUTPUT OPTIONS

Stage no.	Stage description	Output options: Displacement Bending mom. Shear force	Active, Passive pressures	Graph. output
1	Apply surcharge no.1 at elev. 18.02	No	No	No
2	Apply surcharge no.2 at elev. 18.02	No	No	No
3	Apply surcharge no.4 at elev. 18.02	No	No	No
4	Excav. to elev. 17.11 on PASSIVE side	Yes	Yes	Yes
5	Install strut no.1 at elev. 18.32	No	No	No
6	Apply surcharge no.3 at elev. 13.45	No	No	No
7	Apply water pressure profile no.2	No	No	No
8	Excav. to elev. 13.45 on PASSIVE side	No	No	No
9	Install strut no.2 at elev. 13.85	No	No	No
10	Install strut no.3 at elev. 17.98	No	No	No
11	Remove strut no.1 at elev. 18.32	No	No	No
12	Change soil type 1 to soil type 5	No	No	No
13	Change soil type 2 to soil type 6	No	No	No
14	Change soil type 3 to soil type 7	No	No	No
15	Change soil type 4 to soil type 8	No	No	No
*	Summary output	Yes	-	Yes

Units: kN,m



GEOTECHNICAL & ENVIRONMENTAL ASSOCIATES | Sheet No.
Program: WALLAP Version 6.05 Revision A45.B58.R48 | Job No. J15050
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Data filename/Run ID: East Terrace S2.1 S2 East SLS1_SLS |
Lincoln's Inn Fields, London WC2A 3TL | Date: 4-02-2016
East Terrace S2.1 Section 2 East | Checked :

Units: kN,m

Stage No. 4 Excavate to elevation 17.11 on PASSIVE side

STABILITY ANALYSIS of Fully Embedded Wall according to Burland-Potts method

Factor of safety on nett available passive
Active limit pressures calculated by Wedge Stability
Passive limit pressures calculated by Wedge Stability

Stage No.	G.L. Act.	G.L. Pass.	Strut Elev.	FoS for toe elev. = 7.00: Factor of Safety	Moment equilib. at elev.	Toe elev. for FoS = 1.000: Toe elev.	Wall Penetration
4	18.02	17.11	Cant.	16.885	7.35	***	***

Legend: *** Result not found

BENDING MOMENT and DISPLACEMENT ANALYSIS of Fully Embedded Wall

Analysis options

Length of wall perpendicular to section = 1000.00m
Subgrade reaction model - Boussinesq Influence coefficients
Soil deformations are elastic until the active or passive limit is reached
Active limit pressures calculated by Wedge Stability
Passive limit pressures calculated by Wedge Stability
Open Tension Crack analysis - No

Rigid boundaries: Active side 20.00 from wall
Passive side 20.00 from wall

Limit State: Serviceability Limit State

Calculated Bending Moments and Strut Forces are to be multiplied by a factor of 1.35 to obtain values for structural design. See summary for factored values.

Node no.	Y coord	Nett pressure kN/m2	Wall disp. m	Wall rotation rad.	Shear force kN/m	Bending moment kN.m/m	Strut forces kN/m
1	18.32	0.00	0.001	1.17E-05	0.0	-0.0	
2	18.02	0.00	0.001	1.17E-05	0.0	-0.0	
3	17.98	0.18	0.001	1.17E-05	0.0	-0.0	
4	17.55	2.77	0.001	1.11E-05	0.6	0.2	
5	17.11	7.19	0.001	7.65E-06	2.8	0.9	
		5.31	0.001	7.65E-06	2.8	0.9	
6	16.81	9.37	0.001	6.23E-07	5.1	2.1	
7	16.50	12.33	0.001	-1.40E-05	8.4	4.1	
		-5.91	0.001	-1.40E-05	8.4	4.1	
8	16.05	-5.58	0.001	-5.39E-05	5.8	7.3	
9	15.60	-5.54	0.001	-1.12E-04	3.3	9.3	
10	15.00	-6.09	0.001	-2.04E-04	-0.2	10.4	
11	14.60	-6.89	0.001	-2.67E-04	-2.8	9.8	
12	14.20	-8.02	0.001	-3.23E-04	-5.8	8.2	
13	13.85	-9.24	0.001	-3.61E-04	-8.8	5.7	
14	13.45	-10.82	0.002	-3.83E-04	-12.8	1.4	
15	13.20	-11.86	0.002	-3.82E-04	-15.6	-2.1	
		14.15	0.002	-3.82E-04	-15.6	-2.1	
16	12.60	10.98	0.002	-3.30E-04	-8.1	-8.9	
17	12.00	7.69	0.002	-2.33E-04	-2.5	-11.7	
18	11.40	4.68	0.002	-1.23E-04	1.2	-11.8	
19	10.80	2.21	0.002	-2.04E-05	3.3	-10.2	
20	10.20	0.38	0.002	6.40E-05	4.1	-7.8	
21	9.60	-0.83	0.002	1.25E-04	3.9	-5.3	

(continued)

Stage No.4 Excavate to elevation 17.11 on PASSIVE side

Node no.	Y coord	Nett pressure kN/m2	Wall disp. m	Wall rotation rad.	Shear force kN/m	Bending moment kN.m/m	Strut forces kN/m
22	9.00	-1.50	0.002	1.65E-04	3.2	-3.1	
23	8.40	-1.75	0.002	1.86E-04	2.2	-1.5	
24	7.80	-1.70	0.002	1.95E-04	1.2	-0.4	
25	7.40	-1.54	0.002	1.97E-04	0.6	-0.1	
26	7.00	-1.29	0.002	1.97E-04	-0.0	0.0	

ACTIVE side

Node no.	Y coord	Effective stresses: Water press. kN/m2	Vertic -al kN/m2	Active limit kN/m2	Passive limit kN/m2	Earth pressure kN/m2	Total earth pressure kN/m2	Soil stiffness coeff. kN/m3
1	18.32	0.00	0.00	0.00	0.00	0.00	0.00	0.0
2	18.02	0.00	0.00	0.00	0.00	0.00	0.00	0.0
		Total>	0.00	0.00	0.00	0.00	0.00	2092
3	17.98	Total>	0.60	0.18m	60.10	0.18	0.18a	2092
4	17.55	Total>	8.24	2.34m	70.22	2.77	2.77	2092
5	17.11	Total>	16.87	4.50m	77.04	7.19	7.19	2092
6	16.81	Total>	23.52	6.04m	93.67	11.15	11.15	2092
7	16.50	Total>	30.40	7.58m	110.10	15.41	15.41	2092
		0.00	30.40	2.57	234.49	21.55	21.55	5267
8	16.05	0.00	41.03	3.66	348.21	30.13	30.13	5267
9	15.60	0.00	51.58	6.06	348.39	38.55	38.55	5267
10	15.00	0.00	65.29	11.61	325.51	49.44	49.44	5267
11	14.60	0.00	74.17	16.93	368.58	56.45	56.45	5267
12	14.20	0.00	82.84	15.92	396.86	63.27	63.27	5267
13	13.85	3.50	86.76	18.29	417.85	65.60	69.10	5267
14	13.45	7.50	91.07	23.97	440.60	68.16	75.66	5267
15	13.20	10.00	93.68	26.65	453.27	69.72	79.72	5267
		Total>	103.68	24.08m	368.48	93.86	93.86	4881
16	12.60	Total>	116.59	27.08m	369.03	104.58	104.58	5334
17	12.00	Total>	129.22	30.08m	381.87	115.10	115.10	5787
18	11.40	Total>	141.59	33.08m	378.26	125.64	125.64	6239
19	10.80	Total>	153.76	36.08m	352.91	136.36	136.36	6692
20	10.20	Total>	165.75	39.08m	399.86	147.32	147.32	7145
21	9.60	Total>	177.61	42.08m	425.66	158.52	158.52	7598
22	9.00	Total>	189.35	45.08m	419.14	169.94	169.94	8051
23	8.40	Total>	200.99	48.08m	426.36	181.52	181.52	8504
24	7.80	Total>	212.55	51.08m	464.48	193.22	193.22	8956
25	7.40	Total>	220.22	53.08m	495.75	201.07	201.07	9258
26	7.00	Total>	227.87	55.08m	510.41	208.95	208.95	9560

PASSIVE side

Node no.	Y coord	Effective stresses: Water press. kN/m2	Vertic -al kN/m2	Active limit kN/m2	Passive limit kN/m2	Earth pressure kN/m2	Total earth pressure kN/m2	Soil stiffness coeff. kN/m3
1	18.32	0.00	0.00	0.00	0.00	0.00	0.00	0.0
2	18.02	0.00	0.00	0.00	0.00	0.00	0.00	0.0
3	17.98	0.00	0.00	0.00	0.00	0.00	0.00	0.0
4	17.55	0.00	0.00	0.00	0.00	0.00	0.00	0.0
5	17.11	0.00	0.00	0.00	0.00	0.00	0.00	0.0
		Total>	0.00	0.00	59.92	1.88	1.88	2151
6	16.81	Total>	5.23	1.54m	65.14	1.79	1.79	2151
7	16.50	Total>	10.46	3.07m	70.36	3.07	3.07a	2151
		0.00	10.46	1.92	41.16	27.46	27.46	5473
8	16.05	0.00	18.56	3.93	71.33	35.71	35.71	5473

Run ID. East Terrace S2.1 S2 East SLS1_SLS | Sheet No.
Lincoln's Inn Fields, London WC2A 3TL | Date: 4-02-2016
East Terrace S2.1 Section 2 East | Checked :

(continued)

Stage No.4 Excavate to elevation 17.11 on PASSIVE side

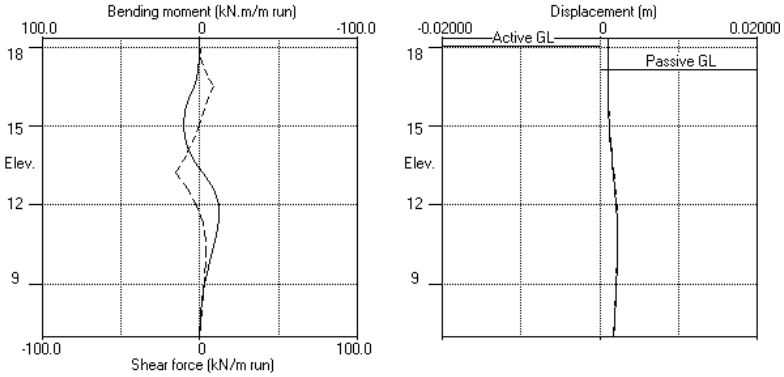
PASSIVE side

Node no.	Y coord	Effective stresses: Water press. kN/m2	Vertic -al kN/m2	Active limit kN/m2	Passive limit kN/m2	Earth pressure kN/m2	Total earth pressure kN/m2	Soil stiffness coeff. kN/m3
9	15.60	0.00	26.66	6.56	102.01	44.09	44.09	5473
10	15.00	0.00	37.46	9.16	146.72	55.53	55.53	5473
11	14.60	0.00	44.67	10.30	172.55	63.34	63.34	5473
12	14.20	0.00	51.87	13.06	197.38	71.29	71.29	5473
13	13.85	3.50	54.68	15.12	212.08	74.84	78.34	5473
14	13.45	7.50	57.89	15.01	225.28	78.98	86.48	5473
15	13.20	10.00	59.90	14.24	232.53	81.58	91.58	5473
		Total>	69.90	19.57m	224.05	79.71	79.71	5018
16	12.60	Total>	81.63	22.57m	251.16	93.60	93.60	5483
17	12.00	Total>	93.36	25.57m	277.97	107.41	107.41	5949
18	11.40	Total>	105.09	28.57m	303.17	120.97	120.97	6414
19	10.80	Total>	116.84	31.57m	324.38	134.16	134.16	6880
20	10.20	Total>	128.59	34.57m	346.45	146.94	146.94	7346
21	9.60	Total>	140.35	37.57m	368.07	159.35	159.35	7811
22	9.00	Total>	152.12	40.57m	391.05	171.44	171.44	8277
23	8.40	Total>	163.89	43.57m	415.19	183.27	183.27	8742
24	7.80	Total>	175.67	46.57m	438.42	194.92	194.92	9208
25	7.40	Total>	183.53	48.58m	451.71	202.60	202.60	9518
26	7.00	Total>	191.39	50.57m	466.61	210.24	210.24	9828

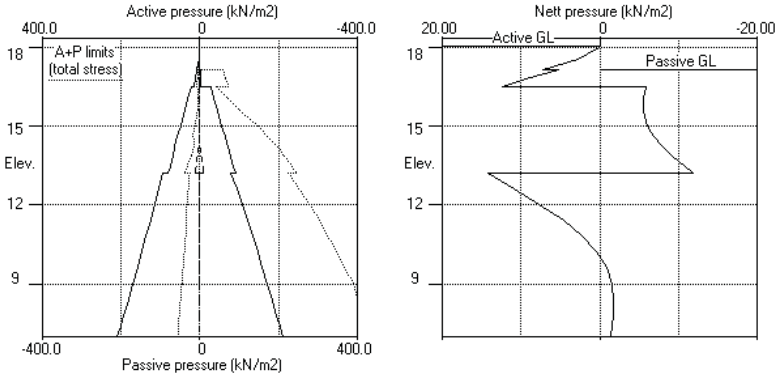
Note: 3.07a Soil pressure at active limit
123.45p Soil pressure at passive limit

Units: kN,m

Stage No.4 Excav. to elev. 17.11 on PASSIVE side



Stage No.4 Excav. to elev. 17.11 on PASSIVE side



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Program: WALLAP Version 6.05 Revision A45.B58.R48 | Job No. J15050
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Data filename/Run ID: East Terrace S2.1 S2 East SLS1_SLS |
Lincoln's Inn Fields, London WC2A 3TL | Date: 4-02-2016
East Terrace S2.1 Section 2 East | Checked :

Units: kN,m

Summary of results

LIMIT STATE PARAMETERS

Limit State: Serviceability Limit State
All loads and soil strengths are unfactored

STABILITY ANALYSIS of Fully Embedded Wall according to Burland-Potts method

Factor of safety on nett available passive
Active limit pressures calculated by Wedge Stability
Passive limit pressures calculated by Wedge Stability

Stage No.	--- G.L. --- Act.	Pass.	Strut Elev.	FoS for toe elev. = 7.00 Factor of Safety	Moment equilib. at elev.	Toe elev. for FoS = 1.000 Toe elev.	Wall Penetr -ation
1	18.02	18.02	---	Conditions not suitable for FoS calc.			
2	18.02	18.02		No analysis at this stage			
3	18.02	18.02		Wall tending to move from right to left			
4	18.02	17.11	Cant.	16.885	7.35	***	***
5	18.02	17.11	18.32	20.668	n/a	***	***
6	18.02	17.11		No analysis at this stage			
7	18.02	17.11		No analysis at this stage			
8	18.02	13.45	18.32	3.606	n/a	***	***
9	18.02	13.45		No analysis at this stage			

All remaining stages have more than one strut - FoS calculation n/a

Legend: *** Result not found

Note: To obtain a Factor of Safety for the case of wall failing from right to left you should reverse the data (Ctrl+K) and re-analyse.

Units: kN,m

Summary of results

BENDING MOMENT and DISPLACEMENT ANALYSIS of Fully Embedded Wall

Analysis options

Length of wall perpendicular to section = 1000.00m
Subgrade reaction model - Boussinesq Influence coefficients
Soil deformations are elastic until the active or passive limit is reached
Active limit pressures calculated by Wedge Stability
Passive limit pressures calculated by Wedge Stability
Open Tension Crack analysis - No

Rigid boundaries: Active side 20.00 from wall
Passive side 20.00 from wall

Limit State: Serviceability Limit State

Calculated Bending Moments and Strut Forces have been multiplied by a factor of 1.35 to obtain values for structural design.

Bending moment, shear force and displacement envelopes

Node no.	Y coord	Displacement max.	Displacement min.	Bending moment Calculated max.	Bending moment Calculated min.	Bending moment Factored max.	Bending moment Factored min.	Shear force Calculated max.	Shear force Calculated min.	Shear force Factored max.	Shear force Factored min.
		m	m	kN.m/m		kN.m/m		kN/m	kN/m	kN/m	kN/m
1	18.32	0.001	-0.000	0	-0	0	-0	0	-24	0	-32
2	18.02	0.001	-0.000	0	-7	0	-10	0	-24	0	-32
3	17.98	0.001	0.000	0	-8	0	-11	0	-26	0	-36
4	17.55	0.002	0.000	0	-17	0	-24	1	-24	1	-33
5	17.11	0.003	0.000	1	-26	1	-35	3	-22	4	-30
6	16.81	0.004	0.000	2	-32	3	-43	5	-21	7	-28
7	16.50	0.004	0.000	4	-37	5	-50	8	-18	11	-25
8	16.05	0.005	0.000	7	-44	10	-59	8	-17	11	-22
9	15.60	0.006	0.000	9	-49	13	-67	7	-14	10	-19
10	15.00	0.007	0.000	10	-55	14	-74	18	-8	25	-11
11	14.60	0.007	0.000	10	-56	13	-76	28	-3	37	-4
12	14.20	0.007	0.000	12	-54	16	-73	38	-6	51	-8
13	13.85	0.007	0.000	27	-51	37	-69	48	-65	65	-87
14	13.45	0.008	0.000	4	-42	5	-57	29	-51	39	-68
15	13.20	0.008	0.000	0	-35	0	-47	31	-49	42	-66
16	12.60	0.009	0.000	0	-31	0	-42	24	-29	32	-40
17	12.00	0.010	0.000	0	-44	0	-59	17	-15	23	-20
18	11.40	0.010	0.000	3	-50	3	-68	10	-4	14	-5
19	10.80	0.011	0.000	7	-50	9	-67	5	0	7	0
20	10.20	0.011	0.000	8	-45	11	-61	11	0	15	0
21	9.60	0.010	0.000	7	-36	10	-49	14	-2	19	-3
22	9.00	0.010	0.000	6	-27	8	-37	15	-3	21	-4
23	8.40	0.009	0.000	3	-18	5	-24	16	-4	22	-5
24	7.80	0.008	0.000	1	-9	2	-12	16	-3	22	-4
25	7.40	0.008	0.000	0	-3	1	-4	11	-2	15	-2
26	7.00	0.007	0.000	0	0	0	0	0	-0	0	-0

Summary of results (continued)

Calculated Bending Moments and Strut Forces have been multiplied by a factor of 1.35 to obtain values for structural design.

Maximum and minimum bending moment and shear force at each stage

Stage no.	Bending moment Calculated max.	elev.	Bending moment Calculated min.	elev.	Bending moment Factored max.	Bending moment Factored min.	Shear force Calculated max.	elev.	Shear force Calculated min.	elev.	Shear force Factored max.	Shear force Factored min.
	kN.m/m		kN.m/m		kN.m/m		kN/m		kN/m		kN/m	kN/m
1	1	15.00	-2	12.00	1	-3	1	16.50	-2	13.20	1	-3
2	No calculation at this stage											
3	4	15.00	-7	12.00	5	-10	3	16.50	-8	13.20	3	-11
4	10	15.00	-12	11.40	14	-16	8	16.50	-16	13.20	11	-21
5	5	14.60	-11	12.00	6	-15	8	16.05	-14	13.20	11	-19
6	No calculation at this stage											
7	No calculation at this stage											
8	8	10.20	-56	14.60	11	-76	31	13.20	-24	18.32	42	-32
9	No calculation at this stage											
10	No calculation at this stage											
11	8	10.20	-56	14.60	11	-76	31	13.20	-26	17.98	41	-36
12	No calculation at this stage											
13	No calculation at this stage											
14	No calculation at this stage											
15	27	13.85	-50	11.40	37	-68	48	13.85	-65	13.85	65	-87

Maximum and minimum displacement at each stage

Stage no.	Displacement maximum	elev.	Displacement minimum	elev.	Stage description
	m		m		
1	0.000	11.40	0.000	18.32	Apply surcharge no.1 at elev. 18.02
2	No calculation at this stage				Apply surcharge no.2 at elev. 18.02
3	0.001	10.80	-0.000	18.32	Apply surcharge no.4 at elev. 18.02
4	0.002	10.80	0.000	18.32	Excav. to elev. 17.11 on PASSIVE side
5	0.002	10.80	-0.000	18.32	Install strut no.1 at elev. 18.32
6	No calculation at this stage				Apply surcharge no.3 at elev. 13.45
7	No calculation at this stage				Apply water pressure profile no.2
8	0.007	13.85	-0.000	18.32	Excav. to elev. 13.45 on PASSIVE side
9	No calculation at this stage				Install strut no.2 at elev. 13.85
10	No calculation at this stage				Install strut no.3 at elev. 17.98
11	0.007	13.85	0.000	18.32	Remove strut no.1 at elev. 18.32
12	No calculation at this stage				Change soil type 1 to soil type 5
13	No calculation at this stage				Change soil type 2 to soil type 6
14	No calculation at this stage				Change soil type 3 to soil type 7
15	0.011	10.80	0.000	18.32	Change soil type 4 to soil type 8

Summary of results (continued)

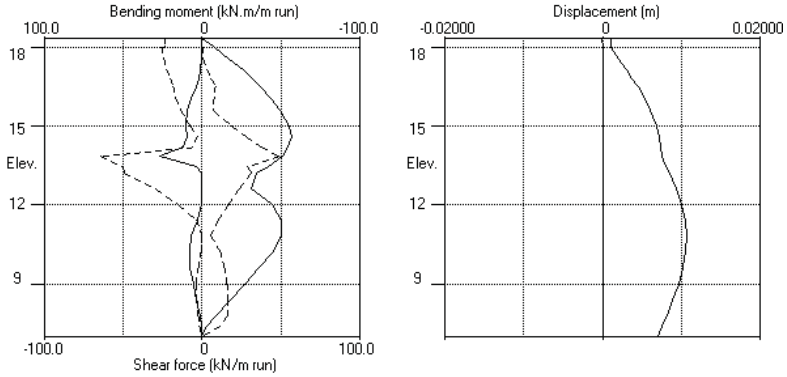
Calculated Bending Moments and Strut Forces have been multiplied by a factor of 1.35 to obtain values for structural design.

Strut forces at each stage (horizontal components)

Stage no.	Strut no. 1 at elev. 18.32			Strut no. 2 at elev. 13.85			Strut no. 3 at elev. 17.98		
	--Calculated-- kN per m run	kN per strut	Factored kN per strut	--Calculated-- kN per m run	kN per strut	Factored kN per strut	--Calculated-- kN per m run	kN per strut	Factored kN per strut
5	10	50	68	---	---	---	---	---	---
8	24	119	160	---	---	---	---	---	---
11	---	---	---	slack	slack	slack	26	26	36
15	---	---	---	113	113	152	17	17	23

* Indicates that the total force shown is the sum of the force in the strut plus a force applied at the same elevation which may represent temperature load or other forces which are part of the strut load. Force components are listed in the detailed results for individual stages.

Bending moment, shear force, displacement envelopes



GEOTECHNICAL & ENVIRONMENTAL ASSOCIATES | Sheet No.
Program: WALLAP Version 6.05 Revision A45.B58.R48 | Job No. J15050
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Data filename/Run ID: East Terrace S2.1 S2 West SLS1_SLS Amended 080216
Lincoln's Inn Fields, London WC2A 3TL | Date: 9-02-2016
East Terrace S2.1 Section 2 West | Checked :

Units: kN,m

INPUT DATA

SOIL PROFILE

Stratum no.	Elevation of top of stratum	Soil types Active side	Passive side
1	18.02	1 Made Ground	1 Made Ground
2	16.50	2 Hackney Gravel	2 Hackney Gravel
3	13.20	3 London Clay	3 London Clay
4	3.50	4 London Clay	4 London Clay

SOIL PROPERTIES

No.	Soil type -- Description (Datum elev.)	Bulk density kN/m3	Young's Modulus Eh,kN/m2 (dEh/dy)	At rest coeff. Ko (dKo/dy)	Consol state. NC/OC (Nu)	Active limit Ka (Kac)	Passive limit Kp (Kpc)	Cohesion kN/m2 (dc/dy)
1	Made Ground	17.00	15000	0.500	NC	1.000	1.000	30.00u
					(0.490)	(2.000)	(2.000)	
2	Hackney Gravel	18.00	60000	1.000	OC	0.260	3.852	
					(0.200)	(0.000)	(0.000)	
3	London Clay	19.50	35000	1.000	OC	1.000	1.000	70.00u
	(13.20)		(5412)		(0.490)	(1.000)	(1.000)	(10.80)
4	London Clay	19.50	87500	1.000	OC	1.000	1.000	175.0u
					(0.490)	(1.000)	(1.000)	
5	Made Ground Drained	17.00	9000	0.500	NC	0.490	2.040	0.0d
					(0.200)	(1.400)	(2.856)	
6	Hackney Gravel	18.00	60000	1.000	OC	0.260	3.852	
					(0.200)	(0.000)	(0.000)	
7	London Cl..	19.50	21000	1.000	OC	0.585	1.247	5.000d
	(13.20)		(3247)		(0.200)	(0.978)	(0.583)	
8	London Clay Drained	19.50	52500	1.000	OC	0.585	1.247	5.000d
					(0.200)	(0.978)	(0.583)	

Additional soil parameters associated with Ka and Kp

No.	Soil type ------- Description	--- parameters for Ka --- Soil friction angle	Wall adhesion coeff.	Back-fill angle	--- parameters for Kp --- Soil friction angle	Wall adhesion coeff.	Back-fill angle
1	Made Ground	0.00	0.000	0.00	0.00	0.000	0.00
2	Hackney Gravel	36.00	0.000	0.00	36.00	0.000	0.00
3	London Clay	0.00	-0.674	0.00	0.00	-0.674	0.00
4	London Clay	0.00	-0.674	0.00	0.00	-0.674	0.00
5	Made Ground Drained	20.00	0.000	0.00	20.00	0.000	0.00
6	Hackney Gravel	36.00	0.000	0.00	36.00	0.000	0.00
7	London Clay Drained	23.00	-0.674	0.00	23.00	-0.674	0.00
8	London Clay Drained	23.00	-0.674	0.00	23.00	-0.674	0.00

GROUND WATER CONDITIONS

Density of water = 10.00 kN/m3

	Active side	Passive side
Initial water table elevation	14.20	14.20

Automatic water pressure balancing at toe of wall : No

Water press. profile no.	Active side Point no.	Elev. m	Piezo elev. m	Water press. kN/m2	Passive side Point no.	Elev. m	Piezo elev. m	Water press. kN/m2
1	1	14.20	14.20	0.0	1	14.20	14.20	0.0
2	1	14.20	14.20	0.0	1	14.20	14.20	0.0

WALL PROPERTIES

Type of structure = Fully Embedded Wall
Elevation of toe of wall = 8.50
Maximum finite element length = 0.60 m
Youngs modulus of wall E = 2.0000E+07 kN/m2
Moment of inertia of wall I = 3.2000E-03 m4/m run
E.I = 64000 kN.m2/m run
Yield Moment of wall = Not defined

STRUTS and ANCHORS

Strut/ anchor no.	Elev.	Strut spacing m	X-section area of strut sq.m	Youngs modulus kN/m2	Free length m	Inclin -ation (degs)	Pre-stress /strut kN	Tension allowed
1	18.32	5.00	0.100000	2.000E+08	5.00	0.00	50.00	Yes
2	14.69	1.00	0.300000	2.000E+07	5.00	0.00	0	No
3	17.98	1.00	0.250000	2.000E+07	5.00	0.00	0	No

SURCHARGE LOADS

Surch -arge no.	Elev.	Distance from wall	Length parallel to wall	Width perpend. to wall	Surcharge ----- kN/m2 ----- Near edge	Far edge	Equiv. soil type	Partial factor/ Category
1	Not defined							
2	Not defined							
3	13.45	-0.00(P)	20.00	20.00	7.50	=	0	1.00 -
4	14.00	4.00(A)	20.00	2.00	100.00	=	0	1.00 P/U

Note: A = Active side, P = Passive side
Limit State Categories P/U = Permanent Unfavourable
P/F = Permanent Favourable
Var = Variable (unfavourable)

CONSTRUCTION STAGES

Construction stage no.	Stage description
1	Apply surcharge no.4 at elevation 14.00
2	Excavate to elevation 17.11 on PASSIVE side
3	Install strut or anchor no.1 at elevation 18.32
4	Excavate to elevation 14.29 on PASSIVE side
5	Install strut or anchor no.2 at elevation 14.69
6	Install strut or anchor no.3 at elevation 17.98
7	Remove strut or anchor no.1 at elevation 18.32
8	Change properties of soil type 1 to soil type 5 No analysis at this stage Ko pressures will not be reset
9	Change properties of soil type 2 to soil type 6 No analysis at this stage Ko pressures will not be reset
10	Change properties of soil type 3 to soil type 7 No analysis at this stage Ko pressures will not be reset
11	Change properties of soil type 4 to soil type 8 Ko pressures will be reset

FACTORS OF SAFETY and ANALYSIS OPTIONS

Limit State options: Serviceability Limit State
All loads and soil strengths are unfactored

Stability analysis:
Method of analysis - Burland-Potts
Factor on passive for calculating wall depth = 1.00
Active limit pressures calculated by Wedge Stability
Passive limit pressures calculated by Wedge Stability

Parameters for undrained strata:
Minimum equivalent fluid density = 5.00 kN/m3
Maximum depth of water filled tension crack = 0.00 m

Bending moment and displacement calculation:
Method - Subgrade reaction model using Influence Coefficients
Open Tension Crack analysis? - No
Non-linear Modulus Parameter (L) = 0 m

Boundary conditions:
   Length of wall (normal to plane of analysis) = 1000.00 m

   Width of excavation on active side of wall = 20.00 m
   Width of excavation on passive side of wall = 12.00 m

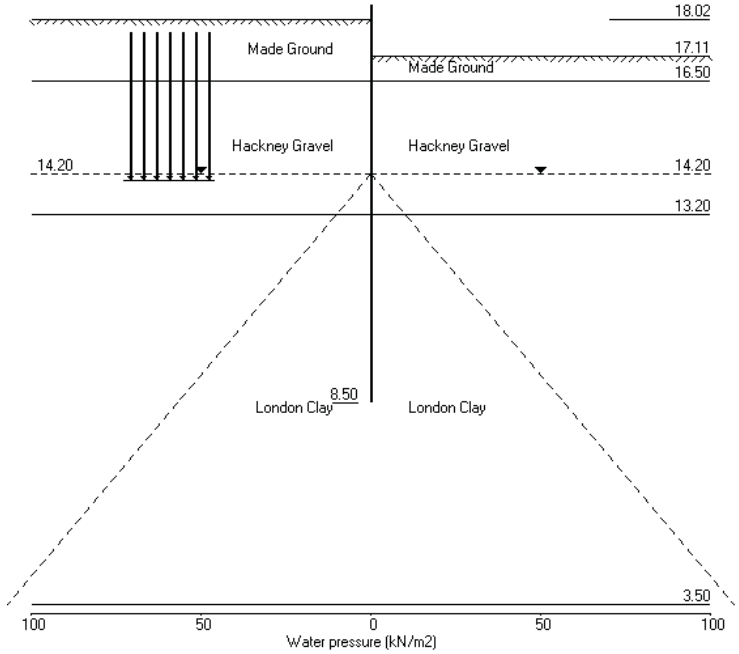
   Distance to rigid boundary on active side = 20.00 m
   Distance to rigid boundary on passive side = 20.00 m

OUTPUT OPTIONS

Stage no.	Stage description	Output options: Displacement, Bending mom. Shear force	Active, Passive pressures	Graph. output
1	Apply surcharge no.4 at elev. 14.00	No	No	No
2	Excav. to elev. 17.11 on PASSIVE side	Yes	Yes	Yes
3	Install strut no.1 at elev. 18.32	No	No	No
4	Excav. to elev. 14.29 on PASSIVE side	No	No	No
5	Install strut no.2 at elev. 14.69	No	No	No
6	Install strut no.3 at elev. 17.98	No	No	No
7	Remove strut no.1 at elev. 18.32	No	No	No
8	Change soil type 1 to soil type 5	No	No	No
9	Change soil type 2 to soil type 6	No	No	No
10	Change soil type 3 to soil type 7	No	No	No
11	Change soil type 4 to soil type 8	No	No	No
*	Summary output	Yes	-	Yes

Units: kN,m

Stage No.2 Excav. to elev. 17.11 on PASSIVE side



GEOTECHNICAL & ENVIRONMENTAL ASSOCIATES | Sheet No.
Program: WALLAP Version 6.05 Revision A45.B58.R48 | Job No. J15050
Licensed from GEOSOLVE | Made by : MC
Data filename/Run ID: East Terrace S2.1 S2 West SLS1_SLS Amended 080216
Lincoln's Inn Fields, London WC2A 3TL | Date: 9-02-2016
East Terrace S2.1 Section 2 West | Checked :

Units: kN,m

Stage No. 2 Excavate to elevation 17.11 on PASSIVE side

STABILITY ANALYSIS of Fully Embedded Wall according to Burland-Potts method

Factor of safety on nett available passive
Active limit pressures calculated by Wedge Stability
Passive limit pressures calculated by Wedge Stability

Stage No.	G.L. Act.	G.L. Pass.	Strut Elev.	FoS for toe elev. = 8.50: Factor of Safety	Moment equilib. at elev.	Toe elev. for FoS = 1.000: Toe elev.	Wall Penetration
2	18.02	17.11	Cant.	17.805	8.81	***	***

Legend: *** Result not found

BENDING MOMENT and DISPLACEMENT ANALYSIS of Fully Embedded Wall

Analysis options

Length of wall perpendicular to section = 1000.00m
Subgrade reaction model - Boussinesq Influence coefficients
Soil deformations are elastic until the active or passive limit is reached
Active limit pressures calculated by Wedge Stability
Passive limit pressures calculated by Wedge Stability
Open Tension Crack analysis - No

Rigid boundaries: Active side 20.00 from wall
Passive side 20.00 from wall

Limit State: Serviceability Limit State

Calculated Bending Moments and Strut Forces are to be multiplied by a factor of 1.35 to obtain values for structural design. See summary for factored values.

Node no.	Y coord	Nett pressure kN/m2	Wall disp. m	Wall rotation rad.	Shear force kN/m	Bending moment kN.m/m	Strut forces kN/m
1	18.32	0.00	0.001	1.70E-04	0.0	-0.0	
2	18.02	0.00	0.001	1.70E-04	0.0	0.0	
3	17.98	0.18	0.001	1.70E-04	0.0	0.0	
4	17.55	2.34	0.001	1.69E-04	0.5	0.1	
5	17.11	5.79	0.001	1.67E-04	2.3	0.7	
		3.80	0.001	1.67E-04	2.3	0.7	
6	16.81	6.64	0.001	1.61E-04	3.9	1.6	
7	16.50	8.16	0.001	1.49E-04	6.2	3.1	
		-4.78	0.001	1.49E-04	6.2	3.1	
8	16.05	-4.09	0.001	1.19E-04	4.2	5.4	
9	15.60	-3.61	0.001	7.62E-05	2.5	6.9	
10	15.15	-3.40	0.001	2.44E-05	0.9	7.7	
11	14.69	-3.51	0.001	-3.01E-05	-0.7	7.7	
12	14.29	-3.87	0.001	-7.65E-05	-2.2	7.1	
13	14.20	-3.98	0.001	-8.63E-05	-2.5	6.9	
14	14.00	-4.28	0.001	-1.07E-04	-3.4	6.3	
15	13.60	-5.04	0.001	-1.41E-04	-5.2	4.6	
16	13.20	-5.95	0.001	-1.62E-04	-7.4	2.2	
		5.96	0.001	-1.62E-04	-7.4	2.2	
17	12.60	4.35	0.001	-1.67E-04	-4.3	-1.2	
18	12.00	3.13	0.001	-1.47E-04	-2.1	-2.9	
19	11.40	2.26	0.001	-1.17E-04	-0.5	-3.5	
20	10.80	1.56	0.001	-8.59E-05	0.7	-3.3	
21	10.20	0.81	0.001	-5.90E-05	1.4	-2.5	

(continued)

Stage No.2 Excavate to elevation 17.11 on PASSIVE side

Node no.	Y coord	Nett pressure kN/m2	Wall disp. m	Wall rotation rad.	Shear force kN/m	Bending moment kN.m/m	Strut forces kN/m
22	9.60	-0.15	0.001	-4.10E-05	1.6	-1.4	
23	9.05	-1.35	0.001	-3.29E-05	1.2	-0.5	
24	8.50	-2.91	0.001	-3.09E-05	-0.0	0.0	

ACTIVE side

Node no.	Y coord	Effective stresses: Water press. kN/m2	Vertic -al kN/m2	Active limit kN/m2	Passive limit kN/m2	Earth pressure kN/m2	Total earth pressure kN/m2	Soil stiffness coeff. kN/m3
1	18.32	0.00	0.00	0.00	0.00	0.00	0.00	0.0
2	18.02	0.00	0.00	0.00	0.00	0.00	0.00	0.0
		Total>	0.00	0.00	0.00	0.00	0.00	2197
3	17.98	Total>	0.60	0.18m	60.23	0.18	0.18a	2197
4	17.55	Total>	7.95	2.34m	70.44	2.34	2.34a	2197
5	17.11	Total>	15.30	4.50m	75.21	5.79	5.79	2197
6	16.81	Total>	20.53	6.04m	80.44	8.52	8.52	2197
7	16.50	Total>	25.76	7.58m	85.66	11.24	11.24	2197
		0.00	25.76	3.52	99.41	21.56	21.56	5633
8	16.05	0.00	33.85	6.17	130.71	30.00	30.00	5633
9	15.60	0.00	41.96	8.41	161.31	38.33	38.33	5633
10	15.15	0.00	50.15	11.98	193.00	46.62	46.62	5633
11	14.69	0.00	58.34	15.65	224.77	54.76	54.76	5633
12	14.29	0.00	65.54	15.66	251.06	61.79	61.79	5633
13	14.20	0.00	67.16	13.13	256.49	63.35	63.35	5633
14	14.00	2.00	68.76	0.89	232.18	64.81	66.81	5633
15	13.60	6.00	71.98	0.00	234.67	67.64	73.64	5633
16	13.20	10.00	75.38	0.00	253.67	70.43	80.43	5633
		Total>	85.38	24.08m	234.31	81.06	81.06	5127
17	12.60	Total>	97.91	27.08m	258.04	92.42	92.42	5602
18	12.00	Total>	111.17	30.08m	284.71	104.33	104.33	6078
19	11.40	Total>	124.95	33.08m	328.04	116.67	116.67	6554
20	10.80	Total>	138.91	36.08m	380.51	129.19	129.19	7029
21	10.20	Total>	152.77	39.08m	395.14	141.64	141.64	7505
22	9.60	Total>	166.34	42.08m	445.00	153.85	153.85	7980
23	9.05	Total>	178.44	44.83m	462.46	164.74	164.74	8416
24	8.50	Total>	190.21	47.58m	416.14	175.28	175.28	8852

PASSIVE side

Node no.	Y coord	Effective stresses: Water press. kN/m2	Vertic -al kN/m2	Active limit kN/m2	Passive limit kN/m2	Earth pressure kN/m2	Total earth pressure kN/m2	Soil stiffness coeff. kN/m3
1	18.32	0.00	0.00	0.00	0.00	0.00	0.00	0.0
2	18.02	0.00	0.00	0.00	0.00	0.00	0.00	0.0
3	17.98	0.00	0.00	0.00	0.00	0.00	0.00	0.0
4	17.55	0.00	0.00	0.00	0.00	0.00	0.00	0.0
5	17.11	0.00	0.00	0.00	0.00	0.00	0.00	0.0
		Total>	0.00	0.00	59.92	2.00	2.00	2281
6	16.81	Total>	5.23	1.54m	65.14	1.88	1.88	2281
7	16.50	Total>	10.46	3.07m	70.36	3.07	3.07a	2281
		0.00	10.46	1.92	41.15	26.34	26.34	5912
8	16.05	0.00	18.56	3.93	71.33	34.09	34.09	5912
9	15.60	0.00	26.67	6.34	102.18	41.94	41.94	5912
10	15.15	0.00	34.87	8.56	136.80	50.03	50.03	5912
11	14.69	0.00	43.09	10.24	166.42	58.27	58.27	5912
12	14.29	0.00	50.31	11.27	189.99	65.66	65.66	5912

Run ID. East Terrace S2.1 S2 West SLS1_SLS Amended 080216 | Sheet No.
Lincoln's Inn Fields, London WC2A 3TL | Date: 9-02-2016
East Terrace S2.1 Section 2 West | Checked :

(continued)

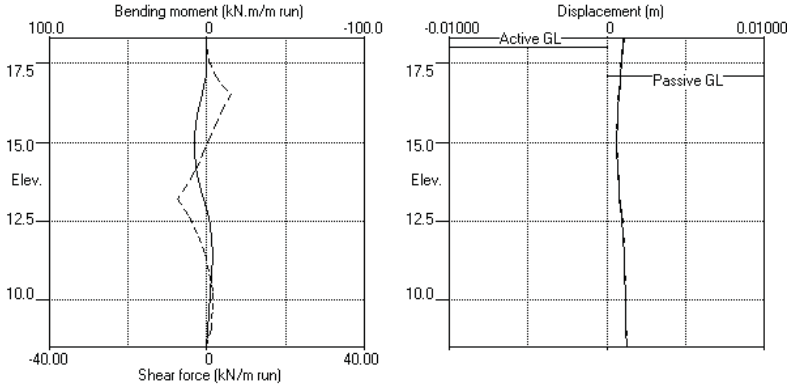
Stage No.2 Excavate to elevation 17.11 on PASSIVE side

PASSIVE side

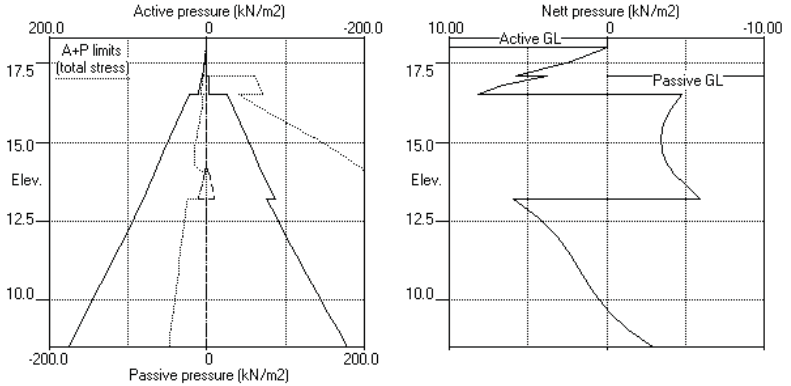
Node no.	Y coord	Effective stresses: Water press. kN/m2	Vertic -al kN/m2	Active limit kN/m2	Passive limit kN/m2	Earth pressure kN/m2	Total earth pressure kN/m2	Soil stiffness coeff. kN/m3
13	14.20	0.00	51.94	15.25	196.59	67.34	67.34	5912
14	14.00	2.00	53.56	14.54	207.21	69.09	71.09	5912
15	13.60	6.00	56.80	14.47	220.94	72.68	78.68	5912
16	13.20	10.00	60.05	15.52	232.74	76.37	86.37	5912
		Total>	70.05	19.57m	224.01	75.10	75.10	5323
17	12.60	Total>	81.85	22.57m	251.16	88.07	88.07	5817
18	12.00	Total>	93.67	25.57m	277.97	101.20	101.20	6310
19	11.40	Total>	105.50	28.57m	303.16	114.40	114.40	6804
20	10.80	Total>	117.36	31.57m	324.38	127.63	127.63	7298
21	10.20	Total>	129.23	34.57m	346.45	140.83	140.83	7792
22	9.60	Total>	141.12	37.57m	368.23	154.01	154.01	8286
23	9.05	Total>	152.03	40.32m	388.94	166.08	166.08	8738
24	8.50	Total>	162.96	43.07m	412.98	178.19	178.19	9191

Note: 3.07a Soil pressure at active limit
123.45p Soil pressure at passive limit

Stage No.2 Excav. to elev. 17.11 on PASSIVE side



Stage No.2 Excav. to elev. 17.11 on PASSIVE side



GEOTECHNICAL & ENVIRONMENTAL ASSOCIATES | Sheet No.
Program: WALLAP Version 6.05 Revision A45.B58.R48 | Job No. J15050
Licensed from GEOSOLVE | Made by : MC
Data filename/Run ID: East Terrace S2.1 S2 West SLS1_SLS Amended 080216
Lincoln's Inn Fields, London WC2A 3TL | Date: 9-02-2016
East Terrace S2.1 Section 2 West | Checked :
Units: kN,m

Summary of results

LIMIT STATE PARAMETERS
Limit State: Serviceability Limit State
All loads and soil strengths are unfactored

STABILITY ANALYSIS of Fully Embedded Wall according to Burland-Potts method
Factor of safety on nett available passive
Active limit pressures calculated by Wedge Stability
Passive limit pressures calculated by Wedge Stability

Stage No.	G.L. Act.	G.L. Pass.	Strut Elev.	FoS for toe elev. = 8.50 Factor of Safety	Moment equilib. at elev.	Toe elev. for FoS = 1.000 Toe elev.	Wall Penetration
1	18.02	18.02		Wall tending to move from right to left			
2	18.02	17.11	Cant.	17.805	8.81	***	***
3	18.02	17.11	18.32	21.323	n/a	***	***
4	18.02	14.29	18.32	4.061	n/a	13.27	1.02
5	18.02	14.29		No analysis at this stage			

All remaining stages have more than one strut - FoS calculation n/a

Legend: *** Result not found

Note: To obtain a Factor of Safety for the case of wall failing from right to left you should reverse the data (Ctrl+K) and re-analyse.

Units: kN,m

Summary of results

BENDING MOMENT and DISPLACEMENT ANALYSIS of Fully Embedded Wall

Analysis options

Length of wall perpendicular to section = 1000.00m
Subgrade reaction model - Boussinesq Influence coefficients
Soil deformations are elastic until the active or passive limit is reached
Active limit pressures calculated by Wedge Stability
Passive limit pressures calculated by Wedge Stability
Open Tension Crack analysis - No

Rigid boundaries: Active side 20.00 from wall
Passive side 20.00 from wall

Limit State: Serviceability Limit State

Calculated Bending Moments and Strut Forces have been multiplied by a factor of 1.35 to obtain values for structural design.

Bending moment, shear force and displacement envelopes

Node no.	Y coord	Displacement		Bending moment Calculated	Bending moment Factored		Shear force Calculated		Shear force Factored	
		max.	min.	max.	min.	max.	min.	max.	min.	max.	min.
		m	m	kN.m/m		kN.m/m		kN/m	kN/m	kN/m	kN/m
1	18.32	0.001	-0.000	0	-0	0	-0	0	-23	0	-31
2	18.02	0.001	-0.000	0	-7	0	-9	0	-23	0	-31
3	17.98	0.001	-0.000	0	-8	0	-11	0	-26	0	-35
4	17.55	0.002	-0.000	0	-17	0	-23	1	-24	1	-32
5	17.11	0.003	-0.000	1	-26	1	-35	2	-22	3	-30
6	16.81	0.003	-0.000	2	-31	2	-42	4	-20	5	-27
7	16.50	0.004	-0.000	3	-36	4	-49	6	-18	8	-24
8	16.05	0.005	-0.000	5	-42	7	-57	6	-15	9	-20
9	15.60	0.005	-0.000	7	-47	9	-63	7	-11	9	-15
10	15.15	0.006	-0.000	8	-50	10	-67	7	-5	10	-7
11	14.69	0.006	0.000	8	-50	10	-67	16	-14	21	-19
12	14.29	0.006	0.000	7	-47	10	-63	13	-6	18	-8
13	14.20	0.006	0.000	7	-46	9	-62	15	-4	21	-5
14	14.00	0.006	0.000	6	-42	9	-57	19	-3	26	-5
15	13.60	0.007	0.000	5	-34	6	-45	24	-5	33	-7
16	13.20	0.007	0.000	2	-24	3	-32	26	-7	35	-10
17	12.60	0.007	0.000	1	-20	2	-27	19	-4	25	-6
18	12.00	0.007	0.000	1	-15	1	-21	11	-2	15	-3
19	11.40	0.007	0.000	4	-11	6	-15	7	-1	10	-1
20	10.80	0.007	0.000	6	-7	8	-9	6	-1	8	-1
21	10.20	0.007	0.000	5	-5	6	-7	3	-3	4	-3
22	9.60	0.007	0.000	3	-4	4	-5	2	-3	3	-5
23	9.05	0.007	0.000	1	-2	1	-3	3	-3	5	-3
24	8.50	0.007	0.000	0	-0	0	-0	0	-0	0	-0

Summary of results (continued)

Calculated Bending Moments and Strut Forces have been multiplied by a factor of 1.35 to obtain values for structural design.

Maximum and minimum bending moment and shear force at each stage

Stage no.	Bending moment Calculated max.	elev.	min.	elev.	Bending moment Factored max.	min.	Shear force Calculated max.	elev.	min.	elev.	Shear force Factored max.	min.
	kN.m/m		kN.m/m		kN.m/m		kN/m		kN/m		kN/m	kN/m
1	2	13.20	-0	10.20	2	-1	1	14.69	-1	11.40	1	-1
2	8	14.69	-4	11.40	10	-5	6	16.50	-7	13.20	8	-10
3	3	14.00	-9	16.81	4	-12	7	15.60	-10	18.32	9	-14
4	6	10.80	-50	15.15	8	-67	26	13.20	-23	18.32	35	-31
5	No calculation at this stage											
6	No calculation at this stage											
7	5	10.80	-50	14.69	7	-67	26	13.20	-26	17.98	35	-35
8	No calculation at this stage											
9	No calculation at this stage											
10	No calculation at this stage											
11	0	18.02	-26	15.60	0	-35	16	14.69	-19	17.98	21	-26

Maximum and minimum displacement at each stage

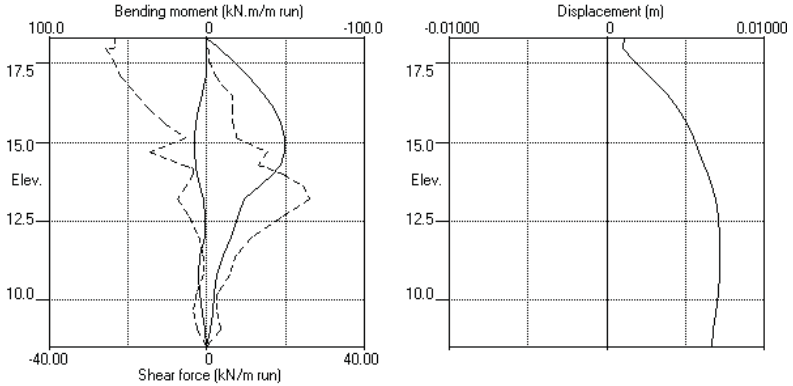
Stage no.	Displacement maximum	elev.	minimum	elev.	Stage description
	m		m		
1	0.000	8.50	-0.000	18.32	Apply surcharge no.4 at elev. 14.00
2	0.001	8.50	0.000	18.32	Excav. to elev. 17.11 on PASSIVE side
3	0.001	8.50	0.000	18.32	Install strut no.1 at elev. 18.32
4	0.006	14.20	0.000	18.32	Excav. to elev. 14.29 on PASSIVE side
5	No calculation at this stage				Install strut no.2 at elev. 14.69
6	No calculation at this stage				Install strut no.3 at elev. 17.98
7	0.006	14.00	0.000	18.32	Remove strut no.1 at elev. 18.32
8	No calculation at this stage				Change soil type 1 to soil type 5
9	No calculation at this stage				Change soil type 2 to soil type 6
10	No calculation at this stage				Change soil type 3 to soil type 7
11	0.007	11.40	0.000	18.32	Change soil type 4 to soil type 8

Strut forces at each stage (horizontal components)

Stage no.	Strut no. 1 at elev. 18.32 Calculated kN per m run	Strut no. 1 Factored kN per strut	Strut no. 2 at elev. 14.69 Calculated kN per strut	Strut no. 2 Factored kN per m run	Strut no. 2 Factored kN per strut	Strut no. 2 Factored kN per strut	Strut no. 3 at elev. 17.98 Calculated kN per m run	Strut no. 3 Factored kN per strut	Strut no. 3 Factored kN per strut
3	10	50	68	---	---	---	---	---	---
4	23	116	157	---	---	---	---	---	---
7	---	---	---	slack	slack	slack	26	26	35
11	---	---	---	30	30	41	19	19	26

* Indicates that the total force shown is the sum of the force in the strut plus a force applied at the same elevation which may represent temperature load or other forces which are part of the strut load. Force components are listed in the detailed results for individual stages.

Bending moment, shear force, displacement envelopes



INPUT DATA

SOIL PROFILE

Stratum no.	Elevation of top of stratum	Soil types: Active side	Passive side
1	21.18	1 Made Ground	1 Made Ground
2	16.50	2 Hackney Gravel	2 Hackney Gravel
3	13.20	3 London Clay	3 London Clay
4	3.50	4 London Clay	4 London Clay

SOIL PROPERTIES

No.	Soil type -- Description (Datum elev.)	Bulk density kN/m3	Young's Modulus Eh,kN/m2 (dEh/dy)	At rest coeff. Ko (dKo/dy)	Consol state. NC/OC (Nu)	Active limit Ka (Kac)	Passive limit Kp (Kpc)	Cohesion kN/m2 (dc/dy)
1	Made Ground	17.00	15000	0.500	NC (0.490)	1.000 (2.000)	1.000 (2.000)	30.00u
2	Hackney Gravel	18.00	60000	1.000	OC (0.200)	0.260 (0.000)	3.852 (0.000)	
3	London Clay (13.20)	19.50	35000 (5412)	1.000	OC (0.490)	1.000 (1.000)	1.000 (1.000)	70.00u (10.80)
4	London Clay	19.50	87500	1.000	OC (0.490)	1.000 (1.000)	1.000 (1.000)	175.0u
5	Made Ground Drained	17.00	9000	0.500	NC (0.200)	0.490 (1.400)	2.040 (2.856)	0.0d
6	Hackney Gravel	18.00	60000	1.000	OC (0.200)	0.260 (0.000)	3.852 (0.000)	
7	London Cl.. (13.20)	19.50	21000 (3247)	1.000	OC (0.200)	0.585 (0.978)	1.247 (0.583)	5.000d
8	London Clay Drained	19.50	52500	1.000	OC (0.200)	0.585 (0.978)	1.247 (0.583)	5.000d

Additional soil parameters associated with Ka and Kp

No.	Soil type ------- Description	--- parameters for Ka --- Soil friction angle	Wall adhesion coeff.	Back-fill angle	--- parameters for Kp --- Soil friction angle	Wall adhesion coeff.	Back-fill angle
1	Made Ground	0.00	0.000	0.00	0.00	0.000	0.00
2	Hackney Gravel	36.00	0.000	0.00	36.00	0.000	0.00
3	London Clay	0.00	-0.674	0.00	0.00	-0.674	0.00
4	London Clay	0.00	-0.674	0.00	0.00	-0.674	0.00
5	Made Ground Drained	20.00	0.000	0.00	20.00	0.000	0.00
6	Hackney Gravel	36.00	0.000	0.00	36.00	0.000	0.00
7	London Clay Drained	23.00	-0.674	0.00	23.00	-0.674	0.00
8	London Clay Drained	23.00	-0.674	0.00	23.00	-0.674	0.00

GROUND WATER CONDITIONS

Density of water = 10.00 kN/m3

	Active side	Passive side
Initial water table elevation	14.40	14.40

Automatic water pressure balancing at toe of wall : No

Water press. profile no.	Active side Point no.	Elev. m	Piezo elev. m	Water press. kN/m2	Passive side Point no.	Elev. m	Piezo elev. m	Water press. kN/m2
1	1	14.40	14.40	0.0	1	14.40	14.40	0.0
2	1	14.20	14.20	0.0	1	13.45	13.45	0.0

WALL PROPERTIES

Type of structure = Fully Embedded Wall
Elevation of toe of wall = 12.00
Maximum finite element length = 0.50 m
Youngs modulus of wall E = 2.0000E+07 kN/m2
Moment of inertia of wall I = 3.2000E-03 m4/m run
E.I = 64000 kN.m2/m run
Yield Moment of wall = Not defined

STRUTS and ANCHORS

Strut/ anchor no.	Elev.	Strut spacing m	X-section area of strut sq.m	Youngs modulus kN/m2	Free length m	Inclin -ation (degs)	Pre- stress /strut kN	Tension allowed
1	21.48	5.00	0.100000	2.000E+08	5.00	0.00	50.00	Yes
2	18.16	1.00	0.300000	2.000E+07	5.00	0.00	0	No
3	21.05	1.00	0.250000	2.000E+07	5.00	0.00	0	No

SURCHARGE LOADS

Surch -arge no.	Elev.	Distance from wall	Length parallel to wall	Width perpend. to wall	Surcharge kN/m2 Near edge	Surcharge kN/m2 Far edge	Equiv. soil type	Partial factor/ Category
1	Not defined							
2	Not defined							
3	Not defined							
4	21.18	0.50(A)	20.00	20.00	5.00	=	0	1.00 Var

Note: A = Active side, P = Passive side
Limit State Categories P/U = Permanent Unfavourable
P/F = Permanent Favourable
Var = Variable (unfavourable)

CONSTRUCTION STAGES

Construction stage no.	Stage description
1	Apply surcharge no.4 at elevation 21.18
2	Excavate to elevation 20.10 on PASSIVE side
3	Install strut or anchor no.1 at elevation 21.48
4	Excavate to elevation 17.76 on PASSIVE side
5	Install strut or anchor no.2 at elevation 18.16
6	Install strut or anchor no.3 at elevation 21.05
7	Remove strut or anchor no.1 at elevation 21.48
8	Change properties of soil type 1 to soil type 5 No analysis at this stage Ko pressures will not be reset
9	Change properties of soil type 2 to soil type 6 No analysis at this stage Ko pressures will not be reset
10	Change properties of soil type 3 to soil type 7 No analysis at this stage Ko pressures will not be reset
11	Change properties of soil type 4 to soil type 8 Ko pressures will be reset

FACTORS OF SAFETY and ANALYSIS OPTIONS

Limit State options: Serviceability Limit State
All loads and soil strengths are unfactored

Stability analysis:
Method of analysis - Burland-Potts
Factor on passive for calculating wall depth = 1.00
Active limit pressures calculated by Wedge Stability
Passive limit pressures calculated by Wedge Stability

Parameters for undrained strata:
Minimum equivalent fluid density = 5.00 kN/m3
Maximum depth of water filled tension crack = 0.00 m

Bending moment and displacement calculation:
Method - Subgrade reaction model using Influence Coefficients
Open Tension Crack analysis? - No
Non-linear Modulus Parameter (L) = 0 m

Boundary conditions:
Length of wall (normal to plane of analysis) = 1000.00 m

Width of excavation on active side of wall = 20.00 m
Width of excavation on passive side of wall = 20.00 m

Distance to rigid boundary on active side = 20.00 m
Distance to rigid boundary on passive side = 20.00 m

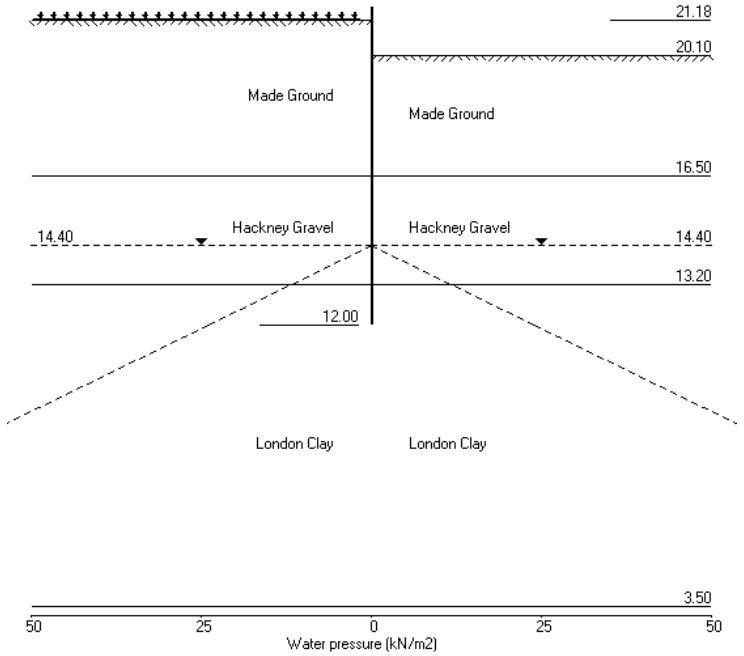
OUTPUT OPTIONS

Stage no.	Stage description	Output options: Displacement, Bending mom., Shear force	Active, Passive pressures	Graph. output
1	Apply surcharge no.4 at elev. 21.18	No	No	No
2	Excav. to elev. 20.10 on PASSIVE side	Yes	Yes	Yes
3	Install strut no.1 at elev. 21.48	No	No	No
4	Excav. to elev. 17.76 on PASSIVE side	No	No	No
5	Install strut no.2 at elev. 18.16	No	No	No
6	Install strut no.3 at elev. 21.05	No	No	No
7	Remove strut no.1 at elev. 21.48	No	No	No
8	Change soil type 1 to soil type 5	No	No	No
9	Change soil type 2 to soil type 6	No	No	No
10	Change soil type 3 to soil type 7	No	No	No
11	Change soil type 4 to soil type 8	No	No	No
*	Summary output	Yes	-	Yes

GEOTECHNICAL & ENVIRONMENTAL ASSOCIATES | Sheet No.
Program: WALLAP Version 6.05 Revision A45.B58.R48 | Job No. J15050
Licensed from GEOSOLVE | Made by : MC
Data filename/Run ID: Library S12.1 S1 East SLS1_SLS |
Lincoln's Inn Fields, London WC2A 3TL | Date: 5-02-2016
Library S12.1 Section 1 East | Checked :

Units: kN,m

Stage No.2 Excav. to elev. 20.10 on PASSIVE side



Units: kN,m

Stage No. 2 Excavate to elevation 20.10 on PASSIVE side

STABILITY ANALYSIS of Fully Embedded Wall according to Burland-Potts method

Factor of safety on nett available passive
Active limit pressures calculated by Wedge Stability
Passive limit pressures calculated by Wedge Stability

Stage No.	--- G.L. --- Act.	Pass.	Strut Elev.	FoS for toe elev. = 12.00 Factor of Safety	Moment equilib. at elev.	Toe elev. for FoS = 1.000 Toe elev.	Wall Penetr -ation
2	21.18	20.10	Cant.	6.288	14.09	***	***

Legend: *** Result not found

BENDING MOMENT and DISPLACEMENT ANALYSIS of Fully Embedded Wall

Analysis options

Length of wall perpendicular to section = 1000.00m
Subgrade reaction model - Boussinesq Influence coefficients
Soil deformations are elastic until the active or passive limit is reached
Active limit pressures calculated by Wedge Stability
Passive limit pressures calculated by Wedge Stability
Open Tension Crack analysis - No

Rigid boundaries: Active side 20.00 from wall
Passive side 20.00 from wall

Limit State: Serviceability Limit State

Calculated Bending Moments and Strut Forces are to be multiplied by a factor of 1.35 to obtain values for structural design. See summary for factored values.

Node no.	Y coord	Nett pressure kN/m2	Wall disp. m	Wall rotation rad.	Shear force kN/m	Bending moment kN.m/m	Strut forces kN/m
1	21.48	0.00	0.004	6.94E-04	0.0	0.0	
2	21.18	0.00	0.004	6.94E-04	0.0	-0.0	
3	21.05	0.63	0.004	6.94E-04	0.0	0.0	
4	20.58	3.01	0.004	6.94E-04	0.9	0.2	
5	20.10	5.40	0.003	6.89E-04	2.9	1.1	
		-8.43	0.003	6.89E-04	2.9	1.1	
6	19.80	-5.99	0.003	6.82E-04	0.8	1.6	
7	19.50	-3.57	0.003	6.75E-04	-0.7	1.6	
8	19.00	-0.52	0.003	6.63E-04	-1.7	1.3	
9	18.58	2.05	0.002	6.58E-04	-1.4	0.5	
10	18.16	4.52	0.002	6.56E-04	-0.0	0.1	
11	17.76	6.81	0.002	6.54E-04	2.3	0.5	
12	17.38	8.93	0.002	6.47E-04	5.3	1.8	
13	17.00	10.98	0.001	6.28E-04	9.0	4.5	
14	16.50	13.48	0.001	5.70E-04	15.2	10.4	
		-19.43	0.001	5.70E-04	15.2	10.4	
15	16.00	-13.46	0.001	4.69E-04	6.9	15.5	
16	15.50	-8.85	0.001	3.41E-04	1.4	17.3	
17	15.00	-5.78	0.001	2.08E-04	-2.3	16.9	
18	14.70	-4.66	0.000	1.31E-04	-3.9	15.9	
19	14.40	-4.06	0.000	6.00E-05	-5.2	14.5	
20	14.10	-3.92	0.000	-4.03E-06	-6.4	12.8	
21	13.80	-4.19	0.000	-5.91E-05	-7.6	10.7	
22	13.50	-4.80	0.000	-1.03E-04	-8.9	8.2	

(continued)

Stage No.2 Excavate to elevation 20.10 on PASSIVE side

Node no.	Y coord	Nett pressure kN/m2	Wall disp. m	Wall rotation rad.	Shear force kN/m	Bending moment kN.m/m	Strut forces kN/m
23	13.20	-5.67	0.001	-1.35E-04	-10.5	5.3	
		11.83	0.001	-1.35E-04	-10.5	5.3	
24	12.85	10.18	0.001	-1.56E-04	-6.7	2.4	
25	12.50	8.32	0.001	-1.64E-04	-3.4	0.7	
26	12.00	5.37	0.001	-1.67E-04	0.0	-0.0	

ACTIVE side

Node no.	Y coord	Effective stresses: Water press. kN/m2	Vertic -al kN/m2	Active limit kN/m2	Passive limit kN/m2	Earth pressure kN/m2	Total earth pressure kN/m2	Soil stiffness coeff. kN/m3
1	21.48	0.00	0.00	0.00	0.00	0.00	0.00	0.0
2	21.18	0.00	0.00	0.00	0.00	0.00	0.00	0.0
		Total> 0.00	0.00	59.97	0.00	0.00a	4104	
3	21.05	Total> 2.16	0.63m	62.39	0.63	0.63a	4104	
4	20.58	Total> 11.47	3.01m	72.84	3.01	3.01a	4104	
5	20.10	Total> 20.76	5.40m	83.09	5.40	5.40a	4104	
6	19.80	Total> 26.33	6.90m	87.85	6.90	6.90a	4104	
7	19.50	Total> 31.76	8.40m	92.87	8.40	8.40a	4104	
8	19.00	Total> 40.63	10.90m	101.54	11.42	11.42	4104	
9	18.58	Total> 47.97	13.00m	108.60	16.31	16.31	4104	
10	18.16	Total> 55.25	15.10m	115.73	21.13	21.13	4104	
11	17.76	Total> 62.15	17.10m	122.53	25.67	25.67	4104	
12	17.38	Total> 68.67	19.00m	128.98	29.95	29.95	4104	
13	17.00	Total> 75.18	20.90m	135.44	34.18	34.18	4104	
14	16.50	Total> 83.71	23.95	143.96	39.64	39.64	4104	
		0.00	83.71	17.31	310.86	68.68	68.68	11473
15	16.00	0.00	92.72	19.13	330.72	80.52	80.52	11473
16	15.50	0.00	101.72	21.00	376.07	91.70	91.70	11473
17	15.00	0.00	110.70	22.57	420.68	102.17	102.17	11473
18	14.70	0.00	116.08	25.14	423.69	108.10	108.10	11473
19	14.40	0.00	121.46	29.62	490.13	113.79	113.79	11473
20	14.10	3.00	123.84	28.68	481.29	116.25	119.25	11473
21	13.80	6.00	126.21	25.87	449.09	118.53	124.53	11473
22	13.50	9.00	128.58	27.47	476.49	120.64	129.64	11473
23	13.20	12.00	130.95	29.78	495.97	122.63	134.63	11473
		Total> 142.95	39.90m	316.49	138.31	138.31	9577	
24	12.85	Total> 149.73	41.65m	311.97	144.35	144.35	10095	
25	12.50	Total> 156.51	43.40m	314.66	150.29	150.29	10613	
26	12.00	Total> 166.20	45.90m	341.74	158.64	158.64	11354	

PASSIVE side

Node no.	Y coord	Effective stresses: Water press. kN/m2	Vertic -al kN/m2	Active limit kN/m2	Passive limit kN/m2	Earth pressure kN/m2	Total earth pressure kN/m2	Soil stiffness coeff. kN/m3
1	21.48	0.00	0.00	0.00	0.00	0.00	0.00	0.0
2	21.18	0.00	0.00	0.00	0.00	0.00	0.00	0.0
3	21.05	0.00	0.00	0.00	0.00	0.00	0.00	0.0
4	20.58	0.00	0.00	0.00	0.00	0.00	0.00	0.0
5	20.10	0.00	0.00	0.00	0.00	0.00	0.00	0.0
		Total> 0.00	0.00	59.92	13.83	13.83	4581	
6	19.80	Total> 5.10	1.50m	65.01	12.89	12.89	4581	
7	19.50	Total> 10.20	3.00m	70.11	11.97	11.97	4581	
8	19.00	Total> 18.70	5.50m	78.61	11.94	11.94	4581	
9	18.58	Total> 25.84	7.60m	85.75	14.27	14.27	4581	

(continued)

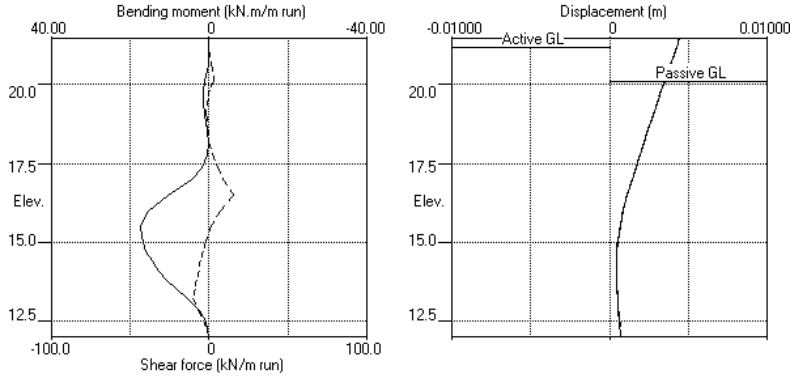
Stage No.2 Excavate to elevation 20.10 on PASSIVE side

Node no.	Y coord	PASSIVE side: Water press. kN/m2	Effective stresses: Vertic -al kN/m2	Active limit kN/m2	Passive limit kN/m2	Earth pressure kN/m2	Total earth pressure kN/m2	Soil stiffness coeff. kN/m3
10	18.16	Total>	32.99	9.70m	92.89	16.61	16.61	4581
11	17.76	Total>	39.79	11.70m	99.69	18.86	18.86	4581
12	17.38	Total>	46.26	13.60m	106.15	21.01	21.01	4581
13	17.00	Total>	52.73	15.50m	112.61	23.20	23.20	4581
14	16.50	Total>	61.24	18.00m	121.12	26.16	26.16	4581
		0.00	61.24	13.31	216.68	88.11	88.11	12897
15	16.00	0.00	70.26	13.27	257.71	93.97	93.97	12897
16	15.50	0.00	79.29	16.49	299.73	100.56	100.56	12897
17	15.00	0.00	88.32	21.61	343.10	107.95	107.95	12897
18	14.70	0.00	93.74	19.85	358.15	112.76	112.76	12897
19	14.40	0.00	99.16	18.20	359.37	117.85	117.85	12897
20	14.10	3.00	101.59	24.09	385.48	120.17	123.17	12897
21	13.80	6.00	104.02	29.25	409.08	122.72	128.72	12897
22	13.50	9.00	106.45	27.08	407.87	125.44	134.44	12897
23	13.20	12.00	108.88	27.27	402.05	128.30	140.30	12897
		Total>	120.88	34.50m	256.74	126.48	126.48	10690
24	12.85	Total>	127.74	36.25m	281.65	134.17	134.17	11268
25	12.50	Total>	134.61	38.00m	308.39	141.97	141.97	11847
26	12.00	Total>	144.43	40.50m	331.04	153.26	153.26	12673

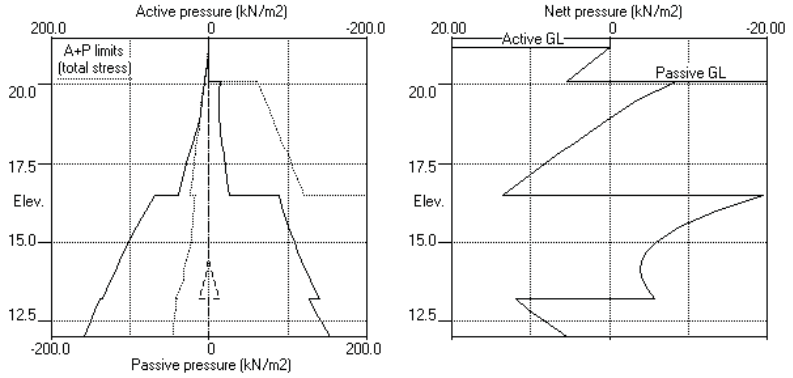
Note: 8.40a Soil pressure at active limit
123.45p Soil pressure at passive limit

Units: kN,m

Stage No.2 Excav. to elev. 20.10 on PASSIVE side



Stage No.2 Excav. to elev. 20.10 on PASSIVE side



Units: kN,m

Summary of results

LIMIT STATE PARAMETERS
Limit State: Serviceability Limit State
All loads and soil strengths are unfactored

STABILITY ANALYSIS of Fully Embedded Wall according to Burland-Potts method
Factor of safety on nett available passive
Active limit pressures calculated by Wedge Stability
Passive limit pressures calculated by Wedge Stability

Stage No.	G.L. Act.	G.L. Pass.	Strut Elev.	FoS for toe elev. = 12.00 Factor of Safety	Moment equilib. at elev.	Toe elev. for FoS = 1.000 Toe elev.	Wall Penetr -ation
1	21.18	21.18	---	Conditions not suitable for FoS calc.			
2	21.18	20.10	Cant.	6.288	14.09	***	***
3	21.18	20.10	21.48	19.319	n/a	***	***
4	21.18	17.76	21.48	5.408	n/a	***	***
5	21.18	17.76		No analysis at this stage			

All remaining stages have more than one strut - FoS calculation n/a

Legend: *** Result not found

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Lincoln's Inn Fields, London WC2A 3TL | Date: 5-02-2016
Library S12.1 Section 1 East | Checked :

Units: kN,m

Summary of results

BENDING MOMENT and DISPLACEMENT ANALYSIS of Fully Embedded Wall
Analysis options
Length of wall perpendicular to section = 1000.00m
Subgrade reaction model - Boussinesq Influence coefficients
Soil deformations are elastic until the active or passive limit is reached
Active limit pressures calculated by Wedge Stability
Passive limit pressures calculated by Wedge Stability
Open Tension Crack analysis - No

Rigid boundaries: Active side 20.00 from wall
Passive side 20.00 from wall
Limit State: Serviceability Limit State
Calculated Bending Moments and Strut Forces have been multiplied by a factor of 1.35 to obtain values for structural design.

Bending moment, shear force and displacement envelopes

Node no.	Y coord	Displacement max.	Displacement min.	Bending moment Calculated max.	Bending moment Calculated min.	Bending moment Factored max.	Bending moment Factored min.	Shear force Calculated max.	Shear force Calculated min.	Shear force Factored max.	Shear force Factored min.
		m	m	kN.m/m		kN.m/m		kN/m	kN/m	kN/m	kN/m
1	21.48	0.004	0.000	0	-0	0	-0	0	-21	0	-28
2	21.18	0.004	0.000	0	-6	0	-8	0	-21	0	-28
3	21.05	0.004	0.000	0	-9	0	-12	1	-26	1	-36
4	20.58	0.004	0.000	0	-17	0	-23	1	-24	1	-32
5	20.10	0.004	0.000	1	-24	1	-33	3	-19	4	-26
6	19.80	0.004	0.000	2	-28	2	-38	1	-16	1	-21
7	19.50	0.005	0.000	2	-32	2	-43	0	-12	0	-16
8	19.00	0.005	0.000	1	-35	2	-47	1	-7	1	-9
9	18.58	0.005	0.000	1	-35	1	-47	7	-1	10	-2
10	18.16	0.004	0.000	0	-33	0	-45	18	-7	24	-9
11	17.76	0.004	0.000	0	-29	1	-39	14	0	19	0
12	17.38	0.004	0.000	2	-25	2	-34	20	0	27	0
13	17.00	0.004	0.000	4	-17	6	-23	28	0	38	0
14	16.50	0.003	0.000	10	0	14	0	42	0	57	0
15	16.00	0.003	0.000	20	0	27	0	29	0	39	0
16	15.50	0.002	0.000	30	0	40	0	15	0	21	0
17	15.00	0.002	0.000	34	0	46	0	5	-2	6	-3
18	14.70	0.002	0.000	34	0	46	0	0	-4	0	-5
19	14.40	0.002	0.000	33	0	45	0	0	-7	0	-9
20	14.10	0.002	0.000	31	0	42	0	0	-11	0	-15
21	13.80	0.002	0.000	27	0	37	0	0	-16	0	-21
22	13.50	0.002	0.000	22	0	30	0	0	-21	0	-28
23	13.20	0.002	0.000	15	0	21	0	0	-26	0	-36
24	12.85	0.002	0.000	7	0	10	0	0	-19	0	-25
25	12.50	0.003	0.000	2	0	3	0	0	-11	0	-14
26	12.00	0.003	0.000	0	-0	0	-0	0	-0	0	-0

Summary of results (continued)

Calculated Bending Moments and Strut Forces have been multiplied by a factor of 1.35 to obtain values for structural design.

Maximum and minimum bending moment and shear force at each stage

Stage	Bending moment						Shear force					
no.	Calculated				Factored		Calculated				Factored	
	max. kN.m/m	elev.	min. kN.m/m	elev.	max. kN.m/m	min. kN.m/m	max. kN/m	elev.	min. kN/m	elev.	max. kN/m	min. kN/m
1	3	15.00	-2	18.16	4	-3	4	16.50	-2	13.20	5	-3
2	17	15.50	-0	21.18	23	-0	15	16.50	-11	13.20	20	-14
3	17	15.00	-9	19.50	23	-12	18	16.50	-11	13.20	24	-15
4	34	14.70	-35	18.58	46	-47	41	16.50	-26	13.20	55	-36
5	No calculation at this stage											
6	No calculation at this stage											
7	33	14.70	-33	18.58	45	-44	40	16.50	-26	13.20	54	-35
8	No calculation at this stage											
9	No calculation at this stage											
10	No calculation at this stage											
11	34	14.70	-35	19.00	46	-47	42	16.50	-26	21.05	57	-36

Maximum and minimum displacement at each stage

Stage no.	Displacement maximum m	elev.	minimum m	elev.	Stage description
1	0.000	20.10	0.000	21.48	Apply surcharge no.4 at elev. 21.18
2	0.004	21.48	0.000	21.48	Excav. to elev. 20.10 on PASSIVE side
3	0.003	21.48	0.000	21.48	Install strut no.1 at elev. 21.48
4	0.005	19.00	0.000	21.48	Excav. to elev. 17.76 on PASSIVE side
5	No calculation at this stage				Install strut no.2 at elev. 18.16
6	No calculation at this stage				Install strut no.3 at elev. 21.05
7	0.004	19.00	0.000	21.48	Remove strut no.1 at elev. 21.48
8	No calculation at this stage				Change soil type 1 to soil type 5
9	No calculation at this stage				Change soil type 2 to soil type 6
10	No calculation at this stage				Change soil type 3 to soil type 7
11	0.005	19.00	0.000	21.48	Change soil type 4 to soil type 8

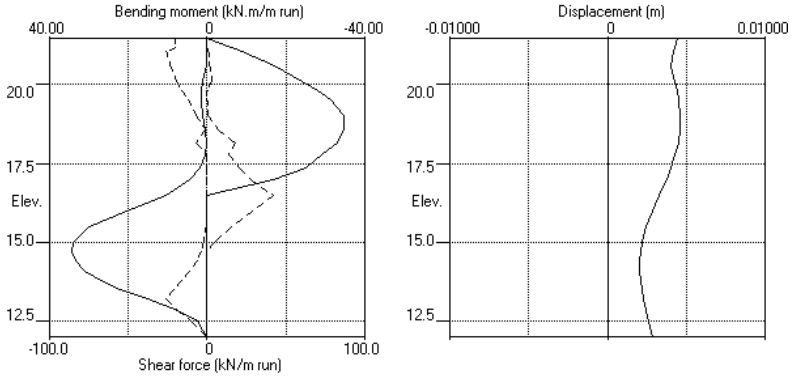
Strut forces at each stage (horizontal components)

Stage no.	Strut no. 1 at elev. 21.48			Strut no. 2 at elev. 18.16			Strut no. 3 at elev. 21.05		
	Calculated kN per m run	Factored kN per strut	Factored kN per strut	Calculated kN per m run	Factored kN per strut	Factored kN per strut	Calculated kN per m run	Factored kN per strut	Factored kN per strut
3	10	50	68	---	---	---	---	---	---
4	21	103	139	---	---	---	---	---	---
7	---	---	---	slack	slack	slack	23	23	31
11	---	---	---	25	25	34	27	27	36

* Indicates that the total force shown is the sum of the force in the strut plus a force applied at the same elevation which may represent temperature load or other forces which are part of the strut load. Force components are listed in the detailed results for individual stages.

Units: kN,m

Bending moment, shear force, displacement envelopes



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Program: WALLAP Version 6.05 Revision A45.B58.R48 | Job No. J15050
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Lincoln's Inn Fields, London WC2A 3TL | Date: 5-02-2016
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Units: kN,m

INPUT DATA

SOIL PROFILE

Stratum no.	Elevation of top of stratum	Soil types Active side	Passive side
1	21.18	1 Made Ground	1 Made Ground
2	16.50	2 Hackney Gravel	2 Hackney Gravel
3	13.20	3 London Clay	3 London Clay
4	3.50	4 London Clay	4 London Clay

SOIL PROPERTIES

No.	Soil type / Description	Bulk density kN/m3	Young's Modulus Eh,kN/m2 (dEh/dy)	At rest coeff. Ko (dKo/dy)	Consol state. NC/OC (Nu)	Active limit Ka (Kac)	Passive limit Kp (Kpc)	Cohesion kN/m2 (dc/dy)
1	Made Ground (Datum elev.)	17.00	15000	0.500	NC (0.490)	1.000 (2.000)	1.000 (2.000)	30.00u
2	Hackney Gravel	18.00	60000	1.000	OC (0.200)	0.260 (0.000)	3.852 (0.000)	
3	London Clay (13.20)	19.50	35000 (5412)	1.000	OC (0.490)	1.000 (1.000)	1.000 (1.000) (	70.00u 10.80)
4	London Clay	19.50	87500	1.000	OC (0.490)	1.000 (1.000)	1.000 (1.000)	175.0u
5	Made Ground Drained	17.00	9000	0.500	NC (0.200)	0.490 (1.400)	2.040 (2.856)	0.0d
6	Hackney Gravel	18.00	60000	1.000	OC (0.200)	0.260 (0.000)	3.852 (0.000)	
7	London Cl.. (13.20)	19.50	21000 (3247)	1.000	OC (0.200)	0.585 (0.978)	1.247 (0.583)	5.000d
8	London Clay Drained	19.50	52500	1.000	OC (0.200)	0.585 (0.978)	1.247 (0.583)	5.000d

Additional soil parameters associated with Ka and Kp

No.	Soil type / Description	--- parameters for Ka --- Soil friction angle	Wall adhesion coeff.	Back-fill angle	--- parameters for Kp --- Soil friction angle	Wall adhesion coeff.	Back-fill angle
1	Made Ground	0.00	0.000	0.00	0.00	0.000	0.00
2	Hackney Gravel	36.00	0.000	0.00	36.00	0.000	0.00
3	London Clay	0.00	-0.674	0.00	0.00	-0.674	0.00
4	London Clay	0.00	-0.674	0.00	0.00	-0.674	0.00
5	Made Ground Drained	20.00	0.000	0.00	20.00	0.000	0.00
6	Hackney Gravel	36.00	0.000	0.00	36.00	0.000	0.00
7	London Clay Drained	23.00	-0.674	0.00	23.00	-0.674	0.00
8	London Clay Drained	23.00	-0.674	0.00	23.00	-0.674	0.00

GROUND WATER CONDITIONS

Density of water = 10.00 kN/m3

	Active side	Passive side
Initial water table elevation	14.40	14.40

Automatic water pressure balancing at toe of wall : No

Water press. profile no.	Active side Point no.	Elev. m	Piezo elev. m	Water press. kN/m2	Passive side Point no.	Elev. m	Piezo elev. m	Water press. kN/m2
1	1	14.40	14.40	0.0	1	14.40	14.40	0.0
2	1	14.20	14.20	0.0	1	13.45	13.45	0.0

WALL PROPERTIES

Type of structure = Fully Embedded Wall
Elevation of toe of wall = 12.00
Maximum finite element length = 0.50 m
Youngs modulus of wall E = 2.0000E+07 kN/m2
Moment of inertia of wall I = 3.2000E-03 m4/m run
E.I = 64000 kN.m2/m run
Yield Moment of wall = Not defined

STRUTS and ANCHORS

Strut/ anchor no.	Elev.	Strut spacing m	X-section area of strut sq.m	Youngs modulus kN/m2	Free length m	Inclin -ation (degs)	Pre-stress /strut kN	Tension allowed
1	21.48	5.00	0.100000	2.000E+08	5.00	0.00	50.00	Yes
2	16.74	1.00	0.300000	2.000E+07	5.00	0.00	0	No
3	19.58	1.00	0.250000	2.000E+07	5.00	0.00	0	No

SURCHARGE LOADS

Surch -arge no.	Elev.	Distance from wall	Length parallel to wall	Width perpend. to wall	Surcharge kN/m2 Near edge	Surcharge kN/m2 Far edge	Equiv. soil type	Partial factor/ Category
1	Not defined							
2	Not defined							
3	Not defined							
4	21.18	0.50(A)	20.00	20.00	5.00	=	0	1.00 Var

Note: A = Active side, P = Passive side
Limit State Categories P/U = Permanent Unfavourable
P/F = Permanent Favourable
Var = Variable (unfavourable)

CONSTRUCTION STAGES

Construction stage no.	Stage description
1	Apply surcharge no.4 at elevation 21.18
2	Excavate to elevation 20.10 on PASSIVE side
3	Install strut or anchor no.1 at elevation 21.48
4	Excavate to elevation 16.34 on PASSIVE side
5	Install strut or anchor no.2 at elevation 16.74
6	Install strut or anchor no.3 at elevation 19.58
7	Remove strut or anchor no.1 at elevation 21.48
8	Change properties of soil type 1 to soil type 5 No analysis at this stage Ko pressures will not be reset
9	Change properties of soil type 2 to soil type 6 No analysis at this stage Ko pressures will not be reset
10	Change properties of soil type 3 to soil type 7 No analysis at this stage Ko pressures will not be reset
11	Change properties of soil type 4 to soil type 8 Ko pressures will be reset
12	Remove surcharge no.4 at elevation 21.18

FACTORS OF SAFETY and ANALYSIS OPTIONS

Limit State options: Serviceability Limit State
All loads and soil strengths are unfactored

Stability analysis:
Method of analysis - Burland-Potts
Factor on passive for calculating wall depth = 1.00
Active limit pressures calculated by Wedge Stability
Passive limit pressures calculated by Wedge Stability

Parameters for undrained strata:
Minimum equivalent fluid density = 5.00 kN/m3
Maximum depth of water filled tension crack = 0.00 m

Bending moment and displacement calculation:
Method - Subgrade reaction model using Influence Coefficients
Open Tension Crack analysis? - No
Non-linear Modulus Parameter (L) = 0 m

Boundary conditions:
   Length of wall (normal to plane of analysis) = 1000.00 m

   Width of excavation on active side of wall = 20.00 m
   Width of excavation on passive side of wall = 20.00 m

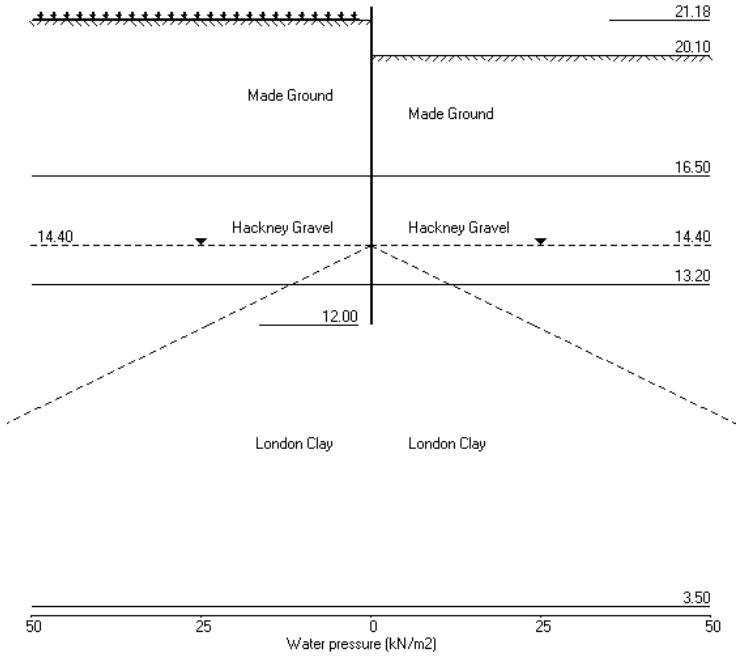
   Distance to rigid boundary on active side = 20.00 m
   Distance to rigid boundary on passive side = 20.00 m

OUTPUT OPTIONS

Stage no.	Stage description	Output options: Displacement, Bending mom., Shear force	Active, Passive pressures	Graph. output
1	Apply surcharge no.4 at elev. 21.18	No	No	No
2	Excav. to elev. 20.10 on PASSIVE side	Yes	Yes	Yes
3	Install strut no.1 at elev. 21.48	No	No	No
4	Excav. to elev. 16.34 on PASSIVE side	No	No	No
5	Install strut no.2 at elev. 16.74	No	No	No
6	Install strut no.3 at elev. 19.58	No	No	No
7	Remove strut no.1 at elev. 21.48	No	No	No
8	Change soil type 1 to soil type 5	No	No	No
9	Change soil type 2 to soil type 6	No	No	No
10	Change soil type 3 to soil type 7	No	No	No
11	Change soil type 4 to soil type 8	No	No	No
12	Remove surcharge no.4 at elev. 21.18	Yes	Yes	Yes
*	Summary output	Yes	-	Yes

Units: kN,m

Stage No.2 Excav. to elev. 20.10 on PASSIVE side



GEOTECHNICAL & ENVIRONMENTAL ASSOCIATES | Sheet No.
Program: WALLAP Version 6.05 Revision A45.B58.R48 | Job No. J15050
Licensed from GEOSOLVE | Made by : MC
Data filename/Run ID: Library S13.1 S1 North SLS1_SLS |
Lincoln's Inn Fields, London WC2A 3TL | Date: 5-02-2016
Library S12.1 Section 2 North | Checked :

Units: kN,m

Stage No. 2 Excavate to elevation 20.10 on PASSIVE side

STABILITY ANALYSIS of Fully Embedded Wall according to Burland-Potts method

Factor of safety on nett available passive
Active limit pressures calculated by Wedge Stability
Passive limit pressures calculated by Wedge Stability

Stage No.	G.L. Act.	G.L. Pass.	Strut Elev.	FoS for toe elev. = 12.00: Factor of Safety	Moment equilib. at elev.	Toe elev. for FoS = 1.000: Toe elev.	Wall Penetration
2	21.18	20.10	Cant.	6.284	14.09	***	***

Legend: *** Result not found

BENDING MOMENT and DISPLACEMENT ANALYSIS of Fully Embedded Wall

Analysis options

Length of wall perpendicular to section = 1000.00m
Subgrade reaction model - Boussinesq Influence coefficients
Soil deformations are elastic until the active or passive limit is reached
Active limit pressures calculated by Wedge Stability
Passive limit pressures calculated by Wedge Stability
Open Tension Crack analysis - No

Rigid boundaries: Active side 20.00 from wall
Passive side 20.00 from wall

Limit State: Serviceability Limit State

Calculated Bending Moments and Strut Forces are to be multiplied by a factor of 1.35 to obtain values for structural design. See summary for factored values.

Node no.	Y coord	Nett pressure kN/m2	Wall disp. m	Wall rotation rad.	Shear force kN/m	Bending moment kN.m/m	Strut forces kN/m
1	21.48	0.00	0.004	6.87E-04	0.0	-0.0	
2	21.18	0.00	0.004	6.87E-04	0.0	0.0	
3	20.91	1.35	0.004	6.87E-04	0.2	0.0	
4	20.64	2.70	0.004	6.87E-04	0.7	0.1	
5	20.37	4.05	0.004	6.86E-04	1.6	0.5	
6	20.10	5.40	0.003	6.83E-04	2.9	1.1	
		-8.44	0.003	6.83E-04	2.9	1.1	
7	19.84	-6.32	0.003	6.77E-04	1.0	1.6	
8	19.58	-4.22	0.003	6.71E-04	-0.4	1.6	
9	19.29	-1.90	0.003	6.64E-04	-1.3	1.3	
10	19.00	-0.53	0.003	6.59E-04	-1.6	1.0	
11	18.50	2.50	0.002	6.54E-04	-1.1	0.2	
12	18.00	5.41	0.002	6.53E-04	0.9	-0.1	
13	17.50	8.23	0.002	6.50E-04	4.3	1.0	
14	17.12	10.31	0.002	6.37E-04	7.8	3.3	
15	16.74	12.28	0.001	6.06E-04	12.1	7.0	
16	16.50	13.45	0.001	5.74E-04	15.2	10.2	
		-19.52	0.001	5.74E-04	15.2	10.2	
17	16.34	-17.47	0.001	5.46E-04	12.2	12.4	
18	15.92	-12.67	0.001	4.53E-04	5.9	16.0	
19	15.50	-8.89	0.001	3.43E-04	1.4	17.4	
20	15.00	-5.81	0.001	2.09E-04	-2.3	16.9	
21	14.70	-4.68	0.000	1.32E-04	-3.9	16.0	
22	14.40	-4.07	0.000	6.12E-05	-5.2	14.6	

(continued)

Stage No.2 Excavate to elevation 20.10 on PASSIVE side

Node no.	Y coord	Nett pressure kN/m2	Wall disp. m	Wall rotation rad.	Shear force kN/m	Bending moment kN.m/m	Strut forces kN/m
23	14.10	-3.92	0.000	-3.00E-06	-6.4	12.8	
24	13.80	-4.19	0.000	-5.82E-05	-7.6	10.7	
25	13.50	-4.79	0.000	-1.02E-04	-9.0	8.3	
26	13.20	-5.66	0.001	-1.34E-04	-10.5	5.4	
		11.84	0.001	-1.34E-04	-10.5	5.4	
27	12.85	10.20	0.001	-1.55E-04	-6.7	2.4	
28	12.50	8.34	0.001	-1.64E-04	-3.4	0.7	
29	12.00	5.40	0.001	-1.67E-04	0.0	-0.0	

ACTIVE side

Node no.	Y coord	Effective stresses: Water press. kN/m2	Vertic -al kN/m2	Active limit kN/m2	Passive limit kN/m2	Earth pressure kN/m2	Total earth pressure kN/m2	Soil stiffness coeff. kN/m3
1	21.48	0.00	0.00	0.00	0.00	0.00	0.00	0.0
2	21.18	0.00	0.00	0.00	0.00	0.00	0.00	0.0
		Total> 0.00	0.00	59.88	0.00	0.00a	4099	
3	20.91	Total> 4.84	1.35m	64.16	1.35	1.35a	4099	
4	20.64	Total> 10.22	2.70m	71.64	2.70	2.70a	4099	
5	20.37	Total> 15.59	4.05m	78.87	4.05	4.05a	4099	
6	20.10	Total> 20.76	5.40m	82.76	5.40	5.40a	4099	
7	19.84	Total> 25.60	6.70m	87.19	6.70	6.70a	4099	
8	19.58	Total> 30.32	8.00m	91.46	8.00	8.00a	4099	
9	19.29	Total> 35.51	9.45m	96.55	9.45	9.45a	4099	
10	19.00	Total> 40.63	10.90m	101.48	11.41	11.41	4099	
11	18.50	Total> 49.36	13.40m	109.96	17.22	17.22	4099	
12	18.00	Total> 58.01	15.90m	118.45	22.94	22.94	4099	
13	17.50	Total> 66.61	18.40m	126.96	28.58	28.58	4099	
14	17.12	Total> 73.12	20.30m	133.40	32.83	32.83	4099	
15	16.74	Total> 79.62	24.27	139.87	37.02	37.02	4099	
16	16.50	Total> 83.71	24.16	143.95	39.63	39.63	4099	
		0.00	83.71	18.88	270.49	68.64	68.64	11458
17	16.34	0.00	86.60	17.76	315.59	72.49	72.49	11458
18	15.92	0.00	94.16	19.09	341.19	82.33	82.33	11458
19	15.50	0.00	101.72	21.11	379.68	91.68	91.68	11458
20	15.00	0.00	110.70	22.57	420.68	102.15	102.15	11458
21	14.70	0.00	116.08	25.14	423.69	108.09	108.09	11458
22	14.40	0.00	121.46	29.62	490.13	113.78	113.78	11458
23	14.10	3.00	123.84	28.68	481.29	116.25	119.25	11458
24	13.80	6.00	126.21	25.87	449.09	118.53	124.53	11458
25	13.50	9.00	128.58	27.47	476.49	120.64	129.64	11458
26	13.20	12.00	130.95	29.78	495.97	122.63	134.63	11458
		Total> 142.95	39.90m	316.49	138.32	138.32	9565	
27	12.85	Total> 149.73	41.65m	311.97	144.36	144.36	10083	
28	12.50	Total> 156.51	43.40m	314.66	150.29	150.29	10601	
29	12.00	Total> 166.20	45.90m	341.74	158.65	158.65	11340	

PASSIVE side

Node no.	Y coord	Effective stresses: Water press. kN/m2	Vertic -al kN/m2	Active limit kN/m2	Passive limit kN/m2	Earth pressure kN/m2	Total earth pressure kN/m2	Soil stiffness coeff. kN/m3
1	21.48	0.00	0.00	0.00	0.00	0.00	0.00	0.0
2	21.18	0.00	0.00	0.00	0.00	0.00	0.00	0.0
3	20.91	0.00	0.00	0.00	0.00	0.00	0.00	0.0
4	20.64	0.00	0.00	0.00	0.00	0.00	0.00	0.0

Run ID. Library S13.1 S1 North SLS1_SLS | Sheet No.
Lincoln's Inn Fields, London WC2A 3TL | Date: 5-02-2016
Library S12.1 Section 2 North | Checked :

(continued)

Stage No.2 Excavate to elevation 20.10 on PASSIVE side

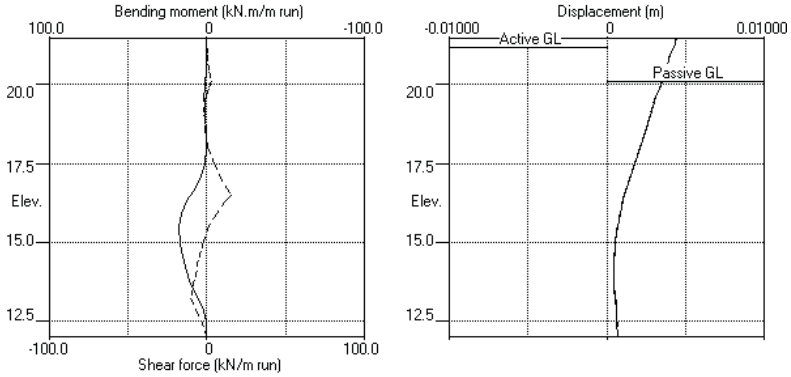
PASSIVE side

Node no.	Y coord	Effective stresses: Water press. kN/m2	Vertic -al kN/m2	Active limit kN/m2	Passive limit kN/m2	Earth pressure kN/m2	Total earth pressure kN/m2	Soil stiffness coeff. kN/m3
5	20.37	0.00	0.00	0.00	0.00	0.00	0.00	0.0
6	20.10	0.00	0.00	0.00	0.00	0.00	0.00	0.0
		Total> 0.00	0.00	59.92	13.84	13.84	4573	
7	19.84	Total> 4.42	1.30m	64.34	13.02	13.02	4573	
8	19.58	Total> 8.84	2.60m	68.75	12.22	12.22	4573	
9	19.29	Total> 13.77	4.05m	73.68	11.35	11.35	4573	
10	19.00	Total> 18.70	5.50m	78.61	11.94	11.94	4573	
11	18.50	Total> 27.20	8.00m	87.11	14.72	14.72	4573	
12	18.00	Total> 35.71	10.50m	95.61	17.52	17.52	4573	
13	17.50	Total> 44.22	13.00m	104.11	20.35	20.35	4573	
14	17.12	Total> 50.69	14.90m	110.57	22.52	22.52	4573	
15	16.74	Total> 57.16	16.80m	117.03	24.74	24.74	4573	
16	16.50	Total> 61.24	18.00m	121.11	26.17	26.17	4573	
		0.00	61.24	0.00	195.50	88.15	88.15	12872
17	16.34	0.00	64.13	13.37	232.82	89.96	89.96	12872
18	15.92	0.00	71.71	15.90	269.52	95.00	95.00	12872
19	15.50	0.00	79.29	16.64	296.81	100.58	100.58	12872
20	15.00	0.00	88.32	21.61	343.10	107.96	107.96	12872
21	14.70	0.00	93.74	19.85	358.15	112.77	112.77	12872
22	14.40	0.00	99.16	18.20	359.37	117.85	117.85	12872
23	14.10	3.00	101.59	24.09	385.48	120.17	123.17	12872
24	13.80	6.00	104.02	29.25	409.08	122.71	128.71	12872
25	13.50	9.00	106.45	27.08	407.87	125.43	134.43	12872
26	13.20	12.00	108.88	27.27	402.05	128.29	140.29	12872
		Total> 120.88	34.50m	256.74	126.48	126.48	10670	
27	12.85	Total> 127.74	36.25m	281.65	134.16	134.16	11247	
28	12.50	Total> 134.61	38.00m	308.39	141.96	141.96	11825	
29	12.00	Total> 144.43	40.50m	331.04	153.24	153.24	12650	

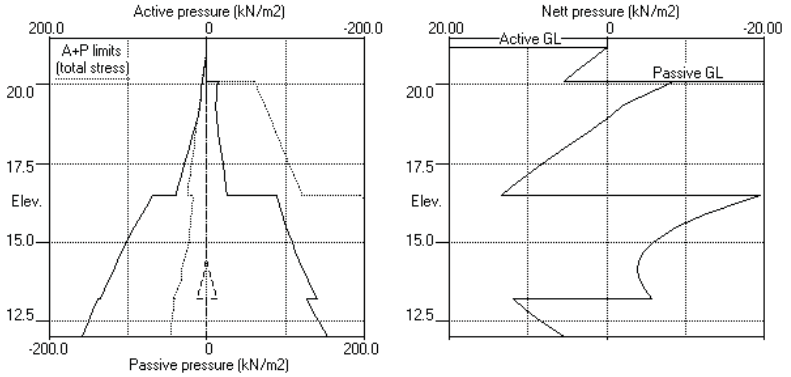
Note: 9.45a Soil pressure at active limit
123.45p Soil pressure at passive limit

Units: kN,m

Stage No.2 Excav. to elev. 20.10 on PASSIVE side



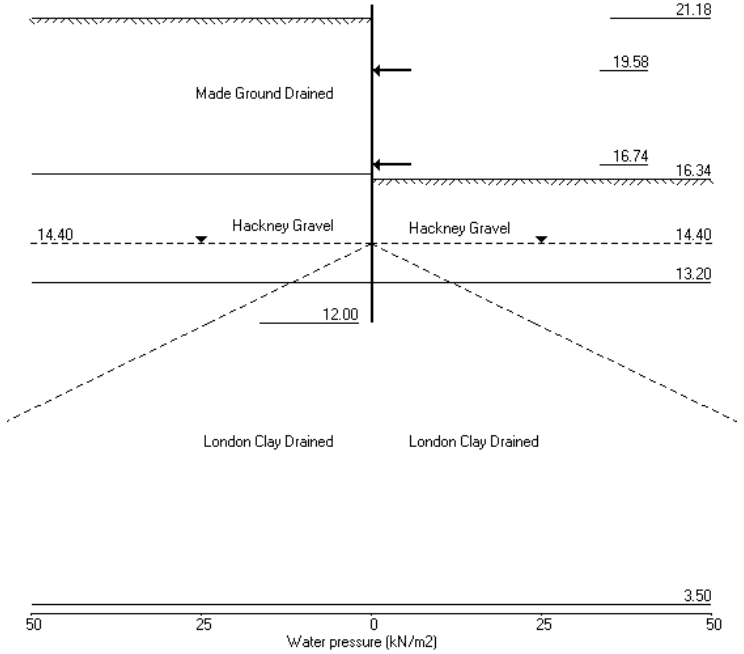
Stage No.2 Excav. to elev. 20.10 on PASSIVE side



GEOTECHNICAL & ENVIRONMENTAL ASSOCIATES | Sheet No.
Program: WALLAP Version 6.05 Revision A45.B58.R48 | Job No. J15050
Licensed from GEOSOLVE | Made by : MC
Data filename/Run ID: Library S13.1 S1 North SLS1_SLS |
Lincoln's Inn Fields, London WC2A 3TL | Date: 5-02-2016
Library S12.1 Section 2 North | Checked :

Units: kN,m

Stage No.12 Remove surcharge no.4 at elev. 21.18



Units: kN,m

Stage No. 12 Remove surcharge no.4 at elevation 21.18

STABILITY ANALYSIS of Fully Embedded Wall according to Burland-Potts method

Factor of safety on nett available passive
Active limit pressures calculated by Wedge Stability
Passive limit pressures calculated by Wedge Stability

Stage No.	--- G.L. --- Act.	Pass.	Strut Elev.	FoS for toe elev. = 12.00 Factor of Safety	Moment equilib. at elev.	Toe elev. for FoS = 1.000 Toe elev.	Wall Penetr -ation
12	21.18	16.34		More than one strut			

BENDING MOMENT and DISPLACEMENT ANALYSIS of Fully Embedded Wall

Analysis options

Length of wall perpendicular to section = 1000.00m
Subgrade reaction model - Boussinesq Influence coefficients
Soil deformations are elastic until the active or passive limit is reached
Active limit pressures calculated by Wedge Stability
Passive limit pressures calculated by Wedge Stability
Open Tension Crack analysis - No

Rigid boundaries: Active side 20.00 from wall
Passive side 20.00 from wall

Limit State: Serviceability Limit State

Calculated Bending Moments and Strut Forces are to be multiplied by a factor of 1.35 to obtain values for structural design. See summary for factored values.

Node no.	Y coord	Nett pressure kN/m2	Wall disp. m	Wall rotation rad.	Shear force kN/m	Bending moment kN.m/m	Strut forces kN/m
1	21.48	0.00	0.006	-7.98E-04	0.0	-0.0	
2	21.18	0.00	0.006	-7.98E-04	0.0	0.0	
3	20.91	2.86	0.006	-7.98E-04	0.4	0.0	
4	20.64	5.28	0.006	-7.99E-04	1.5	0.4	
5	20.37	8.07	0.006	-8.01E-04	3.3	0.9	
6	20.10	10.15	0.007	-8.08E-04	5.7	2.1	
7	19.84	12.48	0.007	-8.20E-04	8.7	4.0	
8	19.58	14.68	0.007	-8.42E-04	12.2	6.7	65.3
		14.68	0.007	-8.42E-04	-53.1	6.7	
9	19.29	17.05	0.007	-8.39E-04	-48.5	-8.0	
10	19.00	19.47	0.008	-7.73E-04	-43.2	-21.2	
11	18.50	23.62	0.008	-5.33E-04	-32.4	-40.2	
12	18.00	27.76	0.008	-1.68E-04	-19.5	-53.4	
13	17.50	31.90	0.008	2.73E-04	-4.6	-59.6	
14	17.12	35.05	0.008	6.25E-04	8.1	-59.0	
15	16.74	38.25	0.008	9.59E-04	22.0	-53.4	-0.0
16	16.50	40.29	0.007	1.14E-03	31.4	-47.0	
		24.39	0.007	1.14E-03	31.4	-47.0	
17	16.34	28.91	0.007	1.25E-03	35.7	-41.6	
18	15.92	13.49	0.007	1.47E-03	44.6	-24.8	
19	15.50	-3.37	0.006	1.57E-03	46.7	-5.7	
20	15.00	-23.07	0.005	1.53E-03	40.1	16.2	
21	14.70	-35.18	0.005	1.43E-03	31.4	26.9	
22	14.40	-47.66	0.004	1.29E-03	19.0	34.5	
23	14.10	-51.99	0.004	1.12E-03	4.0	38.0	
24	13.80	-48.66	0.004	9.43E-04	-11.1	37.5	

(continued)

Stage No.12 Remove surcharge no.4 at elevation 21.18

Node no.	Y coord	Nett pressure kN/m2	Wall disp. m	Wall rotation rad.	Shear force kN/m	Bending moment kN.m/m	Strut forces kN/m
25	13.50	-44.06	0.003	7.80E-04	-25.0	31.9	
26	13.20	-40.36	0.003	6.53E-04	-37.7	22.5	
		31.25	0.003	6.53E-04	-37.7	22.5	
27	12.85	32.75	0.003	5.61E-04	-26.5	11.2	
28	12.50	30.39	0.003	5.19E-04	-15.4	3.9	
29	12.00	31.23	0.002	5.04E-04	0.0	0.0	

At elev. 19.58 Strut force = 65.3 kN/strut = 65.3 kN/m run
At elev. 16.74 The strut is slack

Node no.	Y coord	ACTIVE side: Water press. kN/m2	Effective stresses: Vertic -al kN/m2	Active limit kN/m2	Passive limit kN/m2	Earth pressure kN/m2	Total earth pressure kN/m2	Soil stiffness coeff. kN/m3
1	21.48	0.00	0.00	0.00	0.00	0.00	0.00	0.0
2	21.18	0.00	0.00	0.00	0.00	0.00	0.00	0.0
		0.00	0.00	0.00	0.00	0.00	0.00	4369
3	20.91	0.00	4.59	2.16	9.20	2.86	2.86	4369
4	20.64	0.00	9.18	4.44	18.58	5.28	5.28	4369
5	20.37	0.00	13.77	6.69	27.93	8.07	8.07	4369
6	20.10	0.00	18.36	8.94	37.31	10.15	10.15	4369
7	19.84	0.00	22.78	11.10	46.33	12.48	12.48	4369
8	19.58	0.00	27.20	13.27	55.35	14.68	14.68	1039
9	19.29	0.00	32.13	15.69	65.40	17.05	17.05	1039
10	19.00	0.00	37.06	18.11	75.46	19.47	19.47	1039
11	18.50	0.00	45.56	22.27	92.79	23.62	23.62	1039
12	18.00	0.00	54.06	26.44	110.13	27.76	27.76	1039
13	17.50	0.00	62.56	30.60	127.47	31.90	31.90	1039
14	17.12	0.00	69.02	33.77	140.64	35.05	35.05	1039
15	16.74	0.00	75.48	36.94	153.82	38.25	38.25	1039
16	16.50	0.00	79.56	38.94	162.14	40.29	40.29	1039
		0.00	79.56	16.92	268.46	24.39	24.39	6927
17	16.34	0.00	82.44	19.00	298.37	28.91	28.91	6927
18	15.92	0.00	90.00	22.56	330.56	41.20	41.20	6927
19	15.50	0.00	97.56	24.71	356.13	53.84	53.84	6927
20	15.00	0.00	106.56	26.02	395.73	68.83	68.83	6927
21	14.70	0.00	111.96	28.45	433.94	77.55	77.55	6927
22	14.40	0.00	117.36	31.24	467.02	85.93	85.93	6927
23	14.10	3.00	119.76	31.63	456.49	90.91	93.91	6927
24	13.80	6.00	122.16	30.83	479.75	95.47	101.47	6927
25	13.50	9.00	124.56	30.83	440.76	99.45	108.45	6927
26	13.20	12.00	126.96	31.76	361.05	103.04	115.04	6927
		12.00	126.96	51.57	181.95	98.38	110.38	2424
27	12.85	15.50	130.28	51.84	202.53	112.07	127.57	2556
28	12.50	19.00	133.61	53.87	245.52	115.43	134.43	2687
29	12.00	24.00	138.36	57.25	269.76	120.32	144.32	2874

Node no.	Y coord	PASSIVE side: Water press. kN/m2	Effective stresses: Vertic -al kN/m2	Active limit kN/m2	Passive limit kN/m2	Earth pressure kN/m2	Total earth pressure kN/m2	Soil stiffness coeff. kN/m3
1	21.48	0.00	0.00	0.00	0.00	0.00	0.00	0.0
2	21.18	0.00	0.00	0.00	0.00	0.00	0.00	0.0
3	20.91	0.00	0.00	0.00	0.00	0.00	0.00	0.0
4	20.64	0.00	0.00	0.00	0.00	0.00	0.00	0.0

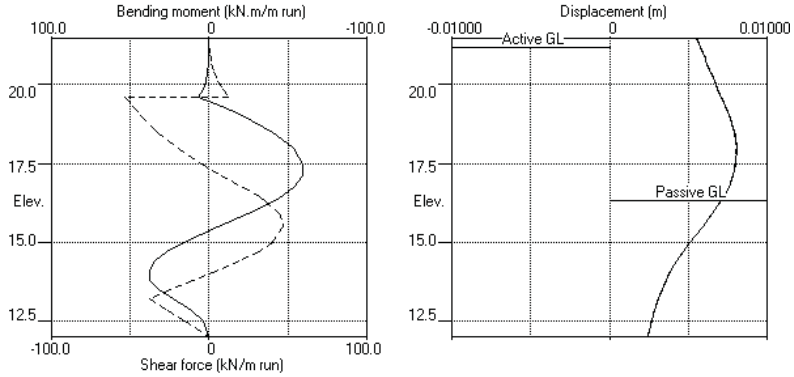
(continued)

Stage No.12 Remove surcharge no.4 at elevation 21.18

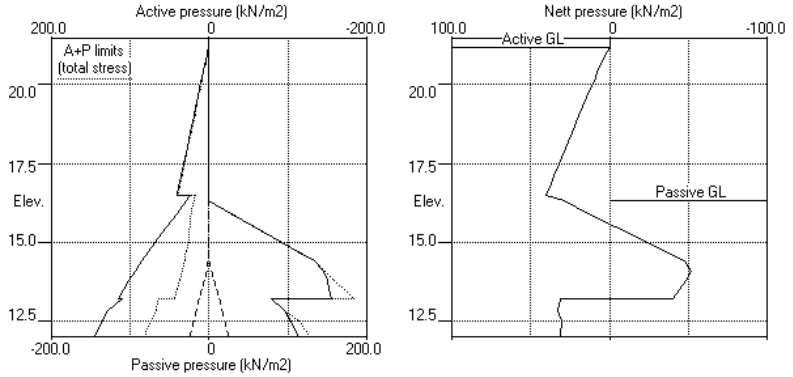
Node no.	Y coord	PASSIVE side: Water press. kN/m2	Effective stresses: Vertic -al kN/m2	Active limit kN/m2	Passive limit kN/m2	Earth pressure kN/m2	Total earth pressure kN/m2	Soil stiffness coeff. kN/m3
5	20.37	0.00	0.00	0.00	0.00	0.00	0.00	0.0
6	20.10	0.00	0.00	0.00	0.00	0.00	0.00	0.0
7	19.84	0.00	0.00	0.00	0.00	0.00	0.00	0.0
8	19.58	0.00	0.00	0.00	0.00	0.00	0.00	0.0
9	19.29	0.00	0.00	0.00	0.00	0.00	0.00	0.0
10	19.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0
11	18.50	0.00	0.00	0.00	0.00	0.00	0.00	0.0
12	18.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0
13	17.50	0.00	0.00	0.00	0.00	0.00	0.00	0.0
14	17.12	0.00	0.00	0.00	0.00	0.00	0.00	0.0
15	16.74	0.00	0.00	0.00	0.00	0.00	0.00	0.0
16	16.50	0.00	0.00	0.00	0.00	0.00	0.00	0.0
17	16.34	0.00	0.00	0.00	0.00	0.00	0.00	0.0
		0.00	0.00	0.00	0.00	0.00	0.00	8699
18	15.92	0.00	7.56	1.89	28.87	27.71	27.71	8699
19	15.50	0.00	15.12	3.87	58.04	57.22	57.22	8699
20	15.00	0.00	24.13	6.20	92.71	91.90	91.90	8699
21	14.70	0.00	29.54	7.61	113.54	112.73	112.73	8699
22	14.40	0.00	34.95	8.94	134.41	133.59	133.59	8699
23	14.10	3.00	37.37	9.51	143.72	142.91	145.91	8699
24	13.80	6.00	39.79	10.14	152.95	144.12	150.12	8699
25	13.50	9.00	42.22	10.78	162.19	143.51	152.51	8699
26	13.20	12.00	44.65	11.42	171.48	143.40	155.40	8699
		12.00	44.65	13.73	67.43	67.13	79.13	3045
27	12.85	15.50	48.02	15.46	79.91	79.32	94.82	3209
28	12.50	19.00	51.41	18.06	94.18	85.04	104.04	3374
29	12.00	24.00	56.26	20.70	103.26	89.09	113.09	3609

Units: kN,m

Stage No.12 Remove surcharge no.4 at elev. 21.18



Stage No.12 Remove surcharge no.4 at elev. 21.18



Units: kN,m

Summary of results

LIMIT STATE PARAMETERS
Limit State: Serviceability Limit State
All loads and soil strengths are unfactored

STABILITY ANALYSIS of Fully Embedded Wall according to Burland-Potts method
Factor of safety on nett available passive
Active limit pressures calculated by Wedge Stability
Passive limit pressures calculated by Wedge Stability

Stage No.	G.L. Act.	G.L. Pass.	Strut Elev.	FoS for toe elev. = 12.00 Factor of Safety	Moment equilib. at elev.	Toe elev. for FoS = 1.000 Toe elev.	Wall Penetration
1	21.18	21.18	---	Conditions not suitable for FoS calc.			
2	21.18	20.10	Cant.	6.284	14.09	***	***
3	21.18	20.10	21.48	19.314	n/a	***	***
4	21.18	16.34	21.48	3.267	n/a	15.03	1.31
5	21.18	16.34		No analysis at this stage			

All remaining stages have more than one strut - FoS calculation n/a

Legend: *** Result not found

GEOTECHNICAL & ENVIRONMENTAL ASSOCIATES | Sheet No.
Program: WALLAP Version 6.05 Revision A45.B58.R48 | Job No. J15050
Licensed from GEOSOLVE | Made by : MC
Data filename/Run ID: Library S13.1 S1 North SLS1_SLS |
Lincoln's Inn Fields, London WC2A 3TL | Date: 5-02-2016
Library S12.1 Section 2 North | Checked :

Units: kN,m

Summary of results

BENDING MOMENT and DISPLACEMENT ANALYSIS of Fully Embedded Wall
Analysis options
Length of wall perpendicular to section = 1000.00m
Subgrade reaction model - Boussinesq Influence coefficients
Soil deformations are elastic until the active or passive limit is reached
Active limit pressures calculated by Wedge Stability
Passive limit pressures calculated by Wedge Stability
Open Tension Crack analysis - No

Rigid boundaries: Active side 20.00 from wall
Passive side 20.00 from wall
Limit State: Serviceability Limit State
Calculated Bending Moments and Strut Forces have been multiplied by a factor of 1.35 to obtain values for structural design.

Bending moment, shear force and displacement envelopes

Node no.	Y coord	Displacement max.	Displacement min.	Bending moment Calculated max.	Bending moment Calculated min.	Bending moment Factored max.	Bending moment Factored min.	Shear force Calculated max.	Shear force Calculated min.	Shear force Factored max.	Shear force Factored min.
		m	m	kN.m/m		kN.m/m		kN/m	kN/m	kN/m	kN/m
1	21.48	0.006	0.000	0	-0	0	-0	0	-27	0	-37
2	21.18	0.006	0.000	0	-8	0	-11	0	-27	0	-37
3	20.91	0.006	0.000	0	-15	0	-21	0	-26	1	-35
4	20.64	0.006	0.000	0	-22	1	-30	2	-25	2	-34
5	20.37	0.007	0.000	1	-29	1	-39	4	-24	5	-32
6	20.10	0.007	0.000	2	-35	3	-47	6	-23	8	-30
7	19.84	0.007	0.000	4	-41	6	-55	9	-21	13	-28
8	19.58	0.007	0.000	7	-46	10	-62	13	-55	18	-74
9	19.29	0.007	0.000	1	-51	2	-69	0	-50	0	-67
10	19.00	0.008	0.000	1	-55	1	-75	1	-44	1	-60
11	18.50	0.008	0.000	0	-61	0	-82	2	-33	3	-45
12	18.00	0.008	0.000	0	-63	0	-85	4	-20	6	-27
13	17.50	0.008	0.000	1	-61	1	-82	8	-6	11	-7
14	17.12	0.008	0.000	3	-60	4	-81	16	0	21	0
15	16.74	0.008	0.000	7	-54	9	-73	24	0	33	0
16	16.50	0.007	0.000	10	-48	14	-65	32	0	43	0
17	16.34	0.007	0.000	12	-42	17	-57	37	0	49	0
18	15.92	0.007	0.000	16	-25	22	-34	45	0	61	0
19	15.50	0.006	0.000	17	-8	23	-10	47	0	64	0
20	15.00	0.005	0.000	19	0	25	0	41	-2	55	-3
21	14.70	0.005	0.000	29	0	39	0	32	-4	43	-5
22	14.40	0.004	0.000	36	0	49	0	20	-5	27	-7
23	14.10	0.004	0.000	39	0	53	0	5	-6	7	-9
24	13.80	0.004	0.000	38	0	52	0	0	-12	0	-16
25	13.50	0.003	0.000	33	0	44	0	0	-26	0	-35
26	13.20	0.003	0.000	23	0	31	0	0	-38	0	-51
27	12.85	0.003	0.000	12	0	16	0	0	-27	0	-37
28	12.50	0.003	0.000	4	0	5	0	0	-16	0	-22
29	12.00	0.003	0.000	0	-0	0	-0	0	0	0	0

Summary of results (continued)

Calculated Bending Moments and Strut Forces have been multiplied by a factor of 1.35 to obtain values for structural design.

Maximum and minimum bending moment and shear force at each stage

Stage	Bending moment						Shear force					
no.	Calculated				Factored		Calculated				Factored	
	max. kN.m/m	elev.	min. kN.m/m	elev.	max. kN.m/m	min. kN.m/m	max. kN/m	elev.	min. kN/m	elev.	max. kN/m	min. kN/m
1	3	15.00	-3	18.50	4	-3	4	16.50	-2	13.20	5	-3
2	17	15.50	-0	18.00	23	-0	15	16.50	-11	13.20	20	-14
3	17	15.00	-9	19.29	23	-13	18	16.50	-11	13.20	24	-15
4	39	14.10	-63	18.00	53	-85	45	15.50	-38	13.20	61	-51
5	No calculation at this stage											
6	No calculation at this stage											
7	35	14.10	-46	17.12	47	-62	42	15.50	-37	19.58	57	-50
8	No calculation at this stage											
9	No calculation at this stage											
10	No calculation at this stage											
11	38	14.10	-61	17.50	52	-82	47	15.50	-55	19.58	64	-74
12	38	14.10	-60	17.50	51	-80	47	15.50	-53	19.58	63	-72

Maximum and minimum displacement at each stage

Stage no.	Displacement maximum m	elev.	minimum m	elev.	Stage description
1	0.000	19.84	0.000	21.48	Apply surcharge no.4 at elev. 21.18
2	0.004	21.48	0.000	21.48	Excav. to elev. 20.10 on PASSIVE side
3	0.003	21.48	0.000	21.48	Install strut no.1 at elev. 21.48
4	0.008	18.00	0.000	21.48	Excav. to elev. 16.34 on PASSIVE side
5	No calculation at this stage				Install strut no.2 at elev. 16.74
6	No calculation at this stage				Install strut no.3 at elev. 19.58
7	0.008	18.00	0.000	21.48	Remove strut no.1 at elev. 21.48
8	No calculation at this stage				Change soil type 1 to soil type 5
9	No calculation at this stage				Change soil type 2 to soil type 6
10	No calculation at this stage				Change soil type 3 to soil type 7
11	0.008	18.00	0.000	21.48	Change soil type 4 to soil type 8
12	0.008	18.00	0.000	21.48	Remove surcharge no.4 at elev. 21.18

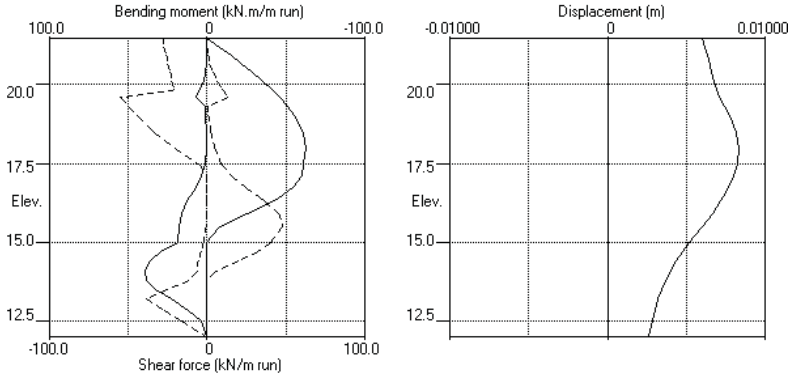
Strut forces at each stage (horizontal components)

Stage no.	Strut no. 1 at elev. 21.48			Strut no. 2 at elev. 16.74			Strut no. 3 at elev. 19.58		
	Calculated kN per m run	Factored kN per strut	Factored kN per strut	Calculated kN per m run	Factored kN per strut	Factored kN per strut	Calculated kN per m run	Factored kN per strut	Factored kN per strut
3	10	50	68	---	---	---	---	---	---
4	27	137	184	---	---	---	---	---	---
7	---	---	---	slack	slack	slack	43	43	58
11	---	---	---	0	0	0	68	68	92
12	---	---	---	slack	slack	slack	65	65	88

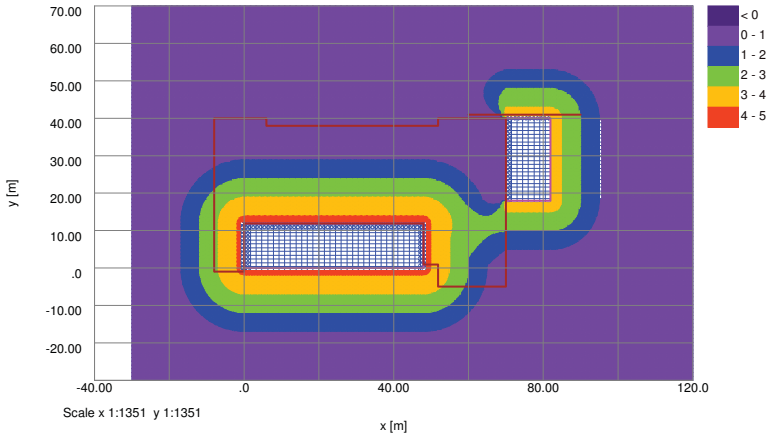
* Indicates that the total force shown is the sum of the force in the strut plus a force applied at the same elevation which may represent temperature load or other forces which are part of the strut load. Force components are listed in the detailed results for individual stages.

Units: kN,m

Bending moment, shear force, displacement envelopes

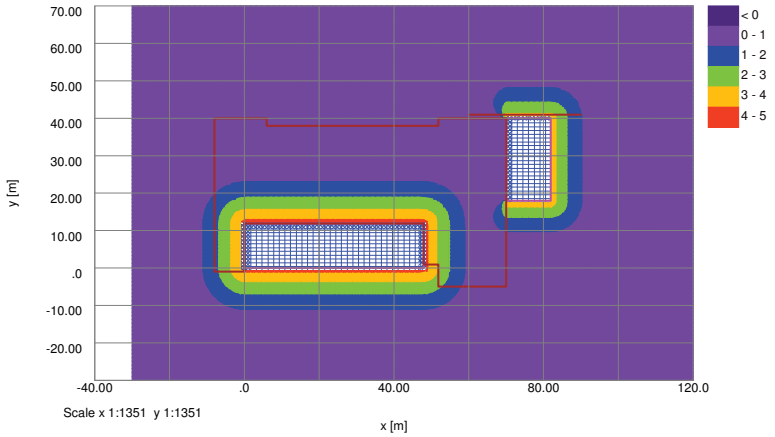


Vertical Settlement Contours: Grid 1 (level 17.000m) (Interval 1mm)

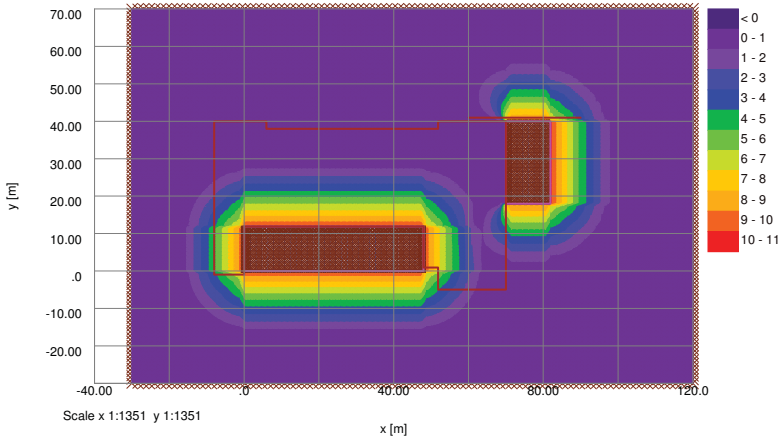


Oasys
GEA LIMITED
(GEOTECHNICAL &ENV ASSOC)
The Great Hall, Lincoln's Inn, Newman's Row, London, WC2A 3TL
Wall Movements Rev 3 Piling Final
Damage Assessment
Job No. J15050A
Sheet No.
Rev.
Drg. Ref.
Made by MP
Date 09-Feb-2016
Checked

Horizontal Displacement Contours: Grid 1 (level 17.000m) Interval 1mm



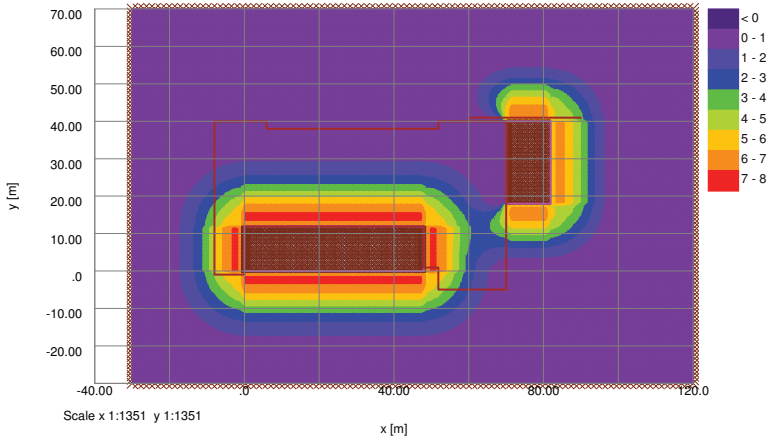
Horizontal Displacement Contours: Grid 1 (level 17.000m) Interval 1mm



Scale x 1:1351 y 1:1351

Oasys
GEA LIMITED
(GEOTECHNICAL &ENV ASSOC)
Job No. J15050A
Sheet No.
Rev.
The Great Hall, Lincoln's Inn, Newman's Row, London, WC2A 3TL
Wall Movements Rev 3 Piling and Excavation
Damage Assessment
Drg. Ref.
Made by MP
Date 08-Feb-2016
Checked

Vertical Settlement Contours: Grid 1 (level 17.000m) (Interval 1mm)



Scale x 1:1351 y 1:1351

Problem Type

Problem Type : Tunnelling and Embedded Wall Excavations

Displacement Data

Type	Name	Direction of extrusion	Point/Line/Line for extrusion						No. of intervals across extrusion/line	Extrusion depth	No. of intervals along extrusion	Calculate	Surface type for 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	-30.00000	17.00000	-	70.00000	17.00000	99	150.00000	99	Yes	Sub-surface
Line	Line 1	-	-7.95000	-1.00000	17.00000	-0.05000	-1.00000	17.00000	8	-	-	Yes	Sub-surface
Line	Line 2	-	0.00000	-1.00000	17.00000	0.00000	12.00000	17.00000	13	-	-	Yes	Sub-surface
Line	Line 3	-	0.05000	12.00000	17.00000	47.95000	12.00000	17.00000	48	-	-	Yes	Sub-surface
Line	Line 4	-	48.00000	12.00000	17.00000	48.00000	1.00000	17.00000	11	-	-	Yes	Sub-surface
Line	Line 5	-	48.05000	1.00000	17.00000	51.95000	1.00000	17.00000	4	-	-	Yes	Sub-surface
Line	Line 6	-	52.00000	1.00000	17.00000	52.00000	-5.00000	17.00000	6	-	-	Yes	Sub-surface
Line	Line 7	-	52.00000	-5.00000	18.00000	70.00000	-5.00000	18.00000	18	-	-	Yes	Sub-surface
Line	Line 8	-	70.00000	-5.00000	18.00000	70.00000	40.00000	18.00000	45	-	-	Yes	Sub-surface
Line	Line 9	-	70.00000	40.00000	18.00000	52.00000	40.00000	18.00000	18	-	-	Yes	Sub-surface
Line	Line 10	-	52.00000	40.00000	17.00000	52.00000	38.00000	17.00000	2	-	-	Yes	Sub-surface
Line	Line 11	-	52.00000	38.00000	17.00000	6.00000	38.00000	17.00000	46	-	-	Yes	Sub-surface
Line	Line 12	-	6.00000	38.00000	17.00000	6.00000	40.00000	17.00000	2	-	-	Yes	Sub-surface
Line	Line 13	-	6.00000	40.00000	17.00000	-8.00000	40.00000	17.00000	14	-	-	Yes	Sub-surface
Line	Line 14	-	-8.00000	40.00000	17.00000	-8.00000	-1.00000	17.00000	41	-	-	Yes	Sub-surface
Line	Line 15	-	60.00000	41.00000	18.00000	90.00000	41.00000	18.00000	30	-	-	Yes	Sub-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: **80 % of 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][3.300,0.000,0.003][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

Curve Name: **93 % of 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)(%)]
[0.000,0.000,0.036][0.100,0.000,0.046][0.200,0.000,0.052][0.300,0.000,0.058]
[0.400,0.000,0.062][0.500,0.000,0.065][0.600,0.000,0.067][0.700,0.000,0.068]
[0.800,0.000,0.068][0.900,0.000,0.067][1.000,0.000,0.065][1.100,0.000,0.063]
[1.200,0.000,0.060][1.300,0.000,0.057][1.400,0.000,0.054][1.500,0.000,0.050]
[1.600,0.000,0.047][1.700,0.000,0.043][1.800,0.000,0.039][1.900,0.000,0.035]
[2.000,0.000,0.032][2.100,0.000,0.028][2.200,0.000,0.025][2.300,0.000,0.021]
[2.400,0.000,0.019][2.500,0.000,0.016][2.600,0.000,0.013][2.700,0.000,0.011]
[2.800,0.000,0.009][2.900,0.000,0.007][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 = $-2.4603E-3x^4 + 2.6500E-2x^3 - 9.3470E-2x^2 + 9.8293E-2x + 3.6261E-2$
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: **80 % of 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)(%)]
[0.000,0.000,0.120][4.000,0.000,0.000]
Curve Fitting Method: Polynomial
x Order: 1
y Order: 0
Polynomial: z = -3.00E-2x + 1.20E-1
Coeff. of Determination: 1.00

Curve Name: **93 % of 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)(%)]
[0.000,0.000,0.140][4.000,0.000,0.000]
Curve Fitting Method: Polynomial
x Order: 1
y Order: 0
Polynomial: z = -3.50E-2x + 1.40E-1

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(GEOTECHNICAL &ENV ASSOC)
The Great Hall, Lincoln's Inn, Newman's Row, London, WC2A 3TL
Wall Movements Rev 3 Piling and Excavation
Damage Assessment

Job No.	Sheet No.	Rev.
J15050A		

Drg. Ref.

Made by	Date	Checked
MP	08-Feb-2016	

Type	Name	Direction of extrusion	Point/Line/Line for extrusion	No. of intervals across extrusion/line	Extrusion depth	No. of intervals along extrusion	Calculate	Surface type for tunnels
Coeff. of Determination:	1.00							

Polygonal Excavations

Excavation Name: East Terrace - Double Level Basement
Surface level [m]: 18.000
Contribution: Positive
Enabled: Yes
Surface movement curves which are selected are applied between surface and [m]: 13.450

Corner	x [m]	y [m]	Base Level [m]	Stiffened	Previous Side d [m]	Previous Side p1 [%]	Previous Side p2* [%]	Next Side d [m]	Next Side p1 [%]	Next Side p2* [%]
1	0.0	0.0	13.450	Yes	0.0	67.000	25.000	0.0	67.000	25.000
2	48.000	0.0	13.450	Yes	0.0	67.000	25.000	0.0	67.000	25.000
3	48.000	12.000	13.450	Yes	0.0	67.000	25.000	0.0	67.000	25.000
4	0.0	12.000	13.450	Yes	0.0	67.000	25.000	0.0	67.000	25.000

Side	Corner 1 x [m]	Corner 1 y [m]	Corner 2 x [m]	Corner 2 y [m]	Ground Movement Curve Vertical	Ground Movement Curve Horizontal
1	0.0	0.0	48.000	0.0	80 % of Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(b)	80 % of Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(a))
2	48.000	0.0	48.000	12.000	80 % of Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(b)	80 % of Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(a))
3	48.000	12.000	0.0	12.000	80 % of Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(b)	80 % of Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(a))
4	0.0	12.000	0.0	0.0	80 % of Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(b)	80 % of Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(a))

Excavation Name: Library & Treasurers House - Single Level Basement
Surface level [m]: 21.000
Contribution: Positive
Enabled: Yes
Surface movement curves which are selected are applied between surface and [m]: 16.340

Corner	x [m]	y [m]	Base Level [m]	Stiffened	Previous Side d [m]	Previous Side p1 [%]	Previous Side p2* [%]	Next Side d [m]	Next Side p1 [%]	Next Side p2* [%]
1	70.000	18.000	16.340	Yes	0.0	67.000	25.000	0.0	67.000	25.000
2	82.000	18.000	16.340	Yes	0.0	67.000	25.000	0.0	67.000	25.000
3	82.000	40.000	16.340	Yes	0.0	67.000	25.000	0.0	67.000	25.000
4	70.000	40.000	16.340	Yes	0.0	67.000	25.000	0.0	67.000	25.000

Side	Corner 1 x [m]	Corner 1 y [m]	Corner 2 x [m]	Corner 2 y [m]	Ground Movement Curve Vertical	Ground Movement Curve Horizontal
1	70.000	18.000	82.000	18.000	80 % of Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(b)	80 % of Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(a))
2	82.000	18.000	82.000	40.000	93 % of Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(b)	93 % of Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(a))
3	82.000	40.000	70.000	40.000	80 % of Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(b)	80 % of Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(a))
4	70.000	40.000	70.000	18.000	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 Line	Start Distance Along Line [m]	End Distance Along Line [m]	Vertical Offsets from Line for Vertical Movement Calculations [m]	Vertical Displacement Limit Sensitivity [mm]	Damage Category Strains	Poisson's Ratio	E/G
East Terrace	Sub 1	Line 1	0.00000	7.85000	0.0	0.10000	Burland Strain Limits	0.20000	2.6000
East Terrace	Sub 2	Line 2	0.00000	13.00000	0.0	0.10000	Burland Strain Limits	0.20000	2.6000
Great Hall (East Terrace Frontage)	Sub 3	Line 3	0.00000	47.85000	0.0	0.10000	Burland Strain Limits	0.20000	2.6000
Library (East Terrace Frontage)	Sub 4	Line 4	0.00000	11.00000	0.0	0.10000	Burland Strain Limits	0.20000	2.6000
Library (Eastern Elevation)	Sub 5	Line 5	0.00000	3.85000	0.0	0.10000	Burland Strain Limits	0.20000	2.6000
Library (Eastern Elevation)	Sub 6	Line 6	0.00000	6.00000	0.0	0.10000	Burland Strain Limits	0.20000	2.6000
Library (Eastern Elevation)	Sub 7	Line 7	0.00000	18.00000	0.0	0.10000	Burland Strain Limits	0.20000	2.6000
Library (Northern Elevation)	Sub 8	Line 8	0.00000	45.00000	0.0	0.10000	Burland Strain Limits	0.20000	2.6000
Library (Western Elevation)	Sub 9	Line 9	0.00000	18.00000	0.0	0.10000	Burland Strain Limits	0.20000	2.6000
Library / Great Hall (Western Elevation	Sub 10	Line 10	0.00000	2.00000	0.0	0.10000	Burland Strain Limits	0.20000	2.6000
Great Hall (Western Elevation)	Sub 11	Line 11	0.00000	46.00000	0.0	0.10000	Burland Strain Limits	0.20000	2.6000
Great Hall (Western Elevation)	Sub 12	Line 12	0.00000	2.00000	0.0	0.10000	Burland Strain Limits	0.20000	2.6000
Great Hall (Western Elevation)	Sub 13	Line 13	0.00000	14.00000	0.0	0.10000	Burland Strain Limits	0.20000	2.6000
Great Hall (Southern Elevation)	Sub 14	Line 14	0.00000	41.00000	0.0	0.10000	Burland Strain Limits	0.20000	2.6000
Boundary Wall (adjacent to single level basement)	Sub 15	Line 15	0.00000	30.00000	0.0	0.10000	Burland Strain Limits	0.20000	2.6000

Specific Structures - Bending Parameters

Structure Name	Sub-Structure Name	Height	Default Properties	Hogging 2nd Moment of Area (per unit	Hogging Distance of Bending Strain	Hogging Distance of N.A. from Edge	Sagging 2nd Moment of Area (per unit	Sagging Distance of Bending Strain	Sagging Distance of N.A. from Edge

				width)	from N.A.	of Beam in Tension	width)	from N.A.	of Beam in Tension
		[m]		[m']	[m]	[m]	[m']	[m]	[m]
East Terrace	Sub 1	4.0000	Yes	21.333	4.0000	4.0000	5.3333	2.0000	2.0000
East Terrace	Sub 2	4.0000	Yes	21.333	4.0000	4.0000	5.3333	2.0000	2.0000
Great Hall (East Terrace Frontage)	Sub 3	25.000	Yes	5208.3	25.000	25.000	1302.1	12.500	12.500
Library (East Terrace Frontage)	Sub 4	25.000	Yes	5208.3	25.000	25.000	1302.1	12.500	12.500
Library (Eastern Elevation)	Sub 5	25.000	Yes	5208.3	25.000	25.000	1302.1	12.500	12.500
Library (Eastern Elevation)	Sub 6	25.000	Yes	5208.3	25.000	25.000	1302.1	12.500	12.500
Library (Eastern Elevation)	Sub 7	25.000	Yes	5208.3	25.000	25.000	1302.1	12.500	12.500
Library (Northern Elevation)	Sub 8	25.000	Yes	5208.3	25.000	25.000	1302.1	12.500	12.500
Library (Western Elevation)	Sub 9	25.000	Yes	5208.3	25.000	25.000	1302.1	12.500	12.500
Library / Great Hall (Western Elevation	Sub 10	25.000	Yes	5208.3	25.000	25.000	1302.1	12.500	12.500
Great Hall (Western Elevation)	Sub 11	25.000	Yes	5208.3	25.000	25.000	1302.1	12.500	12.500
Great Hall (Western Elevation)	Sub 12	25.000	Yes	5208.3	25.000	25.000	1302.1	12.500	12.500
Great Hall (Western Elevation)	Sub 13	25.000	Yes	5208.3	25.000	25.000	1302.1	12.500	12.500
Great Hall (Southern Elevation)	Sub 14	25.000	Yes	5208.3	25.000	25.000	1302.1	12.500	12.500
Boundary Wall (adjacent to single level basement)	Sub 15	5.0000	Yes	41.667	5.0000	5.0000	10.417	2.5000	2.5000

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.

Warnings

1 Multiple excavations have been specified. The displacements resulting from these excavations are calculated by summing the displacements resulting from each individual excavation. No account has been taken of the interactions between excavations (e.g. overlapping zones of influence or 'shielding' of one excavation by another).

Displacement and Strain Results

Type/No.		Coordinates			Displacements					Angle of Line to x Axis
Name	Dist.	x	y	z	x	y	z	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
	[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	[mm]	[°]
Grid 1	Grid 1	-30.00000	-30.00000	17.00000	0.0	0.0	0.0	-	-	-
		-28.48485	-30.00000	17.00000	0.0	0.0	0.0	-	-	-
		-26.96970	-30.00000	17.00000	0.0	0.0	0.0	-	-	-
		-25.45455	-30.00000	17.00000	0.0	0.0	0.0	-	-	-
		-23.93939	-30.00000	17.00000	0.0	0.0	0.0	-	-	-
		-22.42424	-30.00000	17.00000	0.0	0.0	0.0	-	-	-
		-20.90909	-30.00000	17.00000	0.0	0.0	0.0	-	-	-
		-19.39394	-30.00000	17.00000	0.0	0.0	0.0	-	-	-
		-17.87879	-30.00000	17.00000	0.0	0.0	0.0	-	-	-
		-16.36364	-30.00000	17.00000	0.0	0.0	0.0	-	-	-
		-14.84848	-30.00000	17.00000	0.0	0.0	0.0	-	-	-
		-13.33333	-30.00000	17.00000	0.0	0.0	0.0	-	-	-
		-11.81818	-30.00000	17.00000	0.0	0.0	0.0	-	-	-
		-10.30303	-30.00000	17.00000	0.0	0.0	0.0	-	-	-
		-8.78788	-30.00000	17.00000	0.0	0.0	0.0	-	-	-
		-7.27273	-30.00000	17.00000	0.0	0.0	0.0	-	-	-
		-5.75758	-30.00000	17.00000	0.0	0.0	0.0	-	-	-
		-4.24242	-30.00000	17.00000	0.0	0.0	0.0	-	-	-
		-2.72727	-30.00000	17.00000	0.0	0.0	0.0	-	-	-
		-1.21212	-30.00000	17.00000	0.0	0.0	0.0	-	-	-
		0.30303	-30.00000	17.00000	0.0	0.0	0.0	-	-	-
		1.81818	-30.00000	17.00000	0.0	0.0	0.0	-	-	-
		3.33333	-30.00000	17.00000	0.0	0.0	0.0	-	-	-
		4.84848	-30.00000	17.00000	0.0	0.0	0.0	-	-	-
		6.36364	-30.00000	17.00000	0.0	0.0	0.0	-	-	-
		7.87879	-30.00000	17.00000	0.0	0.0	0.0	-	-	-
		9.39394	-30.00000	17.00000	0.0	0.0	0.0	-	-	-
		10.90909	-30.00000	17.00000	0.0	0.0	0.0	-	-	-
		12.42424	-30.00000	17.00000	0.0	0.0	0.0	-	-	-
		13.93939	-30.00000	17.00000	0.0	0.0	0.0	-	-	-
		15.45455	-30.00000	17.00000	0.0	0.0	0.0	-	-	-
		16.96970	-30.00000	17.00000	0.0	0.0	0.0	-	-	-
		18.48485	-30.00000	17.00000	0.0	0.0	0.0	-	-	-
		20.00000	-30.00000	17.00000	0.0	0.0	0.0	-	-	-
		21.51515	-30.00000	17.00000	0.0	0.0	0.0	-	-	-
		23.03030	-30.00000	17.00000	0.0	0.0	0.0	-	-	-
		24.54545	-30.00000	17.00000	0.0	0.0	0.0	-	-	-
		26.06061	-30.00000	17.00000	0.0	0.0	0.0	-	-	-
		27.57576	-30.00000	17.00000	0.0	0.0	0.0	-	-	-
		29.09091	-30.00000	17.00000	0.0	0.0	0.0	-	-	-
		30.60606	-30.00000	17.00000	0.0	0.0	0.0	-	-	-
		32.12121	-30.00000	17.00000	0.0	0.0	0.0	-	-	-
		33.63636	-30.00000	17.00000	0.0	0.0	0.0	-	-	-
		35.15152	-30.00000	17.00000	0.0	0.0	0.0	-	-	-
		36.66667	-30.00000	17.00000	0.0	0.0	0.0	-	-	-
		38.18182	-30.00000	17.00000	0.0	0.0	0.0	-	-	-
		39.69697	-30.00000	17.00000	0.0	0.0	0.0	-	-	-
		41.21212	-30.00000	17.00000	0.0	0.0	0.0	-	-	-
		42.72727	-30.00000	17.00000	0.0	0.0	0.0	-	-	-
		44.24242	-30.00000	17.00000	0.0	0.0	0.0	-	-	-
		45.75758	-30.00000	17.00000	0.0	0.0	0.0	-	-	-
		47.27273	-30.00000	17.00000	0.0	0.0	0.0	-	-	-
		48.78788	-30.00000	17.00000	0.0	0.0	0.0	-	-	-
		50.30303	-30.00000	17.00000	0.0	0.0	0.0	-	-	-
		51.81818	-30.00000	17.00000	0.0	0.0	0.0	-	-	-
		53.33333	-30.00000	17.00000	0.0	0.0	0.0	-	-	-
		54.84848	-30.00000	17.00000	0.0	0.0	0.0	-	-	-
		56.36364	-30.00000	17.00000	0.0	0.0	0.0	-	-	-
		57.87879	-30.00000	17.00000	0.0	0.0	0.0	-	-	-
		59.39394	-30.00000	17.00000	0.0	0.0	0.0	-	-	-
		60.90909	-30.00000	17.00000	0.0	0.0	0.0	-	-	-

Oasys | GEA LIMITED (GEOTECHNICAL &ENV ASSOC) | Job No. J15050A | Sheet No. | Rev.
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Type/No.		Coordinates			Displacements					Angle of Line to x Axis
Name	Dist.	x	y	z	x	y	z	Horizontal displacement	Horizontal displacement	
		62.42424	-30.00000	17.00000	0.0	0.0	0.0	-	-	-
		63.93939	-30.00000	17.00000	0.0	0.0	0.0	-	-	-
		65.45455	-30.00000	17.00000	0.0	0.0	0.0	-	-	-
		66.96970	-30.00000	17.00000	0.0	0.0	0.0	-	-	-
		68.48485	-30.00000	17.00000	0.0	0.0	0.0	-	-	-
		70.00000	-30.00000	17.00000	0.0	0.0	0.0	-	-	-
		71.51515	-30.00000	17.00000	0.0	0.0	0.0	-	-	-
		73.03030	-30.00000	17.00000	0.0	0.0	0.0	-	-	-
		74.54545	-30.00000	17.00000	0.0	0.0	0.0	-	-	-
		76.06061	-30.00000	17.00000	0.0	0.0	0.0	-	-	-
		77.57576	-30.00000	17.00000	0.0	0.0	0.0	-	-	-
		79.09091	-30.00000	17.00000	0.0	0.0	0.0	-	-	-
		80.60606	-30.00000	17.00000	0.0	0.0	0.0	-	-	-
		82.12121	-30.00000	17.00000	0.0	0.0	0.0	-	-	-
		83.63636	-30.00000	17.00000	0.0	0.0	0.0	-	-	-
		85.15152	-30.00000	17.00000	0.0	0.0	0.0	-	-	-
		86.66667	-30.00000	17.00000	0.0	0.0	0.0	-	-	-
		88.18182	-30.00000	17.00000	0.0	0.0	0.0	-	-	-
		89.69697	-30.00000	17.00000	0.0	0.0	0.0	-	-	-
		91.21212	-30.00000	17.00000	0.0	0.0	0.0	-	-	-
		92.72727	-30.00000	17.00000	0.0	0.0	0.0	-	-	-
		94.24242	-30.00000	17.00000	0.0	0.0	0.0	-	-	-
		95.75758	-30.00000	17.00000	0.0	0.0	0.0	-	-	-
		97.27273	-30.00000	17.00000	0.0	0.0	0.0	-	-	-
		98.78788	-30.00000	17.00000	0.0	0.0	0.0	-	-	-
		100.30303	-30.00000	17.00000	0.0	0.0	0.0	-	-	-
		101.81818	-30.00000	17.00000	0.0	0.0	0.0	-	-	-
		103.33333	-30.00000	17.00000	0.0	0.0	0.0	-	-	-
		104.84848	-30.00000	17.00000	0.0	0.0	0.0	-	-	-
		106.36364	-30.00000	17.00000	0.0	0.0	0.0	-	-	-
		107.87879	-30.00000	17.00000	0.0	0.0	0.0	-	-	-
		109.39394	-30.00000	17.00000	0.0	0.0	0.0	-	-	-
		110.90909	-30.00000	17.00000	0.0	0.0	0.0	-	-	-
		112.42424	-30.00000	17.00000	0.0	0.0	0.0	-	-	-
		113.93939	-30.00000	17.00000	0.0	0.0	0.0	-	-	-
		115.45455	-30.00000	17.00000	0.0	0.0	0.0	-	-	-
		116.96970	-30.00000	17.00000	0.0	0.0	0.0	-	-	-
		118.48485	-30.00000	17.00000	0.0	0.0	0.0	-	-	-
		120.00000	-30.00000	17.00000	0.0	0.0	0.0	-	-	-
		-30.00000	-28.98990	17.00000	0.0	0.0	0.0	-	-	-
		-28.48485	-28.98990	17.00000	0.0	0.0	0.0	-	-	-
		-26.96970	-28.98990	17.00000	0.0	0.0	0.0	-	-	-
		-25.45455	-28.98990	17.00000	0.0	0.0	0.0	-	-	-
		-23.93939	-28.98990	17.00000	0.0	0.0	0.0	-	-	-
		-22.42424	-28.98990	17.00000	0.0	0.0	0.0	-	-	-
		-20.90909	-28.98990	17.00000	0.0	0.0	0.0	-	-	-
		-19.39394	-28.98990	17.00000	0.0	0.0	0.0	-	-	-
		-17.87879	-28.98990	17.00000	0.0	0.0	0.0	-	-	-
		-16.36364	-28.98990	17.00000	0.0	0.0	0.0	-	-	-
		-14.84848	-28.98990	17.00000	0.0	0.0	0.0	-	-	-
		-13.33333	-28.98990	17.00000	0.0	0.0	0.0	-	-	-
		-11.81818	-28.98990	17.00000	0.0	0.0	0.0	-	-	-
		-10.30303	-28.98990	17.00000	0.0	0.0	0.0	-	-	-
		-8.78788	-28.98990	17.00000	0.0	0.0	0.0	-	-	-
		-7.27273	-28.98990	17.00000	0.0	0.0	0.0	-	-	-
		-5.75758	-28.98990	17.00000	0.0	0.0	0.0	-	-	-
		-4.24242	-28.98990	17.00000	0.0	0.0	0.0	-	-	-
		-2.72727	-28.98990	17.00000	0.0	0.0	0.0	-	-	-
		-1.21212	-28.98990	17.00000	0.0	0.0	0.0	-	-	-
		0.30303	-28.98990	17.00000	0.0	0.0	0.0	-	-	-
		1.81818	-28.98990	17.00000	0.0	0.0	0.0	-	-	-
		3.33333	-28.98990	17.00000	0.0	0.0	0.0	-	-	-
		4.84848	-28.98990	17.00000	0.0	0.0	0.0	-	-	-
		6.36364	-28.98990	17.00000	0.0	0.0	0.0	-	-	-
		7.87879	-28.98990	17.00000	0.0	0.0	0.0	-	-	-
		9.39394	-28.98990	17.00000	0.0	0.0	0.0	-	-	-
		10.90909	-28.98990	17.00000	0.0	0.0	0.0	-	-	-
		12.42424	-28.98990	17.00000	0.0	0.0	0.0	-	-	-
		13.93939	-28.98990	17.00000	0.0	0.0	0.0	-	-	-
		15.45455	-28.98990	17.00000	0.0	0.0	0.0	-	-	-
		16.96970	-28.98990	17.00000	0.0	0.0	0.0	-	-	-
		18.48485	-28.98990	17.00000	0.0	0.0	0.0	-	-	-
		20.00000	-28.98990	17.00000	0.0	0.0	0.0	-	-	-
		21.51515	-28.98990	17.00000	0.0	0.0	0.0	-	-	-
		23.03030	-28.98990	17.00000	0.0	0.0	0.0	-	-	-
		24.54545	-28.98990	17.00000	0.0	0.0	0.0	-	-	-
		26.06061	-28.98990	17.00000	0.0	0.0	0.0	-	-	-
		27.57576	-28.98990	17.00000	0.0	0.0	0.0	-	-	-
		29.09091	-28.98990	17.00000	0.0	0.0	0.0	-	-	-
		30.60606	-28.98990	17.00000	0.0	0.0	0.0	-	-	-
		32.12121	-28.98990	17.00000	0.0	0.0	0.0	-	-	-
		33.63636	-28.98990	17.00000	0.0	0.0	0.0	-	-	-
		35.15152	-28.98990	17.00000	0.0	0.0	0.0	-	-	-
		36.66667	-28.98990	17.00000	0.0	0.0	0.0	-	-	-
		38.18182	-28.98990	17.00000	0.0	0.0	0.0	-	-	-
		39.69697	-28.98990	17.00000	0.0	0.0	0.0	-	-	-
		41.21212	-28.98990	17.00000	0.0	0.0	0.0	-	-	-
		42.72727	-28.98990	17.00000	0.0	0.0	0.0	-	-	-
		44.24242	-28.98990	17.00000	0.0	0.0	0.0	-	-	-
		45.75758	-28.98990	17.00000	0.0	0.0	0.0	-	-	-
		47.27273	-28.98990	17.00000	0.0	0.0	0.0	-	-	-
		48.78788	-28.98990	17.00000	0.0	0.0	0.0	-	-	-
		50.30303	-28.98990	17.00000	0.0	0.0	0.0	-	-	-
		51.81818	-28.98990	17.00000	0.0	0.0	0.0	-	-	-
		53.33333	-28.98990	17.00000	0.0	0.0	0.0	-	-	-
		54.84848	-28.98990	17.00000	0.0	0.0	0.0	-	-	-
		56.36364	-28.98990	17.00000	0.0	0.0	0.0	-	-	-
		57.87879	-28.98990	17.00000	0.0	0.0	0.0	-	-	-
		59.39394	-28.98990	17.00000	0.0	0.0	0.0	-	-	-
		60.90909	-28.98990	17.00000	0.0	0.0	0.0	-	-	-
		62.42424	-28.98990	17.00000	0.0	0.0	0.0	-	-	-
		63.93939	-28.98990	17.00000	0.0	0.0	0.0	-	-	-
		65.45455	-28.98990	17.00000	0.0	0.0	0.0	-	-	-
		66.96970	-28.98990	17.00000	0.0	0.0	0.0	-	-	-
		68.48485	-28.98990	17.00000	0.0	0.0	0.0	-	-	-
		70.00000	-28.98990	17.00000	0.0	0.0	0.0	-	-	-
		71.51515	-28.98990	17.00000	0.0	0.0	0.0	-	-	-
		73.03030	-28.98990	17.00000	0.0	0.0	0.0	-	-	-
		74.54545	-28.98990	17.00000	0.0	0.0	0.0	-	-	-
		76.06061	-28.98990	17.00000	0.0	0.0	0.0	-	-	-
		77.57576	-28.98990	17.00000	0.0	0.0	0.0	-	-	-
		79.09091	-28.98990	17.00000	0.0	0.0	0.0	-	-	-
		80.60606	-28.98990	17.00000	0.0	0.0	0.0	-	-	-
		82.12121	-28.98990	17.00000	0.0	0.0	0.0	-	-	-
		83.63636	-28.98990	17.00000	0.0	0.0	0.0	-	-	-
		85.15152	-28.98990	17.00000	0.0	0.0	0.0	-	-	-
		86.66667	-28.98990	17.00000	0.0	0.0	0.0	-	-	-
		88.18182	-28.98990	17.00000	0.0	0.0	0.0	-	-	-
		89.69697	-28.98990	17.00000	0.0	0.0	0.0	-	-	-
		91.21212	-28.98990	17.00000	0.0	0.0	0.0	-	-	-
		92.72727	-28.98990	17.00000	0.0	0.0	0.0	-	-	-
		94.24242	-28.98990	17.00000	0.0	0.0	0.0	-	-	-
		95.75758	-28.98990	17.00000	0.0	0.0	0.0	-	-	-
		97.27273	-28.98990	17.00000	0.0	0.0	0.0	-	-	-
		98.78788	-28.98990	17.00000	0.0	0.0	0.0	-	-	-
		100.30303	-28.98990	17.00000	0.0	0.0	0.0	-	-	-
		101.81818	-28.98990	17.00000	0.0	0.0	0.0	-	-	-
		103.33333	-28.98990	17.00000	0.0	0.0	0.0	-	-	-
		104.84848	-28.98990	17.00000	0.0	0.0	0.0	-	-	-
		106.36364	-28.98990	17.00000	0.0	0.0	0.0	-	-	-
		107.87879	-28.98990	17.00000	0.0	0.0	0.0	-	-	-
		109.39394	-28.98990	17.00000	0.0	0.0	0.0	-	-	-
		110.90909	-28.98990	17.00000	0.0	0.0	0.0	-	-	-
		112.42424	-28.98990	17.00000	0.0	0.0	0.0	-	-	-
		113.93939	-28.98990	17.00000	0.0	0.0	0.0	-	-	-
		115.45455	-28.98990	17.00000	0.0	0.0	0.0	-	-	-
		116.96970	-28.98990	17.00000	0.0	0.0	0.0	-	-	-
		118.48485	-28.98990	17.00000	0.0	0.0	0.0	-	-	-
		120.00000	-28.98990	17.00000	0.0	0.0	0.0	-	-	-
		-30.00000	-27.97980	17.00000	0.0	0.0	0.0	-	-	-
		-28.48485	-27.97980	17.00000	0.0	0.0	0.0	-	-	-

Type/No. Name	Dist.	Coordinates x	y	z	Displacements x	y	z	Horizontal displacement	Horizontal displacement	Angle of Line to x Axis	
		-26.96970	-27.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		-25.45455	-27.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		-23.93939	-27.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		-22.42424	-27.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		-20.90909	-27.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		-19.39394	-27.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		-17.87879	-27.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		-16.36364	-27.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		-14.84848	-27.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		-13.33333	-27.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		-11.81818	-27.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		-10.30303	-27.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		-8.78788	-27.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		-7.27273	-27.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		-5.75758	-27.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		-4.24242	-27.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		-2.72727	-27.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		-1.21212	-27.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		0.30303	-27.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		1.81818	-27.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		3.33333	-27.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		4.84848	-27.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		6.36364	-27.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		7.87879	-27.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		9.39394	-27.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		10.90909	-27.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		12.42424	-27.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		13.93939	-27.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		15.45455	-27.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		16.96970	-27.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		18.48485	-27.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		20.00000	-27.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		21.51515	-27.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		23.03030	-27.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		24.54545	-27.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		26.06061	-27.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		27.57576	-27.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		29.09091	-27.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		30.60606	-27.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		32.12121	-27.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		33.63636	-27.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		35.15152	-27.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		36.66667	-27.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		38.18182	-27.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		39.69697	-27.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		41.21212	-27.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		42.72727	-27.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		44.24242	-27.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		45.75758	-27.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		47.27273	-27.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		48.78788	-27.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		50.30303	-27.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		51.81818	-27.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		53.33333	-27.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		54.84848	-27.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		56.36364	-27.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		57.87879	-27.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		59.39394	-27.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		60.90909	-27.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		62.42424	-27.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		63.93939	-27.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		65.45455	-27.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		66.96970	-27.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		68.48485	-27.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		70.00000	-27.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		71.51515	-27.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		73.03030	-27.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		74.54545	-27.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		76.06061	-27.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		77.57576	-27.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		79.09091	-27.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		80.60606	-27.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		82.12121	-27.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		83.63636	-27.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		85.15152	-27.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		86.66667	-27.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		88.18182	-27.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		89.69697	-27.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		91.21212	-27.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		92.72727	-27.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		94.24242	-27.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		95.75758	-27.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		97.27273	-27.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		98.78788	-27.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		100.30303	-27.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		101.81818	-27.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		103.33333	-27.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		104.84848	-27.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		106.36364	-27.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		107.87879	-27.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		109.39394	-27.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		110.90909	-27.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		112.42424	-27.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		113.93939	-27.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		115.45455	-27.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		116.96970	-27.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		118.48485	-27.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		120.00000	-27.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		-30.00000	-26.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		-28.48485	-26.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		-26.96970	-26.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		-25.45455	-26.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		-23.93939	-26.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		-22.42424	-26.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		-20.90909	-26.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		-19.39394	-26.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		-17.87879	-26.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		-16.36364	-26.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		-14.84848	-26.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		-13.33333	-26.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		-11.81818	-26.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		-10.30303	-26.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		-8.78788	-26.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		-7.27273	-26.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		-5.75758	-26.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		-4.24242	-26.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		-2.72727	-26.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		-1.21212	-26.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		0.30303	-26.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		1.81818	-26.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		3.33333	-26.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		4.84848	-26.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		6.36364	-26.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		7.87879	-26.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		9.39394	-26.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		10.90909	-26.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		12.42424	-26.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		13.93939	-26.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		15.45455	-26.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		16.96970	-26.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		18.48485	-26.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		20.00000	-26.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		21.51515	-26.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		23.03030	-26.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		24.54545	-26.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		26.06061	-26.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		27.57576	-26.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		29.09091	-26.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		30.60606	-26.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		32.12121	-26.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		33.63636	-26.96970	17.00000	0.0	0.0	0.0	-	-	-	*

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GEA LIMITED
(GEOTECHNICAL &ENV ASSOC) J15050A
The Great Hall, Lincoln's Inn, Newman's Row, London, WC2A 3TL
Wall Movements Rev 3 Piling and Excavation
Damage Assessment
Job No. J15050A | Sheet No. | Rev.
Drg. Ref.
Made by MP | Date 08-Feb-2016 | Checked

Type/No. Name	Dist.	Coordinates x	y	z	Displacements x	y	z	Horizontal displacement	Horizontal displacement	Angle of Line to x Axis	
		35.15152	-26.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		36.66667	-26.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		38.18182	-26.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		39.69697	-26.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		41.21212	-26.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		42.72727	-26.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		44.24242	-26.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		45.75758	-26.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		47.27273	-26.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		48.78788	-26.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		50.30303	-26.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		51.81818	-26.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		53.33333	-26.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		54.84848	-26.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		56.36364	-26.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		57.87879	-26.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		59.39394	-26.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		60.90909	-26.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		62.42424	-26.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		63.93939	-26.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		65.45455	-26.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		66.96970	-26.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		68.48485	-26.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		70.00000	-26.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		71.51515	-26.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		73.03030	-26.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		74.54545	-26.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		76.06061	-26.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		77.57576	-26.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		79.09091	-26.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		80.60606	-26.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		82.12121	-26.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		83.63636	-26.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		85.15152	-26.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		86.66667	-26.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		88.18182	-26.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		89.69697	-26.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		91.21212	-26.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		92.72727	-26.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		94.24242	-26.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		95.75758	-26.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		-30.00000	-25.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		-28.48485	-25.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		-26.96970	-25.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		-25.45455	-25.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		-23.93939	-25.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		-22.42424	-25.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		-20.90909	-25.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		-19.39394	-25.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		-17.87879	-25.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		-16.36364	-25.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		-14.84848	-25.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		-13.33333	-25.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		-11.81818	-25.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		-10.30303	-25.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		-8.78788	-25.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		-7.27273	-25.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		-5.75758	-25.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		-4.24242	-25.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		-2.72727	-25.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		-1.21212	-25.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		0.30303	-25.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		1.81818	-25.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		3.33333	-25.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		4.84848	-25.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		6.36364	-25.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		7.87879	-25.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		9.39394	-25.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		10.90909	-25.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		12.42424	-25.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		13.93939	-25.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		15.45455	-25.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		16.96970	-25.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		18.48485	-25.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		20.00000	-25.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		21.51515	-25.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		23.03030	-25.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		24.54545	-25.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		26.06061	-25.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		27.57576	-25.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		29.09091	-25.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		30.60606	-25.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		32.12121	-25.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		33.63636	-25.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		35.15152	-25.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		36.66667	-25.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		38.18182	-25.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		39.69697	-25.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		41.21212	-25.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		42.72727	-25.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		44.24242	-25.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		45.75758	-25.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		47.27273	-25.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		48.78788	-25.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		50.30303	-25.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		51.81818	-25.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		53.33333	-25.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		54.84848	-25.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		56.36364	-25.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		57.87879	-25.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		59.39394	-25.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		60.90909	-25.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		62.42424	-25.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		63.93939	-25.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		65.45455	-25.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		66.96970	-25.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		68.48485	-25.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		70.00000	-25.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		71.51515	-25.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		73.03030	-25.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		74.54545	-25.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		76.06061	-25.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		77.57576	-25.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		79.09091	-25.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		80.60606	-25.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		82.12121	-25.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		83.63636	-25.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		85.15152	-25.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		86.66667	-25.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		88.18182	-25.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		89.69697	-25.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		91.21212	-25.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		92.72727	-25.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		94.24242	-25.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		95.75758	-25.95960	17.00000	0.0	0.0	0.0	-	-	-	*

Type/No.		Coordinates			Displacements					Angle of Line to x Axis	
Name	Dist.	x	y	z	x	y	z	Horizontal displacement	Horizontal displacement		
		97.27273	-25.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		98.78788	-25.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		100.30303	-25.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		101.81818	-25.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		103.33333	-25.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		104.84848	-25.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		106.36364	-25.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		107.87879	-25.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		109.39394	-25.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		110.90909	-25.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		112.42424	-25.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		113.93939	-25.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		115.45455	-25.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		116.96970	-25.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		118.48485	-25.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		120.00000	-25.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		-30.00000	-24.94949	17.00000	0.0	0.0	0.0	-	-	-	*
		-28.48485	-24.94949	17.00000	0.0	0.0	0.0	-	-	-	*
		-26.96970	-24.94949	17.00000	0.0	0.0	0.0	-	-	-	*
		-25.45455	-24.94949	17.00000	0.0	0.0	0.0	-	-	-	*
		-23.93939	-24.94949	17.00000	0.0	0.0	0.0	-	-	-	*
		-22.42424	-24.94949	17.00000	0.0	0.0	0.0	-	-	-	*
		-20.90909	-24.94949	17.00000	0.0	0.0	0.0	-	-	-	*
		-19.39394	-24.94949	17.00000	0.0	0.0	0.0	-	-	-	*
		-17.87879	-24.94949	17.00000	0.0	0.0	0.0	-	-	-	*
		-16.36364	-24.94949	17.00000	0.0	0.0	0.0	-	-	-	*
		-14.84848	-24.94949	17.00000	0.0	0.0	0.0	-	-	-	*
		-13.33333	-24.94949	17.00000	0.0	0.0	0.0	-	-	-	*
		-11.81818	-24.94949	17.00000	0.0	0.0	0.0	-	-	-	*
		-10.30303	-24.94949	17.00000	0.0	0.0	0.0	-	-	-	*
		-8.78788	-24.94949	17.00000	0.0	0.0	0.0	-	-	-	*
		-7.27273	-24.94949	17.00000	0.0	0.0	0.0	-	-	-	*
		-5.75758	-24.94949	17.00000	0.0	0.0	0.0	-	-	-	*
		-4.24242	-24.94949	17.00000	0.0	0.0	0.0	-	-	-	*
		-2.72727	-24.94949	17.00000	0.0	0.0	0.0	-	-	-	*
		-1.21212	-24.94949	17.00000	0.0	0.0	0.0	-	-	-	*
		0.30303	-24.94949	17.00000	0.0	0.0	0.0	-	-	-	*
		1.81818	-24.94949	17.00000	0.0	0.0	0.0	-	-	-	*
		3.33333	-24.94949	17.00000	0.0	0.0	0.0	-	-	-	*
		4.84848	-24.94949	17.00000	0.0	0.0	0.0	-	-	-	*
		6.36364	-24.94949	17.00000	0.0	0.0	0.0	-	-	-	*
		7.87879	-24.94949	17.00000	0.0	0.0	0.0	-	-	-	*
		9.39394	-24.94949	17.00000	0.0	0.0	0.0	-	-	-	*
		10.90909	-24.94949	17.00000	0.0	0.0	0.0	-	-	-	*
		12.42424	-24.94949	17.00000	0.0	0.0	0.0	-	-	-	*
		13.93939	-24.94949	17.00000	0.0	0.0	0.0	-	-	-	*
		15.45455	-24.94949	17.00000	0.0	0.0	0.0	-	-	-	*
		16.96970	-24.94949	17.00000	0.0	0.0	0.0	-	-	-	*
		18.48485	-24.94949	17.00000	0.0	0.0	0.0	-	-	-	*
		20.00000	-24.94949	17.00000	0.0	0.0	0.0	-	-	-	*
		21.51515	-24.94949	17.00000	0.0	0.0	0.0	-	-	-	*
		23.03030	-24.94949	17.00000	0.0	0.0	0.0	-	-	-	*
		24.54545	-24.94949	17.00000	0.0	0.0	0.0	-	-	-	*
		26.06061	-24.94949	17.00000	0.0	0.0	0.0	-	-	-	*
		27.57576	-24.94949	17.00000	0.0	0.0	0.0	-	-	-	*
		29.09091	-24.94949	17.00000	0.0	0.0	0.0	-	-	-	*
		30.60606	-24.94949	17.00000	0.0	0.0	0.0	-	-	-	*
		32.12121	-24.94949	17.00000	0.0	0.0	0.0	-	-	-	*
		33.63636	-24.94949	17.00000	0.0	0.0	0.0	-	-	-	*
		35.15152	-24.94949	17.00000	0.0	0.0	0.0	-	-	-	*
		36.66667	-24.94949	17.00000	0.0	0.0	0.0	-	-	-	*
		38.18182	-24.94949	17.00000	0.0	0.0	0.0	-	-	-	*
		39.69697	-24.94949	17.00000	0.0	0.0	0.0	-	-	-	*
		41.21212	-24.94949	17.00000	0.0	0.0	0.0	-	-	-	*
		42.72727	-24.94949	17.00000	0.0	0.0	0.0	-	-	-	*
		44.24242	-24.94949	17.00000	0.0	0.0	0.0	-	-	-	*
		45.75758	-24.94949	17.00000	0.0	0.0	0.0	-	-	-	*
		47.27273	-24.94949	17.00000	0.0	0.0	0.0	-	-	-	*
		48.78788	-24.94949	17.00000	0.0	0.0	0.0	-	-	-	*
		50.30303	-24.94949	17.00000	0.0	0.0	0.0	-	-	-	*
		51.81818	-24.94949	17.00000	0.0	0.0	0.0	-	-	-	*
		53.33333	-24.94949	17.00000	0.0	0.0	0.0	-	-	-	*
		54.84848	-24.94949	17.00000	0.0	0.0	0.0	-	-	-	*
		56.36364	-24.94949	17.00000	0.0	0.0	0.0	-	-	-	*
		57.87879	-24.94949	17.00000	0.0	0.0	0.0	-	-	-	*
		59.39394	-24.94949	17.00000	0.0	0.0	0.0	-	-	-	*
		60.90909	-24.94949	17.00000	0.0	0.0	0.0	-	-	-	*
		62.42424	-24.94949	17.00000	0.0	0.0	0.0	-	-	-	*
		63.93939	-24.94949	17.00000	0.0	0.0	0.0	-	-	-	*
		65.45455	-24.94949	17.00000	0.0	0.0	0.0	-	-	-	*
		66.96970	-24.94949	17.00000	0.0	0.0	0.0	-	-	-	*
		68.48485	-24.94949	17.00000	0.0	0.0	0.0	-	-	-	*
		70.00000	-24.94949	17.00000	0.0	0.0	0.0	-	-	-	*
		71.51515	-24.94949	17.00000	0.0	0.0	0.0	-	-	-	*
		73.03030	-24.94949	17.00000	0.0	0.0	0.0	-	-	-	*
		74.54545	-24.94949	17.00000	0.0	0.0	0.0	-	-	-	*
		76.06061	-24.94949	17.00000	0.0	0.0	0.0	-	-	-	*
		77.57576	-24.94949	17.00000	0.0	0.0	0.0	-	-	-	*
		79.09091	-24.94949	17.00000	0.0	0.0	0.0	-	-	-	*
		80.60606	-24.94949	17.00000	0.0	0.0	0.0	-	-	-	*
		82.12121	-24.94949	17.00000	0.0	0.0	0.0	-	-	-	*
		83.63636	-24.94949	17.00000	0.0	0.0	0.0	-	-	-	*
		85.15152	-24.94949	17.00000	0.0	0.0	0.0	-	-	-	*
		86.66667	-24.94949	17.00000	0.0	0.0	0.0	-	-	-	*
		88.18182	-24.94949	17.00000	0.0	0.0	0.0	-	-	-	*
		89.69697	-24.94949	17.00000	0.0	0.0	0.0	-	-	-	*
		91.21212	-24.94949	17.00000	0.0	0.0	0.0	-	-	-	*
		92.72727	-24.94949	17.00000	0.0	0.0	0.0	-	-	-	*
		94.24242	-24.94949	17.00000	0.0	0.0	0.0	-	-	-	*
		95.75758	-24.94949	17.00000	0.0	0.0	0.0	-	-	-	*
		97.27273	-24.94949	17.00000	0.0	0.0	0.0	-	-	-	*
		98.78788	-24.94949	17.00000	0.0	0.0	0.0	-	-	-	*
		100.30303	-24.94949	17.00000	0.0	0.0	0.0	-	-	-	*
		101.81818	-24.94949	17.00000	0.0	0.0	0.0	-	-	-	*
		103.33333	-24.94949	17.00000	0.0	0.0	0.0	-	-	-	*
		104.84848	-24.94949	17.00000	0.0	0.0	0.0	-	-	-	*
		106.36364	-24.94949	17.00000	0.0	0.0	0.0	-	-	-	*
		107.87879	-24.94949	17.00000	0.0	0.0	0.0	-	-	-	*
		109.39394	-24.94949	17.00000	0.0	0.0	0.0	-	-	-	*
		110.90909	-24.94949	17.00000	0.0	0.0	0.0	-	-	-	*
		112.42424	-24.94949	17.00000	0.0	0.0	0.0	-	-	-	*
		113.93939	-24.94949	17.00000	0.0	0.0	0.0	-	-	-	*
		115.45455	-24.94949	17.00000	0.0	0.0	0.0	-	-	-	*
		116.96970	-24.94949	17.00000	0.0	0.0	0.0	-	-	-	*
		118.48485	-24.94949	17.00000	0.0	0.0	0.0	-	-	-	*
		120.00000	-24.94949	17.00000	0.0	0.0	0.0	-	-	-	*
		-30.00000	-23.93939	17.00000	0.0	0.0	0.0	-	-	-	*
		-28.48485	-23.93939	17.00000	0.0	0.0	0.0	-	-	-	*
		-26.96970	-23.93939	17.00000	0.0	0.0	0.0	-	-	-	*
		-25.45455	-23.93939	17.00000	0.0	0.0	0.0	-	-	-	*
		-23.93939	-23.93939	17.00000	0.0	0.0	0.0	-	-	-	*
		-22.42424	-23.93939	17.00000	0.0	0.0	0.0	-	-	-	*
		-20.90909	-23.93939	17.00000	0.0	0.0	0.0	-	-	-	*
		-19.39394	-23.93939	17.00000	0.0	0.0	0.0	-	-	-	*
		-17.87879	-23.93939	17.00000	0.0	0.0	0.0	-	-	-	*
		-16.36364	-23.93939	17.00000	0.0	0.0	0.0	-	-	-	*
		-14.84848	-23.93939	17.00000	0.0	0.0	0.0	-	-	-	*
		-13.33333	-23.93939	17.00000	0.0	0.0	0.0	-	-	-	*
		-11.81818	-23.93939	17.00000	0.0	0.0	0.0	-	-	-	*
		-10.30303	-23.93939	17.00000	0.0	0.0	0.0	-	-	-	*
		-8.78788	-23.93939	17.00000	0.0	0.0	0.0	-	-	-	*
		-7.27273	-23.93939	17.00000	0.0	0.0	0.0	-	-	-	*
		-5.75758	-23.93939	17.00000	0.0	0.0	0.0	-	-	-	*
		-4.24242	-23.93939	17.00000	0.0	0.0	0.0	-	-	-	*
		-2.72727	-23.93939	17.00000	0.0	0.0	0.0	-	-	-	*
		-1.21212	-23.93939	17.00000	0.0	0.0	0.0	-	-	-	*
		0.30303	-23.93939	17.00000	0.0	0.0	0.0	-	-	-	*
		1.81818	-23.93939	17.00000	0.0	0.0	0.0	-	-	-	*
		3.33333	-23.93939	17.00000	0.0	0.0	0.0	-	-	-	*
		4.84848	-23.93939	17.00000	0.0	0.0	0.0	-	-	-	*
		6.36364	-23.93939	17.00000	0.0	0.0	0.0	-	-	-	*

Oasys
GEA LIMITED
(GEOTECHNICAL &ENV ASSOC) J15050A
The Great Hall, Lincoln's Inn, Newman's Row, London, WC2A 3TL
Wall Movements Rev 3 Piling and Excavation
Damage Assessment
Job No. | Sheet No. | Rev.
Drg. Ref.
Made by MP | Date 08-Feb-2016 | Checked

Type/No.		Coordinates			Displacements					Angle of Line to x Axis	
Name	Dist.	x	y	z	x	y	z	Horizontal displacement	Horizontal displacement		
		7.87879	-23.93939	17.00000	0.0	0.0	0.0	-	-	-	*
		9.39394	-23.93939	17.00000	0.0	0.0	0.0	-	-	-	*
		10.90909	-23.93939	17.00000	0.0	0.0	0.0	-	-	-	*
		12.42424	-23.93939	17.00000	0.0	0.0	0.0	-	-	-	*
		13.93939	-23.93939	17.00000	0.0	0.0	0.0	-	-	-	*
		15.45455	-23.93939	17.00000	0.0	0.0	0.0	-	-	-	*
		16.96970	-23.93939	17.00000	0.0	0.0	0.0	-	-	-	*
		18.48485	-23.93939	17.00000	0.0	0.0	0.0	-	-	-	*
		20.00000	-23.93939	17.00000	0.0	0.0	0.0	-	-	-	*
		21.51515	-23.93939	17.00000	0.0	0.0	0.0	-	-	-	*
		23.03030	-23.93939	17.00000	0.0	0.0	0.0	-	-	-	*
		24.54545	-23.93939	17.00000	0.0	0.0	0.0	-	-	-	*
		26.06061	-23.93939	17.00000	0.0	0.0	0.0	-	-	-	*
		27.57576	-23.93939	17.00000	0.0	0.0	0.0	-	-	-	*
		29.09091	-23.93939	17.00000	0.0	0.0	0.0	-	-	-	*
		30.60606	-23.93939	17.00000	0.0	0.0	0.0	-	-	-	*
		32.12121	-23.93939	17.00000	0.0	0.0	0.0	-	-	-	*
		33.63636	-23.93939	17.00000	0.0	0.0	0.0	-	-	-	*
		35.15152	-23.93939	17.00000	0.0	0.0	0.0	-	-	-	*
		36.66667	-23.93939	17.00000	0.0	0.0	0.0	-	-	-	*
		38.18182	-23.93939	17.00000	0.0	0.0	0.0	-	-	-	*
		39.69697	-23.93939	17.00000	0.0	0.0	0.0	-	-	-	*
		41.21212	-23.93939	17.00000	0.0	0.0	0.0	-	-	-	*
		42.72727	-23.93939	17.00000	0.0	0.0	0.0	-	-	-	*
		44.24242	-23.93939	17.00000	0.0	0.0	0.0	-	-	-	*
		45.75758	-23.93939	17.00000	0.0	0.0	0.0	-	-	-	*
		47.27273	-23.93939	17.00000	0.0	0.0	0.0	-	-	-	*
		48.78788	-23.93939	17.00000	0.0	0.0	0.0	-	-	-	*
		50.30303	-23.93939	17.00000	0.0	0.0	0.0	-	-	-	*
		51.81818	-23.93939	17.00000	0.0	0.0	0.0	-	-	-	*
		53.33333	-23.93939	17.00000	0.0	0.0	0.0	-	-	-	*
		54.84848	-23.93939	17.00000	0.0	0.0	0.0	-	-	-	*
		56.36364	-23.93939	17.00000	0.0	0.0	0.0	-	-	-	*
		57.87879	-23.93939	17.00000	0.0	0.0	0.0	-	-	-	*
		59.39394	-23.93939	17.00000	0.0	0.0	0.0	-	-	-	*
		60.90909	-23.93939	17.00000	0.0	0.0	0.0	-	-	-	*
		62.42424	-23.93939	17.00000	0.0	0.0	0.0	-	-	-	*
		63.93939	-23.93939	17.00000	0.0	0.0	0.0	-	-	-	*
		65.45455	-23.93939	17.00000	0.0	0.0	0.0	-	-	-	*
		66.96970	-23.93939	17.00000	0.0	0.0	0.0	-	-	-	*
		68.48485	-23.93939	17.00000	0.0	0.0	0.0	-	-	-	*
		70.00000	-23.93939	17.00000	0.0	0.0	0.0	-	-	-	*
		71.51515	-23.93939	17.00000	0.0	0.0	0.0	-	-	-	*
		73.03030	-23.93939	17.00000	0.0	0.0	0.0	-	-	-	*
		74.54545	-23.93939	17.00000	0.0	0.0	0.0	-	-	-	*
		76.06061	-23.93939	17.00000	0.0	0.0	0.0	-	-	-	*
		77.57576	-23.93939	17.00000	0.0	0.0	0.0	-	-	-	*
		79.09091	-23.93939	17.00000	0.0	0.0	0.0	-	-	-	*
		80.60606	-23.93939	17.00000	0.0	0.0	0.0	-	-	-	*
		82.12121	-23.93939	17.00000	0.0	0.0	0.0	-	-	-	*
		83.63636	-23.93939	17.00000	0.0	0.0	0.0	-	-	-	*
		85.15152	-23.93939	17.00000	0.0	0.0	0.0	-	-	-	*
		86.66667	-23.93939	17.00000	0.0	0.0	0.0	-	-	-	*
		88.18182	-23.93939	17.00000	0.0	0.0	0.0	-	-	-	*
		89.69697	-23.93939	17.00000	0.0	0.0	0.0	-	-	-	*
		91.21212	-23.93939	17.00000	0.0	0.0	0.0	-	-	-	*
		92.72727	-23.93939	17.00000	0.0	0.0	0.0	-	-	-	*
		94.24242	-23.93939	17.00000	0.0	0.0	0.0	-	-	-	*
		95.75758	-23.93939	17.00000	0.0	0.0	0.0	-	-	-	*
		97.27273	-23.93939	17.00000	0.0	0.0	0.0	-	-	-	*
		98.78788	-23.93939	17.00000	0.0	0.0	0.0	-	-	-	*
		100.30303	-23.93939	17.00000	0.0	0.0	0.0	-	-	-	*
		101.81818	-23.93939	17.00000	0.0	0.0	0.0	-	-	-	*
		103.33333	-23.93939	17.00000	0.0	0.0	0.0	-	-	-	*
		104.84848	-23.93939	17.00000	0.0	0.0	0.0	-	-	-	*
		106.36364	-23.93939	17.00000	0.0	0.0	0.0	-	-	-	*
		107.87879	-23.93939	17.00000	0.0	0.0	0.0	-	-	-	*
		109.39394	-23.93939	17.00000	0.0	0.0	0.0	-	-	-	*
		110.90909	-23.93939	17.00000	0.0	0.0	0.0	-	-	-	*
		112.42424	-23.93939	17.00000	0.0	0.0	0.0	-	-	-	*
		113.93939	-23.93939	17.00000	0.0	0.0	0.0	-	-	-	*
		115.45455	-23.93939	17.00000	0.0	0.0	0.0	-	-	-	*
		116.96970	-23.93939	17.00000	0.0	0.0	0.0	-	-	-	*
		118.48485	-23.93939	17.00000	0.0	0.0	0.0	-	-	-	*
		120.00000	-23.93939	17.00000	0.0	0.0	0.0	-	-	-	*
		-30.00000	-22.92929	17.00000	0.0	0.0	0.0	-	-	-	*
		-28.48485	-22.92929	17.00000	0.0	0.0	0.0	-	-	-	*
		-26.96970	-22.92929	17.00000	0.0	0.0	0.0	-	-	-	*
		-25.45455	-22.92929	17.00000	0.0	0.0	0.0	-	-	-	*
		-23.93939	-22.92929	17.00000	0.0	0.0	0.0	-	-	-	*
		-22.42424	-22.92929	17.00000	0.0	0.0	0.0	-	-	-	*
		-20.90909	-22.92929	17.00000	0.0	0.0	0.0	-	-	-	*
		-19.39394	-22.92929	17.00000	0.0	0.0	0.0	-	-	-	*
		-17.87879	-22.92929	17.00000	0.0	0.0	0.0	-	-	-	*
		-16.36364	-22.92929	17.00000	0.0	0.0	0.0	-	-	-	*
		-14.84848	-22.92929	17.00000	0.0	0.0	0.0	-	-	-	*
		-13.33333	-22.92929	17.00000	0.0	0.0	0.0	-	-	-	*
		-11.81818	-22.92929	17.00000	0.0	0.0	0.0	-	-	-	*
		-10.30303	-22.92929	17.00000	0.0	0.0	0.0	-	-	-	*
		-8.78788	-22.92929	17.00000	0.0	0.0	0.0	-	-	-	*
		-7.27273	-22.92929	17.00000	0.0	0.0	0.0	-	-	-	*
		-5.75758	-22.92929	17.00000	0.0	0.0	0.0	-	-	-	*
		-4.24242	-22.92929	17.00000	0.0	0.0	0.0	-	-	-	*
		-2.72727	-22.92929	17.00000	0.0	0.0	0.0	-	-	-	*
		-1.21212	-22.92929	17.00000	0.0	0.0	0.0	-	-	-	*
		0.30303	-22.92929	17.00000	0.0	0.0	0.0	-	-	-	*
		1.81818	-22.92929	17.00000	0.0	0.0	0.0	-	-	-	*
		3.33333	-22.92929	17.00000	0.0	0.0	0.0	-	-	-	*
		4.84848	-22.92929	17.00000	0.0	0.0	0.0	-	-	-	*
		6.36364	-22.92929	17.00000	0.0	0.0	0.0	-	-	-	*
		7.87879	-22.92929	17.00000	0.0	0.0	0.0	-	-	-	*
		9.39394	-22.92929	17.00000	0.0	0.0	0.0	-	-	-	*
		10.90909	-22.92929	17.00000	0.0	0.0	0.0	-	-	-	*
		12.42424	-22.92929	17.00000	0.0	0.0	0.0	-	-	-	*
		13.93939	-22.92929	17.00000	0.0	0.0	0.0	-	-	-	*
		15.45455	-22.92929	17.00000	0.0	0.0	0.0	-	-	-	*
		16.96970	-22.92929	17.00000	0.0	0.0	0.0	-	-	-	*
		18.48485	-22.92929	17.00000	0.0	0.0	0.0	-	-	-	*
		20.00000	-22.92929	17.00000	0.0	0.0	0.0	-	-	-	*
		21.51515	-22.92929	17.00000	0.0	0.0	0.0	-	-	-	*
		23.03030	-22.92929	17.00000	0.0	0.0	0.0	-	-	-	*
		24.54545	-22.92929	17.00000	0.0	0.0	0.0	-	-	-	*
		26.06061	-22.92929	17.00000	0.0	0.0	0.0	-	-	-	*
		27.57576	-22.92929	17.00000	0.0	0.0	0.0	-	-	-	*
		29.09091	-22.92929	17.00000	0.0	0.0	0.0	-	-	-	*
		30.60606	-22.92929	17.00000	0.0	0.0	0.0	-	-	-	*
		32.12121	-22.92929	17.00000	0.0	0.0	0.0	-	-	-	*
		33.63636	-22.92929	17.00000	0.0	0.0	0.0	-	-	-	*
		35.15152	-22.92929	17.00000	0.0	0.0	0.0	-	-	-	*
		36.66667	-22.92929	17.00000	0.0	0.0	0.0	-	-	-	*
		38.18182	-22.92929	17.00000	0.0	0.0	0.0	-	-	-	*
		39.69697	-22.92929	17.00000	0.0	0.0	0.0	-	-	-	*
		41.21212	-22.92929	17.00000	0.0	0.0	0.0	-	-	-	*
		42.72727	-22.92929	17.00000	0.0	0.0	0.0	-	-	-	*
		44.24242	-22.92929	17.00000	0.0	0.0	0.0	-	-	-	*
		45.75758	-22.92929	17.00000	0.0	0.0	0.0	-	-	-	*
		47.27273	-22.92929	17.00000	0.0	0.0	0.0	-	-	-	*
		48.78788	-22.92929	17.00000	0.0	0.0	0.0	-	-	-	*
		50.30303	-22.92929	17.00000	0.0	0.0	0.0	-	-	-	*
		51.81818	-22.92929	17.00000	0.0	0.0	0.0	-	-	-	*
		53.33333	-22.92929	17.00000	0.0	0.0	0.0	-	-	-	*
		54.84848	-22.92929	17.00000	0.0	0.0	0.0	-	-	-	*
		56.36364	-22.92929	17.00000	0.0	0.0	0.0	-	-	-	*
		57.87879	-22.92929	17.00000	0.0	0.0	0.0	-	-	-	*
		59.39394	-22.92929	17.00000	0.0	0.0	0.0	-	-	-	*
		60.90909	-22.92929	17.00000	0.0	0.0	0.0	-	-	-	*
		62.42424	-22.92929	17.00000	0.0	0.0	0.0	-	-	-	*
		63.93939	-22.92929	17.00000	0.0	0.0	0.0	-	-	-	*
		65.45455	-22.92929	17.00000	0.0	0.0	0.0	-	-	-	*
		66.96970	-22.92929	17.00000	0.0	0.0	0.0	-	-	-	*
		68.48485	-22.92929	17.00000	0.0	0.0	0.0	-	-	-	*

Type/No. Name	Dist.	Coordinates x	y	z	Displacements x	y	z	Horizontal displacement	Horizontal displacement	Angle of Line to x Axis	
		70.00000	-22.92929	17.00000	0.0	0.0	0.0	-	-	-	*
		71.51515	-22.92929	17.00000	0.0	0.0	0.0	-	-	-	*
		73.03030	-22.92929	17.00000	0.0	0.0	0.0	-	-	-	*
		74.54545	-22.92929	17.00000	0.0	0.0	0.0	-	-	-	*
		76.06061	-22.92929	17.00000	0.0	0.0	0.0	-	-	-	*
		77.57576	-22.92929	17.00000	0.0	0.0	0.0	-	-	-	*
		79.09091	-22.92929	17.00000	0.0	0.0	0.0	-	-	-	*
		80.60606	-22.92929	17.00000	0.0	0.0	0.0	-	-	-	*
		82.12121	-22.92929	17.00000	0.0	0.0	0.0	-	-	-	*
		83.63636	-22.92929	17.00000	0.0	0.0	0.0	-	-	-	*
		85.15152	-22.92929	17.00000	0.0	0.0	0.0	-	-	-	*
		86.66667	-22.92929	17.00000	0.0	0.0	0.0	-	-	-	*
		88.18182	-22.92929	17.00000	0.0	0.0	0.0	-	-	-	*
		89.69697	-22.92929	17.00000	0.0	0.0	0.0	-	-	-	*
		91.21212	-22.92929	17.00000	0.0	0.0	0.0	-	-	-	*
		92.72727	-22.92929	17.00000	0.0	0.0	0.0	-	-	-	*
		94.24242	-22.92929	17.00000	0.0	0.0	0.0	-	-	-	*
		95.75758	-22.92929	17.00000	0.0	0.0	0.0	-	-	-	*
		97.27273	-22.92929	17.00000	0.0	0.0	0.0	-	-	-	*
		98.78788	-22.92929	17.00000	0.0	0.0	0.0	-	-	-	*
		100.30303	-22.92929	17.00000	0.0	0.0	0.0	-	-	-	*
		101.81818	-22.92929	17.00000	0.0	0.0	0.0	-	-	-	*
		103.33333	-22.92929	17.00000	0.0	0.0	0.0	-	-	-	*
		104.84848	-22.92929	17.00000	0.0	0.0	0.0	-	-	-	*
		106.36364	-22.92929	17.00000	0.0	0.0	0.0	-	-	-	*
		107.87879	-22.92929	17.00000	0.0	0.0	0.0	-	-	-	*
		109.39394	-22.92929	17.00000	0.0	0.0	0.0	-	-	-	*
		110.90909	-22.92929	17.00000	0.0	0.0	0.0	-	-	-	*
		112.42424	-22.92929	17.00000	0.0	0.0	0.0	-	-	-	*
		113.93939	-22.92929	17.00000	0.0	0.0	0.0	-	-	-	*
		115.45455	-22.92929	17.00000	0.0	0.0	0.0	-	-	-	*
		116.96970	-22.92929	17.00000	0.0	0.0	0.0	-	-	-	*
		118.48485	-22.92929	17.00000	0.0	0.0	0.0	-	-	-	*
		120.00000	-22.92929	17.00000	0.0	0.0	0.0	-	-	-	*
		-30.00000	-21.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		-28.48485	-21.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		-26.96970	-21.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		-25.45455	-21.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		-23.93939	-21.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		-22.42424	-21.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		-20.90909	-21.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		-19.39394	-21.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		-17.87879	-21.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		-16.36364	-21.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		-14.84848	-21.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		-13.33333	-21.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		-11.81818	-21.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		-10.30303	-21.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		-8.78788	-21.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		-7.27273	-21.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		-5.75758	-21.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		-4.24242	-21.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		-2.72727	-21.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		-1.21212	-21.91919	17.00000	0.0	0.0	0.0094638	-	-	-	*
		0.30303	-21.91919	17.00000	0.0	0.0	0.016162	-	-	-	*
		1.81818	-21.91919	17.00000	0.0	0.0	0.016162	-	-	-	*
		3.33333	-21.91919	17.00000	0.0	0.0	0.016162	-	-	-	*
		4.84848	-21.91919	17.00000	0.0	0.0	0.016162	-	-	-	*
		6.36364	-21.91919	17.00000	0.0	0.0	0.016162	-	-	-	*
		7.87879	-21.91919	17.00000	0.0	0.0	0.016162	-	-	-	*
		9.39394	-21.91919	17.00000	0.0	0.0	0.016162	-	-	-	*
		10.90909	-21.91919	17.00000	0.0	0.0	0.016162	-	-	-	*
		12.42424	-21.91919	17.00000	0.0	0.0	0.016162	-	-	-	*
		13.93939	-21.91919	17.00000	0.0	0.0	0.016162	-	-	-	*
		15.45455	-21.91919	17.00000	0.0	0.0	0.016162	-	-	-	*
		16.96970	-21.91919	17.00000	0.0	0.0	0.016162	-	-	-	*
		18.48485	-21.91919	17.00000	0.0	0.0	0.016162	-	-	-	*
		20.00000	-21.91919	17.00000	0.0	0.0	0.016162	-	-	-	*
		21.51515	-21.91919	17.00000	0.0	0.0	0.016162	-	-	-	*
		23.03030	-21.91919	17.00000	0.0	0.0	0.016162	-	-	-	*
		24.54545	-21.91919	17.00000	0.0	0.0	0.016162	-	-	-	*
		26.06061	-21.91919	17.00000	0.0	0.0	0.016162	-	-	-	*
		27.57576	-21.91919	17.00000	0.0	0.0	0.016162	-	-	-	*
		29.09091	-21.91919	17.00000	0.0	0.0	0.016162	-	-	-	*
		30.60606	-21.91919	17.00000	0.0	0.0	0.016162	-	-	-	*
		32.12121	-21.91919	17.00000	0.0	0.0	0.016162	-	-	-	*
		33.63636	-21.91919	17.00000	0.0	0.0	0.016162	-	-	-	*
		35.15152	-21.91919	17.00000	0.0	0.0	0.016162	-	-	-	*
		36.66667	-21.91919	17.00000	0.0	0.0	0.016162	-	-	-	*
		38.18182	-21.91919	17.00000	0.0	0.0	0.016162	-	-	-	*
		39.69697	-21.91919	17.00000	0.0	0.0	0.016162	-	-	-	*
		41.21212	-21.91919	17.00000	0.0	0.0	0.016162	-	-	-	*
		42.72727	-21.91919	17.00000	0.0	0.0	0.016162	-	-	-	*
		44.24242	-21.91919	17.00000	0.0	0.0	0.016162	-	-	-	*
		45.75758	-21.91919	17.00000	0.0	0.0	0.016162	-	-	-	*
		47.27273	-21.91919	17.00000	0.0	0.0	0.016162	-	-	-	*
		48.78788	-21.91919	17.00000	0.0	0.0	0.013331	-	-	-	*
		50.30303	-21.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		51.81818	-21.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		53.33333	-21.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		54.84848	-21.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		56.36364	-21.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		57.87879	-21.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		59.39394	-21.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		60.90909	-21.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		62.42424	-21.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		63.93939	-21.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		65.45455	-21.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		66.96970	-21.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		68.48485	-21.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		70.00000	-21.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		71.51515	-21.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		73.03030	-21.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		74.54545	-21.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		76.06061	-21.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		77.57576	-21.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		79.09091	-21.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		80.60606	-21.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		82.12121	-21.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		83.63636	-21.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		85.15152	-21.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		86.66667	-21.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		88.18182	-21.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		89.69697	-21.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		91.21212	-21.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		92.72727	-21.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		94.24242	-21.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		95.75758	-21.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		97.27273	-21.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		98.78788	-21.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		100.30303	-21.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		101.81818	-21.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		103.33333	-21.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		104.84848	-21.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		106.36364	-21.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		107.87879	-21.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		109.39394	-21.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		110.90909	-21.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		112.42424	-21.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		113.93939	-21.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		115.45455	-21.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		116.96970	-21.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		118.48485	-21.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		120.00000	-21.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		-30.00000	-20.90909	17.00000	0.0	0.0	0.0	-	-	-	*
		-28.48485	-20.90909	17.00000	0.0	0.0	0.0	-	-	-	*
		-26.96970	-20.90909	17.00000	0.0	0.0	0.0	-	-	-	*
		-25.45455	-20.90909	17.00000	0.0	0.0	0.0	-	-	-	*
		-23.93939	-20.90909	17.00000	0.0	0.0	0.0	-	-	-	*
		-22.42424	-20.90909	17.00000	0.0	0.0	0.0	-	-	-	*
		-20.90909	-20.90909	17.00000	0.0	0.0	0.0	-	-	-	*

Oasys
GEA LIMITED
(GEOTECHNICAL &ENV ASSOC)
The Great Hall, Lincoln's Inn, Newman's Row, London, WC2A 3TL
Wall Movements Rev 3 Piling and Excavation
Damage Assessment

Job No.	Sheet No.	Rev.
J15050A		
Drg. Ref.		
Made by MP	Date 08-Feb-2016	Checked

Type/No. Name	Dist.	Coordinates x	y	z	Displacements x	y	z	Horizontal displacement	Horizontal displacement	Angle of Line to x Axis	
		-19.39394	-20.90909	17.00000	0.0	0.0	0.0	-	-	-	*
		-17.87879	-20.90909	17.00000	0.0	0.0	0.0	-	-	-	*
		-16.36364	-20.90909	17.00000	0.0	0.0	0.0	-	-	-	*
		-14.84848	-20.90909	17.00000	0.0	0.0	0.0	-	-	-	*
		-13.33333	-20.90909	17.00000	0.0	0.0	0.0	-	-	-	*
		-11.81818	-20.90909	17.00000	0.0	0.0	0.0	-	-	-	*
		-10.30303	-20.90909	17.00000	0.0	0.0	0.0	-	-	-	*
		-8.78788	-20.90909	17.00000	0.0	0.0	0.0	-	-	-	*
		-7.27273	-20.90909	17.00000	0.0	0.0	0.0	-	-	-	*
		-5.75758	-20.90909	17.00000	0.0	0.0	0.062536	-	-	-	*
		-4.24242	-20.90909	17.00000	0.0	0.0	0.13297	-	-	-	*
		-2.72727	-20.90909	17.00000	0.0	0.0	0.18276	-	-	-	*
		-1.21212	-20.90909	17.00000	0.0	0.0	0.21116	-	-	-	*
		0.30303	-20.90909	17.00000	0.0	0.0	0.21818	-	-	-	*
		1.81818	-20.90909	17.00000	0.0	0.0	0.21818	-	-	-	*
		3.33333	-20.90909	17.00000	0.0	0.0	0.21818	-	-	-	*
		4.84848	-20.90909	17.00000	0.0	0.0	0.21818	-	-	-	*
		6.36364	-20.90909	17.00000	0.0	0.0	0.21818	-	-	-	*
		7.87879	-20.90909	17.00000	0.0	0.0	0.21818	-	-	-	*
		9.39394	-20.90909	17.00000	0.0	0.0	0.21818	-	-	-	*
		10.90909	-20.90909	17.00000	0.0	0.0	0.21818	-	-	-	*
		12.42424	-20.90909	17.00000	0.0	0.0	0.21818	-	-	-	*
		13.93939	-20.90909	17.00000	0.0	0.0	0.21818	-	-	-	*
		15.45455	-20.90909	17.00000	0.0	0.0	0.21818	-	-	-	*
		16.96970	-20.90909	17.00000	0.0	0.0	0.21818	-	-	-	*
		18.48485	-20.90909	17.00000	0.0	0.0	0.21818	-	-	-	*
		20.00000	-20.90909	17.00000	0.0	0.0	0.21818	-	-	-	*
		21.51515	-20.90909	17.00000	0.0	0.0	0.21818	-	-	-	*
		23.03030	-20.90909	17.00000	0.0	0.0	0.21818	-	-	-	*
		24.54545	-20.90909	17.00000	0.0	0.0	0.21818	-	-	-	*
		26.06061	-20.90909	17.00000	0.0	0.0	0.21818	-	-	-	*
		27.57576	-20.90909	17.00000	0.0	0.0	0.21818	-	-	-	*
		29.09091	-20.90909	17.00000	0.0	0.0	0.21818	-	-	-	*
		30.60606	-20.90909	17.00000	0.0	0.0	0.21818	-	-	-	*
		32.12121	-20.90909	17.00000	0.0	0.0	0.21818	-	-	-	*
		33.63636	-20.90909	17.00000	0.0	0.0	0.21818	-	-	-	*
		35.15152	-20.90909	17.00000	0.0	0.0	0.21818	-	-	-	*
		36.66667	-20.90909	17.00000	0.0	0.0	0.21818	-	-	-	*
		38.18182	-20.90909	17.00000	0.0	0.0	0.21818	-	-	-	*
		39.69697	-20.90909	17.00000	0.0	0.0	0.21818	-	-	-	*
		41.21212	-20.90909	17.00000	0.0	0.0	0.21818	-	-	-	*
		42.72727	-20.90909	17.00000	0.0	0.0	0.21818	-	-	-	*
		44.24242	-20.90909	17.00000	0.0	0.0	0.21818	-	-	-	*
		45.75758	-20.90909	17.00000	0.0	0.0	0.21818	-	-	-	*
		47.27273	-20.90909	17.00000	0.0	0.0	0.21818	-	-	-	*
		48.78788	-20.90909	17.00000	0.0	0.0	0.21521	-	-	-	*
		50.30303	-20.90909	17.00000	0.0	0.0	0.19289	-	-	-	*
		51.81818	-20.90909	17.00000	0.0	0.0	0.14903	-	-	-	*
		53.33333	-20.90909	17.00000	0.0	0.0	0.084287	-	-	-	*
		54.84848	-20.90909	17.00000	0.0	0.0	0.0	-	-	-	*
		56.36364	-20.90909	17.00000	0.0	0.0	0.0	-	-	-	*
		57.87879	-20.90909	17.00000	0.0	0.0	0.0	-	-	-	*
		59.39394	-20.90909	17.00000	0.0	0.0	0.0	-	-	-	*
		60.90909	-20.90909	17.00000	0.0	0.0	0.0	-	-	-	*
		62.42424	-20.90909	17.00000	0.0	0.0	0.0	-	-	-	*
		63.93939	-20.90909	17.00000	0.0	0.0	0.0	-	-	-	*
		65.45455	-20.90909	17.00000	0.0	0.0	0.0	-	-	-	*
		66.96970	-20.90909	17.00000	0.0	0.0	0.0	-	-	-	*
		68.48485	-20.90909	17.00000	0.0	0.0	0.0	-	-	-	*
		70.00000	-20.90909	17.00000	0.0	0.0	0.0	-	-	-	*
		71.51515	-20.90909	17.00000	0.0	0.0	0.0	-	-	-	*
		73.03030	-20.90909	17.00000	0.0	0.0	0.0	-	-	-	*
		74.54545	-20.90909	17.00000	0.0	0.0	0.0	-	-	-	*
		76.06061	-20.90909	17.00000	0.0	0.0	0.0	-	-	-	*
		77.57576	-20.90909	17.00000	0.0	0.0	0.0	-	-	-	*
		79.09091	-20.90909	17.00000	0.0	0.0	0.0	-	-	-	*
		80.60606	-20.90909	17.00000	0.0	0.0	0.0	-	-	-	*
		82.12121	-20.90909	17.00000	0.0	0.0	0.0	-	-	-	*
		83.63636	-20.90909	17.00000	0.0	0.0	0.0	-	-	-	*
		85.15152	-20.90909	17.00000	0.0	0.0	0.0	-	-	-	*
		86.66667	-20.90909	17.00000	0.0	0.0	0.0	-	-	-	*
		88.18182	-20.90909	17.00000	0.0	0.0	0.0	-	-	-	*
		89.69697	-20.90909	17.00000	0.0	0.0	0.0	-	-	-	*
		91.21212	-20.90909	17.00000	0.0	0.0	0.0	-	-	-	*
		92.72727	-20.90909	17.00000	0.0	0.0	0.0	-	-	-	*
		94.24242	-20.90909	17.00000	0.0	0.0	0.0	-	-	-	*
		95.75758	-20.90909	17.00000	0.0	0.0	0.0	-	-	-	*
		97.27273	-20.90909	17.00000	0.0	0.0	0.0	-	-	-	*
		98.78788	-20.90909	17.00000	0.0	0.0	0.0	-	-	-	*
		100.30303	-20.90909	17.00000	0.0	0.0	0.0	-	-	-	*
		101.81818	-20.90909	17.00000	0.0	0.0	0.0	-	-	-	*
		103.33333	-20.90909	17.00000	0.0	0.0	0.0	-	-	-	*
		104.84848	-20.90909	17.00000	0.0	0.0	0.0	-	-	-	*
		106.36364	-20.90909	17.00000	0.0	0.0	0.0	-	-	-	*
		107.87879	-20.90909	17.00000	0.0	0.0	0.0	-	-	-	*
		109.39394	-20.90909	17.00000	0.0	0.0	0.0	-	-	-	*
		110.90909	-20.90909	17.00000	0.0	0.0	0.0	-	-	-	*
		112.42424	-20.90909	17.00000	0.0	0.0	0.0	-	-	-	*
		113.93939	-20.90909	17.00000	0.0	0.0	0.0	-	-	-	*
		115.45455	-20.90909	17.00000	0.0	0.0	0.0	-	-	-	*
		116.96970	-20.90909	17.00000	0.0	0.0	0.0	-	-	-	*
		118.48485	-20.90909	17.00000	0.0	0.0	0.0	-	-	-	*
		120.00000	-20.90909	17.00000	0.0	0.0	0.0	-	-	-	*
		-30.00000	-19.89899	17.00000	0.0	0.0	0.0	-	-	-	*
		-28.48485	-19.89899	17.00000	0.0	0.0	0.0	-	-	-	*
		-26.96970	-19.89899	17.00000	0.0	0.0	0.0	-	-	-	*
		-25.45455	-19.89899	17.00000	0.0	0.0	0.0	-	-	-	*
		-23.93939	-19.89899	17.00000	0.0	0.0	0.0	-	-	-	*
		-22.42424	-19.89899	17.00000	0.0	0.0	0.0	-	-	-	*
		-20.90909	-19.89899	17.00000	0.0	0.0	0.0	-	-	-	*
		-19.39394	-19.89899	17.00000	0.0	0.0	0.0	-	-	-	*
		-17.87879	-19.89899	17.00000	0.0	0.0	0.0	-	-	-	*
		-16.36364	-19.89899	17.00000	0.0	0.0	0.0	-	-	-	*
		-14.84848	-19.89899	17.00000	0.0	0.0	0.0	-	-	-	*
		-13.33333	-19.89899	17.00000	0.0	0.0	0.0	-	-	-	*
		-11.81818	-19.89899	17.00000	0.0	0.0	0.0	-	-	-	*
		-10.30303	-19.89899	17.00000	0.0	0.0	0.0	-	-	-	*
		-8.78788	-19.89899	17.00000	0.0	0.0	0.049383	-	-	-	*
		-7.27273	-19.89899	17.00000	0.0	0.0	0.16273	-	-	-	*
		-5.75758	-19.89899	17.00000	0.0	0.0	0.25696	-	-	-	*
		-4.24242	-19.89899	17.00000	0.0	0.0	0.33076	-	-	-	*
		-2.72727	-19.89899	17.00000	0.0	0.0	0.38300	-	-	-	*
		-1.21212	-19.89899	17.00000	0.0	0.0	0.41283	-	-	-	*
		0.30303	-19.89899	17.00000	0.0	0.0	0.42020	-	-	-	*
		1.81818	-19.89899	17.00000	0.0	0.0	0.42020	-	-	-	*
		3.33333	-19.89899	17.00000	0.0	0.0	0.42020	-	-	-	*
		4.84848	-19.89899	17.00000	0.0	0.0	0.42020	-	-	-	*
		6.36364	-19.89899	17.00000	0.0	0.0	0.42020	-	-	-	*
		7.87879	-19.89899	17.00000	0.0	0.0	0.42020	-	-	-	*
		9.39394	-19.89899	17.00000	0.0	0.0	0.42020	-	-	-	*
		10.90909	-19.89899	17.00000	0.0	0.0	0.42020	-	-	-	*
		12.42424	-19.89899	17.00000	0.0	0.0	0.42020	-	-	-	*
		13.93939	-19.89899	17.00000	0.0	0.0	0.42020	-	-	-	*
		15.45455	-19.89899	17.00000	0.0	0.0	0.42020	-	-	-	*
		16.96970	-19.89899	17.00000	0.0	0.0	0.42020	-	-	-	*
		18.48485	-19.89899	17.00000	0.0	0.0	0.42020	-	-	-	*
		20.00000	-19.89899	17.00000	0.0	0.0	0.42020	-	-	-	*
		21.51515	-19.89899	17.00000	0.0	0.0	0.42020	-	-	-	*
		23.03030	-19.89899	17.00000	0.0	0.0	0.42020	-	-	-	*
		24.54545	-19.89899	17.00000	0.0	0.0	0.42020	-	-	-	*
		26.06061	-19.89899	17.00000	0.0	0.0	0.42020	-	-	-	*
		27.57576	-19.89899	17.00000	0.0	0.0	0.42020	-	-	-	*
		29.09091	-19.89899	17.00000	0.0	0.0	0.42020	-	-	-	*
		30.60606	-19.89899	17.00000	0.0	0.0	0.42020	-	-	-	*
		32.12121	-19.89899	17.00000	0.0	0.0	0.42020	-	-	-	*
		33.63636	-19.89899	17.00000	0.0	0.0	0.42020	-	-	-	*
		35.15152	-19.89899	17.00000	0.0	0.0	0.42020	-	-	-	*
		36.66667	-19.89899	17.00000	0.0	0.0	0.42020	-	-	-	*
		38.18182	-19.89899	17.00000	0.0	0.0	0.42020	-	-	-	*
		39.69697	-19.89899	17.00000	0.0	0.0	0.42020	-	-	-	*
		41.21212	-19.89899	17.00000	0.0	0.0	0.42020	-	-	-	*

Type/No. Name	Dist.	Coordinates x	y	z	Displacements x	y	z	Horizontal displacement	Horizontal displacement	Angle of Line to x Axis	
		42.72727	-19.89899	17.00000	0.0	0.0	0.42020	-	-	-	*
		44.24242	-19.89899	17.00000	0.0	0.0	0.42020	-	-	-	*
		45.75758	-19.89899	17.00000	0.0	0.0	0.42020	-	-	-	*
		47.27273	-19.89899	17.00000	0.0	0.0	0.42020	-	-	-	*
		48.78788	-19.89899	17.00000	0.0	0.0	0.41708	-	-	-	*
		50.30303	-19.89899	17.00000	0.0	0.0	0.39364	-	-	-	*
		51.81818	-19.89899	17.00000	0.0	0.0	0.34760	-	-	-	*
		53.33333	-19.89899	17.00000	0.0	0.0	0.27974	-	-	-	*
		54.84848	-19.89899	17.00000	0.0	0.0	0.19110	-	-	-	*
		56.36364	-19.89899	17.00000	0.0	0.0	0.082963	-	-	-	*
		57.87879	-19.89899	17.00000	0.0	0.0	0.0	-	-	-	*
		59.39394	-19.89899	17.00000	0.0	0.0	0.0	-	-	-	*
		60.90909	-19.89899	17.00000	0.0	0.0	0.0	-	-	-	*
		62.42424	-19.89899	17.00000	0.0	0.0	0.0	-	-	-	*
		63.93939	-19.89899	17.00000	0.0	0.0	0.0	-	-	-	*
		65.45455	-19.89899	17.00000	0.0	0.0	0.0	-	-	-	*
		66.96970	-19.89899	17.00000	0.0	0.0	0.0	-	-	-	*
		68.48485	-19.89899	17.00000	0.0	0.0	0.0	-	-	-	*
		70.00000	-19.89899	17.00000	0.0	0.0	0.0	-	-	-	*
		71.51515	-19.89899	17.00000	0.0	0.0	0.0	-	-	-	*
		73.03030	-19.89899	17.00000	0.0	0.0	0.0	-	-	-	*
		74.54545	-19.89899	17.00000	0.0	0.0	0.0	-	-	-	*
		76.06061	-19.89899	17.00000	0.0	0.0	0.0	-	-	-	*
		77.57576	-19.89899	17.00000	0.0	0.0	0.0	-	-	-	*
		79.09091	-19.89899	17.00000	0.0	0.0	0.0	-	-	-	*
		80.60606	-19.89899	17.00000	0.0	0.0	0.0	-	-	-	*
		82.12121	-19.89899	17.00000	0.0	0.0	0.0	-	-	-	*
		83.63636	-19.89899	17.00000	0.0	0.0	0.0	-	-	-	*
		85.15152	-19.89899	17.00000	0.0	0.0	0.0	-	-	-	*
		86.66667	-19.89899	17.00000	0.0	0.0	0.0	-	-	-	*
		88.18182	-19.89899	17.00000	0.0	0.0	0.0	-	-	-	*
		89.69697	-19.89899	17.00000	0.0	0.0	0.0	-	-	-	*
		91.21212	-19.89899	17.00000	0.0	0.0	0.0	-	-	-	*
		92.72727	-19.89899	17.00000	0.0	0.0	0.0	-	-	-	*
		94.24242	-19.89899	17.00000	0.0	0.0	0.0	-	-	-	*
		95.75758	-19.89899	17.00000	0.0	0.0	0.0	-	-	-	*
		97.27273	-19.89899	17.00000	0.0	0.0	0.0	-	-	-	*
		98.78788	-19.89899	17.00000	0.0	0.0	0.0	-	-	-	*
		100.30303	-19.89899	17.00000	0.0	0.0	0.0	-	-	-	*
		101.81818	-19.89899	17.00000	0.0	0.0	0.0	-	-	-	*
		103.33333	-19.89899	17.00000	0.0	0.0	0.0	-	-	-	*
		104.84848	-19.89899	17.00000	0.0	0.0	0.0	-	-	-	*
		106.36364	-19.89899	17.00000	0.0	0.0	0.0	-	-	-	*
		107.87879	-19.89899	17.00000	0.0	0.0	0.0	-	-	-	*
		109.39394	-19.89899	17.00000	0.0	0.0	0.0	-	-	-	*
		110.90909	-19.89899	17.00000	0.0	0.0	0.0	-	-	-	*
		112.42424	-19.89899	17.00000	0.0	0.0	0.0	-	-	-	*
		113.93939	-19.89899	17.00000	0.0	0.0	0.0	-	-	-	*
		115.45455	-19.89899	17.00000	0.0	0.0	0.0	-	-	-	*
		116.96970	-19.89899	17.00000	0.0	0.0	0.0	-	-	-	*
		118.48485	-19.89899	17.00000	0.0	0.0	0.0	-	-	-	*
		120.00000	-19.89899	17.00000	0.0	0.0	0.0	-	-	-	*
		-30.00000	-18.88889	17.00000	0.0	0.0	0.0	-	-	-	*
		-28.48485	-18.88889	17.00000	0.0	0.0	0.0	-	-	-	*
		-26.96970	-18.88889	17.00000	0.0	0.0	0.0	-	-	-	*
		-25.45455	-18.88889	17.00000	0.0	0.0	0.0	-	-	-	*
		-23.93939	-18.88889	17.00000	0.0	0.0	0.0	-	-	-	*
		-22.42424	-18.88889	17.00000	0.0	0.0	0.0	-	-	-	*
		-20.90909	-18.88889	17.00000	0.0	0.0	0.0	-	-	-	*
		-19.39394	-18.88889	17.00000	0.0	0.0	0.0	-	-	-	*
		-17.87879	-18.88889	17.00000	0.0	0.0	0.0	-	-	-	*
		-16.36364	-18.88889	17.00000	0.0	0.0	0.0	-	-	-	*
		-14.84848	-18.88889	17.00000	0.0	0.0	0.0	-	-	-	*
		-13.33333	-18.88889	17.00000	0.0	0.0	0.0	-	-	-	*
		-11.81818	-18.88889	17.00000	0.0	0.0	0.096780	-	-	-	*
		-10.30303	-18.88889	17.00000	0.0	0.0	0.096780	-	-	-	*
		-8.78788	-18.88889	17.00000	0.0	0.0	0.23339	-	-	-	*
		-7.27273	-18.88889	17.00000	0.0	0.0	0.35188	-	-	-	*
		-5.75758	-18.88889	17.00000	0.0	0.0	0.45062	-	-	-	*
		-4.24242	-18.88889	17.00000	0.0	0.0	0.52811	-	-	-	*
		-2.72727	-18.88889	17.00000	0.0	0.0	0.58305	-	-	-	*
		-1.21212	-18.88889	17.00000	0.0	0.0	0.61445	-	-	-	*
		0.30303	-18.88889	17.00000	0.0	0.0	0.62222	-	-	-	*
		1.81818	-18.88889	17.00000	0.0	0.0	0.62222	-	-	-	*
		3.33333	-18.88889	17.00000	0.0	0.0	0.62222	-	-	-	*
		4.84848	-18.88889	17.00000	0.0	0.0	0.62222	-	-	-	*
		6.36364	-18.88889	17.00000	0.0	0.0	0.62222	-	-	-	*
		7.87879	-18.88889	17.00000	0.0	0.0	0.62222	-	-	-	*
		9.39394	-18.88889	17.00000	0.0	0.0	0.62222	-	-	-	*
		10.90909	-18.88889	17.00000	0.0	0.0	0.62222	-	-	-	*
		12.42424	-18.88889	17.00000	0.0	0.0	0.62222	-	-	-	*
		13.93939	-18.88889	17.00000	0.0	0.0	0.62222	-	-	-	*
		15.45455	-18.88889	17.00000	0.0	0.0	0.62222	-	-	-	*
		16.96970	-18.88889	17.00000	0.0	0.0	0.62222	-	-	-	*
		18.48485	-18.88889	17.00000	0.0	0.0	0.62222	-	-	-	*
		20.00000	-18.88889	17.00000	0.0	0.0	0.62222	-	-	-	*
		21.51515	-18.88889	17.00000	0.0	0.0	0.62222	-	-	-	*
		23.03030	-18.88889	17.00000	0.0	0.0	0.62222	-	-	-	*
		24.54545	-18.88889	17.00000	0.0	0.0	0.62222	-	-	-	*
		26.06061	-18.88889	17.00000	0.0	0.0	0.62222	-	-	-	*
		27.57576	-18.88889	17.00000	0.0	0.0	0.62222	-	-	-	*
		29.09091	-18.88889	17.00000	0.0	0.0	0.62222	-	-	-	*
		30.60606	-18.88889	17.00000	0.0	0.0	0.62222	-	-	-	*
		32.12121	-18.88889	17.00000	0.0	0.0	0.62222	-	-	-	*
		33.63636	-18.88889	17.00000	0.0	0.0	0.62222	-	-	-	*
		35.15152	-18.88889	17.00000	0.0	0.0	0.62222	-	-	-	*
		36.66667	-18.88889	17.00000	0.0	0.0	0.62222	-	-	-	*
		38.18182	-18.88889	17.00000	0.0	0.0	0.62222	-	-	-	*
		39.69697	-18.88889	17.00000	0.0	0.0	0.62222	-	-	-	*
		41.21212	-18.88889	17.00000	0.0	0.0	0.62222	-	-	-	*
		42.72727	-18.88889	17.00000	0.0	0.0	0.62222	-	-	-	*
		44.24242	-18.88889	17.00000	0.0	0.0	0.62222	-	-	-	*
		45.75758	-18.88889	17.00000	0.0	0.0	0.62222	-	-	-	*
		47.27273	-18.88889	17.00000	0.0	0.0	0.62222	-	-	-	*
		48.78788	-18.88889	17.00000	0.0	0.0	0.61894	-	-	-	*
		50.30303	-18.88889	17.00000	0.0	0.0	0.59425	-	-	-	*
		51.81818	-18.88889	17.00000	0.0	0.0	0.54581	-	-	-	*
		53.33333	-18.88889	17.00000	0.0	0.0	0.47452	-	-	-	*
		54.84848	-18.88889	17.00000	0.0	0.0	0.38158	-	-	-	*
		56.36364	-18.88889	17.00000	0.0	0.0	0.26846	-	-	-	*
		57.87879	-18.88889	17.00000	0.0	0.0	0.13676	-	-	-	*
		59.39394	-18.88889	17.00000	0.0	0.0	0.0	-	-	-	*
		60.90909	-18.88889	17.00000	0.0	0.0	0.0	-	-	-	*
		62.42424	-18.88889	17.00000	0.0	0.0	0.0	-	-	-	*
		63.93939	-18.88889	17.00000	0.0	0.0	0.0	-	-	-	*
		65.45455	-18.88889	17.00000	0.0	0.0	0.0	-	-	-	*
		66.96970	-18.88889	17.00000	0.0	0.0	0.0	-	-	-	*
		68.48485	-18.88889	17.00000	0.0	0.0	0.0	-	-	-	*
		70.00000	-18.88889	17.00000	0.0	0.0	0.0	-	-	-	*
		71.51515	-18.88889	17.00000	0.0	0.0	0.0	-	-	-	*
		73.03030	-18.88889	17.00000	0.0	0.0	0.0	-	-	-	*
		74.54545	-18.88889	17.00000	0.0	0.0	0.0	-	-	-	*
		76.06061	-18.88889	17.00000	0.0	0.0	0.0	-	-	-	*
		77.57576	-18.88889	17.00000	0.0	0.0	0.0	-	-	-	*
		79.09091	-18.88889	17.00000	0.0	0.0	0.0	-	-	-	*
		80.60606	-18.88889	17.00000	0.0	0.0	0.0	-	-	-	*
		82.12121	-18.88889	17.00000	0.0	0.0	0.0	-	-	-	*
		83.63636	-18.88889	17.00000	0.0	0.0	0.0	-	-	-	*
		85.15152	-18.88889	17.00000	0.0	0.0	0.0	-	-	-	*
		86.66667	-18.88889	17.00000	0.0	0.0	0.0	-	-	-	*
		88.18182	-18.88889	17.00000	0.0	0.0	0.0	-	-	-	*
		89.69697	-18.88889	17.00000	0.0	0.0	0.0	-	-	-	*
		91.21212	-18.88889	17.00000	0.0	0.0	0.0	-	-	-	*
		92.72727	-18.88889	17.00000	0.0	0.0	0.0	-	-	-	*
		94.24242	-18.88889	17.00000	0.0	0.0	0.0	-	-	-	*
		95.75758	-18.88889	17.00000	0.0	0.0	0.0	-	-	-	*
		97.27273	-18.88889	17.00000	0.0	0.0	0.0	-	-	-	*
		98.78788	-18.88889	17.00000	0.0	0.0	0.0	-	-	-	*
		100.30303	-18.88889	17.00000	0.0	0.0	0.0	-	-	-	*
		101.81818	-18.88889	17.00000	0.0	0.0	0.0	-	-	-	*
		103.33333	-18.88889	17.00000	0.0	0.0	0.0	-	-	-	*

Oasys
GEA LIMITED
(GEOTECHNICAL &ENV ASSOC)
The Great Hall, Lincoln's Inn, Newman's Row, London, WC2A 3TL
Wall Movements Rev 3 Piling and Excavation
Damage Assessment

Job No. J15050A | Sheet No. | Rev.
Drg. Ref.
Made by MP | Date 08-Feb-2016 | Checked

Type/No. Name	Dist.	Coordinates x	y	z	Displacements x	y	z	Horizontal displacement	Horizontal displacement	Angle of Line to x Axis	
		104.84848	-18.88889	17.00000	0.0	0.0	0.0	-	-	-	*
		106.36364	-18.88889	17.00000	0.0	0.0	0.0	-	-	-	*
		107.87879	-18.88889	17.00000	0.0	0.0	0.0	-	-	-	*
		109.39394	-18.88889	17.00000	0.0	0.0	0.0	-	-	-	*
		110.90909	-18.88889	17.00000	0.0	0.0	0.0	-	-	-	*
		112.42424	-18.88889	17.00000	0.0	0.0	0.0	-	-	-	*
		113.93939	-18.88889	17.00000	0.0	0.0	0.0	-	-	-	*
		115.45455	-18.88889	17.00000	0.0	0.0	0.0	-	-	-	*
		116.96970	-18.88889	17.00000	0.0	0.0	0.0	-	-	-	*
		118.48485	-18.88889	17.00000	0.0	0.0	0.0	-	-	-	*
		120.00000	-18.88889	17.00000	0.0	0.0	0.0	-	-	-	*
		-30.00000	-17.87879	17.00000	0.0	0.0	0.0	-	-	-	*
		-28.48485	-17.87879	17.00000	0.0	0.0	0.0	-	-	-	*
		-26.96970	-17.87879	17.00000	0.0	0.0	0.0	-	-	-	*
		-25.45455	-17.87879	17.00000	0.0	0.0	0.0	-	-	-	*
		-23.93939	-17.87879	17.00000	0.0	0.0	0.0	-	-	-	*
		-22.42424	-17.87879	17.00000	0.0	0.0	0.0	-	-	-	*
		-20.90909	-17.87879	17.00000	0.0	0.0	0.0	-	-	-	*
		-19.39394	-17.87879	17.00000	0.0	0.0	0.0	-	-	-	*
		-17.87879	-17.87879	17.00000	0.0	0.0	0.0	-	-	-	*
		-16.36364	-17.87879	17.00000	0.0	0.0	0.0	-	-	-	*
		-14.84848	-17.87879	17.00000	0.0	0.0	0.0	-	-	-	*
		-13.33333	-17.87879	17.00000	0.0	0.0	0.0	-	-	-	*
		-11.81818	-17.87879	17.00000	0.0	0.0	0.11365	-	-	-	*
		-10.30303	-17.87879	17.00000	0.0	0.0	0.27300	-	-	-	*
		-8.78788	-17.87879	17.00000	0.0	0.0	0.41564	-	-	-	*
		-7.27273	-17.87879	17.00000	0.0	0.0	0.53972	-	-	-	*
		-5.75758	-17.87879	17.00000	0.0	0.0	0.64340	-	-	-	*
		-4.24242	-17.87879	17.00000	0.0	0.0	0.72495	-	-	-	*
		-2.72727	-17.87879	17.00000	0.0033978	0.021619	0.79087	-	-	-	*
		-1.21212	-17.87879	17.00000	0.0037259	0.054957	0.83168	-	-	-	*
		0.30303	-17.87879	17.00000	0.0	0.096364	0.85074	-	-	-	*
		1.81818	-17.87879	17.00000	0.0	0.096364	0.85074	-	-	-	*
		3.33333	-17.87879	17.00000	0.0	0.096364	0.85074	-	-	-	*
		4.84848	-17.87879	17.00000	0.0	0.096364	0.85074	-	-	-	*
		6.36364	-17.87879	17.00000	0.0	0.096364	0.85074	-	-	-	*
		7.87879	-17.87879	17.00000	0.0	0.096364	0.85074	-	-	-	*
		9.39394	-17.87879	17.00000	0.0	0.096364	0.85074	-	-	-	*
		10.90909	-17.87879	17.00000	0.0	0.096364	0.85074	-	-	-	*
		12.42424	-17.87879	17.00000	0.0	0.096364	0.85074	-	-	-	*
		13.93939	-17.87879	17.00000	0.0	0.096364	0.85074	-	-	-	*
		15.45455	-17.87879	17.00000	0.0	0.096364	0.85074	-	-	-	*
		16.96970	-17.87879	17.00000	0.0	0.096364	0.85074	-	-	-	*
		18.48485	-17.87879	17.00000	0.0	0.096364	0.85074	-	-	-	*
		20.00000	-17.87879	17.00000	0.0	0.096364	0.85074	-	-	-	*
		21.51515	-17.87879	17.00000	0.0	0.096364	0.85074	-	-	-	*
		23.03030	-17.87879	17.00000	0.0	0.096364	0.85074	-	-	-	*
		24.54545	-17.87879	17.00000	0.0	0.096364	0.85074	-	-	-	*
		26.06061	-17.87879	17.00000	0.0	0.096364	0.85074	-	-	-	*
		27.57576	-17.87879	17.00000	0.0	0.096364	0.85074	-	-	-	*
		29.09091	-17.87879	17.00000	0.0	0.096364	0.85074	-	-	-	*
		30.60606	-17.87879	17.00000	0.0	0.096364	0.85074	-	-	-	*
		32.12121	-17.87879	17.00000	0.0	0.096364	0.85074	-	-	-	*
		33.63636	-17.87879	17.00000	0.0	0.096364	0.85074	-	-	-	*
		35.15152	-17.87879	17.00000	0.0	0.096364	0.85074	-	-	-	*
		36.66667	-17.87879	17.00000	0.0	0.096364	0.85074	-	-	-	*
		38.18182	-17.87879	17.00000	0.0	0.096364	0.85074	-	-	-	*
		39.69697	-17.87879	17.00000	0.0	0.096364	0.85074	-	-	-	*
		41.21212	-17.87879	17.00000	0.0	0.096364	0.85074	-	-	-	*
		42.72727	-17.87879	17.00000	0.0	0.096364	0.85074	-	-	-	*
		44.24242	-17.87879	17.00000	0.0	0.096364	0.85074	-	-	-	*
		45.75758	-17.87879	17.00000	0.0	0.096364	0.85074	-	-	-	*
		47.27273	-17.87879	17.00000	0.0	0.096364	0.85074	-	-	-	*
		48.78788	-17.87879	17.00000	-0.0026506	0.060149	0.83755	-	-	-	*
		50.30303	-17.87879	17.00000	-0.0042708	0.033155	0.80544	-	-	-	*
		51.81818	-17.87879	17.00000	0.0	0.0	0.74361	-	-	-	*
		53.33333	-17.87879	17.00000	0.0	0.0	0.66854	-	-	-	*
		54.84848	-17.87879	17.00000	0.0	0.0	0.57089	-	-	-	*
		56.36364	-17.87879	17.00000	0.0	0.0	0.45233	-	-	-	*
		57.87879	-17.87879	17.00000	0.0	0.0	0.31470	-	-	-	*
		59.39394	-17.87879	17.00000	0.0	0.0	0.15984	-	-	-	*
		60.90909	-17.87879	17.00000	0.0	0.0	0.0	-	-	-	*
		62.42424	-17.87879	17.00000	0.0	0.0	0.0	-	-	-	*
		63.93939	-17.87879	17.00000	0.0	0.0	0.0	-	-	-	*
		65.45455	-17.87879	17.00000	0.0	0.0	0.0	-	-	-	*
		66.96970	-17.87879	17.00000	0.0	0.0	0.0	-	-	-	*
		68.48485	-17.87879	17.00000	0.0	0.0	0.0	-	-	-	*
		70.00000	-17.87879	17.00000	0.0	0.0	0.0	-	-	-	*
		71.51515	-17.87879	17.00000	0.0	0.0	0.0	-	-	-	*
		73.03030	-17.87879	17.00000	0.0	0.0	0.0	-	-	-	*
		74.54545	-17.87879	17.00000	0.0	0.0	0.0	-	-	-	*
		76.06061	-17.87879	17.00000	0.0	0.0	0.0	-	-	-	*
		77.57576	-17.87879	17.00000	0.0	0.0	0.0	-	-	-	*
		79.09091	-17.87879	17.00000	0.0	0.0	0.0	-	-	-	*
		80.60606	-17.87879	17.00000	0.0	0.0	0.0	-	-	-	*
		82.12121	-17.87879	17.00000	0.0	0.0	0.0	-	-	-	*
		83.63636	-17.87879	17.00000	0.0	0.0	0.0	-	-	-	*
		85.15152	-17.87879	17.00000	0.0	0.0	0.0	-	-	-	*
		86.66667	-17.87879	17.00000	0.0	0.0	0.0	-	-	-	*
		88.18182	-17.87879	17.00000	0.0	0.0	0.0	-	-	-	*
		89.69697	-17.87879	17.00000	0.0	0.0	0.0	-	-	-	*
		91.21212	-17.87879	17.00000	0.0	0.0	0.0	-	-	-	*
		92.72727	-17.87879	17.00000	0.0	0.0	0.0	-	-	-	*
		94.24242	-17.87879	17.00000	0.0	0.0	0.0	-	-	-	*
		95.75758	-17.87879	17.00000	0.0	0.0	0.0	-	-	-	*
		97.27273	-17.87879	17.00000	0.0	0.0	0.0	-	-	-	*
		98.78788	-17.87879	17.00000	0.0	0.0	0.0	-	-	-	*
		100.30303	-17.87879	17.00000	0.0	0.0	0.0	-	-	-	*
		101.81818	-17.87879	17.00000	0.0	0.0	0.0	-	-	-	*
		103.33333	-17.87879	17.00000	0.0	0.0	0.0	-	-	-	*
		104.84848	-17.87879	17.00000	0.0	0.0	0.0	-	-	-	*
		106.36364	-17.87879	17.00000	0.0	0.0	0.0	-	-	-	*
		107.87879	-17.87879	17.00000	0.0	0.0	0.0	-	-	-	*
		109.39394	-17.87879	17.00000	0.0	0.0	0.0	-	-	-	*
		110.90909	-17.87879	17.00000	0.0	0.0	0.0	-	-	-	*
		112.42424	-17.87879	17.00000	0.0	0.0	0.0	-	-	-	*
		113.93939	-17.87879	17.00000	0.0	0.0	0.0	-	-	-	*
		115.45455	-17.87879	17.00000	0.0	0.0	0.0	-	-	-	*
		116.96970	-17.87879	17.00000	0.0	0.0	0.0	-	-	-	*
		118.48485	-17.87879	17.00000	0.0	0.0	0.0	-	-	-	*
		120.00000	-17.87879	17.00000	0.0	0.0	0.0	-	-	-	*
		-30.00000	-16.86869	17.00000	0.0	0.0	0.0	-	-	-	*
		-28.48485	-16.86869	17.00000	0.0	0.0	0.0	-	-	-	*
		-26.96970	-16.86869	17.00000	0.0	0.0	0.0	-	-	-	*
		-25.45455	-16.86869	17.00000	0.0	0.0	0.0	-	-	-	*
		-23.93939	-16.86869	17.00000	0.0	0.0	0.0	-	-	-	*
		-22.42424	-16.86869	17.00000	0.0	0.0	0.0	-	-	-	*
		-20.90909	-16.86869	17.00000	0.0	0.0	0.0	-	-	-	*
		-19.39394	-16.86869	17.00000	0.0	0.0	0.0	-	-	-	*
		-17.87879	-16.86869	17.00000	0.0	0.0	0.0	-	-	-	*
		-16.36364	-16.86869	17.00000	0.0	0.0	0.0	-	-	-	*
		-14.84848	-16.86869	17.00000	0.0	0.0	0.0	-	-	-	*
		-13.33333	-16.86869	17.00000	0.0	0.0	0.099626	-	-	-	*
		-11.81818	-16.86869	17.00000	0.0	0.0	0.28067	-	-	-	*
		-10.30303	-16.86869	17.00000	0.0	0.0	0.44675	-	-	-	*
		-8.78788	-16.86869	17.00000	0.0	0.0	0.59590	-	-	-	*
		-7.27273	-16.86869	17.00000	0.0	0.0	0.72606	-	-	-	*
		-5.75758	-16.86869	17.00000	0.021807	0.063889	0.85304	-	-	-	*
		-4.24242	-16.86869	17.00000	0.036369	0.14461	0.95367	-	-	-	*
		-2.72727	-16.86869	17.00000	0.033834	0.20927	1.0243	-	-	-	*
		-1.21212	-16.86869	17.00000	0.018122	0.25220	1.0652	-	-	-	*
		0.30303	-16.86869	17.00000	0.0	0.39939	1.1007	-	-	-	*
		1.81818	-16.86869	17.00000	0.0	0.39939	1.1007	-	-	-	*
		3.33333	-16.86869	17.00000	0.0	0.39939	1.1007	-	-	-	*
		4.84848	-16.86869	17.00000	0.0	0.39939	1.1007	-	-	-	*
		6.36364	-16.86869	17.00000	0.0	0.39939	1.1007	-	-	-	*
		7.87879	-16.86869	17.00000	0.0	0.39939	1.1007	-	-	-	*
		9.39394	-16.86869	17.00000	0.0	0.39939	1.1007	-	-	-	*
		10.90909	-16.86869	17.00000	0.0	0.39939	1.1007	-	-	-	*
		12.42424	-16.86869	17.00000	0.0	0.39939	1.1007	-	-	-	*
		13.93939	-16.86869	17.00000	0.0	0.39939	1.1007	-	-	-	*

Type/No.		Coordinates			Displacements					Angle of Line	
Name	Dist.	x	y	z	x	y	z	Horizontal displacement	Horizontal displacement	to x Axis	
		15.45455	-16.86869	17.00000	0.0	0.39939	1.1007	-	-	-	*
		16.96970	-16.86869	17.00000	0.0	0.39939	1.1007	-	-	-	*
		18.48485	-16.86869	17.00000	0.0	0.39939	1.1007	-	-	-	*
		20.00000	-16.86869	17.00000	0.0	0.39939	1.1007	-	-	-	*
		21.51515	-16.86869	17.00000	0.0	0.39939	1.1007	-	-	-	*
		23.03030	-16.86869	17.00000	0.0	0.39939	1.1007	-	-	-	*
		24.54545	-16.86869	17.00000	0.0	0.39939	1.1007	-	-	-	*
		26.06061	-16.86869	17.00000	0.0	0.39939	1.1007	-	-	-	*
		27.57576	-16.86869	17.00000	0.0	0.39939	1.1007	-	-	-	*
		29.09091	-16.86869	17.00000	0.0	0.39939	1.1007	-	-	-	*
		30.60606	-16.86869	17.00000	0.0	0.39939	1.1007	-	-	-	*
		32.12121	-16.86869	17.00000	0.0	0.39939	1.1007	-	-	-	*
		33.63636	-16.86869	17.00000	0.0	0.39939	1.1007	-	-	-	*
		35.15152	-16.86869	17.00000	0.0	0.39939	1.1007	-	-	-	*
		36.66667	-16.86869	17.00000	0.0	0.39939	1.1007	-	-	-	*
		38.18182	-16.86869	17.00000	0.0	0.39939	1.1007	-	-	-	*
		39.69697	-16.86869	17.00000	0.0	0.39939	1.1007	-	-	-	*
		41.21212	-16.86869	17.00000	0.0	0.39939	1.1007	-	-	-	*
		42.72727	-16.86869	17.00000	0.0	0.39939	1.1007	-	-	-	*
		44.24242	-16.86869	17.00000	0.0	0.39939	1.1007	-	-	-	*
		45.75758	-16.86869	17.00000	0.0	0.39939	1.1007	-	-	-	*
		47.27273	-16.86869	17.00000	0.0	0.39939	1.1007	-	-	-	*
		48.78788	-16.86869	17.00000	-0.0121127	0.25964	1.0713	-	-	-	*
		50.30303	-16.86869	17.00000	-0.030543	0.22371	1.0388	-	-	-	*
		51.81818	-16.86869	17.00000	-0.037253	0.16458	0.97644	-	-	-	*
		53.33333	-16.86869	17.00000	-0.027751	0.087774	0.88432	-	-	-	*
		54.84848	-16.86869	17.00000	0.0	0.0	0.75882	-	-	-	*
		56.36364	-16.86869	17.00000	0.0	0.0	0.63435	-	-	-	*
		57.87879	-16.86869	17.00000	0.0	0.0	0.49030	-	-	-	*
		59.39394	-16.86869	17.00000	0.0	0.0	0.32876	-	-	-	*
		60.90909	-16.86869	17.00000	0.0	0.0	0.15172	-	-	-	*
		62.42424	-16.86869	17.00000	0.0	0.0	0.0	-	-	-	*
		63.93939	-16.86869	17.00000	0.0	0.0	0.0	-	-	-	*
		65.45455	-16.86869	17.00000	0.0	0.0	0.0	-	-	-	*
		66.96970	-16.86869	17.00000	0.0	0.0	0.0	-	-	-	*
		68.48485	-16.86869	17.00000	0.0	0.0	0.0	-	-	-	*
		70.00000	-16.86869	17.00000	0.0	0.0	0.0	-	-	-	*
		71.51515	-16.86869	17.00000	0.0	0.0	0.0	-	-	-	*
		73.03030	-16.86869	17.00000	0.0	0.0	0.0	-	-	-	*
		74.54545	-16.86869	17.00000	0.0	0.0	0.0	-	-	-	*
		76.06061	-16.86869	17.00000	0.0	0.0	0.0	-	-	-	*
		77.57576	-16.86869	17.00000	0.0	0.0	0.0	-	-	-	*
		79.09091	-16.86869	17.00000	0.0	0.0	0.0	-	-	-	*
		80.60606	-16.86869	17.00000	0.0	0.0	0.0	-	-	-	*
		82.12121	-16.86869	17.00000	0.0	0.0	0.0	-	-	-	*
		83.63636	-16.86869	17.00000	0.0	0.0	0.0	-	-	-	*
		85.15152	-16.86869	17.00000	0.0	0.0	0.0	-	-	-	*
		86.66667	-16.86869	17.00000	0.0	0.0	0.0	-	-	-	*
		88.18182	-16.86869	17.00000	0.0	0.0	0.0	-	-	-	*
		89.69697	-16.86869	17.00000	0.0	0.0	0.0	-	-	-	*
		91.21212	-16.86869	17.00000	0.0	0.0	0.0	-	-	-	*
		92.72727	-16.86869	17.00000	0.0	0.0	0.0	-	-	-	*
		94.24242	-16.86869	17.00000	0.0	0.0	0.0	-	-	-	*
		95.75758	-16.86869	17.00000	0.0	0.0	0.0	-	-	-	*
		97.27273	-16.86869	17.00000	0.0	0.0	0.0	-	-	-	*
		98.78788	-16.86869	17.00000	0.0	0.0	0.0	-	-	-	*
		100.30303	-16.86869	17.00000	0.0	0.0	0.0	-	-	-	*
		101.81818	-16.86869	17.00000	0.0	0.0	0.0	-	-	-	*
		103.33333	-16.86869	17.00000	0.0	0.0	0.0	-	-	-	*
		104.84848	-16.86869	17.00000	0.0	0.0	0.0	-	-	-	*
		106.36364	-16.86869	17.00000	0.0	0.0	0.0	-	-	-	*
		107.87879	-16.86869	17.00000	0.0	0.0	0.0	-	-	-	*
		109.39394	-16.86869	17.00000	0.0	0.0	0.0	-	-	-	*
		110.90909	-16.86869	17.00000	0.0	0.0	0.0	-	-	-	*
		112.42424	-16.86869	17.00000	0.0	0.0	0.0	-	-	-	*
		113.93939	-16.86869	17.00000	0.0	0.0	0.0	-	-	-	*
		115.45455	-16.86869	17.00000	0.0	0.0	0.0	-	-	-	*
		116.96970	-16.86869	17.00000	0.0	0.0	0.0	-	-	-	*
		118.48485	-16.86869	17.00000	0.0	0.0	0.0	-	-	-	*
		120.00000	-16.86869	17.00000	0.0	0.0	0.0	-	-	-	*
		-30.00000	-15.85859	17.00000	0.0	0.0	0.0	-	-	-	*
		-28.48485	-15.85859	17.00000	0.0	0.0	0.0	-	-	-	*
		-26.96970	-15.85859	17.00000	0.0	0.0	0.0	-	-	-	*
		-25.45455	-15.85859	17.00000	0.0	0.0	0.0	-	-	-	*
		-23.93939	-15.85859	17.00000	0.0	0.0	0.0	-	-	-	*
		-22.42424	-15.85859	17.00000	0.0	0.0	0.0	-	-	-	*
		-20.90909	-15.85859	17.00000	0.0	0.0	0.0	-	-	-	*
		-19.39394	-15.85859	17.00000	0.0	0.0	0.0	-	-	-	*
		-17.87879	-15.85859	17.00000	0.0	0.0	0.0	-	-	-	*
		-16.36364	-15.85859	17.00000	0.0	0.0	0.055016	-	-	-	*
		-14.84848	-15.85859	17.00000	0.0	0.0	0.25622	-	-	-	*
		-13.33333	-15.85859	17.00000	0.0	0.0	0.44443	-	-	-	*
		-11.81818	-15.85859	17.00000	0.0	0.0	0.61769	-	-	-	*
		-10.30303	-15.85859	17.00000	0.0	0.0	0.77903	-	-	-	*
		-8.78788	-15.85859	17.00000	0.0056494	0.010195	0.77903	-	-	-	*
		-7.27273	-15.85859	17.00000	0.054350	0.11851	0.93960	-	-	-	*
		-5.75758	-15.85859	17.00000	0.080880	0.22277	1.0699	-	-	-	*
		-4.24242	-15.85859	17.00000	0.089320	0.33389	1.1728	-	-	-	*
		-2.72727	-15.85859	17.00000	0.080525	0.44824	1.2476	-	-	-	*
		-1.21212	-15.85859	17.00000	0.042484	0.55584	1.2922	-	-	-	*
		0.30303	-15.85859	17.00000	0.0	0.81809	1.3423	-	-	-	*
		1.81818	-15.85859	17.00000	0.0	0.81809	1.3423	-	-	-	*
		3.33333	-15.85859	17.00000	0.0	0.81809	1.3423	-	-	-	*
		4.84848	-15.85859	17.00000	0.0	0.81809	1.3423	-	-	-	*
		6.36364	-15.85859	17.00000	0.0	0.81809	1.3423	-	-	-	*
		7.87879	-15.85859	17.00000	0.0	0.81809	1.3423	-	-	-	*
		9.39394	-15.85859	17.00000	0.0	0.81809	1.3423	-	-	-	*
		10.90909	-15.85859	17.00000	0.0	0.81809	1.3423	-	-	-	*
		12.42424	-15.85859	17.00000	0.0	0.81809	1.3423	-	-	-	*
		13.93939	-15.85859	17.00000	0.0	0.81809	1.3423	-	-	-	*
		15.45455	-15.85859	17.00000	0.0	0.81809	1.3423	-	-	-	*
		16.96970	-15.85859	17.00000	0.0	0.81809	1.3423	-	-	-	*
		18.48485	-15.85859	17.00000	0.0	0.81809	1.3423	-	-	-	*
		20.00000	-15.85859	17.00000	0.0	0.81809	1.3423	-	-	-	*
		21.51515	-15.85859	17.00000	0.0	0.81809	1.3423	-	-	-	*
		23.03030	-15.85859	17.00000	0.0	0.81809	1.3423	-	-	-	*
		24.54545	-15.85859	17.00000	0.0	0.81809	1.3423	-	-	-	*
		26.06061	-15.85859	17.00000	0.0	0.81809	1.3423	-	-	-	*
		27.57576	-15.85859	17.00000	0.0	0.81809	1.3423	-	-	-	*
		29.09091	-15.85859	17.00000	0.0	0.81809	1.3423	-	-	-	*
		30.60606	-15.85859	17.00000	0.0	0.81809	1.3423	-	-	-	*
		32.12121	-15.85859	17.00000	0.0	0.81809	1.3423	-	-	-	*
		33.63636	-15.85859	17.00000	0.0	0.81809	1.3423	-	-	-	*
		35.15152	-15.85859	17.00000	0.0	0.81809	1.3423	-	-	-	*
		36.66667	-15.85859	17.00000	0.0	0.81809	1.3423	-	-	-	*
		38.18182	-15.85859	17.00000	0.0	0.81809	1.3423	-	-	-	*
		39.69697	-15.85859	17.00000	0.0	0.81809	1.3423	-	-	-	*
		41.21212	-15.85859	17.00000	0.0	0.81809	1.3423	-	-	-	*
		42.72727	-15.85859	17.00000	0.0	0.81809	1.3423	-	-	-	*
		44.24242	-15.85859	17.00000	0.0	0.81809	1.3423	-	-	-	*
		45.75758	-15.85859	17.00000	0.0	0.81809	1.3423	-	-	-	*
		47.27273	-15.85859	17.00000	0.0	0.81809	1.3423	-	-	-	*
		48.78788	-15.85859	17.00000	-0.028354	0.57072	1.2989	-	-	-	*
		50.30303	-15.85859	17.00000	-0.072308	0.49791	1.2632	-	-	-	*
		51.81818	-15.85859	17.00000	-0.090433	0.37561	1.1966	-	-	-	*
		53.33333	-15.85859	17.00000	-0.084234	0.25047	1.1015	-	-	-	*
		54.84848	-15.85859	17.00000	-0.064062	0.14834	0.97894	-	-	-	*
		56.36364	-15.85859	17.00000	-0.021435	0.040643	0.82738	-	-	-	*
		57.87879	-15.85859	17.00000	0.0	0.0	0.66324	-	-	-	*
		59.39394	-15.85859	17.00000	0.0	0.0	0.49453	-	-	-	*
		60.90909	-15.85859	17.00000	0.0	0.0	0.31031	-	-	-	*
		62.42424	-15.85859	17.00000	0.0	0.0	0.11256	-	-	-	*
		63.93939	-15.85859	17.00000	0.0	0.0	0.0	-	-	-	*
		65.45455	-15.85859	17.00000	0.0	0.0	0.0	-	-	-	*
		66.96970	-15.85859	17.00000	0.0	0.0	0.0	-	-	-	*
		68.48485	-15.85859	17.00000	0.0	0.0	0.0	-	-	-	*
		70.00000	-15.85859	17.00000	0.0	0.0	0.0	-	-	-	*
		71.51515	-15.85859	17.00000	0.0	0.0	0.0	-	-	-	*
		73.03030	-15.85859	17.00000	0.0	0.0	0.0	-	-	-	*
		74.54545	-15.85859	17.00000	0.0	0.0	0.0	-	-	-	*
		76.06061	-15.85859	17.00000	0.0	0.0	0.0	-	-	-	*

Oasys
GEA LIMITED
(GEOTECHNICAL &ENV ASSOC) J15050A
The Great Hall, Lincoln's Inn, Newman's Row, London, WC2A 3TL
Wall Movements Rev 3 Piling and Excavation
Damage Assessment
Job No. | Sheet No. | Rev.
Drg. Ref.
Made by MP | Date 08-Feb-2016 | Checked

Type/No.		Coordinates			Displacements					Angle of Line	
Name	Dist.	x	y	z	x	y	z	Horizontal displacement	Horizontal displacement	to x Axis	
		77.57576	-15.85859	17.00000	0.0	0.0	0.0	-	-	-	*
		79.09091	-15.85859	17.00000	0.0	0.0	0.0	-	-	-	*
		80.60606	-15.85859	17.00000	0.0	0.0	0.0	-	-	-	*
		82.12121	-15.85859	17.00000	0.0	0.0	0.0	-	-	-	*
		83.63636	-15.85859	17.00000	0.0	0.0	0.0	-	-	-	*
		85.15152	-15.85859	17.00000	0.0	0.0	0.0	-	-	-	*
		86.66667	-15.85859	17.00000	0.0	0.0	0.0	-	-	-	*
		88.18182	-15.85859	17.00000	0.0	0.0	0.0	-	-	-	*
		89.69697	-15.85859	17.00000	0.0	0.0	0.0	-	-	-	*
		91.21212	-15.85859	17.00000	0.0	0.0	0.0	-	-	-	*
		92.72727	-15.85859	17.00000	0.0	0.0	0.0	-	-	-	*
		94.24242	-15.85859	17.00000	0.0	0.0	0.0	-	-	-	*
		95.75758	-15.85859	17.00000	0.0	0.0	0.0	-	-	-	*
		97.27273	-15.85859	17.00000	0.0	0.0	0.0	-	-	-	*
		98.78788	-15.85859	17.00000	0.0	0.0	0.0	-	-	-	*
		100.30303	-15.85859	17.00000	0.0	0.0	0.0	-	-	-	*
		101.81818	-15.85859	17.00000	0.0	0.0	0.0	-	-	-	*
		103.33333	-15.85859	17.00000	0.0	0.0	0.0	-	-	-	*
		104.84848	-15.85859	17.00000	0.0	0.0	0.0	-	-	-	*
		106.36364	-15.85859	17.00000	0.0	0.0	0.0	-	-	-	*
		107.87879	-15.85859	17.00000	0.0	0.0	0.0	-	-	-	*
		109.39394	-15.85859	17.00000	0.0	0.0	0.0	-	-	-	*
		110.90909	-15.85859	17.00000	0.0	0.0	0.0	-	-	-	*
		112.42424	-15.85859	17.00000	0.0	0.0	0.0	-	-	-	*
		113.93939	-15.85859	17.00000	0.0	0.0	0.0	-	-	-	*
		115.45455	-15.85859	17.00000	0.0	0.0	0.0	-	-	-	*
		116.96970	-15.85859	17.00000	0.0	0.0	0.0	-	-	-	*
		118.48485	-15.85859	17.00000	0.0	0.0	0.0	-	-	-	*
		120.00000	-15.85859	17.00000	0.0	0.0	0.0	-	-	-	*
		-30.00000	-14.84848	17.00000	0.0	0.0	0.0	-	-	-	*
		-28.48485	-14.84848	17.00000	0.0	0.0	0.0	-	-	-	*
		-26.96970	-14.84848	17.00000	0.0	0.0	0.0	-	-	-	*
		-25.45455	-14.84848	17.00000	0.0	0.0	0.0	-	-	-	*
		-23.93939	-14.84848	17.00000	0.0	0.0	0.0	-	-	-	*
		-22.42424	-14.84848	17.00000	0.0	0.0	0.0	-	-	-	*
		-20.90909	-14.84848	17.00000	0.0	0.0	0.0	-	-	-	*
		-19.39394	-14.84848	17.00000	0.0	0.0	0.0	-	-	-	*
		-17.87879	-14.84848	17.00000	0.0	0.0	0.0	-	-	-	*
		-16.36364	-14.84848	17.00000	0.0	0.0	0.0	-	-	-	*
		-14.84848	-14.84848	17.00000	0.0	0.0	0.20021	-	-	-	*
		-13.33333	-14.84848	17.00000	0.0	0.0	0.40873	-	-	-	*
		-11.81818	-14.84848	17.00000	0.0	0.0	0.60449	-	-	-	*
		-10.30303	-14.84848	17.00000	0.0117009	0.018875	0.79266	-	-	-	*
		-8.78788	-14.84848	17.00000	0.080116	0.13537	0.98184	-	-	-	*
		-7.27273	-14.84848	17.00000	0.12563	0.25650	1.1429	-	-	-	*
		-5.75758	-14.84848	17.00000	0.18305	0.47209	1.2804	-	-	-	*
		-4.24242	-14.84848	17.00000	0.19055	0.66693	1.3936	-	-	-	*
		-2.72727	-14.84848	17.00000	0.15135	0.82400	1.4789	-	-	-	*
		-1.21212	-14.84848	17.00000	0.075864	0.92934	1.5313	-	-	-	*
		0.30303	-14.84848	17.00000	0.0	1.3005	1.6039	-	-	-	*
		1.81818	-14.84848	17.00000	0.0	1.3005	1.6039	-	-	-	*
		3.33333	-14.84848	17.00000	0.0	1.3005	1.6039	-	-	-	*
		4.84848	-14.84848	17.00000	0.0	1.3005	1.6039	-	-	-	*
		6.36364	-14.84848	17.00000	0.0	1.3005	1.6039	-	-	-	*
		7.87879	-14.84848	17.00000	0.0	1.3005	1.6039	-	-	-	*
		9.39394	-14.84848	17.00000	0.0	1.3005	1.6039	-	-	-	*
		10.90909	-14.84848	17.00000	0.0	1.3005	1.6039	-	-	-	*
		12.42424	-14.84848	17.00000	0.0	1.3005	1.6039	-	-	-	*
		13.93939	-14.84848	17.00000	0.0	1.3005	1.6039	-	-	-	*
		15.45455	-14.84848	17.00000	0.0	1.3005	1.6039	-	-	-	*
		16.96970	-14.84848	17.00000	0.0	1.3005	1.6039	-	-	-	*
		18.48485	-14.84848	17.00000	0.0	1.3005	1.6039	-	-	-	*
		20.00000	-14.84848	17.00000	0.0	1.3005	1.6039	-	-	-	*
		21.51515	-14.84848	17.00000	0.0	1.3005	1.6039	-	-	-	*
		23.03030	-14.84848	17.00000	0.0	1.3005	1.6039	-	-	-	*
		24.54545	-14.84848	17.00000	0.0	1.3005	1.6039	-	-	-	*
		26.06061	-14.84848	17.00000	0.0	1.3005	1.6039	-	-	-	*
		27.57576	-14.84848	17.00000	0.0	1.3005	1.6039	-	-	-	*
		29.09091	-14.84848	17.00000	0.0	1.3005	1.6039	-	-	-	*
		30.60606	-14.84848	17.00000	0.0	1.3005	1.6039	-	-	-	*
		32.12121	-14.84848	17.00000	0.0	1.3005	1.6039	-	-	-	*
		33.63636	-14.84848	17.00000	0.0	1.3005	1.6039	-	-	-	*
		35.15152	-14.84848	17.00000	0.0	1.3005	1.6039	-	-	-	*
		36.66667	-14.84848	17.00000	0.0	1.3005	1.6039	-	-	-	*
		38.18182	-14.84848	17.00000	0.0	1.3005	1.6039	-	-	-	*
		39.69697	-14.84848	17.00000	0.0	1.3005	1.6039	-	-	-	*
		41.21212	-14.84848	17.00000	0.0	1.3005	1.6039	-	-	-	*
		42.72727	-14.84848	17.00000	0.0	1.3005	1.6039	-	-	-	*
		44.24242	-14.84848	17.00000	0.0	1.3005	1.6039	-	-	-	*
		45.75758	-14.84848	17.00000	0.0	1.3005	1.6039	-	-	-	*
		47.27273	-14.84848	17.00000	0.0	1.3005	1.6039	-	-	-	*
		48.78788	-14.84848	17.00000	-0.0502598	0.94792	1.5394	-	-	-	*
		50.30303	-14.84848	17.00000	-0.13327	0.85927	1.4971	-	-	-	*
		51.81818	-14.84848	17.00000	-0.18295	0.71534	1.4205	-	-	-	*
		53.33333	-14.84848	17.00000	-0.19023	0.52962	1.3146	-	-	-	*
		54.84848	-14.84848	17.00000	-0.14590	0.31634	1.1837	-	-	-	*
		56.36364	-14.84848	17.00000	-0.059304	0.16920	1.0295	-	-	-	*
		57.87879	-14.84848	17.00000	-0.032980	0.049570	0.84898	-	-	-	*
		59.39394	-14.84848	17.00000	0.0	0.0	0.65674	-	-	-	*
		60.90909	-14.84848	17.00000	0.0	0.0	0.46492	-	-	-	*
		62.42424	-14.84848	17.00000	0.0	0.0	0.25978	-	-	-	*
		63.93939	-14.84848	17.00000	0.0	0.0	0.043204	-	-	-	*
		65.45455	-14.84848	17.00000	0.0	0.0	0.0	-	-	-	*
		66.96970	-14.84848	17.00000	0.0	0.0	0.0	-	-	-	*
		68.48485	-14.84848	17.00000	0.0	0.0	0.0	-	-	-	*
		70.00000	-14.84848	17.00000	0.0	0.0	0.0	-	-	-	*
		71.51515	-14.84848	17.00000	0.0	0.0	0.0	-	-	-	*
		73.03030	-14.84848	17.00000	0.0	0.0	0.0	-	-	-	*
		74.54545	-14.84848	17.00000	0.0	0.0	0.0	-	-	-	*
		76.06061	-14.84848	17.00000	0.0	0.0	0.0	-	-	-	*
		77.57576	-14.84848	17.00000	0.0	0.0	0.0	-	-	-	*
		79.09091	-14.84848	17.00000	0.0	0.0	0.0	-	-	-	*
		80.60606	-14.84848	17.00000	0.0	0.0	0.0	-	-	-	*
		82.12121	-14.84848	17.00000	0.0	0.0	0.0	-	-	-	*
		83.63636	-14.84848	17.00000	0.0	0.0	0.0	-	-	-	*
		85.15152	-14.84848	17.00000	0.0	0.0	0.0	-	-	-	*
		86.66667	-14.84848	17.00000	0.0	0.0	0.0	-	-	-	*
		88.18182	-14.84848	17.00000	0.0	0.0	0.0	-	-	-	*
		89.69697	-14.84848	17.00000	0.0	0.0	0.0	-	-	-	*
		91.21212	-14.84848	17.00000	0.0	0.0	0.0	-	-	-	*
		92.72727	-14.84848	17.00000	0.0	0.0	0.0	-	-	-	*
		94.24242	-14.84848	17.00000	0.0	0.0	0.0	-	-	-	*
		95.75758	-14.84848	17.00000	0.0	0.0	0.0	-	-	-	*
		97.27273	-14.84848	17.00000	0.0	0.0	0.0	-	-	-	*
		98.78788	-14.84848	17.00000	0.0	0.0	0.0	-	-	-	*
		100.30303	-14.84848	17.00000	0.0	0.0	0.0	-	-	-	*
		101.81818	-14.84848	17.00000	0.0	0.0	0.0	-	-	-	*
		103.33333	-14.84848	17.00000	0.0	0.0	0.0	-	-	-	*
		104.84848	-14.84848	17.00000	0.0	0.0	0.0	-	-	-	*
		106.36364	-14.84848	17.00000	0.0	0.0	0.0	-	-	-	*
		107.87879	-14.84848	17.00000	0.0	0.0	0.0	-	-	-	*
		109.39394	-14.84848	17.00000	0.0	0.0	0.0	-	-	-	*
		110.90909	-14.84848	17.00000	0.0	0.0	0.0	-	-	-	*
		112.42424	-14.84848	17.00000	0.0	0.0	0.0	-	-	-	*
		113.93939	-14.84848	17.00000	0.0	0.0	0.0	-	-	-	*
		115.45455	-14.84848	17.00000	0.0	0.0	0.0	-	-	-	*
		116.96970	-14.84848	17.00000	0.0	0.0	0.0	-	-	-	*
		118.48485	-14.84848	17.00000	0.0	0.0	0.0	-	-	-	*
		120.00000	-14.84848	17.00000	0.0	0.0	0.0	-	-	-	*
		-30.00000	-13.83838	17.00000	0.0	0.0	0.0	-	-	-	*
		-28.48485	-13.83838	17.00000	0.0	0.0	0.0	-	-	-	*
		-26.96970	-13.83838	17.00000	0.0	0.0	0.0	-	-	-	*
		-25.45455	-13.83838	17.00000	0.0	0.0	0.0	-	-	-	*
		-23.93939	-13.83838	17.00000	0.0	0.0	0.0	-	-	-	*
		-22.42424	-13.83838	17.00000	0.0	0.0	0.0	-	-	-	*
		-20.90909	-13.83838	17.00000	0.0	0.0	0.0	-	-	-	*
		-19.39394	-13.83838	17.00000	0.0	0.0	0.0	-	-	-	*
		-17.87879	-13.83838	17.00000	0.0	0.0	0.0	-	-	-	*
		-16.36364	-13.83838	17.00000	0.0	0.0	0.11389	-	-	-	*
		-14.84848	-13.83838	17.00000	0.0	0.0	0.34055	-	-	-	*
		-13.33333	-13.83838	17.00000	0.0	0.0	0.55668	-	-	-	*

Type/No.		Coordinates			Displacements					Angle of Line	
Name	Dist.	x	y	z	x	y	z	Horizontal displacement	Horizontal displacement	to x Axis	
		-11.81818	-13.83838	17.00000	192.92E-6	225.89E-6	0.76248	-	-	-	*
		-10.30303	-13.83838	17.00000	0.090205	0.12116	0.98083	-	-	-	*
		-8.78788	-13.83838	17.00000	0.17064	0.26871	1.1719	-	-	-	*
		-7.27273	-13.83838	17.00000	0.27485	0.52298	1.3439	-	-	-	*
		-5.75758	-13.83838	17.00000	0.32011	0.76939	1.4978	-	-	-	*
		-4.24242	-13.83838	17.00000	0.30459	0.99355	1.6296	-	-	-	*
		-2.72727	-13.83838	17.00000	0.23216	1.1780	1.7318	-	-	-	*
		-1.21212	-13.83838	17.00000	0.11428	1.3047	1.7964	-	-	-	*
		0.30303	-13.83838	17.00000	0.0	1.7863	1.9073	-	-	-	*
		1.81818	-13.83838	17.00000	0.0	1.7863	1.9073	-	-	-	*
		3.33333	-13.83838	17.00000	0.0	1.7863	1.9073	-	-	-	*
		4.84848	-13.83838	17.00000	0.0	1.7863	1.9073	-	-	-	*
		6.36364	-13.83838	17.00000	0.0	1.7863	1.9073	-	-	-	*
		7.87879	-13.83838	17.00000	0.0	1.7863	1.9073	-	-	-	*
		9.39394	-13.83838	17.00000	0.0	1.7863	1.9073	-	-	-	*
		10.90909	-13.83838	17.00000	0.0	1.7863	1.9073	-	-	-	*
		12.42424	-13.83838	17.00000	0.0	1.7863	1.9073	-	-	-	*
		13.93939	-13.83838	17.00000	0.0	1.7863	1.9073	-	-	-	*
		15.45455	-13.83838	17.00000	0.0	1.7863	1.9073	-	-	-	*
		16.96970	-13.83838	17.00000	0.0	1.7863	1.9073	-	-	-	*
		18.48485	-13.83838	17.00000	0.0	1.7863	1.9073	-	-	-	*
		20.00000	-13.83838	17.00000	0.0	1.7863	1.9073	-	-	-	*
		21.51515	-13.83838	17.00000	0.0	1.7863	1.9073	-	-	-	*
		23.03030	-13.83838	17.00000	0.0	1.7863	1.9073	-	-	-	*
		24.54545	-13.83838	17.00000	0.0	1.7863	1.9073	-	-	-	*
		26.06061	-13.83838	17.00000	0.0	1.7863	1.9073	-	-	-	*
		27.57576	-13.83838	17.00000	0.0	1.7863	1.9073	-	-	-	*
		29.09091	-13.83838	17.00000	0.0	1.7863	1.9073	-	-	-	*
		30.60606	-13.83838	17.00000	0.0	1.7863	1.9073	-	-	-	*
		32.12121	-13.83838	17.00000	0.0	1.7863	1.9073	-	-	-	*
		33.63636	-13.83838	17.00000	0.0	1.7863	1.9073	-	-	-	*
		35.15152	-13.83838	17.00000	0.0	1.7863	1.9073	-	-	-	*
		36.66667	-13.83838	17.00000	0.0	1.7863	1.9073	-	-	-	*
		38.18182	-13.83838	17.00000	0.0	1.7863	1.9073	-	-	-	*
		39.69697	-13.83838	17.00000	0.0	1.7863	1.9073	-	-	-	*
		41.21212	-13.83838	17.00000	0.0	1.7863	1.9073	-	-	-	*
		42.72727	-13.83838	17.00000	0.0	1.7863	1.9073	-	-	-	*
		44.24242	-13.83838	17.00000	0.0	1.7863	1.9073	-	-	-	*
		45.75758	-13.83838	17.00000	0.0	1.7863	1.9073	-	-	-	*
		47.27273	-13.83838	17.00000	0.0	1.7863	1.9073	-	-	-	*
		48.78788	-13.83838	17.00000	-0.075594	1.3277	1.8068	-	-	-	*
		50.30303	-13.83838	17.00000	-0.20304	1.2200	1.7540	-	-	-	*
		51.81818	-13.83838	17.00000	-0.28970	1.0500	1.6615	-	-	-	*
		53.33333	-13.83838	17.00000	-0.32185	0.83511	1.5372	-	-	-	*
		54.84848	-13.83838	17.00000	-0.29362	0.59331	1.3989	-	-	-	*
		56.36364	-13.83838	17.00000	-0.20550	0.34002	1.2218	-	-	-	*
		57.87879	-13.83838	17.00000	-0.11182	0.15664	1.0366	-	-	-	*
		59.39394	-13.83838	17.00000	-0.027268	0.033119	0.82715	-	-	-	*
		60.90909	-13.83838	17.00000	0.0	0.0	0.61505	-	-	-	*
		62.42424	-13.83838	17.00000	0.0	0.0	0.40220	-	-	-	*
		63.93939	-13.83838	17.00000	0.0	0.0	0.17832	-	-	-	*
		65.45455	-13.83838	17.00000	0.0	0.0	0.0	-	-	-	*
		66.96970	-13.83838	17.00000	0.0	0.0	0.0	-	-	-	*
		68.48485	-13.83838	17.00000	0.0	0.0	0.0	-	-	-	*
		70.00000	-13.83838	17.00000	0.0	0.0	0.0	-	-	-	*
		71.51515	-13.83838	17.00000	0.0	0.0	0.0	-	-	-	*
		73.03030	-13.83838	17.00000	0.0	0.0	0.0	-	-	-	*
		74.54545	-13.83838	17.00000	0.0	0.0	0.0	-	-	-	*
		76.06061	-13.83838	17.00000	0.0	0.0	0.0	-	-	-	*
		77.57576	-13.83838	17.00000	0.0	0.0	0.0	-	-	-	*
		79.09091	-13.83838	17.00000	0.0	0.0	0.0	-	-	-	*
		80.60606	-13.83838	17.00000	0.0	0.0	0.0	-	-	-	*
		82.12121	-13.83838	17.00000	0.0	0.0	0.0	-	-	-	*
		83.63636	-13.83838	17.00000	0.0	0.0	0.0	-	-	-	*
		85.15152	-13.83838	17.00000	0.0	0.0	0.0	-	-	-	*
		86.66667	-13.83838	17.00000	0.0	0.0	0.0	-	-	-	*
		88.18182	-13.83838	17.00000	0.0	0.0	0.0	-	-	-	*
		89.69697	-13.83838	17.00000	0.0	0.0	0.0	-	-	-	*
		91.21212	-13.83838	17.00000	0.0	0.0	0.0	-	-	-	*
		92.72727	-13.83838	17.00000	0.0	0.0	0.0	-	-	-	*
		94.24242	-13.83838	17.00000	0.0	0.0	0.0	-	-	-	*
		95.75758	-13.83838	17.00000	0.0	0.0	0.0	-	-	-	*
		97.27273	-13.83838	17.00000	0.0	0.0	0.0	-	-	-	*
		98.78788	-13.83838	17.00000	0.0	0.0	0.0	-	-	-	*
		100.30303	-13.83838	17.00000	0.0	0.0	0.0	-	-	-	*
		101.81818	-13.83838	17.00000	0.0	0.0	0.0	-	-	-	*
		103.33333	-13.83838	17.00000	0.0	0.0	0.0	-	-	-	*
		104.84848	-13.83838	17.00000	0.0	0.0	0.0	-	-	-	*
		106.36364	-13.83838	17.00000	0.0	0.0	0.0	-	-	-	*
		107.87879	-13.83838	17.00000	0.0	0.0	0.0	-	-	-	*
		109.39394	-13.83838	17.00000	0.0	0.0	0.0	-	-	-	*
		110.90909	-13.83838	17.00000	0.0	0.0	0.0	-	-	-	*
		112.42424	-13.83838	17.00000	0.0	0.0	0.0	-	-	-	*
		113.93939	-13.83838	17.00000	0.0	0.0	0.0	-	-	-	*
		115.45455	-13.83838	17.00000	0.0	0.0	0.0	-	-	-	*
		116.96970	-13.83838	17.00000	0.0	0.0	0.0	-	-	-	*
		118.48485	-13.83838	17.00000	0.0	0.0	0.0	-	-	-	*
		120.00000	-13.83838	17.00000	0.0	0.0	0.0	-	-	-	*
		-30.00000	-12.82828	17.00000	0.0	0.0	0.0	-	-	-	*
		-28.48485	-12.82828	17.00000	0.0	0.0	0.0	-	-	-	*
		-26.96970	-12.82828	17.00000	0.0	0.0	0.0	-	-	-	*
		-25.45455	-12.82828	17.00000	0.0	0.0	0.0	-	-	-	*
		-23.93939	-12.82828	17.00000	0.0	0.0	0.0	-	-	-	*
		-22.42424	-12.82828	17.00000	0.0	0.0	0.0	-	-	-	*
		-20.90909	-12.82828	17.00000	0.0	0.0	0.0	-	-	-	*
		-19.39394	-12.82828	17.00000	0.0	0.0	0.0	-	-	-	*
		-17.87879	-12.82828	17.00000	0.0	0.0	0.0	-	-	-	*
		-16.36364	-12.82828	17.00000	0.0	0.0	0.24147	-	-	-	*
		-14.84848	-12.82828	17.00000	0.0	0.0	0.47550	-	-	-	*
		-13.33333	-12.82828	17.00000	0.0	0.0	0.69950	-	-	-	*
		-11.81818	-12.82828	17.00000	0.078372	0.085071	0.93717	-	-	-	*
		-10.30303	-12.82828	17.00000	0.17854	0.22230	1.1564	-	-	-	*
		-8.78788	-12.82828	17.00000	0.33888	0.49468	1.3597	-	-	-	*
		-7.27273	-12.82828	17.00000	0.43982	0.77579	1.5522	-	-	-	*
		-5.75758	-12.82828	17.00000	0.47321	1.0543	1.7314	-	-	-	*
		-4.24242	-12.82828	17.00000	0.43432	1.3133	1.8895	-	-	-	*
		-2.72727	-12.82828	17.00000	0.32546	1.5309	2.0153	-	-	-	*
		-1.21212	-12.82828	17.00000	0.15909	1.6837	2.0970	-	-	-	*
		0.30303	-12.82828	17.00000	0.0	2.2779	2.2668	-	-	-	*
		1.81818	-12.82828	17.00000	0.0	2.2779	2.2668	-	-	-	*
		3.33333	-12.82828	17.00000	0.0	2.2779	2.2668	-	-	-	*
		4.84848	-12.82828	17.00000	0.0	2.2779	2.2668	-	-	-	*
		6.36364	-12.82828	17.00000	0.0	2.2779	2.2668	-	-	-	*
		7.87879	-12.82828	17.00000	0.0	2.2779	2.2668	-	-	-	*
		9.39394	-12.82828	17.00000	0.0	2.2779	2.2668	-	-	-	*
		10.90909	-12.82828	17.00000	0.0	2.2779	2.2668	-	-	-	*
		12.42424	-12.82828	17.00000	0.0	2.2779	2.2668	-	-	-	*
		13.93939	-12.82828	17.00000	0.0	2.2779	2.2668	-	-	-	*
		15.45455	-12.82828	17.00000	0.0	2.2779	2.2668	-	-	-	*
		16.96970	-12.82828	17.00000	0.0	2.2779	2.2668	-	-	-	*
		18.48485	-12.82828	17.00000	0.0	2.2779	2.2668	-	-	-	*
		20.00000	-12.82828	17.00000	0.0	2.2779	2.2668	-	-	-	*
		21.51515	-12.82828	17.00000	0.0	2.2779	2.2668	-	-	-	*
		23.03030	-12.82828	17.00000	0.0	2.2779	2.2668	-	-	-	*
		24.54545	-12.82828	17.00000	0.0	2.2779	2.2668	-	-	-	*
		26.06061	-12.82828	17.00000	0.0	2.2779	2.2668	-	-	-	*
		27.57576	-12.82828	17.00000	0.0	2.2779	2.2668	-	-	-	*
		29.09091	-12.82828	17.00000	0.0	2.2779	2.2668	-	-	-	*
		30.60606	-12.82828	17.00000	0.0	2.2779	2.2668	-	-	-	*
		32.12121	-12.82828	17.00000	0.0	2.2779	2.2668	-	-	-	*
		33.63636	-12.82828	17.00000	0.0	2.2779	2.2668	-	-	-	*
		35.15152	-12.82828	17.00000	0.0	2.2779	2.2668	-	-	-	*
		36.66667	-12.82828	17.00000	0.0	2.2779	2.2668	-	-	-	*
		38.18182	-12.82828	17.00000	0.0	2.2779	2.2668	-	-	-	*
		39.69697	-12.82828	17.00000	0.0	2.2779	2.2668	-	-	-	*
		41.21212	-12.82828	17.00000	0.0	2.2779	2.2668	-	-	-	*
		42.72727	-12.82828	17.00000	0.0	2.2779	2.2668	-	-	-	*
		44.24242	-12.82828	17.00000	0.0	2.2779	2.2668	-	-	-	*
		45.75758	-12.82828	17.00000	0.0	2.2779	2.2668	-	-	-	*
		47.27273	-12.82828	17.00000	0.0	2.2779	2.2668	-	-	-	*
		48.78788	-12.82828	17.00000	-0.10515	1.7121	2.1106	-	-	-	*

Oasys
GEA LIMITED
(GEOTECHNICAL &ENV ASSOC) J15050A
The Great Hall, Lincoln's Inn, Newman's Row, London, WC2A 3TL
Wall Movements Rev 3 Piling and Excavation
Damage Assessment
Job No. | Sheet No. | Rev.
Drg. Ref.
Made by MP | Date 08-Feb-2016 | Checked

Type/No.		Coordinates			Displacements					Angle of Line	
Name	Dist.	x	y	z	x	y	z	Horizontal displacement	Horizontal displacement	to x Axis	
		50.30303	-12.82828	17.00000	-0.28386	1.5811	2.0431	-	-	-	*
		51.81818	-12.82828	17.00000	-0.41056	1.3794	1.9285	-	-	-	*
		53.33333	-12.82828	17.00000	-0.46966	1.1297	1.7782	-	-	-	*
		54.84848	-12.82828	17.00000	-0.45627	0.85466	1.6039	-	-	-	*
		56.36364	-12.82828	17.00000	-0.37351	0.57289	1.4147	-	-	-	*
		57.87879	-12.82828	17.00000	-0.22891	0.29725	1.2146	-	-	-	*
		59.39394	-12.82828	17.00000	-0.10648	0.11989	1.0008	-	-	-	*
		60.90909	-12.82828	17.00000	-89.368E-6	88.809E-6	0.76216	-	-	-	*
		62.42424	-12.82828	17.00000	0.0	0.0	0.53931	-	-	-	*
		63.93939	-12.82828	17.00000	0.0	0.0	0.30791	-	-	-	*
		65.45455	-12.82828	17.00000	0.0	0.0	0.067675	-	-	-	*
		66.96970	-12.82828	17.00000	0.0	0.0	0.0	-	-	-	*
		68.48485	-12.82828	17.00000	0.0	0.0	0.0	-	-	-	*
		70.00000	-12.82828	17.00000	0.0	0.0	0.0	-	-	-	*
		71.51515	-12.82828	17.00000	0.0	0.0	0.0	-	-	-	*
		73.03030	-12.82828	17.00000	0.0	0.0	0.0	-	-	-	*
		74.54545	-12.82828	17.00000	0.0	0.0	0.0	-	-	-	*
		76.06061	-12.82828	17.00000	0.0	0.0	0.0	-	-	-	*
		77.57576	-12.82828	17.00000	0.0	0.0	0.0	-	-	-	*
		79.09091	-12.82828	17.00000	0.0	0.0	0.0	-	-	-	*
		80.60606	-12.82828	17.00000	0.0	0.0	0.0	-	-	-	*
		82.12121	-12.82828	17.00000	0.0	0.0	0.0	-	-	-	*
		83.63636	-12.82828	17.00000	0.0	0.0	0.0	-	-	-	*
		85.15152	-12.82828	17.00000	0.0	0.0	0.0	-	-	-	*
		86.66667	-12.82828	17.00000	0.0	0.0	0.0	-	-	-	*
		88.18182	-12.82828	17.00000	0.0	0.0	0.0	-	-	-	*
		89.69697	-12.82828	17.00000	0.0	0.0	0.0	-	-	-	*
		91.21212	-12.82828	17.00000	0.0	0.0	0.0	-	-	-	*
		92.72727	-12.82828	17.00000	0.0	0.0	0.0	-	-	-	*
		94.24242	-12.82828	17.00000	0.0	0.0	0.0	-	-	-	*
		95.75758	-12.82828	17.00000	0.0	0.0	0.0	-	-	-	*
		97.27273	-12.82828	17.00000	0.0	0.0	0.0	-	-	-	*
		98.78788	-12.82828	17.00000	0.0	0.0	0.0	-	-	-	*
		100.30303	-12.82828	17.00000	0.0	0.0	0.0	-	-	-	*
		101.81818	-12.82828	17.00000	0.0	0.0	0.0	-	-	-	*
		103.33333	-12.82828	17.00000	0.0	0.0	0.0	-	-	-	*
		104.84848	-12.82828	17.00000	0.0	0.0	0.0	-	-	-	*
		106.36364	-12.82828	17.00000	0.0	0.0	0.0	-	-	-	*
		107.87879	-12.82828	17.00000	0.0	0.0	0.0	-	-	-	*
		109.39394	-12.82828	17.00000	0.0	0.0	0.0	-	-	-	*
		110.90909	-12.82828	17.00000	0.0	0.0	0.0	-	-	-	*
		-30.00000	-11.81818	17.00000	0.0	0.0	0.0	-	-	-	*
		-28.48485	-11.81818	17.00000	0.0	0.0	0.0	-	-	-	*
		-26.96970	-11.81818	17.00000	0.0	0.0	0.0	-	-	-	*
		-25.45455	-11.81818	17.00000	0.0	0.0	0.0	-	-	-	*
		-23.93939	-11.81818	17.00000	0.0	0.0	0.0	-	-	-	*
		-22.42424	-11.81818	17.00000	0.0	0.0	0.0	-	-	-	*
		-20.90909	-11.81818	17.00000	0.0	0.0	0.0	-	-	-	*
		-19.39394	-11.81818	17.00000	0.0	0.0	0.0	-	-	-	*
		-17.87879	-11.81818	17.00000	0.0	0.0	0.11365	-	-	-	*
		-16.36364	-11.81818	17.00000	0.0	0.0	0.36298	-	-	-	*
		-14.84848	-11.81818	17.00000	0.0	0.0	0.60449	-	-	-	*
		-13.33333	-11.81818	17.00000	0.044107	0.039095	0.85213	-	-	-	*
		-11.81818	-11.81818	17.00000	0.15767	0.15767	1.0975	-	-	-	*
		-10.30303	-11.81818	17.00000	0.35277	0.40465	1.3273	-	-	-	*
		-8.78788	-11.81818	17.00000	0.51944	0.69855	1.5519	-	-	-	*
		-7.27273	-11.81818	17.00000	0.62103	1.0092	1.7734	-	-	-	*
		-5.75758	-11.81818	17.00000	0.64530	1.3246	1.9859	-	-	-	*
		-4.24242	-11.81818	17.00000	0.58328	1.6248	2.1778	-	-	-	*
		-2.72727	-11.81818	17.00000	0.43450	1.8828	2.3336	-	-	-	*
		-1.21212	-11.81818	17.00000	0.21209	2.0679	2.4374	-	-	-	*
		0.30303	-11.81818	17.00000	0.0	2.7773	2.6900	-	-	-	*
		1.81818	-11.81818	17.00000	0.0	2.7773	2.6900	-	-	-	*
		3.33333	-11.81818	17.00000	0.0	2.7773	2.6900	-	-	-	*
		4.84848	-11.81818	17.00000	0.0	2.7773	2.6900	-	-	-	*
		6.36364	-11.81818	17.00000	0.0	2.7773	2.6900	-	-	-	*
		7.87879	-11.81818	17.00000	0.0	2.7773	2.6900	-	-	-	*
		9.39394	-11.81818	17.00000	0.0	2.7773	2.6900	-	-	-	*
		10.90909	-11.81818	17.00000	0.0	2.7773	2.6900	-	-	-	*
		12.42424	-11.81818	17.00000	0.0	2.7773	2.6900	-	-	-	*
		13.93939	-11.81818	17.00000	0.0	2.7773	2.6900	-	-	-	*
		15.45455	-11.81818	17.00000	0.0	2.7773	2.6900	-	-	-	*
		16.96970	-11.81818	17.00000	0.0	2.7773	2.6900	-	-	-	*
		18.48485	-11.81818	17.00000	0.0	2.7773	2.6900	-	-	-	*
		20.00000	-11.81818	17.00000	0.0	2.7773	2.6900	-	-	-	*
		21.51515	-11.81818	17.00000	0.0	2.7773	2.6900	-	-	-	*
		23.03030	-11.81818	17.00000	0.0	2.7773	2.6900	-	-	-	*
		24.54545	-11.81818	17.00000	0.0	2.7773	2.6900	-	-	-	*
		26.06061	-11.81818	17.00000	0.0	2.7773	2.6900	-	-	-	*
		27.57576	-11.81818	17.00000	0.0	2.7773	2.6900	-	-	-	*
		29.09091	-11.81818	17.00000	0.0	2.7773	2.6900	-	-	-	*
		30.60606	-11.81818	17.00000	0.0	2.7773	2.6900	-	-	-	*
		32.12121	-11.81818	17.00000	0.0	2.7773	2.6900	-	-	-	*
		33.63636	-11.81818	17.00000	0.0	2.7773	2.6900	-	-	-	*
		35.15152	-11.81818	17.00000	0.0	2.7773	2.6900	-	-	-	*
		36.66667	-11.81818	17.00000	0.0	2.7773	2.6900	-	-	-	*
		38.18182	-11.81818	17.00000	0.0	2.7773	2.6900	-	-	-	*
		39.69697	-11.81818	17.00000	0.0	2.7773	2.6900	-	-	-	*
		41.21212	-11.81818	17.00000	0.0	2.7773	2.6900	-	-	-	*
		42.72727	-11.81818	17.00000	0.0	2.7773	2.6900	-	-	-	*
		44.24242	-11.81818	17.00000	0.0	2.7773	2.6900	-	-	-	*
		45.75758	-11.81818	17.00000	0.0	2.7773	2.6900	-	-	-	*
		47.27273	-11.81818	17.00000	0.0	2.7773	2.6900	-	-	-	*
		48.78788	-11.81818	17.00000	-0.14019	2.1029	2.4553	-	-	-	*
		50.30303	-11.81818	17.00000	-0.37869	1.9433	2.3685	-	-	-	*
		51.81818	-11.81818	17.00000	-0.55009	1.7026	2.2257	-	-	-	*
		53.33333	-11.81818	17.00000	-0.63685	1.4112	2.0424	-	-	-	*
		54.84848	-11.81818	17.00000	-0.63610	1.0977	1.8342	-	-	-	*
		56.36364	-11.81818	17.00000	-0.55498	0.78422	1.6144	-	-	-	*
		57.87879	-11.81818	17.00000	-0.40528	0.48484	1.3905	-	-	-	*
		59.39394	-11.81818	17.00000	-0.19924	0.20666	1.1628	-	-	-	*
		60.90909	-11.81818	17.00000	-0.078718	0.072066	0.92383	-	-	-	*
		62.42424	-11.81818	17.00000	0.0	0.0	0.67051	-	-	-	*
		63.93939	-11.81818	17.00000	0.0	0.0	0.43146	-	-	-	*
		65.45455	-11.81818	17.00000	0.0	0.0	0.18417	-	-	-	*
		66.96970	-11.81818	17.00000	0.0	0.0	0.0	-	-	-	*
		68.48485	-11.81818	17.00000	0.0	0.0	0.0	-	-	-	*
		70.00000	-11.81818	17.00000	0.0	0.0	0.0	-	-	-	*
		71.51515	-11.81818	17.00000	0.0	0.0	0.0	-	-	-	*
		73.03030	-11.81818	17.00000	0.0	0.0	0.0	-	-	-	*
		74.54545	-11.81818	17.00000	0.0	0.0	0.0	-	-	-	*
		76.06061	-11.81818	17.00000	0.0	0.0	0.0	-	-	-	*
		77.57576	-11.81818	17.00000	0.0	0.0	0.0	-	-	-	*
		79.09091	-11.81818	17.00000	0.0	0.0	0.0	-	-	-	*
		80.60606	-11.81818	17.00000	0.0	0.0	0.0	-	-	-	*
		82.12121	-11.81818	17.00000	0.0	0.0	0.0	-	-	-	*
		83.63636	-11.81818	17.00000	0.0	0.0	0.0	-	-	-	*
		85.15152	-11.81818	17.00000	0.0	0.0	0.0	-	-	-	*
		86.66667	-11.81818	17.00000	0.0	0.0	0.0	-	-	-	*
		88.18182	-11.81818	17.00000	0.0	0.0	0.0	-	-	-	*
		89.69697	-11.81818	17.00000	0.0	0.0	0.0	-	-	-	*
		91.21212	-11.81818	17.00000	0.0	0.0	0.0	-	-	-	*
		92.72727	-11.81818	17.00000	0.0	0.0	0.0	-	-	-	*
		94.24242	-11.81818	17.00000	0.0	0.0	0.0	-	-	-	*
		95.75758	-11.81818	17.00000	0.0	0.0	0.0	-	-	-	*
		97.27273	-11.81818	17.00000	0.0	0.0	0.0	-	-	-	*
		98.78788	-11.81818	17.00000	0.0	0.0	0.0	-	-	-	*
		100.30303	-11.81818	17.00000	0.0	0.0	0.0	-	-	-	*
		101.81818	-11.81818	17.00000	0.0	0.0	0.0	-	-	-	*
		103.33333	-11.81818	17.00000	0.0	0.0	0.0	-	-	-	*
		104.84848	-11.81818	17.00000	0.0	0.0	0.0	-	-	-	*
		106.36364	-11.81818	17.00000	0.0	0.0	0.0	-	-	-	*
		107.87879	-11.81818	17.00000	0.0	0.0	0.0	-	-	-	*
		109.39394	-11.81818	17.00000	0.0	0.0	0.0	-	-	-	*
		110.90909	-11.81818	17.00000	0.0	0.0	0.0	-	-	-	*

Type/No.		Coordinates			Displacements					Angle of Line to x Axis	
Name	Dist.	x	y	z	x	y	z	Horizontal displacement	Horizontal displacement		
		112.42424	-11.81818	17.00000	0.0	0.0	0.0	-	-	-	*
		113.93939	-11.81818	17.00000	0.0	0.0	0.0	-	-	-	*
		115.45455	-11.81818	17.00000	0.0	0.0	0.0	-	-	-	*
		116.96970	-11.81818	17.00000	0.0	0.0	0.0	-	-	-	*
		118.48485	-11.81818	17.00000	0.0	0.0	0.0	-	-	-	*
		120.00000	-11.81818	17.00000	0.0	0.0	0.0	-	-	-	*
		-30.00000	-10.80808	17.00000	0.0	0.0	0.0	-	-	-	*
		-28.48485	-10.80808	17.00000	0.0	0.0	0.0	-	-	-	*
		-26.96970	-10.80808	17.00000	0.0	0.0	0.0	-	-	-	*
		-25.45455	-10.80808	17.00000	0.0	0.0	0.0	-	-	-	*
		-23.93939	-10.80808	17.00000	0.0	0.0	0.0	-	-	-	*
		-22.42424	-10.80808	17.00000	0.0	0.0	0.0	-	-	-	*
		-20.90909	-10.80808	17.00000	0.0	0.0	0.0	-	-	-	*
		-19.39394	-10.80808	17.00000	0.0	0.0	0.0	-	-	-	*
		-17.87879	-10.80808	17.00000	0.0	0.0	0.22165	-	-	-	*
		-16.36364	-10.80808	17.00000	0.0	0.0	0.47784	-	-	-	*
		-14.84848	-10.80808	17.00000	0.0	0.0	0.72690	-	-	-	*
		-13.33333	-10.80808	17.00000	0.12620	0.10230	1.0001	-	-	-	*
		-11.81818	-10.80808	17.00000	0.31149	0.28487	1.2516	-	-	-	*
		-10.30303	-10.80808	17.00000	0.53497	0.56119	1.4981	-	-	-	*
		-8.78788	-10.80808	17.00000	0.71293	0.87683	1.7517	-	-	-	*
		-7.27273	-10.80808	17.00000	0.82037	1.2192	2.0094	-	-	-	*
		-5.75758	-10.80808	17.00000	0.83970	1.5763	2.2622	-	-	-	*
		-4.24242	-10.80808	17.00000	0.75583	1.9256	2.4943	-	-	-	*
		-2.72727	-10.80808	17.00000	0.56350	2.2331	2.6863	-	-	-	*
		-1.21212	-10.80808	17.00000	0.27573	2.4586	2.8177	-	-	-	*
		0.30303	-10.80808	17.00000	0.0	3.2867	3.1775	-	-	-	*
		1.81818	-10.80808	17.00000	0.0	3.2867	3.1775	-	-	-	*
		3.33333	-10.80808	17.00000	0.0	3.2867	3.1775	-	-	-	*
		4.84848	-10.80808	17.00000	0.0	3.2867	3.1775	-	-	-	*
		6.36364	-10.80808	17.00000	0.0	3.2867	3.1775	-	-	-	*
		7.87879	-10.80808	17.00000	0.0	3.2867	3.1775	-	-	-	*
		9.39394	-10.80808	17.00000	0.0	3.2867	3.1775	-	-	-	*
		10.90909	-10.80808	17.00000	0.0	3.2867	3.1775	-	-	-	*
		12.42424	-10.80808	17.00000	0.0	3.2867	3.1775	-	-	-	*
		13.93939	-10.80808	17.00000	0.0	3.2867	3.1775	-	-	-	*
		15.45455	-10.80808	17.00000	0.0	3.2867	3.1775	-	-	-	*
		16.96970	-10.80808	17.00000	0.0	3.2867	3.1775	-	-	-	*
		18.48485	-10.80808	17.00000	0.0	3.2867	3.1775	-	-	-	*
		20.00000	-10.80808	17.00000	0.0	3.2867	3.1775	-	-	-	*
		21.51515	-10.80808	17.00000	0.0	3.2867	3.1775	-	-	-	*
		23.03030	-10.80808	17.00000	0.0	3.2867	3.1775	-	-	-	*
		24.54545	-10.80808	17.00000	0.0	3.2867	3.1775	-	-	-	*
		26.06061	-10.80808	17.00000	0.0	3.2867	3.1775	-	-	-	*
		27.57576	-10.80808	17.00000	0.0	3.2867	3.1775	-	-	-	*
		29.09091	-10.80808	17.00000	0.0	3.2867	3.1775	-	-	-	*
		30.60606	-10.80808	17.00000	0.0	3.2867	3.1775	-	-	-	*
		32.12121	-10.80808	17.00000	0.0	3.2867	3.1775	-	-	-	*
		33.63636	-10.80808	17.00000	0.0	3.2867	3.1775	-	-	-	*
		35.15152	-10.80808	17.00000	0.0	3.2867	3.1775	-	-	-	*
		36.66667	-10.80808	17.00000	0.0	3.2867	3.1775	-	-	-	*
		38.18182	-10.80808	17.00000	0.0	3.2867	3.1775	-	-	-	*
		39.69697	-10.80808	17.00000	0.0	3.2867	3.1775	-	-	-	*
		41.21212	-10.80808	17.00000	0.0	3.2867	3.1775	-	-	-	*
		42.72727	-10.80808	17.00000	0.0	3.2867	3.1775	-	-	-	*
		44.24242	-10.80808	17.00000	0.0	3.2867	3.1775	-	-	-	*
		45.75758	-10.80808	17.00000	0.0	3.2867	3.1775	-	-	-	*
		47.27273	-10.80808	17.00000	0.0	3.2867	3.1775	-	-	-	*
		48.78788	-10.80808	17.00000	-0.18237	2.5017	2.8412	-	-	-	*
		50.30303	-10.80808	17.00000	-0.49143	2.3063	2.7300	-	-	-	*
		51.81818	-10.80808	17.00000	-0.71275	2.0176	2.5530	-	-	-	*
		53.33333	-10.80808	17.00000	-0.82710	1.6761	2.3300	-	-	-	*
		54.84848	-10.80808	17.00000	-0.83541	1.3184	2.0812	-	-	-	*
		56.36364	-10.80808	17.00000	-0.75087	0.97033	1.8237	-	-	-	*
		57.87879	-10.80808	17.00000	-0.59094	0.64653	1.5685	-	-	-	*
		59.39394	-10.80808	17.00000	-0.37830	0.35885	1.3203	-	-	-	*
		60.90909	-10.80808	17.00000	-0.16285	0.13634	1.0720	-	-	-	*
		62.42424	-10.80808	17.00000	-0.022398	0.016783	0.80411	-	-	-	*
		63.93939	-10.80808	17.00000	0.0	0.0	0.54836	-	-	-	*
		65.45455	-10.80808	17.00000	0.0	0.0	0.29402	-	-	-	*
		66.96970	-10.80808	17.00000	0.0	0.0	0.033473	-	-	-	*
		68.48485	-10.80808	17.00000	0.0	0.0	0.0	-	-	-	*
		70.00000	-10.80808	17.00000	0.0	0.0	0.0	-	-	-	*
		71.51515	-10.80808	17.00000	0.0	0.0	0.0	-	-	-	*
		73.03030	-10.80808	17.00000	0.0	0.0	0.0	-	-	-	*
		74.54545	-10.80808	17.00000	0.0	0.0	0.0	-	-	-	*
		76.06061	-10.80808	17.00000	0.0	0.0	0.0	-	-	-	*
		77.57576	-10.80808	17.00000	0.0	0.0	0.0	-	-	-	*
		79.09091	-10.80808	17.00000	0.0	0.0	0.0	-	-	-	*
		80.60606	-10.80808	17.00000	0.0	0.0	0.0	-	-	-	*
		82.12121	-10.80808	17.00000	0.0	0.0	0.0	-	-	-	*
		83.63636	-10.80808	17.00000	0.0	0.0	0.0	-	-	-	*
		85.15152	-10.80808	17.00000	0.0	0.0	0.0	-	-	-	*
		86.66667	-10.80808	17.00000	0.0	0.0	0.0	-	-	-	*
		88.18182	-10.80808	17.00000	0.0	0.0	0.0	-	-	-	*
		89.69697	-10.80808	17.00000	0.0	0.0	0.0	-	-	-	*
		91.21212	-10.80808	17.00000	0.0	0.0	0.0	-	-	-	*
		92.72727	-10.80808	17.00000	0.0	0.0	0.0	-	-	-	*
		94.24242	-10.80808	17.00000	0.0	0.0	0.0	-	-	-	*
		95.75758	-10.80808	17.00000	0.0	0.0	0.0	-	-	-	*
		97.27273	-10.80808	17.00000	0.0	0.0	0.0	-	-	-	*
		98.78788	-10.80808	17.00000	0.0	0.0	0.0	-	-	-	*
		100.30303	-10.80808	17.00000	0.0	0.0	0.0	-	-	-	*
		101.81818	-10.80808	17.00000	0.0	0.0	0.0	-	-	-	*
		103.33333	-10.80808	17.00000	0.0	0.0	0.0	-	-	-	*
		104.84848	-10.80808	17.00000	0.0	0.0	0.0	-	-	-	*
		106.36364	-10.80808	17.00000	0.0	0.0	0.0	-	-	-	*
		107.87879	-10.80808	17.00000	0.0	0.0	0.0	-	-	-	*
		109.39394	-10.80808	17.00000	0.0	0.0	0.0	-	-	-	*
		110.90909	-10.80808	17.00000	0.0	0.0	0.0	-	-	-	*
		112.42424	-10.80808	17.00000	0.0	0.0	0.0	-	-	-	*
		113.93939	-10.80808	17.00000	0.0	0.0	0.0	-	-	-	*
		115.45455	-10.80808	17.00000	0.0	0.0	0.0	-	-	-	*
		116.96970	-10.80808	17.00000	0.0	0.0	0.0	-	-	-	*
		118.48485	-10.80808	17.00000	0.0	0.0	0.0	-	-	-	*
		120.00000	-10.80808	17.00000	0.0	0.0	0.0	-	-	-	*
		-30.00000	-9.79798	17.00000	0.0	0.0	0.0	-	-	-	*
		-28.48485	-9.79798	17.00000	0.0	0.0	0.0	-	-	-	*
		-26.96970	-9.79798	17.00000	0.0	0.0	0.0	-	-	-	*
		-25.45455	-9.79798	17.00000	0.0	0.0	0.0	-	-	-	*
		-23.93939	-9.79798	17.00000	0.0	0.0	0.0	-	-	-	*
		-22.42424	-9.79798	17.00000	0.0	0.0	0.0	-	-	-	*
		-20.90909	-9.79798	17.00000	0.0	0.0	0.0	-	-	-	*
		-19.39394	-9.79798	17.00000	0.0	0.0	0.054311	-	-	-	*
		-17.87879	-9.79798	17.00000	0.0	0.0	0.32249	-	-	-	*
		-16.36364	-9.79798	17.00000	0.0	0.0	0.58545	-	-	-	*
		-14.84848	-9.79798	17.00000	0.055847	0.036851	0.85939	-	-	-	*
		-13.33333	-9.79798	17.00000	0.21302	0.15654	1.1368	-	-	-	*
		-11.81818	-9.79798	17.00000	0.50031	0.41479	1.4025	-	-	-	*
		-10.30303	-9.79798	17.00000	0.73360	0.69764	1.6731	-	-	-	*
		-8.78788	-9.79798	17.00000	0.91936	1.0250	1.9589	-	-	-	*
		-7.27273	-9.79798	17.00000	1.0394	1.4003	2.2584	-	-	-	*
		-5.75758	-9.79798	17.00000	1.0600	1.8038	2.5568	-	-	-	*
		-4.24242	-9.79798	17.00000	0.95731	2.2109	2.8348	-	-	-	*
		-2.72727	-9.79798	17.00000	0.71811	2.5799	3.0686	-	-	-	*
		-1.21212	-9.79798	17.00000	0.35339	2.8566	3.2329	-	-	-	*
		0.30303	-9.79798	17.00000	0.0	3.8083	3.7226	-	-	-	*
		1.81818	-9.79798	17.00000	0.0	3.8083	3.7226	-	-	-	*
		3.33333	-9.79798	17.00000	0.0	3.8083	3.7226	-	-	-	*
		4.84848	-9.79798	17.00000	0.0	3.8083	3.7226	-	-	-	*
		6.36364	-9.79798	17.00000	0.0	3.8083	3.7226	-	-	-	*
		7.87879	-9.79798	17.00000	0.0	3.8083	3.7226	-	-	-	*
		9.39394	-9.79798	17.00000	0.0	3.8083	3.7226	-	-	-	*
		10.90909	-9.79798	17.00000	0.0	3.8083	3.7226	-	-	-	*
		12.42424	-9.79798	17.00000	0.0	3.8083	3.7226	-	-	-	*
		13.93939	-9.79798	17.00000	0.0	3.8083	3.7226	-	-	-	*
		15.45455	-9.79798	17.00000	0.0	3.8083	3.7226	-	-	-	*
		16.96970	-9.79798	17.00000	0.0	3.8083	3.7226	-	-	-	*
		18.48485	-9.79798	17.00000	0.0	3.8083	3.7226	-	-	-	*
		20.00000	-9.79798	17.00000	0.0	3.8083	3.7226	-	-	-	*
		21.51515	-9.79798	17.00000	0.0	3.8083	3.7226	-	-	-	*

Oasys
GEA LIMITED
(GEOTECHNICAL &ENV ASSOC) J15050A
The Great Hall, Lincoln's Inn, Newman's Row, London, WC2A 3TL
Wall Movements Rev 3 Piling and Excavation
Damage Assessment
Job No. | Sheet No. | Rev.
Drg. Ref.
Made by MP | Date 08-Feb-2016 | Checked

Type/No.		Coordinates			Displacements					Angle of Line to x Axis	
Name	Dist.	x	y	z	x	y	z	Horizontal displacement	Horizontal displacement		
		23.03030	-9.79798	17.00000	0.0	3.8083	3.7226	-	-	-	*
		24.54545	-9.79798	17.00000	0.0	3.8083	3.7226	-	-	-	*
		26.06061	-9.79798	17.00000	0.0	3.8083	3.7226	-	-	-	*
		27.57576	-9.79798	17.00000	0.0	3.8083	3.7226	-	-	-	*
		29.09091	-9.79798	17.00000	0.0	3.8083	3.7226	-	-	-	*
		30.60606	-9.79798	17.00000	0.0	3.8083	3.7226	-	-	-	*
		32.12121	-9.79798	17.00000	0.0	3.8083	3.7226	-	-	-	*
		33.63636	-9.79798	17.00000	0.0	3.8083	3.7226	-	-	-	*
		35.15152	-9.79798	17.00000	0.0	3.8083	3.7226	-	-	-	*
		36.66667	-9.79798	17.00000	0.0	3.8083	3.7226	-	-	-	*
		38.18182	-9.79798	17.00000	0.0	3.8083	3.7226	-	-	-	*
		39.69697	-9.79798	17.00000	0.0	3.8083	3.7226	-	-	-	*
		41.21212	-9.79798	17.00000	0.0	3.8083	3.7226	-	-	-	*
		42.72727	-9.79798	17.00000	0.0	3.8083	3.7226	-	-	-	*
		44.24242	-9.79798	17.00000	0.0	3.8083	3.7226	-	-	-	*
		45.75758	-9.79798	17.00000	0.0	3.8083	3.7226	-	-	-	*
		47.27273	-9.79798	17.00000	0.0	3.8083	3.7226	-	-	-	*
		48.78788	-9.79798	17.00000	-0.23401	2.9101	3.2634	-	-	-	*
		50.30303	-9.79798	17.00000	-0.62737	2.6691	3.1227	-	-	-	*
		51.81818	-9.79798	17.00000	-0.90418	2.3203	2.9059	-	-	-	*
		53.33333	-9.79798	17.00000	-1.0445	1.9189	2.6377	-	-	-	*
		54.84848	-9.79798	17.00000	-1.0563	1.5112	2.3427	-	-	-	*
		56.36364	-9.79798	17.00000	-0.96154	1.1264	2.0420	-	-	-	*
		57.87879	-9.79798	17.00000	-0.78678	0.78035	1.7503	-	-	-	*
		59.39394	-9.79798	17.00000	-0.57201	0.49189	1.4774	-	-	-	*
		60.90909	-9.79798	17.00000	-0.29554	0.22431	1.2114	-	-	-	*
		62.42424	-9.79798	17.00000	-0.10237	0.069536	0.93991	-	-	-	*
		63.93939	-9.79798	17.00000	0.0	0.0	0.65800	-	-	-	*
		65.45455	-9.79798	17.00000	0.0	0.0	0.39669	-	-	-	*
		66.96970	-9.79798	17.00000	0.0	0.0	0.12997	-	-	-	*
		68.48485	-9.79798	17.00000	0.0	0.0	0.0	-	-	-	*
		70.00000	-9.79798	17.00000	0.0	0.0	0.0	-	-	-	*
		71.51515	-9.79798	17.00000	0.0	0.0	0.0	-	-	-	*
		73.03030	-9.79798	17.00000	0.0	0.0	0.0	-	-	-	*
		74.54545	-9.79798	17.00000	0.0	0.0	0.0	-	-	-	*
		76.06061	-9.79798	17.00000	0.0	0.0	0.0	-	-	-	*
		77.57576	-9.79798	17.00000	0.0	0.0	0.0	-	-	-	*
		79.09091	-9.79798	17.00000	0.0	0.0	0.0	-	-	-	*
		80.60606	-9.79798	17.00000	0.0	0.0	0.0	-	-	-	*
		82.12121	-9.79798	17.00000	0.0	0.0	0.0	-	-	-	*
		83.63636	-9.79798	17.00000	0.0	0.0	0.0	-	-	-	*
		85.15152	-9.79798	17.00000	0.0	0.0	0.0	-	-	-	*
		86.66667	-9.79798	17.00000	0.0	0.0	0.0	-	-	-	*
		88.18182	-9.79798	17.00000	0.0	0.0	0.0	-	-	-	*
		89.69697	-9.79798	17.00000	0.0	0.0	0.0	-	-	-	*
		91.21212	-9.79798	17.00000	0.0	0.0	0.0	-	-	-	*
		92.72727	-9.79798	17.00000	0.0	0.0	0.0	-	-	-	*
		94.24242	-9.79798	17.00000	0.0	0.0	0.0	-	-	-	*
		95.75758	-9.79798	17.00000	0.0	0.0	0.0	-	-	-	*
		97.27273	-9.79798	17.00000	0.0	0.0	0.0	-	-	-	*
		98.78788	-9.79798	17.00000	0.0	0.0	0.0	-	-	-	*
		100.30303	-9.79798	17.00000	0.0	0.0	0.0	-	-	-	*
		101.81818	-9.79798	17.00000	0.0	0.0	0.0	-	-	-	*
		103.33333	-9.79798	17.00000	0.0	0.0	0.0	-	-	-	*
		104.84848	-9.79798	17.00000	0.0	0.0	0.0	-	-	-	*
		106.36364	-9.79798	17.00000	0.0	0.0	0.0	-	-	-	*
		107.87879	-9.79798	17.00000	0.0	0.0	0.0	-	-	-	*
		109.39394	-9.79798	17.00000	0.0	0.0	0.0	-	-	-	*
		110.90909	-9.79798	17.00000	0.0	0.0	0.0	-	-	-	*
		112.42424	-9.79798	17.00000	0.0	0.0	0.0	-	-	-	*
		113.93939	-9.79798	17.00000	0.0	0.0	0.0	-	-	-	*
		115.45455	-9.79798	17.00000	0.0	0.0	0.0	-	-	-	*
		116.96970	-9.79798	17.00000	0.0	0.0	0.0	-	-	-	*
		118.48485	-9.79798	17.00000	0.0	0.0	0.0	-	-	-	*
		120.00000	-9.79798	17.00000	0.0	0.0	0.0	-	-	-	*
		-30.00000	-8.78788	17.00000	0.0	0.0	0.0	-	-	-	*
		-28.48485	-8.78788	17.00000	0.0	0.0	0.0	-	-	-	*
		-26.96970	-8.78788	17.00000	0.0	0.0	0.0	-	-	-	*
		-25.45455	-8.78788	17.00000	0.0	0.0	0.0	-	-	-	*
		-23.93939	-8.78788	17.00000	0.0	0.0	0.0	-	-	-	*
		-22.42424	-8.78788	17.00000	0.0	0.0	0.0	-	-	-	*
		-20.90909	-8.78788	17.00000	0.0	0.0	0.0	-	-	-	*
		-19.39394	-8.78788	17.00000	0.0	0.0	0.14159	-	-	-	*
		-17.87879	-8.78788	17.00000	0.0	0.0	0.41564	-	-	-	*
		-16.36364	-8.78788	17.00000	0.0	0.0	0.68519	-	-	-	*
		-14.84848	-8.78788	17.00000	0.13537	0.080116	0.98184	-	-	-	*
		-13.33333	-8.78788	17.00000	0.38428	0.25327	1.2656	-	-	-	*
		-11.81818	-8.78788	17.00000	0.69855	0.51944	1.5519	-	-	-	*
		-10.30303	-8.78788	17.00000	0.95501	0.81457	1.8545	-	-	-	*
		-8.78788	-8.78788	17.00000	1.1377	1.1377	2.1706	-	-	-	*
		-7.27273	-8.78788	17.00000	1.2789	1.5453	2.5153	-	-	-	*
		-5.75758	-8.78788	17.00000	1.3097	1.9990	2.8629	-	-	-	*
		-4.24242	-8.78788	17.00000	1.1942	2.4737	3.1909	-	-	-	*
		-2.72727	-8.78788	17.00000	0.90590	2.9190	3.4711	-	-	-	*
		-1.21212	-8.78788	17.00000	0.44994	3.2621	3.6735	-	-	-	*
		0.30303	-8.78788	17.00000	0.0	4.3443	4.3118	-	-	-	*
		1.81818	-8.78788	17.00000	0.0	4.3443	4.3118	-	-	-	*
		3.33333	-8.78788	17.00000	0.0	4.3443	4.3118	-	-	-	*
		4.84848	-8.78788	17.00000	0.0	4.3443	4.3118	-	-	-	*
		6.36364	-8.78788	17.00000	0.0	4.3443	4.3118	-	-	-	*
		7.87879	-8.78788	17.00000	0.0	4.3443	4.3118	-	-	-	*
		9.39394	-8.78788	17.00000	0.0	4.3443	4.3118	-	-	-	*
		10.90909	-8.78788	17.00000	0.0	4.3443	4.3118	-	-	-	*
		12.42424	-8.78788	17.00000	0.0	4.3443	4.3118	-	-	-	*
		13.93939	-8.78788	17.00000	0.0	4.3443	4.3118	-	-	-	*
		15.45455	-8.78788	17.00000	0.0	4.3443	4.3118	-	-	-	*
		16.96970	-8.78788	17.00000	0.0	4.3443	4.3118	-	-	-	*
		18.48485	-8.78788	17.00000	0.0	4.3443	4.3118	-	-	-	*
		20.00000	-8.78788	17.00000	0.0	4.3443	4.3118	-	-	-	*
		21.51515	-8.78788	17.00000	0.0	4.3443	4.3118	-	-	-	*
		23.03030	-8.78788	17.00000	0.0	4.3443	4.3118	-	-	-	*
		24.54545	-8.78788	17.00000	0.0	4.3443	4.3118	-	-	-	*
		26.06061	-8.78788	17.00000	0.0	4.3443	4.3118	-	-	-	*
		27.57576	-8.78788	17.00000	0.0	4.3443	4.3118	-	-	-	*
		29.09091	-8.78788	17.00000	0.0	4.3443	4.3118	-	-	-	*
		30.60606	-8.78788	17.00000	0.0	4.3443	4.3118	-	-	-	*
		32.12121	-8.78788	17.00000	0.0	4.3443	4.3118	-	-	-	*
		33.63636	-8.78788	17.00000	0.0	4.3443	4.3118	-	-	-	*
		35.15152	-8.78788	17.00000	0.0	4.3443	4.3118	-	-	-	*
		36.66667	-8.78788	17.00000	0.0	4.3443	4.3118	-	-	-	*
		38.18182	-8.78788	17.00000	0.0	4.3443	4.3118	-	-	-	*
		39.69697	-8.78788	17.00000	0.0	4.3443	4.3118	-	-	-	*
		41.21212	-8.78788	17.00000	0.0	4.3443	4.3118	-	-	-	*
		42.72727	-8.78788	17.00000	0.0	4.3443	4.3118	-	-	-	*
		44.24242	-8.78788	17.00000	0.0	4.3443	4.3118	-	-	-	*
		45.75758	-8.78788	17.00000	0.0	4.3443	4.3118	-	-	-	*
		47.27273	-8.78788	17.00000	0.0	4.3443	4.3118	-	-	-	*
		48.78788	-8.78788	17.00000	-0.29848	3.3292	3.7124	-	-	-	*
		50.30303	-8.78788	17.00000	-0.79376	3.0288	3.5369	-	-	-	*
		51.81818	-8.78788	17.00000	-1.1314	2.6041	3.2754	-	-	-	*
		53.33333	-8.78788	17.00000	-1.2936	2.1315	2.9579	-	-	-	*
		54.84848	-8.78788	17.00000	-1.3002	1.6684	2.6132	-	-	-	*
		56.36364	-8.78788	17.00000	-1.1863	1.2465	2.2658	-	-	-	*
		57.87879	-8.78788	17.00000	-1.0144	0.90239	1.9421	-	-	-	*
		59.39394	-8.78788	17.00000	-0.77678	0.59911	1.6348	-	-	-	*
		60.90909	-8.78788	17.00000	-0.47738	0.32498	1.3446	-	-	-	*
		62.42424	-8.78788	17.00000	-0.18506	0.11275	1.0625	-	-	-	*
		63.93939	-8.78788	17.00000	0.0	0.0	0.75972	-	-	-	*
		65.45455	-8.78788	17.00000	0.0	0.0	0.49161	-	-	-	*
		66.96970	-8.78788	17.00000	0.0	0.0	0.21873	-	-	-	*
		68.48485	-8.78788	17.00000	0.0	0.0	0.0	-	-	-	*
		70.00000	-8.78788	17.00000	0.0	0.0	0.0	-	-	-	*
		71.51515	-8.78788	17.00000	0.0	0.0	0.0	-	-	-	*
		73.03030	-8.78788	17.00000	0.0	0.0	0.0	-	-	-	*
		74.54545	-8.78788	17.00000	0.0	0.0	0.0	-	-	-	*
		76.06061	-8.78788	17.00000	0.0	0.0	0.0	-	-	-	*
		77.57576	-8.78788	17.00000	0.0	0.0	0.0	-	-	-	*
		79.09091	-8.78788	17.00000	0.0	0.0	0.0	-	-	-	*
		80.60606	-8.78788	17.00000	0.0	0.0	0.0	-	-	-	*
		82.12121	-8.78788	17.00000	0.0	0.0	0.0	-	-	-	*
		83.63636	-8.78788	17.00000	0.0	0.0	0.0	-	-	-	*

Type/No.		Coordinates			Displacements					Angle of Line
Name	Dist.	x	y	z	x	y	z	Horizontal displacement	Horizontal displacement	to x Axis
		85.15152	-8.78788	17.00000	0.0	0.0	0.0	-	-	-
		86.66667	-8.78788	17.00000	0.0	0.0	0.0	-	-	-
		88.18182	-8.78788	17.00000	0.0	0.0	0.0	-	-	-
		89.69697	-8.78788	17.00000	0.0	0.0	0.0	-	-	-
		91.21212	-8.78788	17.00000	0.0	0.0	0.0	-	-	-
		92.72727	-8.78788	17.00000	0.0	0.0	0.0	-	-	-
		94.24242	-8.78788	17.00000	0.0	0.0	0.0	-	-	-
		95.75758	-8.78788	17.00000	0.0	0.0	0.0	-	-	-
		97.27273	-8.78788	17.00000	0.0	0.0	0.0	-	-	-
		98.78788	-8.78788	17.00000	0.0	0.0	0.0	-	-	-
		100.30303	-8.78788	17.00000	0.0	0.0	0.0	-	-	-
		101.81818	-8.78788	17.00000	0.0	0.0	0.0	-	-	-
		103.33333	-8.78788	17.00000	0.0	0.0	0.0	-	-	-
		104.84848	-8.78788	17.00000	0.0	0.0	0.0	-	-	-
		106.36364	-8.78788	17.00000	0.0	0.0	0.0	-	-	-
		107.87879	-8.78788	17.00000	0.0	0.0	0.0	-	-	-
		109.39394	-8.78788	17.00000	0.0	0.0	0.0	-	-	-
		110.90909	-8.78788	17.00000	0.0	0.0	0.0	-	-	-
		112.42424	-8.78788	17.00000	0.0	0.0	0.0	-	-	-
		113.93939	-8.78788	17.00000	0.0	0.0	0.0	-	-	-
		115.45455	-8.78788	17.00000	0.0	0.0	0.0	-	-	-
		116.96970	-8.78788	17.00000	0.0	0.0	0.0	-	-	-
		118.48485	-8.78788	17.00000	0.0	0.0	0.0	-	-	-
		120.00000	-8.78788	17.00000	0.0	0.0	0.0	-	-	-
		-30.00000	-7.77778	17.00000	0.0	0.0	0.0	-	-	-
		-28.48485	-7.77778	17.00000	0.0	0.0	0.0	-	-	-
		-26.96970	-7.77778	17.00000	0.0	0.0	0.0	-	-	-
		-25.45455	-7.77778	17.00000	0.0	0.0	0.0	-	-	-
		-23.93939	-7.77778	17.00000	0.0	0.0	0.0	-	-	-
		-22.42424	-7.77778	17.00000	0.0	0.0	0.0	-	-	-
		-20.90909	-7.77778	17.00000	0.0	0.0	0.0	-	-	-
		-19.39394	-7.77778	17.00000	0.0	0.0	0.22092	-	-	-
		-17.87879	-7.77778	17.00000	0.0	0.0	0.50054	-	-	-
		-16.36364	-7.77778	17.00000	0.012750	0.0060602	0.78223	-	-	-
		-14.84848	-7.77778	17.00000	0.21610	0.11319	1.0919	-	-	-
		-13.33333	-7.77778	17.00000	0.56247	0.32811	1.3879	-	-	-
		-11.81818	-7.77778	17.00000	0.90436	0.59517	1.7001	-	-	-
		-10.30303	-7.77778	17.00000	1.1910	0.85912	2.0395	-	-	-
		-8.78788	-7.77778	17.00000	1.4037	1.2423	2.3991	-	-	-
		-7.27273	-7.77778	17.00000	1.5381	1.6450	2.7724	-	-	-
		-5.75758	-7.77778	17.00000	1.5917	2.1502	3.1704	-	-	-
		-4.24242	-7.77778	17.00000	1.4740	2.7023	3.5501	-	-	-
		-2.72727	-7.77778	17.00000	1.1372	3.2432	3.8799	-	-	-
		-1.21212	-7.77778	17.00000	0.57260	3.6742	4.1253	-	-	-
		0.30303	-7.77778	17.00000	0.0	4.0968	4.9246	-	-	-
		1.81818	-7.77778	17.00000	0.0	4.0968	4.9246	-	-	-
		3.33333	-7.77778	17.00000	0.0	4.0968	4.9246	-	-	-
		4.84848	-7.77778	17.00000	0.0	4.0968	4.9246	-	-	-
		6.36364	-7.77778	17.00000	0.0	4.0968	4.9246	-	-	-
		7.87879	-7.77778	17.00000	0.0	4.0968	4.9246	-	-	-
		9.39394	-7.77778	17.00000	0.0	4.0968	4.9246	-	-	-
		10.90909	-7.77778	17.00000	0.0	4.0968	4.9246	-	-	-
		12.42424	-7.77778	17.00000	0.0	4.0968	4.9246	-	-	-
		13.93939	-7.77778	17.00000	0.0	4.0968	4.9246	-	-	-
		15.45455	-7.77778	17.00000	0.0	4.0968	4.9246	-	-	-
		16.96970	-7.77778	17.00000	0.0	4.0968	4.9246	-	-	-
		18.48485	-7.77778	17.00000	0.0	4.0968	4.9246	-	-	-
		20.00000	-7.77778	17.00000	0.0	4.0968	4.9246	-	-	-
		21.51515	-7.77778	17.00000	0.0	4.0968	4.9246	-	-	-
		23.03030	-7.77778	17.00000	0.0	4.0968	4.9246	-	-	-
		24.54545	-7.77778	17.00000	0.0	4.0968	4.9246	-	-	-
		26.06061	-7.77778	17.00000	0.0	4.0968	4.9246	-	-	-
		27.57576	-7.77778	17.00000	0.0	4.0968	4.9246	-	-	-
		29.09091	-7.77778	17.00000	0.0	4.0968	4.9246	-	-	-
		30.60606	-7.77778	17.00000	0.0	4.0968	4.9246	-	-	-
		32.12121	-7.77778	17.00000	0.0	4.0968	4.9246	-	-	-
		33.63636	-7.77778	17.00000	0.0	4.0968	4.9246	-	-	-
		35.15152	-7.77778	17.00000	0.0	4.0968	4.9246	-	-	-
		36.66667	-7.77778	17.00000	0.0	4.0968	4.9246	-	-	-
		38.18182	-7.77778	17.00000	0.0	4.0968	4.9246	-	-	-
		39.69697	-7.77778	17.00000	0.0	4.0968	4.9246	-	-	-
		41.21212	-7.77778	17.00000	0.0	4.0968	4.9246	-	-	-
		42.72727	-7.77778	17.00000	0.0	4.0968	4.9246	-	-	-
		44.24242	-7.77778	17.00000	0.0	4.0968	4.9246	-	-	-
		45.75758	-7.77778	17.00000	0.0	4.0968	4.9246	-	-	-
		47.27273	-7.77778	17.00000	0.0	4.0968	4.9246	-	-	-
		48.78788	-7.77778	17.00000	-0.38084	3.7596	4.1742	-	-	-
		50.30303	-7.77778	17.00000	-1.0008	3.3799	3.9587	-	-	-
		51.81818	-7.77778	17.00000	-1.4032	2.8585	3.6489	-	-	-
		53.33333	-7.77778	17.00000	-1.5784	2.3018	3.2799	-	-	-
		54.84848	-7.77778	17.00000	-1.5673	1.7799	2.8841	-	-	-
		56.36364	-7.77778	17.00000	-1.4465	1.2452	2.5009	-	-	-
		57.87879	-7.77778	17.00000	-1.2590	0.99128	2.1388	-	-	-
		59.39394	-7.77778	17.00000	-0.99087	0.67639	1.7924	-	-	-
		60.90909	-7.77778	17.00000	-0.66295	0.39943	1.4728	-	-	-
		62.42424	-7.77778	17.00000	-0.28916	0.15592	1.1745	-	-	-
		63.93939	-7.77778	17.00000	-0.071558	0.034917	0.87289	-	-	-
		65.45455	-7.77778	17.00000	0.0	0.0	0.57819	-	-	-
		66.96970	-7.77778	17.00000	0.0	0.0	0.29955	-	-	-
		68.48485	-7.77778	17.00000	0.0	0.0	0.017659	-	-	-
		70.00000	-7.77778	17.00000	0.0	0.0	0.0	-	-	-
		71.51515	-7.77778	17.00000	0.0	0.0	0.0	-	-	-
		73.03030	-7.77778	17.00000	0.0	0.0	0.0	-	-	-
		74.54545	-7.77778	17.00000	0.0	0.0	0.0	-	-	-
		76.06061	-7.77778	17.00000	0.0	0.0	0.0	-	-	-
		77.57576	-7.77778	17.00000	0.0	0.0	0.0	-	-	-
		79.09091	-7.77778	17.00000	0.0	0.0	0.0	-	-	-
		80.60606	-7.77778	17.00000	0.0	0.0	0.0	-	-	-
		82.12121	-7.77778	17.00000	0.0	0.0	0.0	-	-	-
		83.63636	-7.77778	17.00000	0.0	0.0	0.0	-	-	-
		85.15152	-7.77778	17.00000	0.0	0.0	0.0	-	-	-
		86.66667	-7.77778	17.00000	0.0	0.0	0.0	-	-	-
		88.18182	-7.77778	17.00000	0.0	0.0	0.0	-	-	-
		89.69697	-7.77778	17.00000	0.0	0.0	0.0	-	-	-
		91.21212	-7.77778	17.00000	0.0	0.0	0.0	-	-	-
		92.72727	-7.77778	17.00000	0.0	0.0	0.0	-	-	-
		94.24242	-7.77778	17.00000	0.0	0.0	0.0	-	-	-
		95.75758	-7.77778	17.00000	0.0	0.0	0.0	-	-	-
		97.27273	-7.77778	17.00000	0.0	0.0	0.0	-	-	-
		98.78788	-7.77778	17.00000	0.0	0.0	0.0	-	-	-
		100.30303	-7.77778	17.00000	0.0	0.0	0.0	-	-	-
		101.81818	-7.77778	17.00000	0.0	0.0	0.0	-	-	-
		103.33333	-7.77778	17.00000	0.0	0.0	0.0	-	-	-
		104.84848	-7.77778	17.00000	0.0	0.0	0.0	-	-	-
		106.36364	-7.77778	17.00000	0.0	0.0	0.0	-	-	-
		107.87879	-7.77778	17.00000	0.0	0.0	0.0	-	-	-
		109.39394	-7.77778	17.00000	0.0	0.0	0.0	-	-	-
		110.90909	-7.77778	17.00000	0.0	0.0	0.0	-	-	-
		112.42424	-7.77778	17.00000	0.0	0.0	0.0	-	-	-
		113.93939	-7.77778	17.00000	0.0	0.0	0.0	-	-	-
		115.45455	-7.77778	17.00000	0.0	0.0	0.0	-	-	-
		116.96970	-7.77778	17.00000	0.0	0.0	0.0	-	-	-
		118.48485	-7.77778	17.00000	0.0	0.0	0.0	-	-	-
		120.00000	-7.77778	17.00000	0.0	0.0	0.0	-	-	-
		-30.00000	-6.76768	17.00000	0.0	0.0	0.0	-	-	-
		-28.48485	-6.76768	17.00000	0.0	0.0	0.0	-	-	-
		-26.96970	-6.76768	17.00000	0.0	0.0	0.0	-	-	-
		-25.45455	-6.76768	17.00000	0.0	0.0	0.0	-	-	-
		-23.93939	-6.76768	17.00000	0.0	0.0	0.0	-	-	-
		-22.42424	-6.76768	17.00000	0.0	0.0	0.0	-	-	-
		-20.90909	-6.76768	17.00000	0.0	0.0	0.0043863	-	-	-
		-19.39394	-6.76768	17.00000	0.0	0.0	0.29183	-	-	-
		-17.87879	-6.76768	17.00000	0.0	0.0	0.57664	-	-	-
		-16.36364	-6.76768	17.00000	0.079822	0.033013	0.87986	-	-	-
		-14.84848	-6.76768	17.00000	0.32819	0.14958	1.1913	-	-	-
		-13.33333	-6.76768	17.00000	0.74020	0.37571	1.5038	-	-	-
		-11.81818	-6.76768	17.00000	1.1146	0.63826	1.8457	-	-	-
		-10.30303	-6.76768	17.00000	1.4389	0.94516	2.2253	-	-	-
		-8.78788	-6.76768	17.00000	1.6922	1.3032	2.6318	-	-	-
		-7.27273	-6.76768	17.00000	1.8423	1.7143	3.0391	-	-	-
		-5.75758	-6.76768	17.00000	1.9072	2.2418	3.4666	-	-	-

Oasys
GEA LIMITED
(GEOTECHNICAL &ENV ASSOC) J15050A
The Great Hall, Lincoln's Inn, Newman's Row, London, WC2A 3TL
Wall Movements Rev 3 Piling and Excavation
Damage Assessment
Job No. | Sheet No. | Rev.
Drg. Ref.
Made by MP | Date 08-Feb-2016 | Checked

Type/No.		Coordinates			Displacements					Angle of Line
Name	Dist.	x	y	z	x	y	z	Horizontal displacement	Horizontal displacement	to x Axis
		-4.24242	-6.76768	17.00000	1.8050	2.8793	3.8969	-	-	-
		-2.72727	-6.76768	17.00000	1.4263	3.5393	4.2772	-	-	-
		-1.21212	-6.76768	17.00000	0.73247	4.0896	4.5692	-	-	-
		0.30303	-6.76768	17.00000	0.0	5.4680	5.5335	-	-	-
		1.81818	-6.76768	17.00000	0.0	5.4680	5.5335	-	-	-
		3.33333	-6.76768	17.00000	0.0	5.4680	5.5335	-	-	-
		4.84848	-6.76768	17.00000	0.0	5.4680	5.5335	-	-	-
		6.36364	-6.76768	17.00000	0.0	5.4680	5.5335	-	-	-
		7.87879	-6.76768	17.00000	0.0	5.4680	5.5335	-	-	-
		9.39394	-6.76768	17.00000	0.0	5.4680	5.5335	-	-	-
		10.90909	-6.76768	17.00000	0.0	5.4680	5.5335	-	-	-
		12.42424	-6.76768	17.00000	0.0	5.4680	5.5335	-	-	-
		13.93939	-6.76768	17.00000	0.0	5.4680	5.5335	-	-	-
		15.45455	-6.76768	17.00000	0.0	5.4680	5.5335	-	-	-
		16.96970	-6.76768	17.00000	0.0	5.4680	5.5335	-	-	-
		18.48485	-6.76768	17.00000	0.0	5.4680	5.5335	-	-	-
		20.00000	-6.76768	17.00000	0.0	5.4680	5.5335	-	-	-
		21.51515	-6.76768	17.00000	0.0	5.4680	5.5335	-	-	-
		23.03030	-6.76768	17.00000	0.0	5.4680	5.5335	-	-	-
		24.54545	-6.76768	17.00000	0.0	5.4680	5.5335	-	-	-
		26.06061	-6.76768	17.00000	0.0	5.4680	5.5335	-	-	-
		27.57576	-6.76768	17.00000	0.0	5.4680	5.5335	-	-	-
		29.09091	-6.76768	17.00000	0.0	5.4680	5.5335	-	-	-
		30.60606	-6.76768	17.00000	0.0	5.4680	5.5335	-	-	-
		32.12121	-6.76768	17.00000	0.0	5.4680	5.5335	-	-	-
		33.63636	-6.76768	17.00000	0.0	5.4680	5.5335	-	-	-
		35.15152	-6.76768	17.00000	0.0	5.4680	5.5335	-	-	-
		36.66667	-6.76768	17.00000	0.0	5.4680	5.5335	-	-	-
		38.18182	-6.76768	17.00000	0.0	5.4680	5.5335	-	-	-
		39.69697	-6.76768	17.00000	0.0	5.4680	5.5335	-	-	-
		41.21212	-6.76768	17.00000	0.0	5.4680	5.5335	-	-	-
		42.72727	-6.76768	17.00000	0.0	5.4680	5.5335	-	-	-
		44.24242	-6.76768	17.00000	0.0	5.4680	5.5335	-	-	-
		45.75758	-6.76768	17.00000	0.0	5.4680	5.5335	-	-	-
		47.27273	-6.76768	17.00000	0.0	5.4680	5.5335	-	-	-
		48.78788	-6.76768	17.00000	-0.48901	4.2004	4.6297	-	-	-
		50.30303	-6.76768	17.00000	-1.2631	3.7117	4.3695	-	-	-
		51.81818	-6.76768	17.00000	-1.7299	3.0662	4.0100	-	-	-
		53.33333	-6.76768	17.00000	-1.9019	2.4134	3.5901	-	-	-
		54.84848	-6.76768	17.00000	-1.8599	1.8380	3.1484	-	-	-
		56.36364	-6.76768	17.00000	-1.7463	1.4131	2.7472	-	-	-
		57.87879	-6.76768	17.00000	-1.5181	1.0400	2.3372	-	-	-
		59.39394	-6.76768	17.00000	-1.2122	0.71939	1.9483	-	-	-
		60.90909	-6.76768	17.00000	-0.84922	0.44521	1.5958	-	-	-
		62.42424	-6.76768	17.00000	-0.44688	0.20967	1.2771	-	-	-
		63.93939	-6.76768	17.00000	-0.14224	0.060391	0.96943	-	-	-
		65.45455	-6.76768	17.00000	0.0	0.0	0.65587	-	-	-
		66.96970	-6.76768	17.00000	0.0	0.0	0.37184	-	-	-
		68.48485	-6.76768	17.00000	0.0	0.0	0.085232	-	-	-
		70.00000	-6.76768	17.00000	0.0	0.0	0.0	-	-	-
		71.51515	-6.76768	17.00000	0.0	0.0	0.0	-	-	-
		73.03030	-6.76768	17.00000	0.0	0.0	0.0	-	-	-
		74.54545	-6.76768	17.00000	0.0	0.0	0.0	-	-	-
		76.06061	-6.76768	17.00000	0.0	0.0	0.0	-	-	-
		77.57576	-6.76768	17.00000	0.0	0.0	0.0	-	-	-
		79.09091	-6.76768	17.00000	0.0	0.0	0.0	-	-	-
		80.60606	-6.76768	17.00000	0.0	0.0	0.0	-	-	-
		82.12121	-6.76768	17.00000	0.0	0.0	0.0	-	-	-
		83.63636	-6.76768	17.00000	0.0	0.0	0.0	-	-	-
		85.15152	-6.76768	17.00000	0.0	0.0	0.0	-	-	-
		86.66667	-6.76768	17.00000	0.0	0.0	0.0	-	-	-
		88.18182	-6.76768	17.00000	0.0	0.0	0.0	-	-	-
		89.69697	-6.76768	17.00000	0.0	0.0	0.0	-	-	-
		91.21212	-6.76768	17.00000	0.0	0.0	0.0	-	-	-
		92.72727	-6.76768	17.00000	0.0	0.0	0.0	-	-	-
		94.24242	-6.76768	17.00000	0.0	0.0	0.0	-	-	-
		95.75758	-6.76768	17.00000	0.0	0.0	0.0	-	-	-
		97.27273	-6.76768	17.00000	0.0	0.0	0.0	-	-	-
		98.78788	-6.76768	17.00000	0.0	0.0	0.0	-	-	-
		100.30303	-6.76768	17.00000	0.0	0.0	0.0	-	-	-
		101.81818	-6.76768	17.00000	0.0	0.0	0.0	-	-	-
		103.33333	-6.76768	17.00000	0.0	0.0	0.0	-	-	-
		104.84848	-6.76768	17.00000	0.0	0.0	0.0	-	-	-
		106.36364	-6.76768	17.00000	0.0	0.0	0.0	-	-	-
		107.87879	-6.76768	17.00000	0.0	0.0	0.0	-	-	-
		109.39394	-6.76768	17.00000	0.0	0.0	0.0	-	-	-
		110.90909	-6.76768	17.00000	0.0	0.0	0.0	-	-	-
		112.42424	-6.76768	17.00000	0.0	0.0	0.0	-	-	-
		113.93939	-6.76768	17.00000	0.0	0.0	0.0	-	-	-
		115.45455	-6.76768	17.00000	0.0	0.0	0.0	-	-	-
		116.96970	-6.76768	17.00000	0.0	0.0	0.0	-	-	-
		118.48485	-6.76768	17.00000	0.0	0.0	0.0	-	-	-
		120.00000	-6.76768	17.00000	0.0	0.0	0.0	-	-	-
		-30.00000	-5.75758	17.00000	0.0	0.0	0.0	-	-	-
		-28.48485	-5.75758	17.00000	0.0	0.0	0.0	-	-	-
		-26.96970	-5.75758	17.00000	0.0	0.0	0.0	-	-	-
		-25.45455	-5.75758	17.00000	0.0	0.0	0.0	-	-	-
		-23.93939	-5.75758	17.00000	0.0	0.0	0.0	-	-	-
		-22.42424	-5.75758	17.00000	0.0	0.0	0.0	-	-	-
		-20.90909	-5.75758	17.00000	0.0	0.0	0.062536	-	-	-
		-19.39394	-5.75758	17.00000	0.0	0.0	0.35389	-	-	-
		-17.87879	-5.75758	17.00000	0.0	0.0	0.64340	-	-	-
		-16.36364	-5.75758	17.00000	0.14406	0.050687	0.96331	-	-	-
		-14.84848	-5.75758	17.00000	0.47209	0.18305	1.2804	-	-	-
		-13.33333	-5.75758	17.00000	0.91353	0.39448	1.6122	-	-	-
		-11.81818	-5.75758	17.00000	1.3246	0.64530	1.9859	-	-	-
		-10.30303	-5.75758	17.00000	1.6935	0.94638	2.4075	-	-	-
		-8.78788	-5.75758	17.00000	1.9990	1.3097	2.8629	-	-	-
		-7.27273	-5.75758	17.00000	2.2047	1.7454	3.3208	-	-	-
		-5.75758	-5.75758	17.00000	2.2533	2.2533	3.7969	-	-	-
		-4.24242	-5.75758	17.00000	2.1943	2.9780	4.2131	-	-	-
		-2.72727	-5.75758	17.00000	1.7925	3.7841	4.6409	-	-	-
		-1.21212	-5.75758	17.00000	0.94759	4.5010	4.9814	-	-	-
		0.30303	-5.75758	17.00000	0.0	6.0601	6.1037	-	-	-
		1.81818	-5.75758	17.00000	0.0	6.0601	6.1037	-	-	-
		3.33333	-5.75758	17.00000	0.0	6.0601	6.1037	-	-	-
		4.84848	-5.75758	17.00000	0.0	6.0601	6.1037	-	-	-
		6.36364	-5.75758	17.00000	0.0	6.0601	6.1037	-	-	-
		7.87879	-5.75758	17.00000	0.0	6.0601	6.1037	-	-	-
		9.39394	-5.75758	17.00000	0.0	6.0601	6.1037	-	-	-
		10.90909	-5.75758	17.00000	0.0	6.0601	6.1037	-	-	-
		12.42424	-5.75758	17.00000	0.0	6.0601	6.1037	-	-	-
		13.93939	-5.75758	17.00000	0.0	6.0601	6.1037	-	-	-
		15.45455	-5.75758	17.00000	0.0	6.0601	6.1037	-	-	-
		16.96970	-5.75758	17.00000	0.0	6.0601	6.1037	-	-	-
		18.48485	-5.75758	17.00000	0.0	6.0601	6.1037	-	-	-
		20.00000	-5.75758	17.00000	0.0	6.0601	6.1037	-	-	-
		21.51515	-5.75758	17.00000	0.0	6.0601	6.1037	-	-	-
		23.03030	-5.75758	17.00000	0.0	6.0601	6.1037	-	-	-
		24.54545	-5.75758	17.00000	0.0	6.0601	6.1037	-	-	-
		26.06061	-5.75758	17.00000	0.0	6.0601	6.1037	-	-	-
		27.57576	-5.75758	17.00000	0.0	6.0601	6.1037	-	-	-
		29.09091	-5.75758	17.00000	0.0	6.0601	6.1037	-	-	-
		30.60606	-5.75758	17.00000	0.0	6.0601	6.1037	-	-	-
		32.12121	-5.75758	17.00000	0.0	6.0601	6.1037	-	-	-
		33.63636	-5.75758	17.00000	0.0	6.0601	6.1037	-	-	-
		35.15152	-5.75758	17.00000	0.0	6.0601	6.1037	-	-	-
		36.66667	-5.75758	17.00000	0.0	6.0601	6.1037	-	-	-
		38.18182	-5.75758	17.00000	0.0	6.0601	6.1037	-	-	-
		39.69697	-5.75758	17.00000	0.0	6.0601	6.1037	-	-	-
		41.21212	-5.75758	17.00000	0.0	6.0601	6.1037	-	-	-
		42.72727	-5.75758	17.00000	0.0	6.0601	6.1037	-	-	-
		44.24242	-5.75758	17.00000	0.0	6.0601	6.1037	-	-	-
		45.75758	-5.75758	17.00000	0.0	6.0601	6.1037	-	-	-
		47.27273	-5.75758	17.00000	0.0	6.0601	6.1037	-	-	-
		48.78788	-5.75758	17.00000	-0.63617	4.6489	5.0552	-	-	-
		50.30303	-5.75758	17.00000	-1.6018	4.0046	4.7469	-	-	-
		51.81818	-5.75758	17.00000	-2.1223	3.2002	4.3393	-	-	-
		53.33333	-5.75758	17.00000	-2.2634	2.4434	3.8730	-	-	-
		54.84848	-5.75758	17.00000	-2.2371	1.8808	3.4437	-	-	-
		56.36364	-5.75758	17.00000	-2.0687	1.4241	2.9926	-	-	-

Type/No.		Coordinates			Displacements					Angle of Line to x Axis	
Name	Dist.	x	y	z	x	y	z	Horizontal displacement	Horizontal displacement		
		57.87879	-5.75758	17.00000	-1.7867	1.0413	2.5327	-	-	-	*
		59.39394	-5.75758	17.00000	-1.4328	0.72403	2.0994	-	-	-	*
		60.90909	-5.75758	17.00000	-1.0320	0.46030	1.7120	-	-	-	*
		62.42424	-5.75758	17.00000	-0.59836	0.23884	1.3702	-	-	-	*
		63.93939	-5.75758	17.00000	-0.21028	0.075958	1.0530	-	-	-	*
		65.45455	-5.75758	17.00000	0.0	0.0	0.72407	-	-	-	*
		66.96970	-5.75758	17.00000	0.0	0.0	0.43516	-	-	-	*
		68.48485	-5.75758	17.00000	0.0	0.0	0.14428	-	-	-	*
		70.00000	-5.75758	17.00000	0.0	0.0	0.0	-	-	-	*
		71.51515	-5.75758	17.00000	0.0	0.0	0.0	-	-	-	*
		73.03030	-5.75758	17.00000	0.0	0.0	0.0	-	-	-	*
		74.54545	-5.75758	17.00000	0.0	0.0	0.0	-	-	-	*
		76.06061	-5.75758	17.00000	0.0	0.0	0.0	-	-	-	*
		77.57576	-5.75758	17.00000	0.0	0.0	0.0	-	-	-	*
		79.09091	-5.75758	17.00000	0.0	0.0	0.0	-	-	-	*
		80.60606	-5.75758	17.00000	0.0	0.0	0.0	-	-	-	*
		82.12121	-5.75758	17.00000	0.0	0.0	0.0	-	-	-	*
		83.63636	-5.75758	17.00000	0.0	0.0	0.0	-	-	-	*
		85.15152	-5.75758	17.00000	0.0	0.0	0.0	-	-	-	*
		86.66667	-5.75758	17.00000	0.0	0.0	0.0	-	-	-	*
		88.18182	-5.75758	17.00000	0.0	0.0	0.0	-	-	-	*
		89.69697	-5.75758	17.00000	0.0	0.0	0.0	-	-	-	*
		91.21212	-5.75758	17.00000	0.0	0.0	0.0	-	-	-	*
		92.72727	-5.75758	17.00000	0.0	0.0	0.0	-	-	-	*
		94.24242	-5.75758	17.00000	0.0	0.0	0.0	-	-	-	*
		95.75758	-5.75758	17.00000	0.0	0.0	0.0	-	-	-	*
		97.27273	-5.75758	17.00000	0.0	0.0	0.0	-	-	-	*
		98.78788	-5.75758	17.00000	0.0	0.0	0.0	-	-	-	*
		100.30303	-5.75758	17.00000	0.0	0.0	0.0	-	-	-	*
		101.81818	-5.75758	17.00000	0.0	0.0	0.0	-	-	-	*
		103.33333	-5.75758	17.00000	0.0	0.0	0.0	-	-	-	*
		104.84848	-5.75758	17.00000	0.0	0.0	0.0	-	-	-	*
		106.36364	-5.75758	17.00000	0.0	0.0	0.0	-	-	-	*
		107.87879	-5.75758	17.00000	0.0	0.0	0.0	-	-	-	*
		109.39394	-5.75758	17.00000	0.0	0.0	0.0	-	-	-	*
		110.90909	-5.75758	17.00000	0.0	0.0	0.0	-	-	-	*
		112.42424	-5.75758	17.00000	0.0	0.0	0.0	-	-	-	*
		113.93939	-5.75758	17.00000	0.0	0.0	0.0	-	-	-	*
		115.45455	-5.75758	17.00000	0.0	0.0	0.0	-	-	-	*
		116.96970	-5.75758	17.00000	0.0	0.0	0.0	-	-	-	*
		118.48485	-5.75758	17.00000	0.0	0.0	0.0	-	-	-	*
		120.00000	-5.75758	17.00000	0.0	0.0	0.0	-	-	-	*
		-30.00000	-4.74747	17.00000	0.0	0.0	0.0	-	-	-	*
		-28.48485	-4.74747	17.00000	0.0	0.0	0.0	-	-	-	*
		-26.96970	-4.74747	17.00000	0.0	0.0	0.0	-	-	-	*
		-25.45455	-4.74747	17.00000	0.0	0.0	0.0	-	-	-	*
		-23.93939	-4.74747	17.00000	0.0	0.0	0.0	-	-	-	*
		-22.42424	-4.74747	17.00000	0.0	0.0	0.0	-	-	-	*
		-20.90909	-4.74747	17.00000	0.0	0.0	0.11174	-	-	-	*
		-19.39394	-4.74747	17.00000	0.0	0.0	0.40669	-	-	-	*
		-17.87879	-4.74747	17.00000	0.0	0.0	0.70033	-	-	-	*
		-16.36364	-4.74747	17.00000	0.20378	0.059121	1.0336	-	-	-	*
		-14.84848	-4.74747	17.00000	0.60547	0.19359	1.3587	-	-	-	*
		-13.33333	-4.74747	17.00000	1.0776	0.38368	1.7111	-	-	-	*
		-11.81818	-4.74747	17.00000	1.5280	0.61380	2.1170	-	-	-	*
		-10.30303	-4.74747	17.00000	1.9472	0.89725	2.5808	-	-	-	*
		-8.78788	-4.74747	17.00000	2.3157	1.2510	3.0854	-	-	-	*
		-7.27273	-4.74747	17.00000	2.5962	1.6948	3.5949	-	-	-	*
		-5.75758	-4.74747	17.00000	2.7229	2.2452	4.0579	-	-	-	*
		-4.24242	-4.74747	17.00000	2.6444	2.9592	4.4787	-	-	-	*
		-2.72727	-4.74747	17.00000	2.2611	3.9359	4.9462	-	-	-	*
		-1.21212	-4.74747	17.00000	1.2489	4.8914	5.3335	-	-	-	*
		0.30303	-4.74747	17.00000	0.0	6.6753	6.5938	-	-	-	*
		1.81818	-4.74747	17.00000	0.0	6.6753	6.5938	-	-	-	*
		3.33333	-4.74747	17.00000	0.0	6.6753	6.5938	-	-	-	*
		4.84848	-4.74747	17.00000	0.0	6.6753	6.5938	-	-	-	*
		6.36364	-4.74747	17.00000	0.0	6.6753	6.5938	-	-	-	*
		7.87879	-4.74747	17.00000	0.0	6.6753	6.5938	-	-	-	*
		9.39394	-4.74747	17.00000	0.0	6.6753	6.5938	-	-	-	*
		10.90909	-4.74747	17.00000	0.0	6.6753	6.5938	-	-	-	*
		12.42424	-4.74747	17.00000	0.0	6.6753	6.5938	-	-	-	*
		13.93939	-4.74747	17.00000	0.0	6.6753	6.5938	-	-	-	*
		15.45455	-4.74747	17.00000	0.0	6.6753	6.5938	-	-	-	*
		16.96970	-4.74747	17.00000	0.0	6.6753	6.5938	-	-	-	*
		18.48485	-4.74747	17.00000	0.0	6.6753	6.5938	-	-	-	*
		20.00000	-4.74747	17.00000	0.0	6.6753	6.5938	-	-	-	*
		21.51515	-4.74747	17.00000	0.0	6.6753	6.5938	-	-	-	*
		23.03030	-4.74747	17.00000	0.0	6.6753	6.5938	-	-	-	*
		24.54545	-4.74747	17.00000	0.0	6.6753	6.5938	-	-	-	*
		26.06061	-4.74747	17.00000	0.0	6.6753	6.5938	-	-	-	*
		27.57576	-4.74747	17.00000	0.0	6.6753	6.5938	-	-	-	*
		29.09091	-4.74747	17.00000	0.0	6.6753	6.5938	-	-	-	*
		30.60606	-4.74747	17.00000	0.0	6.6753	6.5938	-	-	-	*
		32.12121	-4.74747	17.00000	0.0	6.6753	6.5938	-	-	-	*
		33.63636	-4.74747	17.00000	0.0	6.6753	6.5938	-	-	-	*
		35.15152	-4.74747	17.00000	0.0	6.6753	6.5938	-	-	-	*
		36.66667	-4.74747	17.00000	0.0	6.6753	6.5938	-	-	-	*
		38.18182	-4.74747	17.00000	0.0	6.6753	6.5938	-	-	-	*
		39.69697	-4.74747	17.00000	0.0	6.6753	6.5938	-	-	-	*
		41.21212	-4.74747	17.00000	0.0	6.6753	6.5938	-	-	-	*
		42.72727	-4.74747	17.00000	0.0	6.6753	6.5938	-	-	-	*
		44.24242	-4.74747	17.00000	0.0	6.6753	6.5938	-	-	-	*
		45.75758	-4.74747	17.00000	0.0	6.6753	6.5938	-	-	-	*
		47.27273	-4.74747	17.00000	0.0	6.6753	6.5938	-	-	-	*
		48.78788	-4.74747	17.00000	-0.84588	5.0970	5.4220	-	-	-	*
		50.30303	-4.74747	17.00000	-2.0477	4.2211	5.0644	-	-	-	*
		51.81818	-4.74747	17.00000	-2.5885	3.2185	4.6156	-	-	-	*
		53.33333	-4.74747	17.00000	-2.7172	2.4187	4.1711	-	-	-	*
		54.84848	-4.74747	17.00000	-2.6510	1.8377	3.7317	-	-	-	*
		56.36364	-4.74747	17.00000	-2.4053	1.3653	3.2295	-	-	-	*
		57.87879	-4.74747	17.00000	-2.0567	0.98839	2.7192	-	-	-	*
		59.39394	-4.74747	17.00000	-1.6491	0.68713	2.2414	-	-	-	*
		60.90909	-4.74747	17.00000	-1.2061	0.44357	1.8188	-	-	-	*
		62.42424	-4.74747	17.00000	-0.73956	0.24341	1.4531	-	-	-	*
		63.93939	-4.74747	17.00000	-0.27392	0.081584	1.1243	-	-	-	*
		65.45455	-4.74747	17.00000	-0.019742	0.0053696	0.78981	-	-	-	*
		66.96970	-4.74747	17.00000	0.0	0.0	0.48905	-	-	-	*
		68.48485	-4.74747	17.00000	0.0	0.0	0.19444	-	-	-	*
		70.00000	-4.74747	17.00000	0.0	0.0	0.0	-	-	-	*
		71.51515	-4.74747	17.00000	0.0	0.0	0.0	-	-	-	*
		73.03030	-4.74747	17.00000	0.0	0.0	0.0	-	-	-	*
		74.54545	-4.74747	17.00000	0.0	0.0	0.0	-	-	-	*
		76.06061	-4.74747	17.00000	0.0	0.0	0.0	-	-	-	*
		77.57576	-4.74747	17.00000	0.0	0.0	0.0	-	-	-	*
		79.09091	-4.74747	17.00000	0.0	0.0	0.0	-	-	-	*
		80.60606	-4.74747	17.00000	0.0	0.0	0.0	-	-	-	*
		82.12121	-4.74747	17.00000	0.0	0.0	0.0	-	-	-	*
		83.63636	-4.74747	17.00000	0.0	0.0	0.0	-	-	-	*
		85.15152	-4.74747	17.00000	0.0	0.0	0.0	-	-	-	*
		86.66667	-4.74747	17.00000	0.0	0.0	0.0	-	-	-	*
		88.18182	-4.74747	17.00000	0.0	0.0	0.0	-	-	-	*
		89.69697	-4.74747	17.00000	0.0	0.0	0.0	-	-	-	*
		91.21212	-4.74747	17.00000	0.0	0.0	0.0	-	-	-	*
		92.72727	-4.74747	17.00000	0.0	0.0	0.0	-	-	-	*
		94.24242	-4.74747	17.00000	0.0	0.0	0.0	-	-	-	*
		95.75758	-4.74747	17.00000	0.0	0.0	0.0	-	-	-	*
		97.27273	-4.74747	17.00000	0.0	0.0	0.0	-	-	-	*
		98.78788	-4.74747	17.00000	0.0	0.0	0.0	-	-	-	*
		100.30303	-4.74747	17.00000	0.0	0.0	0.0	-	-	-	*
		101.81818	-4.74747	17.00000	0.0	0.0	0.0	-	-	-	*
		103.33333	-4.74747	17.00000	0.0	0.0	0.0	-	-	-	*
		104.84848	-4.74747	17.00000	0.0	0.0	0.0	-	-	-	*
		106.36364	-4.74747	17.00000	0.0	0.0	0.0	-	-	-	*
		107.87879	-4.74747	17.00000	0.0	0.0	0.0	-	-	-	*
		109.39394	-4.74747	17.00000	0.0	0.0	0.0	-	-	-	*
		110.90909	-4.74747	17.00000	0.0	0.0	0.0	-	-	-	*
		112.42424	-4.74747	17.00000	0.0	0.0	0.0	-	-	-	*
		113.93939	-4.74747	17.00000	0.0	0.0	0.0	-	-	-	*
		115.45455	-4.74747	17.00000	0.0	0.0	0.0	-	-	-	*
		116.96970	-4.74747	17.00000	0.0	0.0	0.0	-	-	-	*
		118.48485	-4.74747	17.00000	0.0	0.0	0.0	-	-	-	*

Oasys
GEA LIMITED
(GEOTECHNICAL &ENV ASSOC) J15050A
The Great Hall, Lincoln's Inn, Newman's Row, London, WC2A 3TL
Wall Movements Rev 3 Piling and Excavation
Damage Assessment
Job No. | Sheet No. | Rev.
Drg. Ref.
Made by MP | Date 08-Feb-2016 | Checked

Type/No.		Coordinates			Displacements					Angle of Line to x Axis	
Name	Dist.	x	y	z	x	y	z	Horizontal displacement	Horizontal displacement		
		120.00000	-4.74747	17.00000	0.0	0.0	0.0	-	-	-	*
		-30.00000	-3.73737	17.00000	0.0	0.0	0.0	-	-	-	*
		-28.48485	-3.73737	17.00000	0.0	0.0	0.0	-	-	-	*
		-26.96970	-3.73737	17.00000	0.0	0.0	0.0	-	-	-	*
		-25.45455	-3.73737	17.00000	0.0	0.0	0.0	-	-	-	*
		-23.93939	-3.73737	17.00000	0.0	0.0	0.0	-	-	-	*
		-22.42424	-3.73737	17.00000	0.0	0.0	0.0	-	-	-	*
		-20.90909	-3.73737	17.00000	0.0	0.0	0.15190	-	-	-	*
		-19.39394	-3.73737	17.00000	0.0	0.0	0.44985	-	-	-	*
		-17.87879	-3.73737	17.00000	0.0	0.0	0.74695	-	-	-	*
		-16.36364	-3.73737	17.00000	0.25716	0.058734	1.0912	-	-	-	*
		-14.84848	-3.73737	17.00000	0.72420	0.18228	1.4254	-	-	-	*
		-13.33333	-3.73737	17.00000	1.2266	0.34382	1.7978	-	-	-	*
		-11.81818	-3.73737	17.00000	1.7170	0.54299	2.2345	-	-	-	*
		-10.30303	-3.73737	17.00000	2.1894	0.79421	2.7386	-	-	-	*
		-8.78788	-3.73737	17.00000	2.6286	1.1179	3.2911	-	-	-	*
		-7.27273	-3.73737	17.00000	3.0020	1.5427	3.8519	-	-	-	*
		-5.75758	-3.73737	17.00000	3.2432	2.1052	4.3629	-	-	-	*
		-4.24242	-3.73737	17.00000	3.2204	2.8370	4.7534	-	-	-	*
		-2.72727	-3.73737	17.00000	2.8596	3.9187	5.1661	-	-	-	*
		-1.21212	-3.73737	17.00000	1.6933	5.2209	5.5919	-	-	-	*
		0.30303	-3.73737	17.00000	0.0	7.3157	6.9550	-	-	-	*
		1.81818	-3.73737	17.00000	0.0	7.3157	6.9550	-	-	-	*
		3.33333	-3.73737	17.00000	0.0	7.3157	6.9550	-	-	-	*
		4.84848	-3.73737	17.00000	0.0	7.3157	6.9550	-	-	-	*
		6.36364	-3.73737	17.00000	0.0	7.3157	6.9550	-	-	-	*
		7.87879	-3.73737	17.00000	0.0	7.3157	6.9550	-	-	-	*
		9.39394	-3.73737	17.00000	0.0	7.3157	6.9550	-	-	-	*
		10.90909	-3.73737	17.00000	0.0	7.3157	6.9550	-	-	-	*
		12.42424	-3.73737	17.00000	0.0	7.3157	6.9550	-	-	-	*
		13.93939	-3.73737	17.00000	0.0	7.3157	6.9550	-	-	-	*
		15.45455	-3.73737	17.00000	0.0	7.3157	6.9550	-	-	-	*
		16.96970	-3.73737	17.00000	0.0	7.3157	6.9550	-	-	-	*
		18.48485	-3.73737	17.00000	0.0	7.3157	6.9550	-	-	-	*
		20.00000	-3.73737	17.00000	0.0	7.3157	6.9550	-	-	-	*
		21.51515	-3.73737	17.00000	0.0	7.3157	6.9550	-	-	-	*
		23.03030	-3.73737	17.00000	0.0	7.3157	6.9550	-	-	-	*
		24.54545	-3.73737	17.00000	0.0	7.3157	6.9550	-	-	-	*
		26.06061	-3.73737	17.00000	0.0	7.3157	6.9550	-	-	-	*
		27.57576	-3.73737	17.00000	0.0	7.3157	6.9550	-	-	-	*
		29.09091	-3.73737	17.00000	0.0	7.3157	6.9550	-	-	-	*
		30.60606	-3.73737	17.00000	0.0	7.3157	6.9550	-	-	-	*
		32.12121	-3.73737	17.00000	0.0	7.3157	6.9550	-	-	-	*
		33.63636	-3.73737	17.00000	0.0	7.3157	6.9550	-	-	-	*
		35.15152	-3.73737	17.00000	0.0	7.3157	6.9550	-	-	-	*
		36.66667	-3.73737	17.00000	0.0	7.3157	6.9550	-	-	-	*
		38.18182	-3.73737	17.00000	0.0	7.3157	6.9550	-	-	-	*
		39.69697	-3.73737	17.00000	0.0	7.3157	6.9550	-	-	-	*
		41.21212	-3.73737	17.00000	0.0	7.3157	6.9550	-	-	-	*
		42.72727	-3.73737	17.00000	0.0	7.3157	6.9550	-	-	-	*
		44.24242	-3.73737	17.00000	0.0	7.3157	6.9550	-	-	-	*
		45.75758	-3.73737	17.00000	0.0	7.3157	6.9550	-	-	-	*
		47.27273	-3.73737	17.00000	0.0	7.3157	6.9550	-	-	-	*
		48.78788	-3.73737	17.00000	-1.1644	5.5235	5.6960	-	-	-	*
		50.30303	-3.73737	17.00000	-2.6422	4.2878	5.2929	-	-	-	*
		51.81818	-3.73737	17.00000	-3.1373	3.0709	4.8312	-	-	-	*
		53.33333	-3.73737	17.00000	-3.2714	2.2924	4.4876	-	-	-	*
		54.84848	-3.73737	17.00000	-3.0870	1.6846	4.0029	-	-	-	*
		56.36364	-3.73737	17.00000	-2.7418	1.2252	3.4494	-	-	-	*
		57.87879	-3.73737	17.00000	-2.3167	0.87648	2.8898	-	-	-	*
		59.39394	-3.73737	17.00000	-1.8516	0.60734	2.3693	-	-	-	*
		60.90909	-3.73737	17.00000	-1.3653	0.39527	1.9131	-	-	-	*
		62.42424	-3.73737	17.00000	-0.86596	0.22437	1.5243	-	-	-	*
		63.93939	-3.73737	17.00000	-0.39571	0.083406	1.1833	-	-	-	*
		65.45455	-3.73737	17.00000	-0.064069	0.013718	0.84761	-	-	-	*
		66.96970	-3.73737	17.00000	0.0	0.0	0.53313	-	-	-	*
		68.48485	-3.73737	17.00000	0.0	0.0	0.23540	-	-	-	*
		70.00000	-3.73737	17.00000	0.0	0.0	0.0	-	-	-	*
		71.51515	-3.73737	17.00000	0.0	0.0	0.0	-	-	-	*
		73.03030	-3.73737	17.00000	0.0	0.0	0.0	-	-	-	*
		74.54545	-3.73737	17.00000	0.0	0.0	0.0	-	-	-	*
		76.06061	-3.73737	17.00000	0.0	0.0	0.0	-	-	-	*
		77.57576	-3.73737	17.00000	0.0	0.0	0.0	-	-	-	*
		79.09091	-3.73737	17.00000	0.0	0.0	0.0	-	-	-	*
		80.60606	-3.73737	17.00000	0.0	0.0	0.0	-	-	-	*
		82.12121	-3.73737	17.00000	0.0	0.0	0.0	-	-	-	*
		83.63636	-3.73737	17.00000	0.0	0.0	0.0	-	-	-	*
		85.15152	-3.73737	17.00000	0.0	0.0	0.0	-	-	-	*
		86.66667	-3.73737	17.00000	0.0	0.0	0.0	-	-	-	*
		88.18182	-3.73737	17.00000	0.0	0.0	0.0	-	-	-	*
		89.69697	-3.73737	17.00000	0.0	0.0	0.0	-	-	-	*
		91.21212	-3.73737	17.00000	0.0	0.0	0.0	-	-	-	*
		92.72727	-3.73737	17.00000	0.0	0.0	0.0	-	-	-	*
		94.24242	-3.73737	17.00000	0.0	0.0	0.0	-	-	-	*
		95.75758	-3.73737	17.00000	0.0	0.0	0.0	-	-	-	*
		97.27273	-3.73737	17.00000	0.0	0.0	0.0	-	-	-	*
		98.78788	-3.73737	17.00000	0.0	0.0	0.0	-	-	-	*
		100.30303	-3.73737	17.00000	0.0	0.0	0.0	-	-	-	*
		101.81818	-3.73737	17.00000	0.0	0.0	0.0	-	-	-	*
		103.33333	-3.73737	17.00000	0.0	0.0	0.0	-	-	-	*
		104.84848	-3.73737	17.00000	0.0	0.0	0.0	-	-	-	*
		106.36364	-3.73737	17.00000	0.0	0.0	0.0	-	-	-	*
		107.87879	-3.73737	17.00000	0.0	0.0	0.0	-	-	-	*
		109.39394	-3.73737	17.00000	0.0	0.0	0.0	-	-	-	*
		110.90909	-3.73737	17.00000	0.0	0.0	0.0	-	-	-	*
		112.42424	-3.73737	17.00000	0.0	0.0	0.0	-	-	-	*
		113.93939	-3.73737	17.00000	0.0	0.0	0.0	-	-	-	*
		115.45455	-3.73737	17.00000	0.0	0.0	0.0	-	-	-	*
		116.96970	-3.73737	17.00000	0.0	0.0	0.0	-	-	-	*
		118.48485	-3.73737	17.00000	0.0	0.0	0.0	-	-	-	*
		120.00000	-3.73737	17.00000	0.0	0.0	0.0	-	-	-	*
		-30.00000	-2.72727	17.00000	0.0	0.0	0.0	-	-	-	*
		-28.48485	-2.72727	17.00000	0.0	0.0	0.0	-	-	-	*
		-26.96970	-2.72727	17.00000	0.0	0.0	0.0	-	-	-	*
		-25.45455	-2.72727	17.00000	0.0	0.0	0.0	-	-	-	*
		-23.93939	-2.72727	17.00000	0.0	0.0	0.0	-	-	-	*
		-22.42424	-2.72727	17.00000	0.0	0.0	0.0	-	-	-	*
		-20.90909	-2.72727	17.00000	0.0	0.0	0.18276	-	-	-	*
		-19.39394	-2.72727	17.00000	0.0	0.0	0.48305	-	-	-	*
		-17.87879	-2.72727	17.00000	0.0216119	0.0032978	0.79087	-	-	-	*
		-16.36364	-2.72727	17.00000	0.30230	0.050383	1.1360	-	-	-	*
		-14.84848	-2.72727	17.00000	0.82400	0.15135	1.4789	-	-	-	*
		-13.33333	-2.72727	17.00000	1.3545	0.27706	1.8694	-	-	-	*
		-11.81818	-2.72727	17.00000	1.8828	0.43450	2.3336	-	-	-	*
		-10.30303	-2.72727	17.00000	2.4071	0.63719	2.8742	-	-	-	*
		-8.78788	-2.72727	17.00000	2.9190	0.90590	3.4711	-	-	-	*
		-7.27273	-2.72727	17.00000	3.3959	1.2734	4.0813	-	-	-	*
		-5.75758	-2.72727	17.00000	3.7841	1.7925	4.6409	-	-	-	*
		-4.24242	-2.72727	17.00000	3.9552	2.5426	5.0685	-	-	-	*
		-2.72727	-2.72727	17.00000	3.5971	3.5571	5.2747	-	-	-	*
		-1.21212	-2.72727	17.00000	2.3926	5.3834	5.7180	-	-	-	*
		0.30303	-2.72727	17.00000	0.0	7.9834	7.1318	-	-	-	*
		1.81818	-2.72727	17.00000	0.0	7.9834	7.1318	-	-	-	*
		3.33333	-2.72727	17.00000	0.0	7.9834	7.1318	-	-	-	*
		4.84848	-2.72727	17.00000	0.0	7.9834	7.1318	-	-	-	*
		6.36364	-2.72727	17.00000	0.0	7.9834	7.1318	-	-	-	*
		7.87879	-2.72727	17.00000	0.0	7.9834	7.1318	-	-	-	*
		9.39394	-2.72727	17.00000	0.0	7.9834	7.1318	-	-	-	*
		10.90909	-2.72727	17.00000	0.0	7.9834	7.1318	-	-	-	*
		12.42424	-2.72727	17.00000	0.0	7.9834	7.1318	-	-	-	*
		13.93939	-2.72727	17.00000	0.0	7.9834	7.1318	-	-	-	*
		15.45455	-2.72727	17.00000	0.0	7.9834	7.1318	-	-	-	*
		16.96970	-2.72727	17.00000	0.0	7.9834	7.1318	-	-	-	*
		18.48485	-2.72727	17.00000	0.0	7.9834	7.1318	-	-	-	*
		20.00000	-2.72727	17.00000	0.0	7.9834	7.1318	-	-	-	*
		21.51515	-2.72727	17.00000	0.0	7.9834	7.1318	-	-	-	*
		23.03030	-2.72727	17.00000	0.0	7.9834	7.1318	-	-	-	*
		24.54545	-2.72727	17.00000	0.0	7.9834	7.1318	-	-	-	*
		26.06061	-2.72727	17.00000	0.0	7.9834	7.1318	-	-	-	*
		27.57576	-2.72727	17.00000	0.0	7.9834	7.1318	-	-	-	*
		29.09091	-2.72727	17.00000	0.0	7.9834	7.1318	-	-	-	*

Type/No.		Coordinates			Displacements					Angle of Line
Name	Dist.	x	y	z	x	y	z	Horizontal displacement	Horizontal displacement	to x Axis
		30.60606	-2.72727	17.00000	0.0	7.9834	7.1318	-	-	- *
		32.12121	-2.72727	17.00000	0.0	7.9834	7.1318	-	-	- *
		33.63636	-2.72727	17.00000	0.0	7.9834	7.1318	-	-	- *
		35.15152	-2.72727	17.00000	0.0	7.9834	7.1318	-	-	- *
		36.66667	-2.72727	17.00000	0.0	7.9834	7.1318	-	-	- *
		38.18182	-2.72727	17.00000	0.0	7.9834	7.1318	-	-	- *
		39.69697	-2.72727	17.00000	0.0	7.9834	7.1318	-	-	- *
		41.21212	-2.72727	17.00000	0.0	7.9834	7.1318	-	-	- *
		42.72727	-2.72727	17.00000	0.0	7.9834	7.1318	-	-	- *
		44.24242	-2.72727	17.00000	0.0	7.9834	7.1318	-	-	- *
		45.75758	-2.72727	17.00000	0.0	7.9834	7.1318	-	-	- *
		47.27273	-2.72727	17.00000	0.0	7.9834	7.1318	-	-	- *
		48.78788	-2.72727	17.00000	-1.6949	5.8671	5.8369	-	-	- *
		50.30303	-2.72727	17.00000	-3.4259	4.0570	5.4027	-	-	- *
		51.81818	-2.72727	17.00000	-3.9290	2.8064	5.1523	-	-	- *
		53.33333	-2.72727	17.00000	-3.8626	1.9752	4.7778	-	-	- *
		54.84848	-2.72727	17.00000	-3.5171	1.4006	4.2463	-	-	- *
		56.36364	-2.72727	17.00000	-3.0576	0.99703	3.6430	-	-	- *
		57.87879	-2.72727	17.00000	-2.5523	0.70463	3.0371	-	-	- *
		59.39394	-2.72727	17.00000	-2.0302	0.48596	2.4777	-	-	- *
		60.90909	-2.72727	17.00000	-1.5027	0.31746	1.9914	-	-	- *
		62.42424	-2.72727	17.00000	-0.97284	0.18394	1.5819	-	-	- *
		63.93939	-2.72727	17.00000	-0.43967	0.075229	1.2296	-	-	- *
		65.45455	-2.72727	17.00000	-0.10068	0.015730	0.89152	-	-	- *
		66.96970	-2.72727	17.00000	0.0	0.0	0.56705	-	-	- *
		68.48485	-2.72727	17.00000	0.0	0.0	0.26688	-	-	- *
		70.00000	-2.72727	17.00000	0.0	0.0	0.0	-	-	- *
		71.51515	-2.72727	17.00000	0.0	0.0	0.0	-	-	- *
		73.03030	-2.72727	17.00000	0.0	0.0	0.0	-	-	- *
		74.54545	-2.72727	17.00000	0.0	0.0	0.0	-	-	- *
		76.06061	-2.72727	17.00000	0.0	0.0	0.0	-	-	- *
		77.57576	-2.72727	17.00000	0.0	0.0	0.0	-	-	- *
		79.09091	-2.72727	17.00000	0.0	0.0	0.0	-	-	- *
		80.60606	-2.72727	17.00000	0.0	0.0	0.0	-	-	- *
		82.12121	-2.72727	17.00000	0.0	0.0	0.0	-	-	- *
		83.63636	-2.72727	17.00000	0.0	0.0	0.0	-	-	- *
		85.15152	-2.72727	17.00000	0.0	0.0	0.0	-	-	- *
		86.66667	-2.72727	17.00000	0.0	0.0	0.0	-	-	- *
		88.18182	-2.72727	17.00000	0.0	0.0	0.0	-	-	- *
		89.69697	-2.72727	17.00000	0.0	0.0	0.0	-	-	- *
		91.21212	-2.72727	17.00000	0.0	0.0	0.0	-	-	- *
		92.72727	-2.72727	17.00000	0.0	0.0	0.0	-	-	- *
		94.24242	-2.72727	17.00000	0.0	0.0	0.0	-	-	- *
		95.75758	-2.72727	17.00000	0.0	0.0	0.0	-	-	- *
		97.27273	-2.72727	17.00000	0.0	0.0	0.0	-	-	- *
		98.78788	-2.72727	17.00000	0.0	0.0	0.0	-	-	- *
		100.30303	-2.72727	17.00000	0.0	0.0	0.0	-	-	- *
		101.81818	-2.72727	17.00000	0.0	0.0	0.0	-	-	- *
		103.33333	-2.72727	17.00000	0.0	0.0	0.0	-	-	- *
		104.84848	-2.72727	17.00000	0.0	0.0	0.0	-	-	- *
		106.36364	-2.72727	17.00000	0.0	0.0	0.0	-	-	- *
		107.87879	-2.72727	17.00000	0.0	0.0	0.0	-	-	- *
		109.39394	-2.72727	17.00000	0.0	0.0	0.0	-	-	- *
		110.90909	-2.72727	17.00000	0.0	0.0	0.0	-	-	- *
		112.42424	-2.72727	17.00000	0.0	0.0	0.0	-	-	- *
		113.93939	-2.72727	17.00000	0.0	0.0	0.0	-	-	- *
		115.45455	-2.72727	17.00000	0.0	0.0	0.0	-	-	- *
		116.96970	-2.72727	17.00000	0.0	0.0	0.0	-	-	- *
		118.48485	-2.72727	17.00000	0.0	0.0	0.0	-	-	- *
		120.00000	-2.72727	17.00000	0.0	0.0	0.0	-	-	- *
		-30.00000	-1.71717	17.00000	0.0	0.0	0.0	-	-	- *
		-28.48485	-1.71717	17.00000	0.0	0.0	0.0	-	-	- *
		-26.96970	-1.71717	17.00000	0.0	0.0	0.0	-	-	- *
		-25.45455	-1.71717	17.00000	0.0	0.0	0.0	-	-	- *
		-23.93939	-1.71717	17.00000	0.0	0.0	0.0	-	-	- *
		-22.42424	-1.71717	17.00000	0.0	0.0	0.0	-	-	- *
		-20.90909	-1.71717	17.00000	0.0	0.0	0.20410	-	-	- *
		-19.39394	-1.71717	17.00000	0.0	0.0	0.50604	-	-	- *
		-17.87879	-1.71717	17.00000	0.046328	0.0044496	0.82154	-	-	- *
		-16.36364	-1.71717	17.00000	0.34809	0.036528	1.1675	-	-	- *
		-14.84848	-1.71717	17.00000	0.90076	0.10417	1.5177	-	-	- *
		-13.33333	-1.71717	17.00000	1.4552	0.18742	1.9228	-	-	- *
		-11.81818	-1.71717	17.00000	2.0161	0.29294	2.4095	-	-	- *
		-10.30303	-1.71717	17.00000	2.5861	0.43101	2.9809	-	-	- *
		-8.78788	-1.71717	17.00000	3.1640	0.61825	3.6165	-	-	- *
		-7.27273	-1.71717	17.00000	3.7409	0.88327	4.2721	-	-	- *
		-5.75758	-1.71717	17.00000	4.2881	1.2789	4.8802	-	-	- *
		-4.24242	-1.71717	17.00000	4.7207	1.9108	5.3509	-	-	- *
		-2.72727	-1.71717	17.00000	4.7584	2.9960	5.5741	-	-	- *
		-1.21212	-1.71717	17.00000	3.5612	5.0450	5.6668	-	-	- *
		0.30303	-1.71717	17.00000	0.0	8.6807	7.0614	-	-	- *
		1.81818	-1.71717	17.00000	0.0	8.6807	7.0614	-	-	- *
		3.33333	-1.71717	17.00000	0.0	8.6807	7.0614	-	-	- *
		4.84848	-1.71717	17.00000	0.0	8.6807	7.0614	-	-	- *
		6.36364	-1.71717	17.00000	0.0	8.6807	7.0614	-	-	- *
		7.87879	-1.71717	17.00000	0.0	8.6807	7.0614	-	-	- *
		9.39394	-1.71717	17.00000	0.0	8.6807	7.0614	-	-	- *
		10.90909	-1.71717	17.00000	0.0	8.6807	7.0614	-	-	- *
		12.42424	-1.71717	17.00000	0.0	8.6807	7.0614	-	-	- *
		13.93939	-1.71717	17.00000	0.0	8.6807	7.0614	-	-	- *
		15.45455	-1.71717	17.00000	0.0	8.6807	7.0614	-	-	- *
		16.96970	-1.71717	17.00000	0.0	8.6807	7.0614	-	-	- *
		18.48485	-1.71717	17.00000	0.0	8.6807	7.0614	-	-	- *
		20.00000	-1.71717	17.00000	0.0	8.6807	7.0614	-	-	- *
		21.51515	-1.71717	17.00000	0.0	8.6807	7.0614	-	-	- *
		23.03030	-1.71717	17.00000	0.0	8.6807	7.0614	-	-	- *
		24.54545	-1.71717	17.00000	0.0	8.6807	7.0614	-	-	- *
		26.06061	-1.71717	17.00000	0.0	8.6807	7.0614	-	-	- *
		27.57576	-1.71717	17.00000	0.0	8.6807	7.0614	-	-	- *
		29.09091	-1.71717	17.00000	0.0	8.6807	7.0614	-	-	- *
		30.60606	-1.71717	17.00000	0.0	8.6807	7.0614	-	-	- *
		32.12121	-1.71717	17.00000	0.0	8.6807	7.0614	-	-	- *
		33.63636	-1.71717	17.00000	0.0	8.6807	7.0614	-	-	- *
		35.15152	-1.71717	17.00000	0.0	8.6807	7.0614	-	-	- *
		36.66667	-1.71717	17.00000	0.0	8.6807	7.0614	-	-	- *
		38.18182	-1.71717	17.00000	0.0	8.6807	7.0614	-	-	- *
		39.69697	-1.71717	17.00000	0.0	8.6807	7.0614	-	-	- *
		41.21212	-1.71717	17.00000	0.0	8.6807	7.0614	-	-	- *
		42.72727	-1.71717	17.00000	0.0	8.6807	7.0614	-	-	- *
		44.24242	-1.71717	17.00000	0.0	8.6807	7.0614	-	-	- *
		45.75758	-1.71717	17.00000	0.0	8.6807	7.0614	-	-	- *
		47.27273	-1.71717	17.00000	0.0	8.6807	7.0614	-	-	- *
		48.78788	-1.71717	17.00000	-2.7062	5.8982	5.7942	-	-	- *
		50.30303	-1.71717	17.00000	-4.5940	3.4253	5.5759	-	-	- *
		51.81818	-1.71717	17.00000	-4.7933	2.1557	5.4434	-	-	- *
		53.33333	-1.71717	17.00000	-4.4270	1.4254	5.0303	-	-	- *
		54.84848	-1.71717	17.00000	-3.8992	0.97767	4.4506	-	-	- *
		56.36364	-1.71717	17.00000	-3.3264	0.68295	3.8005	-	-	- *
		57.87879	-1.71717	17.00000	-2.7473	0.47754	3.1539	-	-	- *
		59.39394	-1.71717	17.00000	-2.1747	0.32775	2.5614	-	-	- *
		60.90909	-1.71717	17.00000	-1.6115	0.21436	2.0503	-	-	- *
		62.42424	-1.71717	17.00000	-1.0556	0.12567	1.6240	-	-	- *
		63.93939	-1.71717	17.00000	-0.50296	0.054185	1.2625	-	-	- *
		65.45455	-1.71717	17.00000	-0.12807	0.012600	0.92184	-	-	- *
		66.96970	-1.71717	17.00000	0.0	0.0	0.59055	-	-	- *
		68.48485	-1.71717	17.00000	0.0	0.0	0.28866	-	-	- *
		70.00000	-1.71717	17.00000	0.0	0.0	0.0	-	-	- *
		71.51515	-1.71717	17.00000	0.0	0.0	0.0	-	-	- *
		73.03030	-1.71717	17.00000	0.0	0.0	0.0	-	-	- *
		74.54545	-1.71717	17.00000	0.0	0.0	0.0	-	-	- *
		76.06061	-1.71717	17.00000	0.0	0.0	0.0	-	-	- *
		77.57576	-1.71717	17.00000	0.0	0.0	0.0	-	-	- *
		79.09091	-1.71717	17.00000	0.0	0.0	0.0	-	-	- *
		80.60606	-1.71717	17.00000	0.0	0.0	0.0	-	-	- *
		82.12121	-1.71717	17.00000	0.0	0.0	0.0	-	-	- *
		83.63636	-1.71717	17.00000	0.0	0.0	0.0	-	-	- *
		85.15152	-1.71717	17.00000	0.0	0.0	0.0	-	-	- *
		86.66667	-1.71717	17.00000	0.0	0.0	0.0	-	-	- *
		88.18182	-1.71717	17.00000	0.0	0.0	0.0	-	-	- *
		89.69697	-1.71717	17.00000	0.0	0.0	0.0	-	-	- *
		91.21212	-1.71717	17.00000	0.0	0.0	0.0	-	-	- *

Oasys
GEA LIMITED
(GEOTECHNICAL &ENV ASSOC) J15050A
The Great Hall, Lincoln's Inn, Newman's Row, London, WC2A 3TL
Wall Movements Rev 3 Piling and Excavation
Damage Assessment
Job No. | Sheet No. | Rev.
Drg. Ref.
Made by MP | Date 08-Feb-2016 | Checked

Type/No.		Coordinates			Displacements					Angle of Line
Name	Dist.	x	y	z	x	y	z	Horizontal displacement	Horizontal displacement	to x Axis
		92.72727	-1.71717	17.00000	0.0	0.0	0.0	-	-	- *
		94.24242	-1.71717	17.00000	0.0	0.0	0.0	-	-	- *
		95.75758	-1.71717	17.00000	0.0	0.0	0.0	-	-	- *
		97.27273	-1.71717	17.00000	0.0	0.0	0.0	-	-	- *
		98.78788	-1.71717	17.00000	0.0	0.0	0.0	-	-	- *
		100.30303	-1.71717	17.00000	0.0	0.0	0.0	-	-	- *
		101.81818	-1.71717	17.00000	0.0	0.0	0.0	-	-	- *
		103.33333	-1.71717	17.00000	0.0	0.0	0.0	-	-	- *
		104.84848	-1.71717	17.00000	0.0	0.0	0.0	-	-	- *
		106.36364	-1.71717	17.00000	0.0	0.0	0.0	-	-	- *
		107.87879	-1.71717	17.00000	0.0	0.0	0.0	-	-	- *
		109.39394	-1.71717	17.00000	0.0	0.0	0.0	-	-	- *
		110.90909	-1.71717	17.00000	0.0	0.0	0.0	-	-	- *
		112.42424	-1.71717	17.00000	0.0	0.0	0.0	-	-	- *
		113.93939	-1.71717	17.00000	0.0	0.0	0.0	-	-	- *
		115.45455	-1.71717	17.00000	0.0	0.0	0.0	-	-	- *
		116.96970	-1.71717	17.00000	0.0	0.0	0.0	-	-	- *
		118.48485	-1.71717	17.00000	0.0	0.0	0.0	-	-	- *
		120.00000	-1.71717	17.00000	0.0	0.0	0.0	-	-	- *
		-30.00000	-0.70707	17.00000	0.0	0.0	0.0	-	-	- *
		-28.48485	-0.70707	17.00000	0.0	0.0	0.0	-	-	- *
		-26.96970	-0.70707	17.00000	0.0	0.0	0.0	-	-	- *
		-25.45455	-0.70707	17.00000	0.0	0.0	0.0	-	-	- *
		-23.93939	-0.70707	17.00000	0.0	0.0	0.0	-	-	- *
		-22.42424	-0.70707	17.00000	0.0	0.0	0.0	-	-	- *
		-20.90909	-0.70707	17.00000	0.0	0.0	0.21579	-	-	- *
		-19.39394	-0.70707	17.00000	0.0	0.0	0.51864	-	-	- *
		-17.87879	-0.70707	17.00000	0.060918	0.0024092	0.83839	-	-	- *
		-16.36364	-0.70707	17.00000	0.38452	0.016615	1.1855	-	-	- *
		-14.84848	-0.70707	17.00000	0.95088	0.045280	1.5406	-	-	- *
		-13.33333	-0.70707	17.00000	1.5234	0.080786	1.9555	-	-	- *
		-11.81818	-0.70707	17.00000	2.1086	0.12615	2.4582	-	-	- *
		-10.30303	-0.70707	17.00000	2.7125	0.18616	3.0525	-	-	- *
		-8.78788	-0.70707	17.00000	3.3403	0.26876	3.7188	-	-	- *
		-7.27273	-0.70707	17.00000	3.9948	0.38838	4.4133	-	-	- *
		-5.75758	-0.70707	17.00000	4.6733	0.57392	5.0680	-	-	- *
		-4.24242	-0.70707	17.00000	5.3562	0.89270	5.5901	-	-	- *
		-2.72727	-0.70707	17.00000	5.9497	1.5425	5.8593	-	-	- *
		-1.21212	-0.70707	17.00000	5.7570	3.3583	5.7082	-	-	- *
		0.30303	-0.70707	17.00000	0.0	9.4098	6.6743	-	-	- *
		1.81818	-0.70707	17.00000	0.0	9.4098	6.6743	-	-	- *
		3.33333	-0.70707	17.00000	0.0	9.4098	6.6743	-	-	- *
		4.84848	-0.70707	17.00000	0.0	9.4098	6.6743	-	-	- *
		6.36364	-0.70707	17.00000	0.0	9.4098	6.6743	-	-	- *
		7.87879	-0.70707	17.00000	0.0	9.4098	6.6743	-	-	- *
		9.39394	-0.70707	17.00000	0.0	9.4098	6.6743	-	-	- *
		10.90909	-0.70707	17.00000	0.0	9.4098	6.6743	-	-	- *
		12.42424	-0.70707	17.00000	0.0	9.4098	6.6743	-	-	- *
		13.93939	-0.70707	17.00000	0.0	9.4098	6.6743	-	-	- *
		15.45455	-0.70707	17.00000	0.0	9.4098	6.6743	-	-	- *
		16.96970	-0.70707	17.00000	0.0	9.4098	6.6743	-	-	- *
		18.48485	-0.70707	17.00000	0.0	9.4098	6.6743	-	-	- *
		20.00000	-0.70707	17.00000	0.0	9.4098	6.6743	-	-	- *
		21.51515	-0.70707	17.00000	0.0	9.4098	6.6743	-	-	- *
		23.03030	-0.70707	17.00000	0.0	9.4098	6.6743	-	-	- *
		24.54545	-0.70707	17.00000	0.0	9.4098	6.6743	-	-	- *
		26.06061	-0.70707	17.00000	0.0	9.4098	6.6743	-	-	- *
		27.57576	-0.70707	17.00000	0.0	9.4098	6.6743	-	-	- *
		29.09091	-0.70707	17.00000	0.0	9.4098	6.6743	-	-	- *
		30.60606	-0.70707	17.00000	0.0	9.4098	6.6743	-	-	- *
		32.12121	-0.70707	17.00000	0.0	9.4098	6.6743	-	-	- *
		33.63636	-0.70707	17.00000	0.0	9.4098	6.6743	-	-	- *
		35.15152	-0.70707	17.00000	0.0	9.4098	6.6743	-	-	- *
		36.66667	-0.70707	17.00000	0.0	9.4098	6.6743	-	-	- *
		38.18182	-0.70707	17.00000	0.0	9.4098	6.6743	-	-	- *
		39.69697	-0.70707	17.00000	0.0	9.4098	6.6743	-	-	- *
		41.21212	-0.70707	17.00000	0.0	9.4098	6.6743	-	-	- *
		42.72727	-0.70707	17.00000	0.0	9.4098	6.6743	-	-	- *
		44.24242	-0.70707	17.00000	0.0	9.4098	6.6743	-	-	- *
		45.75758	-0.70707	17.00000	0.0	9.4098	6.6743	-	-	- *
		47.27273	-0.70707	17.00000	0.0	9.4098	6.6743	-	-	- *
		48.78788	-0.70707	17.00000	-4.9427	4.4357	5.5501	-	-	- *
		50.30303	-0.70707	17.00000	-6.0522	1.8581	5.8687	-	-	- *
		51.81818	-0.70707	17.00000	-5.5398	1.0259	5.6970	-	-	- *
		53.33333	-0.70707	17.00000	-4.8658	0.64509	5.2322	-	-	- *
		54.84848	-0.70707	17.00000	-4.1827	0.43184	4.6042	-	-	- *
		56.36364	-0.70707	17.00000	-3.5208	0.29766	3.9129	-	-	- *
		57.87879	-0.70707	17.00000	-2.8857	0.20655	3.2333	-	-	- *
		59.39394	-0.70707	17.00000	-2.2756	0.14121	2.6157	-	-	- *
		60.90909	-0.70707	17.00000	-1.6857	0.092330	2.0868	-	-	- *
		62.42424	-0.70707	17.00000	-1.1103	0.054425	1.6491	-	-	- *
		63.93939	-0.70707	17.00000	-0.52887	0.024082	1.2815	-	-	- *
		65.45455	-0.70707	17.00000	-0.14482	0.0058705	0.93869	-	-	- *
		66.96970	-0.70707	17.00000	0.0	0.0	0.60343	-	-	- *
		68.48485	-0.70707	17.00000	0.0	0.0	0.30059	-	-	- *
		70.00000	-0.70707	17.00000	0.0	0.0	0.0	-	-	- *
		71.51515	-0.70707	17.00000	0.0	0.0	0.0	-	-	- *
		73.03030	-0.70707	17.00000	0.0	0.0	0.0	-	-	- *
		74.54545	-0.70707	17.00000	0.0	0.0	0.0	-	-	- *
		76.06061	-0.70707	17.00000	0.0	0.0	0.0	-	-	- *
		77.57576	-0.70707	17.00000	0.0	0.0	0.0	-	-	- *
		79.09091	-0.70707	17.00000	0.0	0.0	0.0	-	-	- *
		80.60606	-0.70707	17.00000	0.0	0.0	0.0	-	-	- *
		82.12121	-0.70707	17.00000	0.0	0.0	0.0	-	-	- *
		83.63636	-0.70707	17.00000	0.0	0.0	0.0	-	-	- *
		85.15152	-0.70707	17.00000	0.0	0.0	0.0	-	-	- *
		86.66667	-0.70707	17.00000	0.0	0.0	0.0	-	-	- *
		88.18182	-0.70707	17.00000	0.0	0.0	0.0	-	-	- *
		89.69697	-0.70707	17.00000	0.0	0.0	0.0	-	-	- *
		91.21212	-0.70707	17.00000	0.0	0.0	0.0	-	-	- *
		92.72727	-0.70707	17.00000	0.0	0.0	0.0	-	-	- *
		94.24242	-0.70707	17.00000	0.0	0.0	0.0	-	-	- *
		95.75758	-0.70707	17.00000	0.0	0.0	0.0	-	-	- *
		97.27273	-0.70707	17.00000	0.0	0.0	0.0	-	-	- *
		98.78788	-0.70707	17.00000	0.0	0.0	0.0	-	-	- *
		100.30303	-0.70707	17.00000	0.0	0.0	0.0	-	-	- *
		101.81818	-0.70707	17.00000	0.0	0.0	0.0	-	-	- *
		103.33333	-0.70707	17.00000	0.0	0.0	0.0	-	-	- *
		104.84848	-0.70707	17.00000	0.0	0.0	0.0	-	-	- *
		106.36364	-0.70707	17.00000	0.0	0.0	0.0	-	-	- *
		107.87879	-0.70707	17.00000	0.0	0.0	0.0	-	-	- *
		109.39394	-0.70707	17.00000	0.0	0.0	0.0	-	-	- *
		110.90909	-0.70707	17.00000	0.0	0.0	0.0	-	-	- *
		112.42424	-0.70707	17.00000	0.0	0.0	0.0	-	-	- *
		113.93939	-0.70707	17.00000	0.0	0.0	0.0	-	-	- *
		115.45455	-0.70707	17.00000	0.0	0.0	0.0	-	-	- *
		116.96970	-0.70707	17.00000	0.0	0.0	0.0	-	-	- *
		118.48485	-0.70707	17.00000	0.0	0.0	0.0	-	-	- *
		120.00000	-0.70707	17.00000	0.0	0.0	0.0	-	-	- *
		-30.00000	0.30303	17.00000	0.0	0.0	0.0	-	-	- *
		-28.48485	0.30303	17.00000	0.0	0.0	0.0	-	-	- *
		-26.96970	0.30303	17.00000	0.0	0.0	0.0	-	-	- *
		-25.45455	0.30303	17.00000	0.0	0.0	0.0	-	-	- *
		-23.93939	0.30303	17.00000	0.0	0.0	0.0	-	-	- *
		-22.42424	0.30303	17.00000	0.0	0.0	0.0	-	-	- *
		-20.90909	0.30303	17.00000	0.0	0.0	0.21818	-	-	- *
		-19.39394	0.30303	17.00000	0.0	0.0	0.52121	-	-	- *
		-17.87879	0.30303	17.00000	0.096364	0.0	0.85074	-	-	- *
		-16.36364	0.30303	17.00000	0.57754	0.0	1.2206	-	-	- *
		-14.84848	0.30303	17.00000	1.3005	0.0	1.6039	-	-	- *
		-13.33333	0.30303	17.00000	2.0313	0.0	2.0794	-	-	- *
		-11.81818	0.30303	17.00000	2.7773	0.0	2.6900	-	-	- *
		-10.30303	0.30303	17.00000	3.5459	0.0	3.4435	-	-	- *
		-8.78788	0.30303	17.00000	4.3443	0.0	4.3118	-	-	- *
		-7.27273	0.30303	17.00000	5.1800	0.0	5.2316	-	-	- *
		-5.75758	0.30303	17.00000	6.0601	0.0	6.1037	-	-	- *
		-4.24242	0.30303	17.00000	6.9922	0.0	6.7938	-	-	- *
		-2.72727	0.30303	17.00000	7.9834	0.0	7.1318	-	-	- *
		-1.21212	0.30303	17.00000	9.0412	0.0	6.9121	-	-	- *
		0.30303	0.30303	17.00000		Point lies within an excavation.				
		1.81818	0.30303	17.00000		Point lies within an excavation.				

Type/No.		Coordinates			Displacements					Angle of Line to x Axis	
Name	Dist.	x	y	z	x	y	z	Horizontal displacement	Horizontal displacement		
		3.33333	0.30303	17.00000			Point lies within an excavation.				*
		4.84848	0.30303	17.00000			Point lies within an excavation.				*
		6.36364	0.30303	17.00000			Point lies within an excavation.				*
		7.87879	0.30303	17.00000			Point lies within an excavation.				*
		9.39394	0.30303	17.00000			Point lies within an excavation.				*
		10.90909	0.30303	17.00000			Point lies within an excavation.				*
		12.42424	0.30303	17.00000			Point lies within an excavation.				*
		13.93939	0.30303	17.00000			Point lies within an excavation.				*
		15.45455	0.30303	17.00000			Point lies within an excavation.				*
		16.96970	0.30303	17.00000			Point lies within an excavation.				*
		18.48485	0.30303	17.00000			Point lies within an excavation.				*
		20.00000	0.30303	17.00000			Point lies within an excavation.				*
		21.51515	0.30303	17.00000			Point lies within an excavation.				*
		23.03030	0.30303	17.00000			Point lies within an excavation.				*
		24.54545	0.30303	17.00000			Point lies within an excavation.				*
		26.06061	0.30303	17.00000			Point lies within an excavation.				*
		27.57576	0.30303	17.00000			Point lies within an excavation.				*
		29.09091	0.30303	17.00000			Point lies within an excavation.				*
		30.60606	0.30303	17.00000			Point lies within an excavation.				*
		32.12121	0.30303	17.00000			Point lies within an excavation.				*
		33.63636	0.30303	17.00000			Point lies within an excavation.				*
		35.15152	0.30303	17.00000			Point lies within an excavation.				*
		36.66667	0.30303	17.00000			Point lies within an excavation.				*
		38.18182	0.30303	17.00000			Point lies within an excavation.				*
		39.69697	0.30303	17.00000			Point lies within an excavation.				*
		41.21212	0.30303	17.00000			Point lies within an excavation.				*
		42.72727	0.30303	17.00000			Point lies within an excavation.				*
		44.24242	0.30303	17.00000			Point lies within an excavation.				*
		45.75758	0.30303	17.00000			Point lies within an excavation.				*
		47.27273	0.30303	17.00000			Point lies within an excavation.				*
		48.78788	0.30303	17.00000	-9.3502	0.0	6.7187	-	-	-	*
		50.30303	0.30303	17.00000	-8.2726	0.0	7.1362	-	-	-	*
		51.81818	0.30303	17.00000	-7.2634	0.0	6.9321	-	-	-	*
		53.33333	0.30303	17.00000	-6.3156	0.0	6.3219	-	-	-	*
		54.84848	0.30303	17.00000	-5.4216	0.0	5.4857	-	-	-	*
		56.36364	0.30303	17.00000	-4.5742	0.0	4.5678	-	-	-	*
		57.87879	0.30303	17.00000	-3.7661	0.0	3.6771	-	-	-	*
		59.39394	0.30303	17.00000	-2.9899	0.0	2.8871	-	-	-	*
		60.90909	0.30303	17.00000	-2.2383	0.0	2.2357	-	-	-	*
		62.42424	0.30303	17.00000	-1.5040	0.0	1.7253	-	-	-	*
		63.93939	0.30303	17.00000	-0.77959	0.0	1.3225	-	-	-	*
		65.45455	0.30303	17.00000	-0.20890	0.057360	0.97472	-	-	-	*
		66.96970	0.30303	17.00000	0.020106	0.11742	0.64149	-	-	-	*
		68.48485	0.30303	17.00000	0.014033	0.16390	0.38327	-	-	-	*
		70.00000	0.30303	17.00000	0.0	0.18955	0.10029	-	-	-	*
		71.51515	0.30303	17.00000	0.0	0.28291	0.11984	-	-	-	*
		73.03030	0.30303	17.00000	0.0	0.28291	0.11984	-	-	-	*
		74.54545	0.30303	17.00000	0.0	0.28291	0.11984	-	-	-	*
		76.06061	0.30303	17.00000	0.0	0.28291	0.11984	-	-	-	*
		77.57576	0.30303	17.00000	0.0	0.28291	0.11984	-	-	-	*
		79.09091	0.30303	17.00000	0.0	0.28291	0.11984	-	-	-	*
		80.60606	0.30303	17.00000	0.0	0.28291	0.11984	-	-	-	*
		82.12121	0.30303	17.00000	-0.0012955	0.18914	0.10010	-	-	-	*
		83.63636	0.30303	17.00000	-0.015694	0.16973	0.081702	-	-	-	*
		85.15152	0.30303	17.00000	-0.022414	0.12586	0.033869	-	-	-	*
		86.66667	0.30303	17.00000	-0.016237	0.061575	0.016856	-	-	-	*
		88.18182	0.30303	17.00000	0.0	0.0	0.0	-	-	-	*
		89.69697	0.30303	17.00000	0.0	0.0	0.0	-	-	-	*
		91.21212	0.30303	17.00000	0.0	0.0	0.0	-	-	-	*
		92.72727	0.30303	17.00000	0.0	0.0	0.0	-	-	-	*
		94.24242	0.30303	17.00000	0.0	0.0	0.0	-	-	-	*
		95.75758	0.30303	17.00000	0.0	0.0	0.0	-	-	-	*
		97.27273	0.30303	17.00000	0.0	0.0	0.0	-	-	-	*
		98.78788	0.30303	17.00000	0.0	0.0	0.0	-	-	-	*
		100.30303	0.30303	17.00000	0.0	0.0	0.0	-	-	-	*
		101.81818	0.30303	17.00000	0.0	0.0	0.0	-	-	-	*
		103.33333	0.30303	17.00000	0.0	0.0	0.0	-	-	-	*
		104.84848	0.30303	17.00000	0.0	0.0	0.0	-	-	-	*
		106.36364	0.30303	17.00000	0.0	0.0	0.0	-	-	-	*
		107.87879	0.30303	17.00000	0.0	0.0	0.0	-	-	-	*
		109.39394	0.30303	17.00000	0.0	0.0	0.0	-	-	-	*
		110.90909	0.30303	17.00000	0.0	0.0	0.0	-	-	-	*
		112.42424	0.30303	17.00000	0.0	0.0	0.0	-	-	-	*
		113.93939	0.30303	17.00000	0.0	0.0	0.0	-	-	-	*
		115.45455	0.30303	17.00000	0.0	0.0	0.0	-	-	-	*
		116.96970	0.30303	17.00000	0.0	0.0	0.0	-	-	-	*
		118.48485	0.30303	17.00000	0.0	0.0	0.0	-	-	-	*
		120.00000	0.30303	17.00000	0.0	0.0	0.0	-	-	-	*
		-30.00000	1.31313	17.00000	0.0	0.0	0.0	-	-	-	*
		-28.48485	1.31313	17.00000	0.0	0.0	0.0	-	-	-	*
		-26.96970	1.31313	17.00000	0.0	0.0	0.0	-	-	-	*
		-25.45455	1.31313	17.00000	0.0	0.0	0.0	-	-	-	*
		-23.93939	1.31313	17.00000	0.0	0.0	0.0	-	-	-	*
		-22.42424	1.31313	17.00000	0.0	0.0	0.0	-	-	-	*
		-20.90909	1.31313	17.00000	0.0	0.0	0.0	-	-	-	*
		-19.39394	1.31313	17.00000	0.0	0.0	0.52121	-	-	-	*
		-17.87879	1.31313	17.00000	0.096364	0.0	0.85074	-	-	-	*
		-16.36364	1.31313	17.00000	0.57754	0.0	1.2206	-	-	-	*
		-14.84848	1.31313	17.00000	1.3005	0.0	1.6039	-	-	-	*
		-13.33333	1.31313	17.00000	2.0313	0.0	2.0794	-	-	-	*
		-11.81818	1.31313	17.00000	2.7773	0.0	2.6900	-	-	-	*
		-10.30303	1.31313	17.00000	3.5459	0.0	3.4435	-	-	-	*
		-8.78788	1.31313	17.00000	4.3443	0.0	4.3118	-	-	-	*
		-7.27273	1.31313	17.00000	5.1800	0.0	5.2316	-	-	-	*
		-5.75758	1.31313	17.00000	6.0601	0.0	6.1037	-	-	-	*
		-4.24242	1.31313	17.00000	6.9922	0.0	6.7938	-	-	-	*
		-2.72727	1.31313	17.00000	7.9834	0.0	7.1318	-	-	-	*
		-1.21212	1.31313	17.00000	9.0412	0.0	6.9121	-	-	-	*
		0.30303	1.31313	17.00000			Point lies within an excavation.				*
		1.81818	1.31313	17.00000			Point lies within an excavation.				*
		3.33333	1.31313	17.00000			Point lies within an excavation.				*
		4.84848	1.31313	17.00000			Point lies within an excavation.				*
		6.36364	1.31313	17.00000			Point lies within an excavation.				*
		7.87879	1.31313	17.00000			Point lies within an excavation.				*
		9.39394	1.31313	17.00000			Point lies within an excavation.				*
		10.90909	1.31313	17.00000			Point lies within an excavation.				*
		12.42424	1.31313	17.00000			Point lies within an excavation.				*
		13.93939	1.31313	17.00000			Point lies within an excavation.				*
		15.45455	1.31313	17.00000			Point lies within an excavation.				*
		16.96970	1.31313	17.00000			Point lies within an excavation.				*
		18.48485	1.31313	17.00000			Point lies within an excavation.				*
		20.00000	1.31313	17.00000			Point lies within an excavation.				*
		21.51515	1.31313	17.00000			Point lies within an excavation.				*
		23.03030	1.31313	17.00000			Point lies within an excavation.				*
		24.54545	1.31313	17.00000			Point lies within an excavation.				*
		26.06061	1.31313	17.00000			Point lies within an excavation.				*
		27.57576	1.31313	17.00000			Point lies within an excavation.				*
		29.09091	1.31313	17.00000			Point lies within an excavation.				*
		30.60606	1.31313	17.00000			Point lies within an excavation.				*
		32.12121	1.31313	17.00000			Point lies within an excavation.				*
		33.63636	1.31313	17.00000			Point lies within an excavation.				*
		35.15152	1.31313	17.00000			Point lies within an excavation.				*
		36.66667	1.31313	17.00000			Point lies within an excavation.				*
		38.18182	1.31313	17.00000			Point lies within an excavation.				*
		39.69697	1.31313	17.00000			Point lies within an excavation.				*
		41.21212	1.31313	17.00000			Point lies within an excavation.				*
		42.72727	1.31313	17.00000			Point lies within an excavation.				*
		44.24242	1.31313	17.00000			Point lies within an excavation.				*
		45.75758	1.31313	17.00000			Point lies within an excavation.				*
		47.27273	1.31313	17.00000			Point lies within an excavation.				*
		48.78788	1.31313	17.00000	-9.3502	0.0	6.7187	-	-	-	*
		50.30303	1.31313	17.00000	-8.2726	0.0	7.1362	-	-	-	*
		51.81818	1.31313	17.00000	-7.2634	0.0	6.9321	-	-	-	*
		53.33333	1.31313	17.00000	-6.3156	0.0	6.3219	-	-	-	*
		54.84848	1.31313	17.00000	-5.4216	0.0	5.4857	-	-	-	*
		56.36364	1.31313	17.00000	-4.5742	0.0	4.5678	-	-	-	*
		57.87879	1.31313	17.00000	-3.7661	0.0	3.6771	-	-	-	*
		59.39394	1.31313	17.00000	-2.9899	0.0	2.8871	-	-	-	*
		60.90909	1.31313	17.00000	-2.2383	0.0	2.2357	-	-	-	*
		62.42424	1.31313	17.00000	-1.4868	0.037916	1.7368	-	-	-	*
		63.93939	1.31313	17.00000	-0.73567	0.12093	1.3883	-	-	-	*

Oasys

GEA LIMITED
(GEOTECHNICAL &ENV ASSOC) *J15050A*

The Great Hall, Lincoln's Inn, Newman's Row, London, WC2A 3TL
Wall Movements Rev 3 Piling and Excavation
Damage Assessment

Job No. | Sheet No. | Rev.
Drg. Ref.
Made by MP | Date 08-Feb-2016 | Checked

Type/No.		Coordinates			Displacements					Angle of Line to x Axis	
Name	Dist.	x	y	z	x	y	z	Horizontal displacement	Horizontal displacement		
		65.45455	1.31313	17.00000	-0.16766	0.20549	1.1159	-	-	-	*
		66.96970	1.31313	17.00000	0.051691	0.28464	0.84086	-	-	-	*
		68.48485	1.31313	17.00000	0.031777	0.34997	0.59707	-	-	-	*
		70.00000	1.31313	17.00000	0.0	0.39258	0.32852	-	-	-	*
		71.51515	1.31313	17.00000	0.0	0.58594	0.36097	-	-	-	*
		73.03030	1.31313	17.00000	0.0	0.58594	0.36097	-	-	-	*
		74.54545	1.31313	17.00000	0.0	0.58594	0.36097	-	-	-	*
		76.06061	1.31313	17.00000	0.0	0.58594	0.36097	-	-	-	*
		77.57576	1.31313	17.00000	0.0	0.58594	0.36097	-	-	-	*
		79.09091	1.31313	17.00000	0.0	0.58594	0.36097	-	-	-	*
		80.60606	1.31313	17.00000	0.0	0.58594	0.36097	-	-	-	*
		82.12121	1.31313	17.00000	-0.0028459	0.39179	0.32825	-	-	-	*
		83.63636	1.31313	17.00000	-0.035868	0.36576	0.30824	-	-	-	*
		85.15152	1.31313	17.00000	-0.059036	0.31259	0.25820	-	-	-	*
		86.66667	1.31313	17.00000	-0.068345	0.23724	0.17953	-	-	-	*
		88.18182	1.31313	17.00000	-0.053889	0.14547	0.073061	-	-	-	*
		89.69697	1.31313	17.00000	-0.011847	0.043028	0.012998	-	-	-	*
		91.21212	1.31313	17.00000	0.0	0.0	0.0	-	-	-	*
		92.72727	1.31313	17.00000	0.0	0.0	0.0	-	-	-	*
		94.24242	1.31313	17.00000	0.0	0.0	0.0	-	-	-	*
		95.75758	1.31313	17.00000	0.0	0.0	0.0	-	-	-	*
		97.27273	1.31313	17.00000	0.0	0.0	0.0	-	-	-	*
		98.78788	1.31313	17.00000	0.0	0.0	0.0	-	-	-	*
		100.30303	1.31313	17.00000	0.0	0.0	0.0	-	-	-	*
		101.81818	1.31313	17.00000	0.0	0.0	0.0	-	-	-	*
		103.33333	1.31313	17.00000	0.0	0.0	0.0	-	-	-	*
		104.84848	1.31313	17.00000	0.0	0.0	0.0	-	-	-	*
		106.36364	1.31313	17.00000	0.0	0.0	0.0	-	-	-	*
		107.87879	1.31313	17.00000	0.0	0.0	0.0	-	-	-	*
		109.39394	1.31313	17.00000	0.0	0.0	0.0	-	-	-	*
		110.90909	1.31313	17.00000	0.0	0.0	0.0	-	-	-	*
		112.42424	1.31313	17.00000	0.0	0.0	0.0	-	-	-	*
		113.93939	1.31313	17.00000	0.0	0.0	0.0	-	-	-	*
		115.45455	1.31313	17.00000	0.0	0.0	0.0	-	-	-	*
		116.96970	1.31313	17.00000	0.0	0.0	0.0	-	-	-	*
		118.48485	1.31313	17.00000	0.0	0.0	0.0	-	-	-	*
		120.00000	1.31313	17.00000	0.0	0.0	0.0	-	-	-	*
		-30.00000	2.32323	17.00000	0.0	0.0	0.0	-	-	-	*
		-28.48485	2.32323	17.00000	0.0	0.0	0.0	-	-	-	*
		-26.96970	2.32323	17.00000	0.0	0.0	0.0	-	-	-	*
		-25.45455	2.32323	17.00000	0.0	0.0	0.0	-	-	-	*
		-23.93939	2.32323	17.00000	0.0	0.0	0.0	-	-	-	*
		-22.42424	2.32323	17.00000	0.0	0.0	0.0	-	-	-	*
		-20.90909	2.32323	17.00000	0.0	0.0	0.21818	-	-	-	*
		-19.39394	2.32323	17.00000	0.0	0.0	0.52121	-	-	-	*
		-17.87879	2.32323	17.00000	0.096364	0.0	0.85074	-	-	-	*
		-16.36364	2.32323	17.00000	0.57754	0.0	1.2206	-	-	-	*
		-14.84848	2.32323	17.00000	1.3005	0.0	1.6039	-	-	-	*
		-13.33333	2.32323	17.00000	2.0313	0.0	2.0794	-	-	-	*
		-11.81818	2.32323	17.00000	2.7773	0.0	2.6900	-	-	-	*
		-10.30303	2.32323	17.00000	3.5459	0.0	3.4435	-	-	-	*
		-8.78788	2.32323	17.00000	4.3443	0.0	4.3118	-	-	-	*
		-7.27273	2.32323	17.00000	5.1800	0.0	5.2316	-	-	-	*
		-5.75758	2.32323	17.00000	6.0601	0.0	6.1037	-	-	-	*
		-4.24242	2.32323	17.00000	6.9922	0.0	6.7938	-	-	-	*
		-2.72727	2.32323	17.00000	7.9834	0.0	7.1318	-	-	-	*
		-1.21212	2.32323	17.00000	9.0412	0.0	6.9121	-	-	-	*
		0.30303	2.32323	17.00000			Point lies within an excavation.				*
		1.81818	2.32323	17.00000			Point lies within an excavation.				*
		3.33333	2.32323	17.00000			Point lies within an excavation.				*
		4.84848	2.32323	17.00000			Point lies within an excavation.				*
		6.36364	2.32323	17.00000			Point lies within an excavation.				*
		7.87879	2.32323	17.00000			Point lies within an excavation.				*
		9.39394	2.32323	17.00000			Point lies within an excavation.				*
		10.90909	2.32323	17.00000			Point lies within an excavation.				*
		12.42424	2.32323	17.00000			Point lies within an excavation.				*
		13.93939	2.32323	17.00000			Point lies within an excavation.				*
		15.45455	2.32323	17.00000			Point lies within an excavation.				*
		16.96970	2.32323	17.00000			Point lies within an excavation.				*
		18.48485	2.32323	17.00000			Point lies within an excavation.				*
		20.00000	2.32323	17.00000			Point lies within an excavation.				*
		21.51515	2.32323	17.00000			Point lies within an excavation.				*
		23.03030	2.32323	17.00000			Point lies within an excavation.				*
		24.54545	2.32323	17.00000			Point lies within an excavation.				*
		26.06061	2.32323	17.00000			Point lies within an excavation.				*
		27.57576	2.32323	17.00000			Point lies within an excavation.				*
		29.09091	2.32323	17.00000			Point lies within an excavation.				*
		30.60606	2.32323	17.00000			Point lies within an excavation.				*
		32.12121	2.32323	17.00000			Point lies within an excavation.				*
		33.63636	2.32323	17.00000			Point lies within an excavation.				*
		35.15152	2.32323	17.00000			Point lies within an excavation.				*
		36.66667	2.32323	17.00000			Point lies within an excavation.				*
		38.18182	2.32323	17.00000			Point lies within an excavation.				*
		39.69697	2.32323	17.00000			Point lies within an excavation.				*
		41.21212	2.32323	17.00000			Point lies within an excavation.				*
		42.72727	2.32323	17.00000			Point lies within an excavation.				*
		44.24242	2.32323	17.00000			Point lies within an excavation.				*
		45.75758	2.32323	17.00000			Point lies within an excavation.				*
		47.27273	2.32323	17.00000			Point lies within an excavation.				*
		48.78788	2.32323	17.00000	-9.3502	0.0	6.7187	-	-	-	*
		50.30303	2.32323	17.00000	-8.2726	0.0	7.1362	-	-	-	*
		51.81818	2.32323	17.00000	-7.2634	0.0	6.9321	-	-	-	*
		53.33333	2.32323	17.00000	-6.3156	0.0	6.3219	-	-	-	*
		54.84848	2.32323	17.00000	-5.4216	0.0	5.4857	-	-	-	*
		56.36364	2.32323	17.00000	-4.5742	0.0	4.5678	-	-	-	*
		57.87879	2.32323	17.00000	-3.7661	0.0	3.6771	-	-	-	*
		59.39394	2.32323	17.00000	-2.9899	0.0	2.8871	-	-	-	*
		60.90909	2.32323	17.00000	-2.2080	0.052295	2.2506	-	-	-	*
		62.42424	2.32323	17.00000	-1.4351	0.14247	1.8398	-	-	-	*
		63.93939	2.32323	17.00000	-0.68588	0.24240	1.5493	-	-	-	*
		65.45455	2.32323	17.00000	-0.12313	0.34663	1.2929	-	-	-	*
		66.96970	2.32323	17.00000	0.086428	0.44712	1.0370	-	-	-	*
		68.48485	2.32323	17.00000	0.051588	0.53377	0.81310	-	-	-	*
		70.00000	2.32323	17.00000	0.0	0.59561	0.56245	-	-	-	*
		71.51515	2.32323	17.00000	0.0	0.88897	0.61062	-	-	-	*
		73.03030	2.32323	17.00000	0.0	0.88897	0.61062	-	-	-	*
		74.54545	2.32323	17.00000	0.0	0.88897	0.61062	-	-	-	*
		76.06061	2.32323	17.00000	0.0	0.88897	0.61062	-	-	-	*
		77.57576	2.32323	17.00000	0.0	0.88897	0.61062	-	-	-	*
		79.09091	2.32323	17.00000	0.0	0.88897	0.61062	-	-	-	*
		80.60606	2.32323	17.00000	0.0	0.88897	0.61062	-	-	-	*
		82.12121	2.32323	17.00000	-0.0045957	0.59437	0.56207	-	-	-	*
		83.63636	2.32323	17.00000	-0.058534	0.56077	0.53859	-	-	-	*
		85.15152	2.32323	17.00000	-0.099884	0.49686	0.48207	-	-	-	*
		86.66667	2.32323	17.00000	-0.11271	0.40885	0.39580	-	-	-	*
		88.18182	2.32323	17.00000	-0.11979	0.30378	0.28313	-	-	-	*
		89.69697	2.32323	17.00000	-0.092551	0.18850	0.14581	-	-	-	*
		91.21212	2.32323	17.00000	-0.040301	0.068923	0.018926	-	-	-	*
		92.72727	2.32323	17.00000	0.0	0.0	0.0	-	-	-	*
		94.24242	2.32323	17.00000	0.0	0.0	0.0	-	-	-	*
		95.75758	2.32323	17.00000	0.0	0.0	0.0	-	-	-	*
		97.27273	2.32323	17.00000	0.0	0.0	0.0	-	-	-	*
		98.78788	2.32323	17.00000	0.0	0.0	0.0	-	-	-	*
		100.30303	2.32323	17.00000	0.0	0.0	0.0	-	-	-	*
		101.81818	2.32323	17.00000	0.0	0.0	0.0	-	-	-	*
		103.33333	2.32323	17.00000	0.0	0.0	0.0	-	-	-	*
		104.84848	2.32323	17.00000	0.0	0.0	0.0	-	-	-	*
		106.36364	2.32323	17.00000	0.0	0.0	0.0	-	-	-	*
		107.87879	2.32323	17.00000	0.0	0.0	0.0	-	-	-	*
		109.39394	2.32323	17.00000	0.0	0.0	0.0	-	-	-	*
		110.90909	2.32323	17.00000	0.0	0.0	0.0	-	-	-	*
		112.42424	2.32323	17.00000	0.0	0.0	0.0	-	-	-	*
		113.93939	2.32323	17.00000	0.0	0.0	0.0	-	-	-	*
		115.45455	2.32323	17.00000	0.0	0.0	0.0	-	-	-	*
		116.96970	2.32323	17.00000	0.0	0.0	0.0	-	-	-	*
		118.48485	2.32323	17.00000	0.0	0.0	0.0	-	-	-	*
		120.00000	2.32323	17.00000	0.0	0.0	0.0	-	-	-	*
		-30.00000	3.33333	17.00000	0.0	0.0	0.0	-	-	-	*
		-28.48485	3.33333	17.00000	0.0	0.0	0.0	-	-	-	*
		-26.96970	3.33333	17.00000	0.0	0.0	0.0	-	-	-	*
		-25.45455	3.33333	17.00000	0.0	0.0	0.0	-	-	-	*

Type/No.		Coordinates			Displacements					Angle of Line to x Axis	
Name	Dist.	x	y	z	x	y	z	Horizontal displacement	Horizontal displacement		
		-23.93939	3.33333	17.00000	0.0	0.0	0.0	-	-	-	*
		-22.42424	3.33333	17.00000	0.0	0.0	0.0	-	-	-	*
		-20.90909	3.33333	17.00000	0.0	0.0	0.21818	-	-	-	*
		-19.39394	3.33333	17.00000	0.0	0.0	0.52121	-	-	-	*
		-17.87879	3.33333	17.00000	0.096364	0.0	0.85074	-	-	-	*
		-16.36364	3.33333	17.00000	0.57754	0.0	1.2206	-	-	-	*
		-14.84848	3.33333	17.00000	1.3005	0.0	1.6039	-	-	-	*
		-13.33333	3.33333	17.00000	2.0313	0.0	2.0794	-	-	-	*
		-11.81818	3.33333	17.00000	2.7773	0.0	2.6900	-	-	-	*
		-10.30303	3.33333	17.00000	3.5459	0.0	3.4435	-	-	-	*
		-8.78788	3.33333	17.00000	4.3443	0.0	4.3118	-	-	-	*
		-7.27273	3.33333	17.00000	5.1800	0.0	5.2316	-	-	-	*
		-5.75758	3.33333	17.00000	6.0601	0.0	6.1037	-	-	-	*
		-4.24242	3.33333	17.00000	6.9922	0.0	6.7938	-	-	-	*
		-2.72727	3.33333	17.00000	7.9834	0.0	7.1318	-	-	-	*
		-1.21212	3.33333	17.00000	9.0412	0.0	6.9121	-	-	-	*
		0.30303	3.33333	17.00000		Point lies within an excavation.					*
		1.81818	3.33333	17.00000		Point lies within an excavation.					*
		3.33333	3.33333	17.00000		Point lies within an excavation.					*
		4.84848	3.33333	17.00000		Point lies within an excavation.					*
		6.36364	3.33333	17.00000		Point lies within an excavation.					*
		7.87879	3.33333	17.00000		Point lies within an excavation.					*
		9.39394	3.33333	17.00000		Point lies within an excavation.					*
		10.90909	3.33333	17.00000		Point lies within an excavation.					*
		12.42424	3.33333	17.00000		Point lies within an excavation.					*
		13.93939	3.33333	17.00000		Point lies within an excavation.					*
		15.45455	3.33333	17.00000		Point lies within an excavation.					*
		16.96970	3.33333	17.00000		Point lies within an excavation.					*
		18.48485	3.33333	17.00000		Point lies within an excavation.					*
		20.00000	3.33333	17.00000		Point lies within an excavation.					*
		21.51515	3.33333	17.00000		Point lies within an excavation.					*
		23.03030	3.33333	17.00000		Point lies within an excavation.					*
		24.54545	3.33333	17.00000		Point lies within an excavation.					*
		26.06061	3.33333	17.00000		Point lies within an excavation.					*
		27.57576	3.33333	17.00000		Point lies within an excavation.					*
		29.09091	3.33333	17.00000		Point lies within an excavation.					*
		30.60606	3.33333	17.00000		Point lies within an excavation.					*
		32.12121	3.33333	17.00000		Point lies within an excavation.					*
		33.63636	3.33333	17.00000		Point lies within an excavation.					*
		35.15152	3.33333	17.00000		Point lies within an excavation.					*
		36.66667	3.33333	17.00000		Point lies within an excavation.					*
		38.18182	3.33333	17.00000		Point lies within an excavation.					*
		39.69697	3.33333	17.00000		Point lies within an excavation.					*
		41.21212	3.33333	17.00000		Point lies within an excavation.					*
		42.72727	3.33333	17.00000		Point lies within an excavation.					*
		44.24242	3.33333	17.00000		Point lies within an excavation.					*
		45.75758	3.33333	17.00000		Point lies within an excavation.					*
		47.27273	3.33333	17.00000		Point lies within an excavation.					*
		48.78788	3.33333	17.00000	-9.3502	0.0	6.7187	-	-	-	*
		50.30303	3.33333	17.00000	-8.2726	0.0	7.1362	-	-	-	*
		51.81818	3.33333	17.00000	-7.2634	0.0	6.9321	-	-	-	*
		53.33333	3.33333	17.00000	-6.3156	0.0	6.3219	-	-	-	*
		54.84848	3.33333	17.00000	-5.4216	0.0	5.4857	-	-	-	*
		56.36364	3.33333	17.00000	-4.5742	0.0	4.5678	-	-	-	*
		57.87879	3.33333	17.00000	-3.7661	0.0	3.6771	-	-	-	*
		59.39394	3.33333	17.00000	-2.9581	0.044025	2.9004	-	-	-	*
		60.90909	3.33333	17.00000	-2.1566	0.13177	2.3608	-	-	-	*
		62.42424	3.33333	17.00000	-1.3821	0.23589	1.9769	-	-	-	*
		63.93939	3.33333	17.00000	-0.63343	0.35369	1.7045	-	-	-	*
		65.45455	3.33333	17.00000	-0.075054	0.47943	1.4717	-	-	-	*
		66.96970	3.33333	17.00000	0.12477	0.60387	1.2427	-	-	-	*
		68.48485	3.33333	17.00000	0.073845	0.71482	1.0454	-	-	-	*
		70.00000	3.33333	17.00000	0.0	0.79864	0.81784	-	-	-	*
		71.51515	3.33333	17.00000	0.0	1.1920	0.89230	-	-	-	*
		73.03030	3.33333	17.00000	0.0	1.1920	0.89230	-	-	-	*
		74.54545	3.33333	17.00000	0.0	1.1920	0.89230	-	-	-	*
		76.06061	3.33333	17.00000	0.0	1.1920	0.89230	-	-	-	*
		77.57576	3.33333	17.00000	0.0	1.1920	0.89230	-	-	-	*
		79.09091	3.33333	17.00000	0.0	1.1920	0.89230	-	-	-	*
		80.60606	3.33333	17.00000	0.0	1.1920	0.89230	-	-	-	*
		82.12121	3.33333	17.00000	-0.0065860	0.79690	0.81726	-	-	-	*
		83.63636	3.33333	17.00000	-0.084182	0.75452	0.78788	-	-	-	*
		85.15152	3.33333	17.00000	-0.14571	0.67812	0.72020	-	-	-	*
		86.66667	3.33333	17.00000	-0.18312	0.57552	0.61981	-	-	-	*
		88.18182	3.33333	17.00000	-0.19195	0.45542	0.49295	-	-	-	*
		89.69697	3.33333	17.00000	-0.17108	0.32599	0.34449	-	-	-	*
		91.21212	3.33333	17.00000	-0.12184	0.19398	0.17604	-	-	-	*
		92.72727	3.33333	17.00000	-0.047080	0.064370	0.018453	-	-	-	*
		94.24242	3.33333	17.00000	0.0	0.0	0.0	-	-	-	*
		95.75758	3.33333	17.00000	0.0	0.0	0.0	-	-	-	*
		97.27273	3.33333	17.00000	0.0	0.0	0.0	-	-	-	*
		98.78788	3.33333	17.00000	0.0	0.0	0.0	-	-	-	*
		100.30303	3.33333	17.00000	0.0	0.0	0.0	-	-	-	*
		101.81818	3.33333	17.00000	0.0	0.0	0.0	-	-	-	*
		103.33333	3.33333	17.00000	0.0	0.0	0.0	-	-	-	*
		104.84848	3.33333	17.00000	0.0	0.0	0.0	-	-	-	*
		106.36364	3.33333	17.00000	0.0	0.0	0.0	-	-	-	*
		107.87879	3.33333	17.00000	0.0	0.0	0.0	-	-	-	*
		109.39394	3.33333	17.00000	0.0	0.0	0.0	-	-	-	*
		110.90909	3.33333	17.00000	0.0	0.0	0.0	-	-	-	*
		112.42424	3.33333	17.00000	0.0	0.0	0.0	-	-	-	*
		113.93939	3.33333	17.00000	0.0	0.0	0.0	-	-	-	*
		115.45455	3.33333	17.00000	0.0	0.0	0.0	-	-	-	*
		116.96970	3.33333	17.00000	0.0	0.0	0.0	-	-	-	*
		118.48485	3.33333	17.00000	0.0	0.0	0.0	-	-	-	*
		120.00000	3.33333	17.00000	0.0	0.0	0.0	-	-	-	*
		-30.00000	4.34343	17.00000	0.0	0.0	0.0	-	-	-	*
		-28.48485	4.34343	17.00000	0.0	0.0	0.0	-	-	-	*
		-26.96970	4.34343	17.00000	0.0	0.0	0.0	-	-	-	*
		-25.45455	4.34343	17.00000	0.0	0.0	0.0	-	-	-	*
		-23.93939	4.34343	17.00000	0.0	0.0	0.0	-	-	-	*
		-22.42424	4.34343	17.00000	0.0	0.0	0.0	-	-	-	*
		-20.90909	4.34343	17.00000	0.0	0.0	0.21818	-	-	-	*
		-19.39394	4.34343	17.00000	0.0	0.0	0.52121	-	-	-	*
		-17.87879	4.34343	17.00000	0.096364	0.0	0.85074	-	-	-	*
		-16.36364	4.34343	17.00000	0.57754	0.0	1.2206	-	-	-	*
		-14.84848	4.34343	17.00000	1.3005	0.0	1.6039	-	-	-	*
		-13.33333	4.34343	17.00000	2.0313	0.0	2.0794	-	-	-	*
		-11.81818	4.34343	17.00000	2.7773	0.0	2.6900	-	-	-	*
		-10.30303	4.34343	17.00000	3.5459	0.0	3.4435	-	-	-	*
		-8.78788	4.34343	17.00000	4.3443	0.0	4.3118	-	-	-	*
		-7.27273	4.34343	17.00000	5.1800	0.0	5.2316	-	-	-	*
		-5.75758	4.34343	17.00000	6.0601	0.0	6.1037	-	-	-	*
		-4.24242	4.34343	17.00000	6.9922	0.0	6.7938	-	-	-	*
		-2.72727	4.34343	17.00000	7.9834	0.0	7.1318	-	-	-	*
		-1.21212	4.34343	17.00000	9.0412	0.0	6.9121	-	-	-	*
		0.30303	4.34343	17.00000		Point lies within an excavation.					*
		1.81818	4.34343	17.00000		Point lies within an excavation.					*
		3.33333	4.34343	17.00000		Point lies within an excavation.					*
		4.84848	4.34343	17.00000		Point lies within an excavation.					*
		6.36364	4.34343	17.00000		Point lies within an excavation.					*
		7.87879	4.34343	17.00000		Point lies within an excavation.					*
		9.39394	4.34343	17.00000		Point lies within an excavation.					*
		10.90909	4.34343	17.00000		Point lies within an excavation.					*
		12.42424	4.34343	17.00000		Point lies within an excavation.					*
		13.93939	4.34343	17.00000		Point lies within an excavation.					*
		15.45455	4.34343	17.00000		Point lies within an excavation.					*
		16.96970	4.34343	17.00000		Point lies within an excavation.					*
		18.48485	4.34343	17.00000		Point lies within an excavation.					*
		20.00000	4.34343	17.00000		Point lies within an excavation.					*
		21.51515	4.34343	17.00000		Point lies within an excavation.					*
		23.03030	4.34343	17.00000		Point lies within an excavation.					*
		24.54545	4.34343	17.00000		Point lies within an excavation.					*
		26.06061	4.34343	17.00000		Point lies within an excavation.					*
		27.57576	4.34343	17.00000		Point lies within an excavation.					*
		29.09091	4.34343	17.00000		Point lies within an excavation.					*
		30.60606	4.34343	17.00000		Point lies within an excavation.					*
		32.12121	4.34343	17.00000		Point lies within an excavation.					*
		33.63636	4.34343	17.00000		Point lies within an excavation.					*
		35.15152	4.34343	17.00000		Point lies within an excavation.					*
		36.66667	4.34343	17.00000		Point lies within an excavation.					*

Oasys
GEA LIMITED
(GEOTECHNICAL &ENV ASSOC)
The Great Hall, Lincoln's Inn, Newman's Row, London, WC2A 3TL
Wall Movements Rev 3 Piling and Excavation
Damage Assessment

Job No.	Sheet No.	Rev.
J15050A		

Drg. Ref.

Made by	Date	Checked
MP	08-Feb-2016	

Type/No.		Coordinates			Displacements					Angle of Line to x Axis	
Name	Dist.	x	y	z	x	y	z	Horizontal displacement	Horizontal displacement		
		38.18182	4.34343	17.00000		Point lies within an excavation.					*
		39.69697	4.34343	17.00000		Point lies within an excavation.					*
		41.21212	4.34343	17.00000		Point lies within an excavation.					*
		42.72727	4.34343	17.00000		Point lies within an excavation.					*
		44.24242	4.34343	17.00000		Point lies within an excavation.					*
		45.75758	4.34343	17.00000		Point lies within an excavation.					*
		47.27273	4.34343	17.00000		Point lies within an excavation.					*
		48.78788	4.34343	17.00000	-9.3502	0.0	6.7187	-	-	-	*
		50.30303	4.34343	17.00000	-8.2726	0.0	7.1362	-	-	-	*
		51.81818	4.34343	17.00000	-7.2634	0.0	6.9321	-	-	-	*
		53.33333	4.34343	17.00000	-6.3156	0.0	6.3219	-	-	-	*
		54.84848	4.34343	17.00000	-5.4216	0.0	5.4857	-	-	-	*
		56.36364	4.34343	17.00000	-4.5742	0.0	4.5678	-	-	-	*
		57.87879	4.34343	17.00000	-3.7448	0.024031	3.6856	-	-	-	*
		59.39394	4.34343	17.00000	-2.9113	0.10126	2.9933	-	-	-	*
		60.90909	4.34343	17.00000	-2.1061	0.19860	2.4744	-	-	-	*
		62.42424	4.34343	17.00000	-1.3284	0.31654	2.1079	-	-	-	*
		63.93939	4.34343	17.00000	-0.57854	0.45304	1.8609	-	-	-	*
		65.45455	4.34343	17.00000	-0.023192	0.60222	1.6598	-	-	-	*
		66.96970	4.34343	17.00000	0.16723	0.75364	1.4660	-	-	-	*
		68.48485	4.34343	17.00000	0.099020	0.89250	1.3036	-	-	-	*
		70.00000	4.34343	17.00000	0.0	0.0	1.0017	-	-	-	*
		71.51515	4.34343	17.00000	0.0	1.4950	1.2229	-	-	-	*
		73.03030	4.34343	17.00000	0.0	1.4950	1.2229	-	-	-	*
		74.54545	4.34343	17.00000	0.0	1.4950	1.2229	-	-	-	*
		76.06061	4.34343	17.00000	0.0	1.4950	1.2229	-	-	-	*
		77.57576	4.34343	17.00000	0.0	1.4950	1.2229	-	-	-	*
		79.09091	4.34343	17.00000	0.0	1.4950	1.2229	-	-	-	*
		80.60606	4.34343	17.00000	0.0	1.4950	1.2229	-	-	-	*
		82.12121	4.34343	17.00000	-0.0087000	0.99935	1.1051	-	-	-	*
		83.63636	4.34343	17.00000	-0.11344	0.94670	1.0668	-	-	-	*
		85.15152	4.34343	17.00000	-0.19745	0.85563	0.98298	-	-	-	*
		86.66667	4.34343	17.00000	-0.25154	0.73611	0.86187	-	-	-	*
		88.18182	4.34343	17.00000	-0.27114	0.59899	0.71300	-	-	-	*
		89.69697	4.34343	17.00000	-0.25588	0.45400	0.54468	-	-	-	*
		91.21212	4.34343	17.00000	-0.20831	0.30881	0.36180	-	-	-	*
		92.72727	4.34343	17.00000	-0.13250	0.16868	0.16402	-	-	-	*
		94.24242	4.34343	17.00000	-0.033007	0.038819	0.012515	-	-	-	*
		95.75758	4.34343	17.00000	0.0	0.0	0.0	-	-	-	*
		97.27273	4.34343	17.00000	0.0	0.0	0.0	-	-	-	*
		98.78788	4.34343	17.00000	0.0	0.0	0.0	-	-	-	*
		100.30303	4.34343	17.00000	0.0	0.0	0.0	-	-	-	*
		101.81818	4.34343	17.00000	0.0	0.0	0.0	-	-	-	*
		103.33333	4.34343	17.00000	0.0	0.0	0.0	-	-	-	*
		104.84848	4.34343	17.00000	0.0	0.0	0.0	-	-	-	*
		106.36364	4.34343	17.00000	0.0	0.0	0.0	-	-	-	*
		107.87879	4.34343	17.00000	0.0	0.0	0.0	-	-	-	*
		109.39394	4.34343	17.00000	0.0	0.0	0.0	-	-	-	*
		110.90909	4.34343	17.00000	0.0	0.0	0.0	-	-	-	*
		112.42424	4.34343	17.00000	0.0	0.0	0.0	-	-	-	*
		113.93939	4.34343	17.00000	0.0	0.0	0.0	-	-	-	*
		115.45455	4.34343	17.00000	0.0	0.0	0.0	-	-	-	*
		116.96970	4.34343	17.00000	0.0	0.0	0.0	-	-	-	*
		118.48485	4.34343	17.00000	0.0	0.0	0.0	-	-	-	*
		120.00000	4.34343	17.00000	0.0	0.0	0.0	-	-	-	*
		-30.00000	5.35354	17.00000	0.0	0.0	0.0	-	-	-	*
		-28.48485	5.35354	17.00000	0.0	0.0	0.0	-	-	-	*
		-26.96970	5.35354	17.00000	0.0	0.0	0.0	-	-	-	*
		-25.45455	5.35354	17.00000	0.0	0.0	0.0	-	-	-	*
		-23.93939	5.35354	17.00000	0.0	0.0	0.0	-	-	-	*
		-22.42424	5.35354	17.00000	0.0	0.0	0.0	-	-	-	*
		-20.90909	5.35354	17.00000	0.0	0.0	0.21818	-	-	-	*
		-19.39394	5.35354	17.00000	0.0	0.0	0.52121	-	-	-	*
		-17.87879	5.35354	17.00000	0.096364	0.0	0.85074	-	-	-	*
		-16.36364	5.35354	17.00000	0.57754	0.0	1.2206	-	-	-	*
		-14.84848	5.35354	17.00000	1.3005	0.0	1.6039	-	-	-	*
		-13.33333	5.35354	17.00000	2.0313	0.0	2.0794	-	-	-	*
		-11.81818	5.35354	17.00000	2.7773	0.0	2.6900	-	-	-	*
		-10.30303	5.35354	17.00000	3.5459	0.0	3.4435	-	-	-	*
		-8.78788	5.35354	17.00000	4.3443	0.0	4.3118	-	-	-	*
		-7.27273	5.35354	17.00000	5.1800	0.0	5.2316	-	-	-	*
		-5.75758	5.35354	17.00000	6.0601	0.0	6.1037	-	-	-	*
		-4.24242	5.35354	17.00000	6.9922	0.0	6.7938	-	-	-	*
		-2.72727	5.35354	17.00000	7.9834	0.0	7.1318	-	-	-	*
		-1.21212	5.35354	17.00000	9.0412	0.0	6.9121	-	-	-	*
		0.30303	5.35354	17.00000		Point lies within an excavation.					*
		1.81818	5.35354	17.00000		Point lies within an excavation.					*
		3.33333	5.35354	17.00000		Point lies within an excavation.					*
		4.84848	5.35354	17.00000		Point lies within an excavation.					*
		6.36364	5.35354	17.00000		Point lies within an excavation.					*
		7.87879	5.35354	17.00000		Point lies within an excavation.					*
		9.39394	5.35354	17.00000		Point lies within an excavation.					*
		10.90909	5.35354	17.00000		Point lies within an excavation.					*
		12.42424	5.35354	17.00000		Point lies within an excavation.					*
		13.93939	5.35354	17.00000		Point lies within an excavation.					*
		15.45455	5.35354	17.00000		Point lies within an excavation.					*
		16.96970	5.35354	17.00000		Point lies within an excavation.					*
		18.48485	5.35354	17.00000		Point lies within an excavation.					*
		20.00000	5.35354	17.00000		Point lies within an excavation.					*
		21.51515	5.35354	17.00000		Point lies within an excavation.					*
		23.03030	5.35354	17.00000		Point lies within an excavation.					*
		24.54545	5.35354	17.00000		Point lies within an excavation.					*
		26.06061	5.35354	17.00000		Point lies within an excavation.					*
		27.57576	5.35354	17.00000		Point lies within an excavation.					*
		29.09091	5.35354	17.00000		Point lies within an excavation.					*
		30.60606	5.35354	17.00000		Point lies within an excavation.					*
		32.12121	5.35354	17.00000		Point lies within an excavation.					*
		33.63636	5.35354	17.00000		Point lies within an excavation.					*
		35.15152	5.35354	17.00000		Point lies within an excavation.					*
		36.66667	5.35354	17.00000		Point lies within an excavation.					*
		38.18182	5.35354	17.00000	-9.3502	0.0	6.7187	-	-	-	*
		50.30303	5.35354	17.00000	-8.2726	0.0	7.1362	-	-	-	*
		51.81818	5.35354	17.00000	-7.2634	0.0	6.9321	-	-	-	*
		53.33333	5.35354	17.00000	-6.3156	0.0	6.3219	-	-	-	*
		54.84848	5.35354	17.00000	-5.4216	0.0	5.4857	-	-	-	*
		56.36364	5.35354	17.00000	-4.5720	0.0020421	4.5695	-	-	-	*
		57.87879	5.35354	17.00000	-3.7052	0.063545	3.7441	-	-	-	*
		59.39394	5.35354	17.00000	-2.8678	0.14565	3.0846	-	-	-	*
		60.90909	5.35354	17.00000	-2.0576	0.25139	2.5796	-	-	-	*
		62.42424	5.35354	17.00000	-1.2748	0.38260	2.2362	-	-	-	*
		63.93939	5.35354	17.00000	-0.52162	0.53829	2.0213	-	-	-	*
		65.45455	5.35354	17.00000	0.036025	0.72244	1.8599	-	-	-	*
		66.96970	5.35354	17.00000	0.23213	0.96877	1.7105	-	-	-	*
		68.48485	5.35354	17.00000	0.14275	1.1915	1.5927	-	-	-	*
		70.00000	5.35354	17.00000	0.0	1.3575	1.4341	-	-	-	*
		71.51515	5.35354	17.00000	0.0	1.9508	1.6130	-	-	-	*
		73.03030	5.35354	17.00000	0.0	1.9508	1.6130	-	-	-	*
		74.54545	5.35354	17.00000	0.0	1.9508	1.6130	-	-	-	*
		76.06061	5.35354	17.00000	0.0	1.9508	1.6130	-	-	-	*
		77.57576	5.35354	17.00000	0.0	1.9508	1.6130	-	-	-	*
		79.09091	5.35354	17.00000	0.0	1.9508	1.6130	-	-	-	*
		80.60606	5.35354	17.00000	0.0	1.9508	1.6130	-	-	-	*
		82.12121	5.35354	17.00000	-0.012981	1.3544	1.4326	-	-	-	*
		83.63636	5.35354	17.00000	-0.16431	1.2699	1.3819	-	-	-	*
		85.15152	5.35354	17.00000	-0.27668	1.1103	1.2765	-	-	-	*
		86.66667	5.35354	17.00000	-0.33006	0.89445	1.1281	-	-	-	*
		88.18182	5.35354	17.00000	-0.35816	0.73270	0.94978	-	-	-	*
		89.69697	5.35354	17.00000	-0.34736	0.57073	0.75354	-	-	-	*
		91.21212	5.35354	17.00000	-0.29993	0.41174	0.54763	-	-	-	*
		92.72727	5.35354	17.00000	-0.22153	0.26116	0.33473	-	-	-	*
		94.24242	5.35354	17.00000	-0.11796	0.12185	0.11052	-	-	-	*
		95.75758	5.35354	17.00000	0.0	0.0	0.0	-	-	-	*
		97.27273	5.35354	17.00000	0.0	0.0	0.0	-	-	-	*
		98.78788	5.35354	17.00000	0.0	0.0	0.0	-	-	-	*

Type/No.		Coordinates			Displacements					Angle of Line
Name	Dist.	x	y	z	x	y	z	Horizontal displacement	Horizontal displacement	to x Axis
		100.30303	5.35354	17.00000	0.0	0.0	0.0	-	-	-
		101.81818	5.35354	17.00000	0.0	0.0	0.0	-	-	-
		103.33333	5.35354	17.00000	0.0	0.0	0.0	-	-	-
		104.84848	5.35354	17.00000	0.0	0.0	0.0	-	-	-
		106.36364	5.35354	17.00000	0.0	0.0	0.0	-	-	-
		107.87879	5.35354	17.00000	0.0	0.0	0.0	-	-	-
		109.39394	5.35354	17.00000	0.0	0.0	0.0	-	-	-
		110.90909	5.35354	17.00000	0.0	0.0	0.0	-	-	-
		112.42424	5.35354	17.00000	0.0	0.0	0.0	-	-	-
		113.93939	5.35354	17.00000	0.0	0.0	0.0	-	-	-
		115.45455	5.35354	17.00000	0.0	0.0	0.0	-	-	-
		116.96970	5.35354	17.00000	0.0	0.0	0.0	-	-	-
		118.48485	5.35354	17.00000	0.0	0.0	0.0	-	-	-
		120.00000	5.35354	17.00000	0.0	0.0	0.0	-	-	-
		-30.00000	6.36364	17.00000	0.0	0.0	0.0	-	-	-
		-28.48485	6.36364	17.00000	0.0	0.0	0.0	-	-	-
		-26.96970	6.36364	17.00000	0.0	0.0	0.0	-	-	-
		-25.45455	6.36364	17.00000	0.0	0.0	0.0	-	-	-
		-23.93939	6.36364	17.00000	0.0	0.0	0.0	-	-	-
		-22.42424	6.36364	17.00000	0.0	0.0	0.0	-	-	-
		-20.90909	6.36364	17.00000	0.0	0.0	0.21818	-	-	-
		-19.39394	6.36364	17.00000	0.0	0.0	0.52121	-	-	-
		-17.87879	6.36364	17.00000	0.096364	0.0	0.85074	-	-	-
		-16.36364	6.36364	17.00000	0.57754	0.0	1.2206	-	-	-
		-14.84848	6.36364	17.00000	1.3005	0.0	1.6039	-	-	-
		-13.33333	6.36364	17.00000	2.0313	0.0	2.0794	-	-	-
		-11.81818	6.36364	17.00000	2.7773	0.0	2.6900	-	-	-
		-10.30303	6.36364	17.00000	3.5459	0.0	3.4435	-	-	-
		-8.78788	6.36364	17.00000	4.3443	0.0	4.3118	-	-	-
		-7.27273	6.36364	17.00000	5.1800	0.0	5.2316	-	-	-
		-5.75758	6.36364	17.00000	6.0601	0.0	6.1037	-	-	-
		-4.24242	6.36364	17.00000	6.9922	0.0	6.7938	-	-	-
		-2.72727	6.36364	17.00000	7.9834	0.0	7.1318	-	-	-
		-1.21212	6.36364	17.00000	9.0412	0.0	6.9121	-	-	-
		0.30303	6.36364	17.00000		Point lies within an excavation.				
		1.81818	6.36364	17.00000		Point lies within an excavation.				
		3.33333	6.36364	17.00000		Point lies within an excavation.				
		4.84848	6.36364	17.00000		Point lies within an excavation.				
		6.36364	6.36364	17.00000		Point lies within an excavation.				
		7.87879	6.36364	17.00000		Point lies within an excavation.				
		9.39394	6.36364	17.00000		Point lies within an excavation.				
		10.90909	6.36364	17.00000		Point lies within an excavation.				
		12.42424	6.36364	17.00000		Point lies within an excavation.				
		13.93939	6.36364	17.00000		Point lies within an excavation.				
		15.45455	6.36364	17.00000		Point lies within an excavation.				
		16.96970	6.36364	17.00000		Point lies within an excavation.				
		18.48485	6.36364	17.00000		Point lies within an excavation.				
		20.00000	6.36364	17.00000		Point lies within an excavation.				
		21.51515	6.36364	17.00000		Point lies within an excavation.				
		23.03030	6.36364	17.00000		Point lies within an excavation.				
		24.54545	6.36364	17.00000		Point lies within an excavation.				
		26.06061	6.36364	17.00000		Point lies within an excavation.				
		27.57576	6.36364	17.00000		Point lies within an excavation.				
		29.09091	6.36364	17.00000		Point lies within an excavation.				
		30.60606	6.36364	17.00000		Point lies within an excavation.				
		32.12121	6.36364	17.00000		Point lies within an excavation.				
		33.63636	6.36364	17.00000		Point lies within an excavation.				
		35.15152	6.36364	17.00000		Point lies within an excavation.				
		36.66667	6.36364	17.00000		Point lies within an excavation.				
		38.18182	6.36364	17.00000		Point lies within an excavation.				
		39.69697	6.36364	17.00000		Point lies within an excavation.				
		41.21212	6.36364	17.00000		Point lies within an excavation.				
		42.72727	6.36364	17.00000		Point lies within an excavation.				
		44.24242	6.36364	17.00000		Point lies within an excavation.				
		45.75758	6.36364	17.00000		Point lies within an excavation.				
		47.27273	6.36364	17.00000		Point lies within an excavation.				
		48.78788	6.36364	17.00000	-9.3502	0.0	6.7187	-	-	-
		50.30303	6.36364	17.00000	-8.2726	0.0	7.1362	-	-	-
		51.81818	6.36364	17.00000	-7.2634	0.0	6.9321	-	-	-
		53.33333	6.36364	17.00000	-6.3156	0.0	6.3219	-	-	-
		54.84848	6.36364	17.00000	-5.4152	0.0044813	5.4884	-	-	-
		56.36364	6.36364	17.00000	-4.5376	0.0312148	4.5853	-	-	-
		57.87879	6.36364	17.00000	-3.6693	0.092953	3.8166	-	-	-
		59.39394	6.36364	17.00000	-2.8291	0.17638	3.1650	-	-	-
		60.90909	6.36364	17.00000	-2.0127	0.28877	2.6774	-	-	-
		62.42424	6.36364	17.00000	-1.2227	0.43201	2.3616	-	-	-
		63.93939	6.36364	17.00000	-0.44133	0.64944	2.1846	-	-	-
		65.45455	6.36364	17.00000	0.14230	0.93680	2.0707	-	-	-
		66.96970	6.36364	17.00000	0.32263	1.2389	1.9754	-	-	-
		68.48485	6.36364	17.00000	0.19812	1.5215	1.9133	-	-	-
		70.00000	6.36364	17.00000	0.0	1.7414	1.8045	-	-	-
		71.51515	6.36364	17.00000	0.0	2.4348	2.0664	-	-	-
		73.03030	6.36364	17.00000	0.0	2.4348	2.0664	-	-	-
		74.54545	6.36364	17.00000	0.0	2.4348	2.0664	-	-	-
		76.06061	6.36364	17.00000	0.0	2.4348	2.0664	-	-	-
		77.57576	6.36364	17.00000	0.0	2.4348	2.0664	-	-	-
		79.09091	6.36364	17.00000	0.0	2.4348	2.0664	-	-	-
		80.60606	6.36364	17.00000	0.0	2.4348	2.0664	-	-	-
		82.12121	6.36364	17.00000	-0.018099	1.7375	1.8023	-	-	-
		83.63636	6.36364	17.00000	-0.22983	1.6344	1.7350	-	-	-
		85.15152	6.36364	17.00000	-0.39112	1.4441	1.6026	-	-	-
		86.66667	6.36364	17.00000	-0.47819	1.1924	1.4205	-	-	-
		88.18182	6.36364	17.00000	-0.48159	0.90653	1.2059	-	-	-
		89.69697	6.36364	17.00000	-0.44580	0.67396	0.97459	-	-	-
		91.21212	6.36364	17.00000	-0.39652	0.50087	0.73820	-	-	-
		92.72727	6.36364	17.00000	-0.31368	0.34026	0.50231	-	-	-
		94.24242	6.36364	17.00000	-0.20904	0.19869	0.26609	-	-	-
		95.75758	6.36364	17.00000	-0.080701	0.068258	0.021820	-	-	-
		97.27273	6.36364	17.00000	0.0	0.0	0.0	-	-	-
		98.78788	6.36364	17.00000	0.0	0.0	0.0	-	-	-
		100.30303	6.36364	17.00000	0.0	0.0	0.0	-	-	-
		101.81818	6.36364	17.00000	0.0	0.0	0.0	-	-	-
		103.33333	6.36364	17.00000	0.0	0.0	0.0	-	-	-
		104.84848	6.36364	17.00000	0.0	0.0	0.0	-	-	-
		106.36364	6.36364	17.00000	0.0	0.0	0.0	-	-	-
		107.87879	6.36364	17.00000	0.0	0.0	0.0	-	-	-
		109.39394	6.36364	17.00000	0.0	0.0	0.0	-	-	-
		110.90909	6.36364	17.00000	0.0	0.0	0.0	-	-	-
		112.42424	6.36364	17.00000	0.0	0.0	0.0	-	-	-
		113.93939	6.36364	17.00000	0.0	0.0	0.0	-	-	-
		115.45455	6.36364	17.00000	0.0	0.0	0.0	-	-	-
		116.96970	6.36364	17.00000	0.0	0.0	0.0	-	-	-
		118.48485	6.36364	17.00000	0.0	0.0	0.0	-	-	-
		120.00000	6.36364	17.00000	0.0	0.0	0.0	-	-	-
		-30.00000	7.37374	17.00000	0.0	0.0	0.0	-	-	-
		-28.48485	7.37374	17.00000	0.0	0.0	0.0	-	-	-
		-26.96970	7.37374	17.00000	0.0	0.0	0.0	-	-	-
		-25.45455	7.37374	17.00000	0.0	0.0	0.0	-	-	-
		-23.93939	7.37374	17.00000	0.0	0.0	0.0	-	-	-
		-22.42424	7.37374	17.00000	0.0	0.0	0.0	-	-	-
		-20.90909	7.37374	17.00000	0.0	0.0	0.21818	-	-	-
		-19.39394	7.37374	17.00000	0.0	0.0	0.52121	-	-	-
		-17.87879	7.37374	17.00000	0.096364	0.0	0.85074	-	-	-
		-16.36364	7.37374	17.00000	0.57754	0.0	1.2206	-	-	-
		-14.84848	7.37374	17.00000	1.3005	0.0	1.6039	-	-	-
		-13.33333	7.37374	17.00000	2.0313	0.0	2.0794	-	-	-
		-11.81818	7.37374	17.00000	2.7773	0.0	2.6900	-	-	-
		-10.30303	7.37374	17.00000	3.5459	0.0	3.4435	-	-	-
		-8.78788	7.37374	17.00000	4.3443	0.0	4.3118	-	-	-
		-7.27273	7.37374	17.00000	5.1800	0.0	5.2316	-	-	-
		-5.75758	7.37374	17.00000	6.0601	0.0	6.1037	-	-	-
		-4.24242	7.37374	17.00000	6.9922	0.0	6.7938	-	-	-
		-2.72727	7.37374	17.00000	7.9834	0.0	7.1318	-	-	-
		-1.21212	7.37374	17.00000	9.0412	0.0	6.9121	-	-	-
		0.30303	7.37374	17.00000		Point lies within an excavation.				
		1.81818	7.37374	17.00000		Point lies within an excavation.				
		3.33333	7.37374	17.00000		Point lies within an excavation.				
		4.84848	7.37374	17.00000		Point lies within an excavation.				
		6.36364	7.37374	17.00000		Point lies within an excavation.				
		7.87879	7.37374	17.00000		Point lies within an excavation.				
		9.39394	7.37374	17.00000		Point lies within an excavation.				

Oasys
GEA LIMITED
(GEOTECHNICAL &ENV ASSOC) J15050A
The Great Hall, Lincoln's Inn, Newman's Row, London, WC2A 3TL
Wall Movements Rev 3 Piling and Excavation
Damage Assessment
Job No. | Sheet No. | Rev.
Drg. Ref.
Made by MP | Date 08-Feb-2016 | Checked

Type/No.		Coordinates			Displacements					Angle of Line
Name	Dist.	x	y	z	x	y	z	Horizontal displacement	Horizontal displacement	to x Axis
		10.90909	7.37374	17.00000		Point lies within an excavation.				
		12.42424	7.37374	17.00000		Point lies within an excavation.				
		13.93939	7.37374	17.00000		Point lies within an excavation.				
		15.45455	7.37374	17.00000		Point lies within an excavation.				
		16.96970	7.37374	17.00000		Point lies within an excavation.				
		18.48485	7.37374	17.00000		Point lies within an excavation.				
		20.00000	7.37374	17.00000		Point lies within an excavation.				
		21.51515	7.37374	17.00000		Point lies within an excavation.				
		23.03030	7.37374	17.00000		Point lies within an excavation.				
		24.54545	7.37374	17.00000		Point lies within an excavation.				
		26.06061	7.37374	17.00000		Point lies within an excavation.				
		27.57576	7.37374	17.00000		Point lies within an excavation.				
		29.09091	7.37374	17.00000		Point lies within an excavation.				
		30.60606	7.37374	17.00000		Point lies within an excavation.				
		32.12121	7.37374	17.00000		Point lies within an excavation.				
		33.63636	7.37374	17.00000		Point lies within an excavation.				
		35.15152	7.37374	17.00000		Point lies within an excavation.				
		36.66667	7.37374	17.00000		Point lies within an excavation.				
		38.18182	7.37374	17.00000		Point lies within an excavation.				
		39.69697	7.37374	17.00000		Point lies within an excavation.				
		41.21212	7.37374	17.00000		Point lies within an excavation.				
		42.72727	7.37374	17.00000		Point lies within an excavation.				
		44.24242	7.37374	17.00000		Point lies within an excavation.				
		45.75758	7.37374	17.00000		Point lies within an excavation.				
		47.27273	7.37374	17.00000		Point lies within an excavation.				
		48.78788	7.37374	17.00000	-9.3502	0.0	6.7187	-	-	-
		50.30303	7.37374	17.00000	-8.2726	0.0	7.1362	-	-	-
		51.81818	7.37374	17.00000	-7.2634	0.0	6.9321	-	-	-
		53.33333	7.37374	17.00000	-6.3156	0.0	6.3219	-	-	-
		54.84848	7.37374	17.00000	-5.4152	0.0044813	5.4884	-	-	-
		56.36364	7.37374	17.00000	-4.5068	0.052540	4.6438	-	-	-
		57.87879	7.37374	17.00000	-3.6358	0.11420	3.8775	-	-	-
		59.39394	7.37374	17.00000	-2.7974	0.19290	3.2346	-	-	-
		60.90909	7.37374	17.00000	-1.9736	0.30943	2.7664	-	-	-
		62.42424	7.37374	17.00000	-1.1456	0.50275	2.4806	-	-	-
		63.93939	7.37374	17.00000	-0.33041	0.78756	2.3458	-	-	-
		65.45455	7.37374	17.00000	0.25725	1.1242	2.2861	-	-	-
		66.96970	7.37374	17.00000	0.42521	1.4911	2.2550	-	-	-
		68.48485	7.37374	17.00000	0.26321	1.8460	2.2610	-	-	-
		70.00000	7.37374	17.00000	0.0	2.1313	2.2156	-	-	-
		71.51515	7.37374	17.00000	0.0	2.9246	2.5804	-	-	-
		73.03030	7.37374	17.00000	0.0	2.9246	2.5804	-	-	-
		74.54545	7.37374	17.00000	0.0	2.9246	2.5804	-	-	-
		76.06061	7.37374	17.00000	0.0	2.9246	2.5804	-	-	-
		77.57576	7.37374	17.00000	0.0	2.9246	2.5804	-	-	-
		79.09091	7.37374	17.00000	0.0	2.9246	2.5804	-	-	-
		80.60606	7.37374	17.00000	0.0	2.9246	2.5804	-	-	-
		82.12121	7.37374	17.00000	-0.024255	2.1264	2.2123	-	-	-
		83.63636	7.37374	17.00000	-0.30796	1.9998	2.1237	-	-	-
		85.15152	7.37374	17.00000	-0.52516	1.7707	1.9587	-	-	-
		86.66667	7.37374	17.00000	-0.64753	1.4745	1.7371	-	-	-
		88.18182	7.37374	17.00000	-0.66739	1.1472	1.4803	-	-	-
		89.69697	7.37374	17.00000	-0.59168	0.81686	1.2080	-	-	-
		91.21212	7.37374	17.00000	-0.49760	0.57399	0.93503	-	-	-
		92.72727	7.37374	17.00000	-0.40984	0.40598	0.67019	-	-	-
		94.24242	7.37374	17.00000	-0.32096	0.26904	0.41631	-	-	-
		95.75758	7.37374	17.00000	-0.17323	0.13380	0.15974	-	-	-
		97.27273	7.37374	17.00000	-0.0050272	0.0034978	0.0034245	-	-	-
		98.78788	7.37374	17.00000	0.0	0.0	0.0	-	-	-
		100.30303	7.37374	17.00000	0.0	0.0	0.0	-	-	-
		101.81818	7.37374	17.00000	0.0	0.0	0.0	-	-	-
		103.33333	7.37374	17.00000	0.0	0.0	0.0	-	-	-
		104.84848	7.37374	17.00000	0.0	0.0	0.0	-	-	-
		106.36364	7.37374	17.00000	0.0	0.0	0.0	-	-	-
		107.87879	7.37374	17.00000	0.0	0.0	0.0	-	-	-
		109.39394	7.37374	17.00000	0.0	0.0	0.0	-	-	-
		110.90909	7.37374	17.00000	0.0	0.0	0.0	-	-	-
		112.42424	7.37374	17.00000	0.0	0.0	0.0	-	-	-
		113.93939	7.37374	17.00000	0.0	0.0	0.0	-	-	-
		115.45455	7.37374	17.00000	0.0	0.0	0.0	-	-	-
		116.96970	7.37374	17.00000	0.0	0.0	0.0	-	-	-
		118.48485	7.37374	17.00000	0.0	0.0	0.0	-	-	-
		120.00000	7.37374	17.00000	0.0	0.0	0.0	-	-	-
		-30.00000	8.38384	17.00000	0.0	0.0	0.0	-	-	-
		-28.48485	8.38384	17.00000	0.0	0.0	0.0	-	-	-
		-26.96970	8.38384	17.00000	0.0	0.0	0.0	-	-	-
		-25.45455	8.38384	17.00000	0.0	0.0	0.0	-	-	-
		-23.93939	8.38384	17.00000	0.0	0.0	0.0	-	-	-
		-22.42424	8.38384	17.00000	0.0	0.0	0.0	-	-	-
		-20.90909	8.38384	17.00000	0.0	0.0	0.21818	-	-	-
		-19.39394	8.38384	17.00000	0.0	0.0	0.52121	-	-	-
		-17.87879	8.38384	17.00000	0.096364	0.0	0.85074	-	-	-
		-16.36364	8.38384	17.00000	0.57754	0.0	1.2206	-	-	-
		-14.84848	8.38384	17.00000	1.3005	0.0	1.6039	-	-	-
		-13.33333	8.38384	17.00000	2.0313	0.0	2.0794	-	-	-
		-11.81818	8.38384	17.00000	2.7773	0.0	2.6900	-	-	-
		-10.30303	8.38384	17.00000	3.5459	0.0	3.4435	-	-	-
		-8.78788	8.38384	17.00000	4.3443	0.0	4.3118	-	-	-
		-7.27273	8.38384	17.00000	5.1800	0.0	5.2316	-	-	-
		-5.75758	8.38384	17.00000	6.0601	0.0	6.1037	-	-	-
		-4.24242	8.38384	17.00000	6.9922	0.0	6.7938	-	-	-
		-2.72727	8.38384	17.00000	7.9834	0.0	7.1318	-	-	-
		-1.21212	8.38384	17.00000	9.0412	0.0	6.9121	-	-	-
		0.30303	8.38384	17.00000		Point lies within an excavation.				
		1.81818	8.38384	17.00000		Point lies within an excavation.				
		3.33333	8.38384	17.00000		Point lies within an excavation.				
		4.84848	8.38384	17.00000		Point lies within an excavation.				
		6.36364	8.38384	17.00000		Point lies within an excavation.				
		7.87879	8.38384	17.00000		Point lies within an excavation.				
		9.39394	8.38384	17.00000		Point lies within an excavation.				
		10.90909	8.38384	17.00000		Point lies within an excavation.				
		12.42424	8.38384	17.00000		Point lies within an excavation.				
		13.93939	8.38384	17.00000		Point lies within an excavation.				
		15.45455	8.38384	17.00000		Point lies within an excavation.				
		16.96970	8.38384	17.00000		Point lies within an excavation.				
		18.48485	8.38384	17.00000		Point lies within an excavation.				
		20.00000	8.38384	17.00000		Point lies within an excavation.				
		21.51515	8.38384	17.00000		Point lies within an excavation.				
		23.03030	8.38384	17.00000		Point lies within an excavation.				
		24.54545	8.38384	17.00000		Point lies within an excavation.				
		26.06061	8.38384	17.00000		Point lies within an excavation.				
		27.57576	8.38384	17.00000		Point lies within an excavation.				
		29.09091	8.38384	17.00000		Point lies within an excavation.				
		30.60606	8.38384	17.00000		Point lies within an excavation.				
		32.12121	8.38384	17.00000		Point lies within an excavation.				
		33.63636	8.38384	17.00000		Point lies within an excavation.				
		35.15152	8.38384	17.00000		Point lies within an excavation.				
		36.66667	8.38384	17.00000		Point lies within an excavation.				
		38.18182	8.38384	17.00000		Point lies within an excavation.				
		39.69697	8.38384	17.00000		Point lies within an excavation.				
		41.21212	8.38384	17.00000		Point lies within an excavation.				
		42.72727	8.38384	17.00000		Point lies within an excavation.				
		44.24242	8.38384	17.00000		Point lies within an excavation.				
		45.75758	8.38384	17.00000		Point lies within an excavation.				
		47.27273	8.38384	17.00000		Point lies within an excavation.				
		48.78788	8.38384	17.00000	-9.3502	0.0	6.7187	-	-	-
		50.30303	8.38384	17.00000	-8.2726	0.0	7.1362	-	-	-
		51.81818	8.38384	17.00000	-7.2634	0.0	6.9321	-	-	-
		53.33333	8.38384	17.00000	-6.3156	0.0	6.3219	-	-	-
		54.84848	8.38384	17.00000	-5.3899	0.020099	5.4982	-	-	-
		56.36364	8.38384	17.00000	-4.4806	0.066049	4.6898	-	-	-
		57.87879	8.38384	17.00000	-3.6072	0.12608	3.9269	-	-	-
		59.39394	8.38384	17.00000	-2.7646	0.20424	3.2945	-	-	-
		60.90909	8.38384	17.00000	-1.9255	0.33087	2.8422	-	-	-
		62.42424	8.38384	17.00000	-1.0520	0.57373	2.5867	-	-	-
		63.93939	8.38384	17.00000	-0.21893	0.88958	2.4960	-	-	-
		65.45455	8.38384	17.00000	0.38089	1.2789	2.4959	-	-	-
		66.96970	8.38384	17.00000	0.54228	1.7208	2.5386	-	-	-
		68.48485	8.38384	17.00000	0.34096	2.1639	2.6269	-	-	-
		70.00000	8.38384	17.00000	0.0	2.5303	2.6612	-	-	-
		71.51515	8.38384	17.00000	0.0	3.4237	3.1460	-	-	-

Type/No.		Coordinates			Displacements					Angle of Line	
Name	Dist.	x	y	z	x	y	z	Horizontal displacement	Horizontal displacement	to x Axis	
		73.03030	8.38384	17.00000	0.0	3.4237	3.1460	-	-	-	*
		74.54545	8.38384	17.00000	0.0	3.4237	3.1460	-	-	-	*
		76.06061	8.38384	17.00000	0.0	3.4237	3.1460	-	-	-	*
		77.57576	8.38384	17.00000	0.0	3.4237	3.1460	-	-	-	*
		79.09091	8.38384	17.00000	0.0	3.4237	3.1460	-	-	-	*
		80.60606	8.38384	17.00000	0.0	3.4237	3.1460	-	-	-	*
		82.12121	8.38384	17.00000	-0.031818	2.5242	2.6564	-	-	-	*
		83.63636	8.38384	17.00000	-0.40288	2.3676	2.5415	-	-	-	*
		85.15152	8.38384	17.00000	-0.68448	2.0886	2.3384	-	-	-	*
		86.66667	8.38384	17.00000	-0.84299	1.7371	2.0721	-	-	-	*
		88.18182	8.38384	17.00000	-0.87489	1.3609	1.7684	-	-	-	*
		89.69697	8.38384	17.00000	-0.79546	0.99380	1.4507	-	-	-	*
		91.21212	8.38384	17.00000	-0.62610	0.65356	1.1369	-	-	-	*
		92.72727	8.38384	17.00000	-0.52803	0.47334	0.84353	-	-	-	*
		94.24242	8.38384	17.00000	-0.41912	0.32921	0.56344	-	-	-	*
		95.75758	8.38384	17.00000	-0.27149	0.18976	0.29158	-	-	-	*
		97.27273	8.38384	17.00000	-0.091686	0.057728	0.022119	-	-	-	*
		98.78788	8.38384	17.00000	0.0	0.0	0.0	-	-	-	*
		100.30303	8.38384	17.00000	0.0	0.0	0.0	-	-	-	*
		101.81818	8.38384	17.00000	0.0	0.0	0.0	-	-	-	*
		103.33333	8.38384	17.00000	0.0	0.0	0.0	-	-	-	*
		104.84848	8.38384	17.00000	0.0	0.0	0.0	-	-	-	*
		106.36364	8.38384	17.00000	0.0	0.0	0.0	-	-	-	*
		107.87879	8.38384	17.00000	0.0	0.0	0.0	-	-	-	*
		109.39394	8.38384	17.00000	0.0	0.0	0.0	-	-	-	*
		110.90909	8.38384	17.00000	0.0	0.0	0.0	-	-	-	*
		112.42424	8.38384	17.00000	0.0	0.0	0.0	-	-	-	*
		113.93939	8.38384	17.00000	0.0	0.0	0.0	-	-	-	*
		115.45455	8.38384	17.00000	0.0	0.0	0.0	-	-	-	*
		116.96970	8.38384	17.00000	0.0	0.0	0.0	-	-	-	*
		118.48485	8.38384	17.00000	0.0	0.0	0.0	-	-	-	*
		120.00000	8.38384	17.00000	0.0	0.0	0.0	-	-	-	*
		-30.00000	9.39394	17.00000	0.0	0.0	0.0	-	-	-	*
		-28.48485	9.39394	17.00000	0.0	0.0	0.0	-	-	-	*
		-26.96970	9.39394	17.00000	0.0	0.0	0.0	-	-	-	*
		-25.45455	9.39394	17.00000	0.0	0.0	0.0	-	-	-	*
		-23.93939	9.39394	17.00000	0.0	0.0	0.0	-	-	-	*
		-22.42424	9.39394	17.00000	0.0	0.0	0.0	-	-	-	*
		-20.90909	9.39394	17.00000	0.0	0.0	0.21818	-	-	-	*
		-19.39394	9.39394	17.00000	0.0	0.0	0.52121	-	-	-	*
		-17.87879	9.39394	17.00000	0.096364	0.0	0.85074	-	-	-	*
		-16.36364	9.39394	17.00000	0.57754	0.0	1.2206	-	-	-	*
		-14.84848	9.39394	17.00000	1.3005	0.0	1.6039	-	-	-	*
		-13.33333	9.39394	17.00000	2.0313	0.0	2.0794	-	-	-	*
		-11.81818	9.39394	17.00000	2.7773	0.0	2.6900	-	-	-	*
		-10.30303	9.39394	17.00000	3.5459	0.0	3.4435	-	-	-	*
		-8.78788	9.39394	17.00000	4.3443	0.0	4.3118	-	-	-	*
		-7.27273	9.39394	17.00000	5.1800	0.0	5.2316	-	-	-	*
		-5.75758	9.39394	17.00000	6.0601	0.0	6.1037	-	-	-	*
		-4.24242	9.39394	17.00000	6.9922	0.0	6.7938	-	-	-	*
		-2.72727	9.39394	17.00000	7.9834	0.0	7.1318	-	-	-	*
		-1.21212	9.39394	17.00000	9.0412	0.0	6.9121	-	-	-	*
		0.30303	9.39394	17.00000			Point lies within an excavation.				*
		1.81818	9.39394	17.00000			Point lies within an excavation.				*
		3.33333	9.39394	17.00000			Point lies within an excavation.				*
		4.84848	9.39394	17.00000			Point lies within an excavation.				*
		6.36364	9.39394	17.00000			Point lies within an excavation.				*
		7.87879	9.39394	17.00000			Point lies within an excavation.				*
		9.39394	9.39394	17.00000			Point lies within an excavation.				*
		10.90909	9.39394	17.00000			Point lies within an excavation.				*
		12.42424	9.39394	17.00000			Point lies within an excavation.				*
		13.93939	9.39394	17.00000			Point lies within an excavation.				*
		15.45455	9.39394	17.00000			Point lies within an excavation.				*
		16.96970	9.39394	17.00000			Point lies within an excavation.				*
		18.48485	9.39394	17.00000			Point lies within an excavation.				*
		20.00000	9.39394	17.00000			Point lies within an excavation.				*
		21.51515	9.39394	17.00000			Point lies within an excavation.				*
		23.03030	9.39394	17.00000			Point lies within an excavation.				*
		24.54545	9.39394	17.00000			Point lies within an excavation.				*
		26.06061	9.39394	17.00000			Point lies within an excavation.				*
		27.57576	9.39394	17.00000			Point lies within an excavation.				*
		29.09091	9.39394	17.00000			Point lies within an excavation.				*
		30.60606	9.39394	17.00000			Point lies within an excavation.				*
		32.12121	9.39394	17.00000			Point lies within an excavation.				*
		33.63636	9.39394	17.00000			Point lies within an excavation.				*
		35.15152	9.39394	17.00000			Point lies within an excavation.				*
		36.66667	9.39394	17.00000			Point lies within an excavation.				*
		38.18182	9.39394	17.00000			Point lies within an excavation.				*
		39.69697	9.39394	17.00000			Point lies within an excavation.				*
		41.21212	9.39394	17.00000			Point lies within an excavation.				*
		42.72727	9.39394	17.00000			Point lies within an excavation.				*
		44.24242	9.39394	17.00000			Point lies within an excavation.				*
		45.75758	9.39394	17.00000			Point lies within an excavation.				*
		47.27273	9.39394	17.00000			Point lies within an excavation.				*
		48.78788	9.39394	17.00000	-9.3502	0.0	6.7187	-	-	-	*
		50.30303	9.39394	17.00000	-8.2726	0.0	7.1362	-	-	-	*
		51.81818	9.39394	17.00000	-7.2634	0.0	6.9321	-	-	-	*
		53.33333	9.39394	17.00000	-6.3156	0.0	6.3219	-	-	-	*
		54.84848	9.39394	17.00000	-5.3695	0.029599	5.5351	-	-	-	*
		56.36364	9.39394	17.00000	-4.4599	0.072163	4.7241	-	-	-	*
		57.87879	9.39394	17.00000	-3.5847	0.12883	3.9641	-	-	-	*
		59.39394	9.39394	17.00000	-2.7381	0.20432	3.3408	-	-	-	*
		60.90909	9.39394	17.00000	-1.8550	0.36285	2.9025	-	-	-	*
		62.42424	9.39394	17.00000	-0.96980	0.60682	2.6708	-	-	-	*
		63.93939	9.39394	17.00000	-0.11110	0.94925	2.6231	-	-	-	*
		65.45455	9.39394	17.00000	0.51185	1.3925	2.6853	-	-	-	*
		66.96970	9.39394	17.00000	0.67628	1.9206	2.8106	-	-	-	*
		68.48485	9.39394	17.00000	0.43533	2.4727	2.9967	-	-	-	*
		70.00000	9.39394	17.00000	0.0	2.9417	3.1308	-	-	-	*
		71.51515	9.39394	17.00000	0.0	3.9351	3.7474	-	-	-	*
		73.03030	9.39394	17.00000	0.0	3.9351	3.7474	-	-	-	*
		74.54545	9.39394	17.00000	0.0	3.9351	3.7474	-	-	-	*
		76.06061	9.39394	17.00000	0.0	3.9351	3.7474	-	-	-	*
		77.57576	9.39394	17.00000	0.0	3.9351	3.7474	-	-	-	*
		79.09091	9.39394	17.00000	0.0	3.9351	3.7474	-	-	-	*
		80.60606	9.39394	17.00000	0.0	3.9351	3.7474	-	-	-	*
		82.12121	9.39394	17.00000	-0.041326	2.9342	3.1241	-	-	-	*
		83.63636	9.39394	17.00000	-0.52060	2.7379	2.9771	-	-	-	*
		85.15152	9.39394	17.00000	-0.87662	2.3939	2.7310	-	-	-	*
		86.66667	9.39394	17.00000	-1.0703	1.9738	2.4160	-	-	-	*
		88.18182	9.39394	17.00000	-1.1069	1.5410	2.0624	-	-	-	*
		89.69697	9.39394	17.00000	-1.0148	1.1347	1.6970	-	-	-	*
		91.21212	9.39394	17.00000	-0.84696	0.79124	1.3479	-	-	-	*
		92.72727	9.39394	17.00000	-0.65765	0.52761	1.0199	-	-	-	*
		94.24242	9.39394	17.00000	-0.53619	0.37693	0.70855	-	-	-	*
		95.75758	9.39394	17.00000	-0.37479	0.23445	0.41587	-	-	-	*
		97.27273	9.39394	17.00000	-0.18119	0.10210	0.12909	-	-	-	*
		98.78788	9.39394	17.00000	0.0	0.0	0.0	-	-	-	*
		100.30303	9.39394	17.00000	0.0	0.0	0.0	-	-	-	*
		101.81818	9.39394	17.00000	0.0	0.0	0.0	-	-	-	*
		103.33333	9.39394	17.00000	0.0	0.0	0.0	-	-	-	*
		104.84848	9.39394	17.00000	0.0	0.0	0.0	-	-	-	*
		106.36364	9.39394	17.00000	0.0	0.0	0.0	-	-	-	*
		107.87879	9.39394	17.00000	0.0	0.0	0.0	-	-	-	*
		109.39394	9.39394	17.00000	0.0	0.0	0.0	-	-	-	*
		110.90909	9.39394	17.00000	0.0	0.0	0.0	-	-	-	*
		112.42424	9.39394	17.00000	0.0	0.0	0.0	-	-	-	*
		113.93939	9.39394	17.00000	0.0	0.0	0.0	-	-	-	*
		115.45455	9.39394	17.00000	0.0	0.0	0.0	-	-	-	*
		116.96970	9.39394	17.00000	0.0	0.0	0.0	-	-	-	*
		118.48485	9.39394	17.00000	0.0	0.0	0.0	-	-	-	*
		120.00000	9.39394	17.00000	0.0	0.0	0.0	-	-	-	*
		-30.00000	10.40404	17.00000	0.0	0.0	0.0	-	-	-	*
		-28.48485	10.40404	17.00000	0.0	0.0	0.0	-	-	-	*
		-26.96970	10.40404	17.00000	0.0	0.0	0.0	-	-	-	*
		-25.45455	10.40404	17.00000	0.0	0.0	0.0	-	-	-	*
		-23.93939	10.40404	17.00000	0.0	0.0	0.0	-	-	-	*
		-22.42424	10.40404	17.00000	0.0	0.0	0.0	-	-	-	*
		-20.90909	10.40404	17.00000	0.0	0.0	0.21818	-	-	-	*
		-19.39394	10.40404	17.00000	0.0	0.0	0.52121	-	-	-	*
		-17.87879	10.40404	17.00000	0.096364	0.0	0.85074	-	-	-	*

Oasys
GEA LIMITED
(GEOTECHNICAL &ENV ASSOC) *J15050A*
The Great Hall, Lincoln's Inn, Newman's Row, London, WC2A 3TL
Wall Movements Rev 3 Piling and Excavation
Damage Assessment

Job No.	Sheet No.	Rev.

Drg. Ref.

Made by	Date	Checked
MP	08-Feb-2016	

Type/No.		Coordinates			Displacements					Angle of Line	
Name	Dist.	x	y	z	x	y	z	Horizontal displacement	Horizontal displacement	to x Axis	
		-16.36364	10.40404	17.00000	0.57754	0.0	1.2206	-	-	-	*
		-14.84848	10.40404	17.00000	1.3005	0.0	1.6039	-	-	-	*
		-13.33333	10.40404	17.00000	2.0313	0.0	2.0794	-	-	-	*
		-11.81818	10.40404	17.00000	2.7773	0.0	2.6900	-	-	-	*
		-10.30303	10.40404	17.00000	3.5459	0.0	3.4435	-	-	-	*
		-8.78788	10.40404	17.00000	4.3443	0.0	4.3118	-	-	-	*
		-7.27273	10.40404	17.00000	5.1800	0.0	5.2316	-	-	-	*
		-5.75758	10.40404	17.00000	6.0601	0.0	6.1037	-	-	-	*
		-4.24242	10.40404	17.00000	6.9922	0.0	6.7938	-	-	-	*
		-2.72727	10.40404	17.00000	7.9834	0.0	7.1318	-	-	-	*
		-1.21212	10.40404	17.00000	9.0412	0.0	6.9121	-	-	-	*
		0.30303	10.40404	17.00000			Point lies within an excavation.				*
		1.81818	10.40404	17.00000			Point lies within an excavation.				*
		3.33333	10.40404	17.00000			Point lies within an excavation.				*
		4.84848	10.40404	17.00000			Point lies within an excavation.				*
		6.36364	10.40404	17.00000			Point lies within an excavation.				*
		7.87879	10.40404	17.00000			Point lies within an excavation.				*
		9.39394	10.40404	17.00000			Point lies within an excavation.				*
		10.90909	10.40404	17.00000			Point lies within an excavation.				*
		12.42424	10.40404	17.00000			Point lies within an excavation.				*
		13.93939	10.40404	17.00000			Point lies within an excavation.				*
		15.45455	10.40404	17.00000			Point lies within an excavation.				*
		16.96970	10.40404	17.00000			Point lies within an excavation.				*
		18.48485	10.40404	17.00000			Point lies within an excavation.				*
		20.00000	10.40404	17.00000			Point lies within an excavation.				*
		21.51515	10.40404	17.00000			Point lies within an excavation.				*
		23.03030	10.40404	17.00000			Point lies within an excavation.				*
		24.54545	10.40404	17.00000			Point lies within an excavation.				*
		26.06061	10.40404	17.00000			Point lies within an excavation.				*
		27.57576	10.40404	17.00000			Point lies within an excavation.				*
		29.09091	10.40404	17.00000			Point lies within an excavation.				*
		30.60606	10.40404	17.00000			Point lies within an excavation.				*
		32.12121	10.40404	17.00000			Point lies within an excavation.				*
		33.63636	10.40404	17.00000			Point lies within an excavation.				*
		35.15152	10.40404	17.00000			Point lies within an excavation.				*
		36.66667	10.40404	17.00000			Point lies within an excavation.				*
		38.18182	10.40404	17.00000			Point lies within an excavation.				*
		39.69697	10.40404	17.00000			Point lies within an excavation.				*
		41.21212	10.40404	17.00000			Point lies within an excavation.				*
		42.72727	10.40404	17.00000			Point lies within an excavation.				*
		44.24242	10.40404	17.00000			Point lies within an excavation.				*
		45.75758	10.40404	17.00000			Point lies within an excavation.				*
		47.27273	10.40404	17.00000			Point lies within an excavation.				*
		48.78788	10.40404	17.00000	-9.3502	0.0	6.7187	-	-	-	*
		50.30303	10.40404	17.00000	-8.2726	0.0	7.1362	-	-	-	*
		51.81818	10.40404	17.00000	-7.2634	0.0	6.9321	-	-	-	*
		53.33333	10.40404	17.00000	-6.3035	0.0054868	6.3256	-	-	-	*
		54.84848	10.40404	17.00000	-5.3545	0.033632	5.5610	-	-	-	*
		56.36364	10.40404	17.00000	-4.4457	0.071578	4.7467	-	-	-	*
		57.87879	10.40404	17.00000	-3.5697	0.12306	3.9878	-	-	-	*
		59.39394	10.40404	17.00000	-2.6935	0.21227	3.3703	-	-	-	*
		60.90909	10.40404	17.00000	-1.7913	0.37352	2.9442	-	-	-	*
		62.42424	10.40404	17.00000	-0.90644	0.59913	2.7224	-	-	-	*
		63.93939	10.40404	17.00000	-0.014181	0.95931	2.7122	-	-	-	*
		65.45455	10.40404	17.00000	0.64612	1.4535	2.8355	-	-	-	*
		66.96970	10.40404	17.00000	0.82910	2.0783	3.0501	-	-	-	*
		68.48485	10.40404	17.00000	0.55176	2.7662	3.3509	-	-	-	*
		70.00000	10.40404	17.00000	0.0	3.3689	3.6095	-	-	-	*
		71.51515	10.40404	17.00000	0.0	4.4622	4.3624	-	-	-	*
		73.03030	10.40404	17.00000	0.0	4.4622	4.3624	-	-	-	*
		74.54545	10.40404	17.00000	0.0	4.4622	4.3624	-	-	-	*
		76.06061	10.40404	17.00000	0.0	4.4622	4.3624	-	-	-	*
		77.57576	10.40404	17.00000	0.0	4.4622	4.3624	-	-	-	*
		79.09091	10.40404	17.00000	0.0	4.4622	4.3624	-	-	-	*
		80.60606	10.40404	17.00000	0.0	4.4622	4.3624	-	-	-	*
		82.12121	10.40404	17.00000	-0.053607	3.3594	3.6003	-	-	-	*
		83.63636	10.40404	17.00000	-0.66987	3.1095	3.4150	-	-	-	*
		85.15152	10.40404	17.00000	-1.1116	2.6791	3.1217	-	-	-	*
		86.66667	10.40404	17.00000	-1.3358	2.1742	2.7561	-	-	-	*
		88.18182	10.40404	17.00000	-1.3654	1.6778	2.3521	-	-	-	*
		89.69697	10.40404	17.00000	-1.2539	1.2374	1.9419	-	-	-	*
		91.21212	10.40404	17.00000	-1.1006	0.90749	1.5675	-	-	-	*
		92.72727	10.40404	17.00000	-0.85131	0.60281	1.1977	-	-	-	*
		94.24242	10.40404	17.00000	-0.66028	0.40968	0.85122	-	-	-	*
		95.75758	10.40404	17.00000	-0.48200	0.26613	0.53351	-	-	-	*
		97.27273	10.40404	17.00000	-0.27234	0.13545	0.23417	-	-	-	*
		98.78788	10.40404	17.00000	-0.038058	0.017220	0.010723	-	-	-	*
		100.30303	10.40404	17.00000	0.0	0.0	0.0	-	-	-	*
		101.81818	10.40404	17.00000	0.0	0.0	0.0	-	-	-	*
		103.33333	10.40404	17.00000	0.0	0.0	0.0	-	-	-	*
		104.84848	10.40404	17.00000	0.0	0.0	0.0	-	-	-	*
		106.36364	10.40404	17.00000	0.0	0.0	0.0	-	-	-	*
		107.87879	10.40404	17.00000	0.0	0.0	0.0	-	-	-	*
		109.39394	10.40404	17.00000	0.0	0.0	0.0	-	-	-	*
		110.90909	10.40404	17.00000	0.0	0.0	0.0	-	-	-	*
		112.42424	10.40404	17.00000	0.0	0.0	0.0	-	-	-	*
		113.93939	10.40404	17.00000	0.0	0.0	0.0	-	-	-	*
		115.45455	10.40404	17.00000	0.0	0.0	0.0	-	-	-	*
		116.96970	10.40404	17.00000	0.0	0.0	0.0	-	-	-	*
		118.48485	10.40404	17.00000	0.0	0.0	0.0	-	-	-	*
		120.00000	10.40404	17.00000	0.0	0.0	0.0	-	-	-	*
		-30.00000	11.41414	17.00000	0.0	0.0	0.0	-	-	-	*
		-28.48485	11.41414	17.00000	0.0	0.0	0.0	-	-	-	*
		-26.96970	11.41414	17.00000	0.0	0.0	0.0	-	-	-	*
		-25.45455	11.41414	17.00000	0.0	0.0	0.0	-	-	-	*
		-23.93939	11.41414	17.00000	0.0	0.0	0.0	-	-	-	*
		-22.42424	11.41414	17.00000	0.0	0.0	0.0	-	-	-	*
		-20.90909	11.41414	17.00000	0.0	0.0	0.21818	-	-	-	*
		-19.39394	11.41414	17.00000	0.0	0.0	0.52121	-	-	-	*
		-17.87879	11.41414	17.00000	0.096364	0.0	0.85074	-	-	-	*
		-16.36364	11.41414	17.00000	0.57754	0.0	1.2206	-	-	-	*
		-14.84848	11.41414	17.00000	1.3005	0.0	1.6039	-	-	-	*
		-13.33333	11.41414	17.00000	2.0313	0.0	2.0794	-	-	-	*
		-11.81818	11.41414	17.00000	2.7773	0.0	2.6900	-	-	-	*
		-10.30303	11.41414	17.00000	3.5459	0.0	3.4435	-	-	-	*
		-8.78788	11.41414	17.00000	4.3443	0.0	4.3118	-	-	-	*
		-7.27273	11.41414	17.00000	5.1800	0.0	5.2316	-	-	-	*
		-5.75758	11.41414	17.00000	6.0601	0.0	6.1037	-	-	-	*
		-4.24242	11.41414	17.00000	6.9922	0.0	6.7938	-	-	-	*
		-2.72727	11.41414	17.00000	7.9834	0.0	7.1318	-	-	-	*
		-1.21212	11.41414	17.00000	9.0412	0.0	6.9121	-	-	-	*
		0.30303	11.41414	17.00000			Point lies within an excavation.				*
		1.81818	11.41414	17.00000			Point lies within an excavation.				*
		3.33333	11.41414	17.00000			Point lies within an excavation.				*
		4.84848	11.41414	17.00000			Point lies within an excavation.				*
		6.36364	11.41414	17.00000			Point lies within an excavation.				*
		7.87879	11.41414	17.00000			Point lies within an excavation.				*
		9.39394	11.41414	17.00000			Point lies within an excavation.				*
		10.90909	11.41414	17.00000			Point lies within an excavation.				*
		12.42424	11.41414	17.00000			Point lies within an excavation.				*
		13.93939	11.41414	17.00000			Point lies within an excavation.				*
		15.45455	11.41414	17.00000			Point lies within an excavation.				*
		16.96970	11.41414	17.00000			Point lies within an excavation.				*
		18.48485	11.41414	17.00000			Point lies within an excavation.				*
		20.00000	11.41414	17.00000			Point lies within an excavation.				*
		21.51515	11.41414	17.00000			Point lies within an excavation.				*
		23.03030	11.41414	17.00000			Point lies within an excavation.				*
		24.54545	11.41414	17.00000			Point lies within an excavation.				*
		26.06061	11.41414	17.00000			Point lies within an excavation.				*
		27.57576	11.41414	17.00000			Point lies within an excavation.				*
		29.09091	11.41414	17.00000			Point lies within an excavation.				*
		30.60606	11.41414	17.00000			Point lies within an excavation.				*
		32.12121	11.41414	17.00000			Point lies within an excavation.				*
		33.63636	11.41414	17.00000			Point lies within an excavation.				*
		35.15152	11.41414	17.00000			Point lies within an excavation.				*
		36.66667	11.41414	17.00000			Point lies within an excavation.				*
		38.18182	11.41414	17.00000			Point lies within an excavation.				*
		39.69697	11.41414	17.00000			Point lies within an excavation.				*
		41.21212	11.41414	17.00000			Point lies within an excavation.				*
		42.72727	11.41414	17.00000			Point lies within an excavation.				*
		44.24242	11.41414	17.00000			Point lies within an excavation.				*

Type/No.		Coordinates			Displacements					Angle of Line to x Axis	
Name	Dist.	x	y	z	x	y	z	Horizontal displacement	Horizontal displacement		
		45.75758	11.41414	17.00000	Point lies within an excavation.						*
		47.27273	11.41414	17.00000	Point lies within an excavation.						*
		48.78788	11.41414	17.00000	-9.3502	0.0	6.7187	-	-	-	*
		50.30303	11.41414	17.00000	-8.2726	0.0	7.1362	-	-	-	*
		51.81818	11.41414	17.00000	-7.2634	0.0	6.9321	-	-	-	*
		53.33333	11.41414	17.00000	-6.2915	0.0094995	6.3316	-	-	-	*
		54.84848	11.41414	17.00000	-5.3455	0.033075	5.5766	-	-	-	*
		56.36364	11.41414	17.00000	-4.4390	0.065334	4.7576	-	-	-	*
		57.87879	11.41414	17.00000	-3.5638	0.10994	3.9964	-	-	-	*
		59.39394	11.41414	17.00000	-2.6579	0.20618	3.3797	-	-	-	*
		60.90909	11.41414	17.00000	-1.7467	0.35611	2.9588	-	-	-	*
		62.42424	11.41414	17.00000	-0.84262	0.57493	2.7495	-	-	-	*
		63.93939	11.41414	17.00000	0.060058	0.91241	2.7462	-	-	-	*
		65.45455	11.41414	17.00000	0.77473	1.4465	2.9234	-	-	-	*
		66.96970	11.41414	17.00000	1.0006	2.1746	3.2298	-	-	-	*
		68.48485	11.41414	17.00000	0.69776	3.0329	3.6631	-	-	-	*
		70.00000	11.41414	17.00000	0.0	3.8149	4.0780	-	-	-	*
		71.51515	11.41414	17.00000	0.0	5.0082	4.9622	-	-	-	*
		73.03030	11.41414	17.00000	0.0	5.0082	4.9622	-	-	-	*
		74.54545	11.41414	17.00000	0.0	5.0082	4.9622	-	-	-	*
		76.06061	11.41414	17.00000	0.0	5.0082	4.9622	-	-	-	*
		77.57576	11.41414	17.00000	0.0	5.0082	4.9622	-	-	-	*
		79.09091	11.41414	17.00000	0.0	5.0082	4.9622	-	-	-	*
		80.60606	11.41414	17.00000	0.0	5.0082	4.9622	-	-	-	*
		82.12121	11.41414	17.00000	-0.069991	3.8029	4.0658	-	-	-	*
		83.63636	11.41414	17.00000	-0.86405	3.4776	3.8357	-	-	-	*
		85.15152	11.41414	17.00000	-1.4024	2.9306	3.6925	-	-	-	*
		86.66667	11.41414	17.00000	-1.6455	2.3223	3.0769	-	-	-	*
		88.18182	11.41414	17.00000	-1.6502	1.7581	2.6250	-	-	-	*
		89.69697	11.41414	17.00000	-1.5644	1.3386	2.2087	-	-	-	*
		91.21212	11.41414	17.00000	-1.3747	0.98282	1.7877	-	-	-	*
		92.72727	11.41414	17.00000	-1.0883	0.66813	1.3737	-	-	-	*
		94.24242	11.41414	17.00000	-0.78977	0.42486	0.99971	-	-	-	*
		95.75758	11.41414	17.00000	-0.59141	0.28311	0.64419	-	-	-	*
		97.27273	11.41414	17.00000	-0.36354	0.15676	0.32884	-	-	-	*
		98.78788	11.41414	17.00000	-0.11305	0.044351	0.023968	-	-	-	*
		100.30303	11.41414	17.00000	0.0	0.0	0.0	-	-	-	*
		101.81818	11.41414	17.00000	0.0	0.0	0.0	-	-	-	*
		103.33333	11.41414	17.00000	0.0	0.0	0.0	-	-	-	*
		104.84848	11.41414	17.00000	0.0	0.0	0.0	-	-	-	*
		106.36364	11.41414	17.00000	0.0	0.0	0.0	-	-	-	*
		107.87879	11.41414	17.00000	0.0	0.0	0.0	-	-	-	*
		109.39394	11.41414	17.00000	0.0	0.0	0.0	-	-	-	*
		110.90909	11.41414	17.00000	0.0	0.0	0.0	-	-	-	*
		112.42424	11.41414	17.00000	0.0	0.0	0.0	-	-	-	*
		113.93939	11.41414	17.00000	0.0	0.0	0.0	-	-	-	*
		115.45455	11.41414	17.00000	0.0	0.0	0.0	-	-	-	*
		116.96970	11.41414	17.00000	0.0	0.0	0.0	-	-	-	*
		118.48485	11.41414	17.00000	0.0	0.0	0.0	-	-	-	*
		120.00000	11.41414	17.00000	0.0	0.0	0.0	-	-	-	*
		-30.00000	12.42424	17.00000	0.0	0.0	0.0	-	-	-	*
		-28.48485	12.42424	17.00000	0.0	0.0	0.0	-	-	-	*
		-26.96970	12.42424	17.00000	0.0	0.0	0.0	-	-	-	*
		-25.45455	12.42424	17.00000	0.0	0.0	0.0	-	-	-	*
		-23.93939	12.42424	17.00000	0.0	0.0	0.0	-	-	-	*
		-22.42424	12.42424	17.00000	0.0	0.0	0.0	-	-	-	*
		-20.90909	12.42424	17.00000	0.0	0.0	0.21732	-	-	-	*
		-19.39394	12.42424	17.00000	0.0	0.0	0.52028	-	-	-	*
		-17.87879	12.42424	17.00000	0.063047	-0.0014960	0.84064	-	-	-	*
		-16.36364	12.42424	17.00000	0.39046	-0.010123	1.1880	-	-	-	*
		-14.84848	12.42424	17.00000	0.95976	-0.027422	1.5440	-	-	-	*
		-13.33333	12.42424	17.00000	1.5360	-0.048874	1.9607	-	-	-	*
		-11.81818	12.42424	17.00000	2.1262	-0.076326	2.4665	-	-	-	*
		-10.30303	12.42424	17.00000	2.7370	-0.11270	3.0656	-	-	-	*
		-8.78788	12.42424	17.00000	3.3746	-0.16291	3.7387	-	-	-	*
		-7.27273	12.42424	17.00000	4.0442	-0.23591	4.4425	-	-	-	*
		-5.75758	12.42424	17.00000	4.7483	-0.34988	5.1095	-	-	-	*
		-4.24242	12.42424	17.00000	5.4815	-0.54815	5.6474	-	-	-	*
		-2.72727	12.42424	17.00000	6.2034	-0.96497	5.9370	-	-	-	*
		-1.21212	12.42424	17.00000	6.5548	-2.2942	5.8124	-	-	-	*
		0.30303	12.42424	17.00000	0.0	-9.6199	6.4989	-	-	-	*
		1.81818	12.42424	17.00000	0.0	-9.6199	6.4989	-	-	-	*
		3.33333	12.42424	17.00000	0.0	-9.6199	6.4989	-	-	-	*
		4.84848	12.42424	17.00000	0.0	-9.6199	6.4989	-	-	-	*
		6.36364	12.42424	17.00000	0.0	-9.6199	6.4989	-	-	-	*
		7.87879	12.42424	17.00000	0.0	-9.6199	6.4989	-	-	-	*
		9.39394	12.42424	17.00000	0.0	-9.6199	6.4989	-	-	-	*
		10.90909	12.42424	17.00000	0.0	-9.6199	6.4989	-	-	-	*
		12.42424	12.42424	17.00000	0.0	-9.6199	6.4989	-	-	-	*
		13.93939	12.42424	17.00000	0.0	-9.6199	6.4989	-	-	-	*
		15.45455	12.42424	17.00000	0.0	-9.6199	6.4989	-	-	-	*
		16.96970	12.42424	17.00000	0.0	-9.6199	6.4989	-	-	-	*
		18.48485	12.42424	17.00000	0.0	-9.6199	6.4989	-	-	-	*
		20.00000	12.42424	17.00000	0.0	-9.6199	6.4989	-	-	-	*
		21.51515	12.42424	17.00000	0.0	-9.6199	6.4989	-	-	-	*
		23.03030	12.42424	17.00000	0.0	-9.6199	6.4989	-	-	-	*
		24.54545	12.42424	17.00000	0.0	-9.6199	6.4989	-	-	-	*
		26.06061	12.42424	17.00000	0.0	-9.6199	6.4989	-	-	-	*
		27.57576	12.42424	17.00000	0.0	-9.6199	6.4989	-	-	-	*
		29.09091	12.42424	17.00000	0.0	-9.6199	6.4989	-	-	-	*
		30.60606	12.42424	17.00000	0.0	-9.6199	6.4989	-	-	-	*
		32.12121	12.42424	17.00000	0.0	-9.6199	6.4989	-	-	-	*
		33.63636	12.42424	17.00000	0.0	-9.6199	6.4989	-	-	-	*
		35.15152	12.42424	17.00000	0.0	-9.6199	6.4989	-	-	-	*
		36.66667	12.42424	17.00000	0.0	-9.6199	6.4989	-	-	-	*
		38.18182	12.42424	17.00000	0.0	-9.6199	6.4989	-	-	-	*
		39.69697	12.42424	17.00000	0.0	-9.6199	6.4989	-	-	-	*
		41.21212	12.42424	17.00000	0.0	-9.6199	6.4989	-	-	-	*
		42.72727	12.42424	17.00000	0.0	-9.6199	6.4989	-	-	-	*
		44.24242	12.42424	17.00000	0.0	-9.6199	6.4989	-	-	-	*
		45.75758	12.42424	17.00000	0.0	-9.6199	6.4989	-	-	-	*
		47.27273	12.42424	17.00000	0.0	-9.6199	6.4989	-	-	-	*
		48.78788	12.42424	17.00000	-6.1664	-3.3204	5.6584	-	-	-	*
		50.30303	12.42424	17.00000	-6.3810	-1.1755	5.9533	-	-	-	*
		51.81818	12.42424	17.00000	-5.6886	-0.63207	5.7595	-	-	-	*
		53.33333	12.42424	17.00000	-4.9202	-0.38344	5.3018	-	-	-	*
		54.84848	12.42424	17.00000	-4.1591	-0.23351	4.7334	-	-	-	*
		56.36364	12.42424	17.00000	-3.4246	-0.12570	4.1237	-	-	-	*
		57.87879	12.42424	17.00000	-2.7070	-0.030494	3.5595	-	-	-	*
		59.39394	12.42424	17.00000	-1.9486	0.096623	3.1039	-	-	-	*
		60.90909	12.42424	17.00000	-1.1892	0.25720	2.7980	-	-	-	*
		62.42424	12.42424	17.00000	-0.42275	0.48031	2.6602	-	-	-	*
		63.93939	12.42424	17.00000	0.34453	0.80794	2.6871	-	-	-	*
		65.45455	12.42424	17.00000	0.95609	1.3503	2.9047	-	-	-	*
		66.96970	12.42424	17.00000	1.1850	2.1804	3.3149	-	-	-	*
		68.48485	12.42424	17.00000	0.88353	3.2514	3.8986	-	-	-	*
		70.00000	12.42424	17.00000	0.0	4.2830	4.5128	-	-	-	*
		71.51515	12.42424	17.00000	0.0	5.5764	5.5116	-	-	-	*
		73.03030	12.42424	17.00000	0.0	5.5764	5.5116	-	-	-	*
		74.54545	12.42424	17.00000	0.0	5.5764	5.5116	-	-	-	*
		76.06061	12.42424	17.00000	0.0	5.5764	5.5116	-	-	-	*
		77.57576	12.42424	17.00000	0.0	5.5764	5.5116	-	-	-	*
		79.09091	12.42424	17.00000	0.0	5.5764	5.5116	-	-	-	*
		80.60606	12.42424	17.00000	0.0	5.5764	5.5116	-	-	-	*
		82.12121	12.42424	17.00000	-0.092772	4.2675	4.4965	-	-	-	*
		83.63636	12.42424	17.00000	-1.1243	3.8308	4.2148	-	-	-	*
		85.15152	12.42424	17.00000	-1.7658	3.1240	3.8219	-	-	-	*
		86.66667	12.42424	17.00000	-2.0036	2.3939	3.3610	-	-	-	*
		88.18182	12.42424	17.00000	-2.0127	1.8154	2.9103	-	-	-	*
		89.69697	12.42424	17.00000	-1.9081	1.3823	2.4716	-	-	-	*
		91.21212	12.42424	17.00000	-1.6656	1.0081	2.0028	-	-	-	*
		92.72727	12.42424	17.00000	-1.3310	0.69184	1.5436	-	-	-	*
		94.24242	12.42424	17.00000	-0.93171	0.42434	1.1212	-	-	-	*
		95.75758	12.42424	17.00000	-0.70070	0.28398	0.74661	-	-	-	*
		97.27273	12.42424	17.00000	-0.45277	0.16530	0.41326	-	-	-	*
		98.78788	12.42424	17.00000	-0.18499	0.061442	0.095769	-	-	-	*
		100.30303	12.42424	17.00000	0.0	0.0	0.0	-	-	-	*
		101.81818	12.42424	17.00000	0.0	0.0	0.0	-	-	-	*
		103.33333	12.42424	17.00000	0.0	0.0	0.0	-	-	-	*
		104.84848	12.42424	17.00000	0.0	0.0	0.0	-	-	-	*
		106.36364	12.42424	17.00000	0.0	0.0	0.0	-	-	-	*

Oasys
GEA LIMITED
(GEOTECHNICAL &ENV ASSOC) J15050A
The Great Hall, Lincoln's Inn, Newman's Row, London, WC2A 3TL
Wall Movements Rev 3 Piling and Excavation
Damage Assessment
Job No. | Sheet No. | Rev.
Drg. Ref.
Made by MP | Date 08-Feb-2016 | Checked

Type/No.		Coordinates			Displacements					Angle of Line to x Axis	
Name	Dist.	x	y	z	x	y	z	Horizontal displacement	Horizontal displacement		
		107.87879	12.42424	17.00000	0.0	0.0	0.0	-	-	-	*
		109.39394	12.42424	17.00000	0.0	0.0	0.0	-	-	-	*
		110.90909	12.42424	17.00000	0.0	0.0	0.0	-	-	-	*
		112.42424	12.42424	17.00000	0.0	0.0	0.0	-	-	-	*
		113.93939	12.42424	17.00000	0.0	0.0	0.0	-	-	-	*
		115.45455	12.42424	17.00000	0.0	0.0	0.0	-	-	-	*
		116.96970	12.42424	17.00000	0.0	0.0	0.0	-	-	-	*
		118.48485	12.42424	17.00000	0.0	0.0	0.0	-	-	-	*
		120.00000	12.42424	17.00000	0.0	0.0	0.0	-	-	-	*
		-30.00000	13.43434	17.00000	0.0	0.0	0.0	-	-	-	*
		-28.48485	13.43434	17.00000	0.0	0.0	0.0	-	-	-	*
		-26.96970	13.43434	17.00000	0.0	0.0	0.0	-	-	-	*
		-25.45455	13.43434	17.00000	0.0	0.0	0.0	-	-	-	*
		-23.93939	13.43434	17.00000	0.0	0.0	0.0	-	-	-	*
		-22.42424	13.43434	17.00000	0.0	0.0	0.0	-	-	-	*
		-20.90909	13.43434	17.00000	0.0	0.0	0.20835	-	-	-	*
		-19.39394	13.43434	17.00000	0.0	0.0	0.51062	-	-	-	*
		-17.87879	13.43434	17.00000	0.051481	-0.0041301	0.82764	-	-	-	*
		-16.36364	13.43434	17.00000	0.36063	-0.031611	1.1739	-	-	-	*
		-14.84848	13.43434	17.00000	0.91761	-0.088640	1.5258	-	-	-	*
		-13.33333	13.43434	17.00000	1.4778	-0.15898	1.9341	-	-	-	*
		-11.81818	13.43434	17.00000	2.0464	-0.24837	2.4260	-	-	-	*
		-10.30303	13.43434	17.00000	2.6273	-0.36576	3.0047	-	-	-	*
		-8.78788	13.43434	17.00000	3.2212	-0.52576	3.6498	-	-	-	*
		-7.27273	13.43434	17.00000	3.8230	-0.75397	4.3171	-	-	-	*
		-5.75758	13.43434	17.00000	4.4117	-1.0991	4.9386	-	-	-	*
		-4.24242	13.43434	17.00000	4.9208	-1.6637	5.4228	-	-	-	*
		-2.72727	13.43434	17.00000	5.1103	-2.6876	5.6550	-	-	-	*
		-1.21212	13.43434	17.00000	4.0071	-4.7418	5.6138	-	-	-	*
		0.30303	13.43434	17.00000	0.0	-8.8816	6.9881	-	-	-	*
		1.81818	13.43434	17.00000	0.0	-8.8816	6.9881	-	-	-	*
		3.33333	13.43434	17.00000	0.0	-8.8816	6.9881	-	-	-	*
		4.84848	13.43434	17.00000	0.0	-8.8816	6.9881	-	-	-	*
		6.36364	13.43434	17.00000	0.0	-8.8816	6.9881	-	-	-	*
		7.87879	13.43434	17.00000	0.0	-8.8816	6.9881	-	-	-	*
		9.39394	13.43434	17.00000	0.0	-8.8816	6.9881	-	-	-	*
		10.90909	13.43434	17.00000	0.0	-8.8816	6.9881	-	-	-	*
		12.42424	13.43434	17.00000	0.0	-8.8816	6.9881	-	-	-	*
		13.93939	13.43434	17.00000	0.0	-8.8816	6.9881	-	-	-	*
		15.45455	13.43434	17.00000	0.0	-8.8816	6.9881	-	-	-	*
		16.96970	13.43434	17.00000	0.0	-8.8816	6.9881	-	-	-	*
		18.48485	13.43434	17.00000	0.0	-8.8816	6.9881	-	-	-	*
		20.00000	13.43434	17.00000	0.0	-8.8816	6.9881	-	-	-	*
		21.51515	13.43434	17.00000	0.0	-8.8816	6.9881	-	-	-	*
		23.03030	13.43434	17.00000	0.0	-8.8816	6.9881	-	-	-	*
		24.54545	13.43434	17.00000	0.0	-8.8816	6.9881	-	-	-	*
		26.06061	13.43434	17.00000	0.0	-8.8816	6.9881	-	-	-	*
		27.57576	13.43434	17.00000	0.0	-8.8816	6.9881	-	-	-	*
		29.09091	13.43434	17.00000	0.0	-8.8816	6.9881	-	-	-	*
		30.60606	13.43434	17.00000	0.0	-8.8816	6.9881	-	-	-	*
		32.12121	13.43434	17.00000	0.0	-8.8816	6.9881	-	-	-	*
		33.63636	13.43434	17.00000	0.0	-8.8816	6.9881	-	-	-	*
		35.15152	13.43434	17.00000	0.0	-8.8816	6.9881	-	-	-	*
		36.66667	13.43434	17.00000	0.0	-8.8816	6.9881	-	-	-	*
		38.18182	13.43434	17.00000	0.0	-8.8816	6.9881	-	-	-	*
		39.69697	13.43434	17.00000	0.0	-8.8816	6.9881	-	-	-	*
		41.21212	13.43434	17.00000	0.0	-8.8816	6.9881	-	-	-	*
		42.72727	13.43434	17.00000	0.0	-8.8816	6.9881	-	-	-	*
		44.24242	13.43434	17.00000	0.0	-8.8816	6.9881	-	-	-	*
		45.75758	13.43434	17.00000	0.0	-8.8816	6.9881	-	-	-	*
		47.27273	13.43434	17.00000	0.0	-8.8816	6.9881	-	-	-	*
		48.78788	13.43434	17.00000	-3.1572	-5.7477	5.7399	-	-	-	*
		50.30303	13.43434	17.00000	-5.0078	-3.1189	5.6569	-	-	-	*
		51.81818	13.43434	17.00000	-5.0259	-1.8880	5.5187	-	-	-	*
		53.33333	13.43434	17.00000	-4.5339	-1.2192	5.1235	-	-	-	*
		54.84848	13.43434	17.00000	-3.9154	-0.81311	4.5931	-	-	-	*
		56.36364	13.43434	17.00000	-3.2648	-0.53955	4.0122	-	-	-	*
		57.87879	13.43434	17.00000	-2.5881	-0.32850	3.4665	-	-	-	*
		59.39394	13.43434	17.00000	-1.8717	-0.13326	3.0197	-	-	-	*
		60.90909	13.43434	17.00000	-1.1389	0.067848	2.7138	-	-	-	*
		62.42424	13.43434	17.00000	-0.38084	0.31089	2.5710	-	-	-	*
		63.93939	13.43434	17.00000	0.40547	0.64814	2.5948	-	-	-	*
		65.45455	13.43434	17.00000	1.0198	1.1479	2.7733	-	-	-	*
		66.96970	13.43434	17.00000	1.3624	2.0527	3.2550	-	-	-	*
		68.48485	13.43434	17.00000	1.1216	3.3799	4.0039	-	-	-	*
		70.00000	13.43434	17.00000	0.0	4.7766	4.8857	-	-	-	*
		71.51515	13.43434	17.00000	0.0	6.1700	5.9687	-	-	-	*
		73.03030	13.43434	17.00000	0.0	6.1700	5.9687	-	-	-	*
		74.54545	13.43434	17.00000	0.0	6.1700	5.9687	-	-	-	*
		76.06061	13.43434	17.00000	0.0	6.1700	5.9687	-	-	-	*
		77.57576	13.43434	17.00000	0.0	6.1700	5.9687	-	-	-	*
		79.09091	13.43434	17.00000	0.0	6.1700	5.9687	-	-	-	*
		80.60606	13.43434	17.00000	0.0	6.1700	5.9687	-	-	-	*
		82.12121	13.43434	17.00000	-0.12626	4.7558	4.8644	-	-	-	*
		83.63636	13.43434	17.00000	-1.4853	4.1441	4.5240	-	-	-	*
		85.15152	13.43434	17.00000	-2.2204	3.2167	4.0863	-	-	-	*
		86.66667	13.43434	17.00000	-2.4208	2.3684	3.6027	-	-	-	*
		88.18182	13.43434	17.00000	-2.4603	1.8171	3.2063	-	-	-	*
		89.69697	13.43434	17.00000	-2.2787	1.3516	2.7224	-	-	-	*
		91.21212	13.43434	17.00000	-1.9655	0.97415	2.2059	-	-	-	*
		92.72727	13.43434	17.00000	-1.5728	0.66939	1.7023	-	-	-	*
		94.24242	13.43434	17.00000	-1.1274	0.42046	1.2421	-	-	-	*
		95.75758	13.43434	17.00000	-0.80689	0.26778	0.83875	-	-	-	*
		97.27273	13.43434	17.00000	-0.53762	0.16072	0.48687	-	-	-	*
		98.78788	13.43434	17.00000	-0.25194	0.068518	0.16167	-	-	-	*
		100.30303	13.43434	17.00000	0.0	0.0	0.0	-	-	-	*
		101.81818	13.43434	17.00000	0.0	0.0	0.0	-	-	-	*
		103.33333	13.43434	17.00000	0.0	0.0	0.0	-	-	-	*
		104.84848	13.43434	17.00000	0.0	0.0	0.0	-	-	-	*
		106.36364	13.43434	17.00000	0.0	0.0	0.0	-	-	-	*
		107.87879	13.43434	17.00000	0.0	0.0	0.0	-	-	-	*
		109.39394	13.43434	17.00000	0.0	0.0	0.0	-	-	-	*
		110.90909	13.43434	17.00000	0.0	0.0	0.0	-	-	-	*
		112.42424	13.43434	17.00000	0.0	0.0	0.0	-	-	-	*
		113.93939	13.43434	17.00000	0.0	0.0	0.0	-	-	-	*
		115.45455	13.43434	17.00000	0.0	0.0	0.0	-	-	-	*
		116.96970	13.43434	17.00000	0.0	0.0	0.0	-	-	-	*
		118.48485	13.43434	17.00000	0.0	0.0	0.0	-	-	-	*
		120.00000	13.43434	17.00000	0.0	0.0	0.0	-	-	-	*
		-30.00000	14.44444	17.00000	0.0	0.0	0.0	-	-	-	*
		-28.48485	14.44444	17.00000	0.0	0.0	0.0	-	-	-	*
		-26.96970	14.44444	17.00000	0.0	0.0	0.0	-	-	-	*
		-25.45455	14.44444	17.00000	0.0	0.0	0.0	-	-	-	*
		-23.93939	14.44444	17.00000	0.0	0.0	0.0	-	-	-	*
		-22.42424	14.44444	17.00000	0.0	0.0	0.0	-	-	-	*
		-20.90909	14.44444	17.00000	0.0	0.0	0.18970	-	-	-	*
		-19.39394	14.44444	17.00000	0.0	0.0	0.49052	-	-	-	*
		-17.87879	14.44444	17.00000	0.029490	-0.0040320	0.80086	-	-	-	*
		-16.36364	14.44444	17.00000	0.31320	-0.046787	1.1461	-	-	-	*
		-14.84848	14.44444	17.00000	0.84798	-0.13960	1.4913	-	-	-	*
		-13.33333	14.44444	17.00000	1.3857	-0.25405	1.8863	-	-	-	*
		-11.81818	14.44444	17.00000	1.9238	-0.39791	2.3573	-	-	-	*
		-10.30303	14.44444	17.00000	2.4618	-0.58407	2.9073	-	-	-	*
		-8.78788	14.44444	17.00000	2.9932	-0.83259	3.5157	-	-	-	*
		-7.27273	14.44444	17.00000	3.4992	-1.1761	4.1391	-	-	-	*
		-5.75758	14.44444	17.00000	3.9321	-1.6694	4.7124	-	-	-	*
		-4.24242	14.44444	17.00000	4.1716	-2.4036	5.1513	-	-	-	*
		-2.72727	14.44444	17.00000	3.8984	-3.4942	5.3605	-	-	-	*
		-1.21212	14.44444	17.00000	2.6604	-5.3651	5.7236	-	-	-	*
		0.30303	14.44444	17.00000	0.0	-8.1756	7.1399	-	-	-	*
		1.81818	14.44444	17.00000	0.0	-8.1756	7.1399	-	-	-	*
		3.33333	14.44444	17.00000	0.0	-8.1756	7.1399	-	-	-	*
		4.84848	14.44444	17.00000	0.0	-8.1756	7.1399	-	-	-	*
		6.36364	14.44444	17.00000	0.0	-8.1756	7.1399	-	-	-	*
		7.87879	14.44444	17.00000	0.0	-8.1756	7.1399	-	-	-	*
		9.39394	14.44444	17.00000	0.0	-8.1756	7.1399	-	-	-	*
		10.90909	14.44444	17.00000	0.0	-8.1756	7.1399	-	-	-	*
		12.42424	14.44444	17.00000	0.0	-8.1756	7.1399	-	-	-	*
		13.93939	14.44444	17.00000	0.0	-8.1756	7.1399	-	-	-	*
		15.45455	14.44444	17.00000	0.0	-8.1756	7.1399	-	-	-	*
		16.96970	14.44444	17.00000	0.0	-8.1756	7.1399	-	-	-	*

Type/No.		Coordinates			Displacements					Angle of Line to x Axis	
Name	Dist.	x	y	z	x	y	z	Horizontal displacement	Horizontal displacement		
		18.48485	14.44444	17.00000	0.0	-8.1756	7.1399	-	-	-	*
		20.00000	14.44444	17.00000	0.0	-8.1756	7.1399	-	-	-	*
		21.51515	14.44444	17.00000	0.0	-8.1756	7.1399	-	-	-	*
		23.03030	14.44444	17.00000	0.0	-8.1756	7.1399	-	-	-	*
		24.54545	14.44444	17.00000	0.0	-8.1756	7.1399	-	-	-	*
		26.06061	14.44444	17.00000	0.0	-8.1756	7.1399	-	-	-	*
		27.57576	14.44444	17.00000	0.0	-8.1756	7.1399	-	-	-	*
		29.09091	14.44444	17.00000	0.0	-8.1756	7.1399	-	-	-	*
		30.60606	14.44444	17.00000	0.0	-8.1756	7.1399	-	-	-	*
		32.12121	14.44444	17.00000	0.0	-8.1756	7.1399	-	-	-	*
		33.63636	14.44444	17.00000	0.0	-8.1756	7.1399	-	-	-	*
		35.15152	14.44444	17.00000	0.0	-8.1756	7.1399	-	-	-	*
		36.66667	14.44444	17.00000	0.0	-8.1756	7.1399	-	-	-	*
		38.18182	14.44444	17.00000	0.0	-8.1756	7.1399	-	-	-	*
		39.69697	14.44444	17.00000	0.0	-8.1756	7.1399	-	-	-	*
		41.21212	14.44444	17.00000	0.0	-8.1756	7.1399	-	-	-	*
		42.72727	14.44444	17.00000	0.0	-8.1756	7.1399	-	-	-	*
		44.24242	14.44444	17.00000	0.0	-8.1756	7.1399	-	-	-	*
		45.75758	14.44444	17.00000	0.0	-8.1756	7.1399	-	-	-	*
		47.27273	14.44444	17.00000	0.0	-8.1756	7.1399	-	-	-	*
		48.78788	14.44444	17.00000	-1.9103	-5.9269	5.8460	-	-	-	*
		50.30303	14.44444	17.00000	-3.6792	-3.9051	5.4086	-	-	-	*
		51.81818	14.44444	17.00000	-4.1671	-2.6687	5.2379	-	-	-	*
		53.33333	14.44444	17.00000	-3.9957	-1.8390	4.8842	-	-	-	*
		54.84848	14.44444	17.00000	-3.5651	-1.2806	4.3907	-	-	-	*
		56.36364	14.44444	17.00000	-3.0316	-0.88942	3.8417	-	-	-	*
		57.87879	14.44444	17.00000	-2.4276	-0.59224	3.3178	-	-	-	*
		59.39394	14.44444	17.00000	-1.7750	-0.34467	2.8798	-	-	-	*
		60.90909	14.44444	17.00000	-1.0899	-0.11633	2.5689	-	-	-	*
		62.42424	14.44444	17.00000	-0.36216	0.12948	2.4080	-	-	-	*
		63.93939	14.44444	17.00000	0.42180	0.44661	2.4054	-	-	-	*
		65.45455	14.44444	17.00000	1.0671	0.90493	2.5615	-	-	-	*
		66.96970	14.44444	17.00000	1.4796	1.7360	2.9966	-	-	-	*
		68.48485	14.44444	17.00000	1.4212	3.3352	3.9122	-	-	-	*
		70.00000	14.44444	17.00000	0.0	5.2988	5.1644	-	-	-	*
		71.51515	14.44444	17.00000	0.0	6.7922	6.2852	-	-	-	*
		73.03030	14.44444	17.00000	0.0	6.7922	6.2852	-	-	-	*
		74.54545	14.44444	17.00000	0.0	6.7922	6.2852	-	-	-	*
		76.06061	14.44444	17.00000	0.0	6.7922	6.2852	-	-	-	*
		77.57576	14.44444	17.00000	0.0	6.7922	6.2852	-	-	-	*
		79.09091	14.44444	17.00000	0.0	6.7922	6.2852	-	-	-	*
		80.60606	14.44444	17.00000	0.0	6.7922	6.2852	-	-	-	*
		82.12121	14.44444	17.00000	-0.17964	5.2695	5.1363	-	-	-	*
		83.63636	14.44444	17.00000	-2.0062	4.3591	4.7310	-	-	-	*
		85.15152	14.44444	17.00000	-2.7793	3.1357	4.2616	-	-	-	*
		86.66667	14.44444	17.00000	-3.0315	2.3097	3.9129	-	-	-	*
		88.18182	14.44444	17.00000	-2.9527	1.6983	3.4811	-	-	-	*
		89.69697	14.44444	17.00000	-2.6618	1.2296	2.9522	-	-	-	*
		91.21212	14.44444	17.00000	-2.2622	0.87313	2.3896	-	-	-	*
		92.72727	14.44444	17.00000	-1.8040	0.59793	1.8438	-	-	-	*
		94.24242	14.44444	17.00000	-1.3096	0.38034	1.3483	-	-	-	*
		95.75758	14.44444	17.00000	-0.90643	0.23426	0.91813	-	-	-	*
		97.27273	14.44444	17.00000	-0.61535	0.14326	0.54860	-	-	-	*
		98.78788	14.44444	17.00000	-0.31177	0.066031	0.21517	-	-	-	*
		100.30303	14.44444	17.00000	0.0	0.0	0.0	-	-	-	*
		101.81818	14.44444	17.00000	0.0	0.0	0.0	-	-	-	*
		103.33333	14.44444	17.00000	0.0	0.0	0.0	-	-	-	*
		104.84848	14.44444	17.00000	0.0	0.0	0.0	-	-	-	*
		106.36364	14.44444	17.00000	0.0	0.0	0.0	-	-	-	*
		107.87879	14.44444	17.00000	0.0	0.0	0.0	-	-	-	*
		109.39394	14.44444	17.00000	0.0	0.0	0.0	-	-	-	*
		110.90909	14.44444	17.00000	0.0	0.0	0.0	-	-	-	*
		112.42424	14.44444	17.00000	0.0	0.0	0.0	-	-	-	*
		113.93939	14.44444	17.00000	0.0	0.0	0.0	-	-	-	*
		115.45455	14.44444	17.00000	0.0	0.0	0.0	-	-	-	*
		116.96970	14.44444	17.00000	0.0	0.0	0.0	-	-	-	*
		118.48485	14.44444	17.00000	0.0	0.0	0.0	-	-	-	*
		120.00000	14.44444	17.00000	0.0	0.0	0.0	-	-	-	*
		-30.00000	15.45455	17.00000	0.0	0.0	0.0	-	-	-	*
		-28.48485	15.45455	17.00000	0.0	0.0	0.0	-	-	-	*
		-26.96970	15.45455	17.00000	0.0	0.0	0.0	-	-	-	*
		-25.45455	15.45455	17.00000	0.0	0.0	0.0	-	-	-	*
		-23.93939	15.45455	17.00000	0.0	0.0	0.0	-	-	-	*
		-22.42424	15.45455	17.00000	0.0	0.0	0.0	-	-	-	*
		-20.90909	15.45455	17.00000	0.0	0.0	0.0	-	-	-	*
		-19.39394	15.45455	17.00000	0.0	0.0	0.0	-	-	-	*
		-17.87879	15.45455	17.00000	0.0	0.0	0.0	-	-	-	*
		-16.36364	15.45455	17.00000	0.27071	-0.057150	1.1051	-	-	-	*
		-14.84848	15.45455	17.00000	0.75424	-0.17548	1.4418	-	-	-	*
		-13.33333	15.45455	17.00000	1.2648	-0.32770	1.8195	-	-	-	*
		-11.81818	15.45455	17.00000	1.7662	-0.51627	2.2643	-	-	-	*
		-10.30303	15.45455	17.00000	2.2535	-0.75558	2.7791	-	-	-	*
		-8.78788	15.45455	17.00000	2.7131	-1.0665	3.3444	-	-	-	*
		-7.27273	15.45455	17.00000	3.1149	-1.4796	3.9194	-	-	-	*
		-5.75758	15.45455	17.00000	3.3945	-2.0367	4.4439	-	-	-	*
		-4.24242	15.45455	17.00000	3.4175	-2.7828	4.8444	-	-	-	*
		-2.72727	15.45455	17.00000	3.0529	-3.8670	5.2087	-	-	-	*
		-1.21212	15.45455	17.00000	1.8565	-5.2909	5.6424	-	-	-	*
		0.30303	15.45455	17.00000	0.0	-7.4998	7.0257	-	-	-	*
		1.81818	15.45455	17.00000	0.0	-7.4998	7.0257	-	-	-	*
		3.33333	15.45455	17.00000	0.0	-7.4998	7.0257	-	-	-	*
		4.84848	15.45455	17.00000	0.0	-7.4998	7.0257	-	-	-	*
		6.36364	15.45455	17.00000	0.0	-7.4998	7.0257	-	-	-	*
		7.87879	15.45455	17.00000	0.0	-7.4998	7.0257	-	-	-	*
		9.39394	15.45455	17.00000	0.0	-7.4998	7.0257	-	-	-	*
		10.90909	15.45455	17.00000	0.0	-7.4998	7.0257	-	-	-	*
		12.42424	15.45455	17.00000	0.0	-7.4998	7.0257	-	-	-	*
		13.93939	15.45455	17.00000	0.0	-7.4998	7.0257	-	-	-	*
		15.45455	15.45455	17.00000	0.0	-7.4998	7.0257	-	-	-	*
		16.96970	15.45455	17.00000	0.0	-7.4998	7.0257	-	-	-	*
		18.48485	15.45455	17.00000	0.0	-7.4998	7.0257	-	-	-	*
		20.00000	15.45455	17.00000	0.0	-7.4998	7.0257	-	-	-	*
		21.51515	15.45455	17.00000	0.0	-7.4998	7.0257	-	-	-	*
		23.03030	15.45455	17.00000	0.0	-7.4998	7.0257	-	-	-	*
		24.54545	15.45455	17.00000	0.0	-7.4998	7.0257	-	-	-	*
		26.06061	15.45455	17.00000	0.0	-7.4998	7.0257	-	-	-	*
		27.57576	15.45455	17.00000	0.0	-7.4998	7.0257	-	-	-	*
		29.09091	15.45455	17.00000	0.0	-7.4998	7.0257	-	-	-	*
		30.60606	15.45455	17.00000	0.0	-7.4998	7.0257	-	-	-	*
		32.12121	15.45455	17.00000	0.0	-7.4998	7.0257	-	-	-	*
		33.63636	15.45455	17.00000	0.0	-7.4998	7.0257	-	-	-	*
		35.15152	15.45455	17.00000	0.0	-7.4998	7.0257	-	-	-	*
		36.66667	15.45455	17.00000	0.0	-7.4998	7.0257	-	-	-	*
		38.18182	15.45455	17.00000	0.0	-7.4998	7.0257	-	-	-	*
		39.69697	15.45455	17.00000	0.0	-7.4998	7.0257	-	-	-	*
		41.21212	15.45455	17.00000	0.0	-7.4998	7.0257	-	-	-	*
		42.72727	15.45455	17.00000	0.0	-7.4998	7.0257	-	-	-	*
		44.24242	15.45455	17.00000	0.0	-7.4998	7.0257	-	-	-	*
		45.75758	15.45455	17.00000	0.0	-7.4998	7.0257	-	-	-	*
		47.27273	15.45455	17.00000	0.0	-7.4998	7.0257	-	-	-	*
		48.78788	15.45455	17.00000	-1.2847	-5.6327	5.7507	-	-	-	*
		50.30303	15.45455	17.00000	-2.8415	-4.2622	5.3368	-	-	-	*
		51.81818	15.45455	17.00000	-3.3425	-3.0270	4.9248	-	-	-	*
		53.33333	15.45455	17.00000	-3.4097	-2.2212	4.5984	-	-	-	*
		54.84848	15.45455	17.00000	-3.1582	-1.6103	4.1390	-	-	-	*
		56.36364	15.45455	17.00000	-2.7508	-1.1549	3.6226	-	-	-	*
		57.87879	15.45455	17.00000	-2.2392	-0.80352	3.1213	-	-	-	*
		59.39394	15.45455	17.00000	-1.6671	-0.52045	2.6905	-	-	-	*
		60.90909	15.45455	17.00000	-1.0495	-0.27642	2.3678	-	-	-	*
		62.42424	15.45455	17.00000	-0.37846	-0.040495	2.1736	-	-	-	*
		63.93939	15.45455	17.00000	0.36690	0.23157	2.1158	-	-	-	*
		65.45455	15.45455	17.00000	0.99493	0.58438	2.2016	-	-	-	*
		66.96970	15.45455	17.00000	1.4776	1.2412	2.5425	-	-	-	*
		68.48485	15.45455	17.00000	1.7523	2.9438	3.5174	-	-	-	*
		70.00000	15.45455	17.00000	0.0	5.8529	5.3121	-	-	-	*
		71.51515	15.45455	17.00000	0.0	7.4462	6.4062	-	-	-	*
		73.03030	15.45455	17.00000	0.0	7.4462	6.4062	-	-	-	*
		74.54545	15.45455	17.00000	0.0	7.4462	6.4062	-	-	-	*
		76.06061	15.45455	17.00000	0.0	7.4462	6.4062	-	-	-	*
		77.57576	15.45455	17.00000	0.0	7.4462	6.4062	-	-	-	*
		79.09091	15.45455	17.00000	0.0	7.4462	6.4062	-	-	-	*

Oasys
GEA LIMITED
(GEOTECHNICAL &ENV ASSOC)
Job No. J15050A
Sheet No.
Rev.
The Great Hall, Lincoln's Inn, Newman's Row, London, WC2A 3TL
Wall Movements Rev 3 Piling and Excavation
Damage Assessment
Drg. Ref.
Made by MP
Date 08-Feb-2016
Checked

Type/No.		Coordinates			Displacements					Angle of Line to x Axis	
Name	Dist.	x	y	z	x	y	z	Horizontal displacement	Horizontal displacement		
		80.60606	15.45455	17.00000	0.0	7.4462	6.4062	-	-	-	*
		82.12121	15.45455	17.00000	-0.27653	5.8071	5.2743	-	-	-	*
		83.63636	15.45455	17.00000	-2.7837	4.3302	4.7994	-	-	-	*
		85.15152	15.45455	17.00000	-3.5932	2.9022	4.4752	-	-	-	*
		86.66667	15.45455	17.00000	-3.7258	2.0322	4.1930	-	-	-	*
		88.18182	15.45455	17.00000	-3.4605	1.4249	3.7243	-	-	-	*
		89.69697	15.45455	17.00000	-3.0335	1.0032	3.1516	-	-	-	*
		91.21212	15.45455	17.00000	-2.5386	0.70144	2.5460	-	-	-	*
		92.72727	15.45455	17.00000	-2.0130	0.47765	1.9622	-	-	-	*
		94.24242	15.45455	17.00000	-1.4701	0.30566	1.4357	-	-	-	*
		95.75758	15.45455	17.00000	-0.99531	0.18415	0.98211	-	-	-	*
		97.27273	15.45455	17.00000	-0.68301	0.11384	0.59718	-	-	-	*
		98.78788	15.45455	17.00000	-0.36228	0.054931	0.25611	-	-	-	*
		100.30303	15.45455	17.00000	-0.035334	0.0049140	0.0095461	-	-	-	*
		101.81818	15.45455	17.00000	0.0	0.0	0.0	-	-	-	*
		103.33333	15.45455	17.00000	0.0	0.0	0.0	-	-	-	*
		104.84848	15.45455	17.00000	0.0	0.0	0.0	-	-	-	*
		106.36364	15.45455	17.00000	0.0	0.0	0.0	-	-	-	*
		107.87879	15.45455	17.00000	0.0	0.0	0.0	-	-	-	*
		109.39394	15.45455	17.00000	0.0	0.0	0.0	-	-	-	*
		110.90909	15.45455	17.00000	0.0	0.0	0.0	-	-	-	*
		112.42424	15.45455	17.00000	0.0	0.0	0.0	-	-	-	*
		113.93939	15.45455	17.00000	0.0	0.0	0.0	-	-	-	*
		115.45455	15.45455	17.00000	0.0	0.0	0.0	-	-	-	*
		116.96970	15.45455	17.00000	0.0	0.0	0.0	-	-	-	*
		118.48485	15.45455	17.00000	0.0	0.0	0.0	-	-	-	*
		120.00000	15.45455	17.00000	0.0	0.0	0.0	-	-	-	*
		-30.00000	16.46465	17.00000	0.0	0.0	0.0	-	-	-	*
		-28.48485	16.46465	17.00000	0.0	0.0	0.0	-	-	-	*
		-26.96970	16.46465	17.00000	0.0	0.0	0.0	-	-	-	*
		-25.45455	16.46465	17.00000	0.0	0.0	0.0	-	-	-	*
		-23.93939	16.46465	17.00000	0.0	0.0	0.0	-	-	-	*
		-22.42424	16.46465	17.00000	0.0	0.0	0.0	-	-	-	*
		-20.90909	16.46465	17.00000	0.0	0.0	0.12391	-	-	-	*
		-19.39394	16.46465	17.00000	0.0	0.0	0.41976	-	-	-	*
		-17.87879	16.46465	17.00000	0.0	0.0	0.71444	-	-	-	*
		-16.36364	16.46465	17.00000	0.21945	-0.059874	1.0510	-	-	-	*
		-14.84848	16.46465	17.00000	0.64037	-0.19255	1.3786	-	-	-	*
		-13.33333	16.46465	17.00000	1.1211	-0.37539	1.7367	-	-	-	*
		-11.81818	16.46465	17.00000	1.5827	-0.59792	2.1515	-	-	-	*
		-10.30303	16.46465	17.00000	2.0167	-0.87391	2.6268	-	-	-	*
		-8.78788	16.46465	17.00000	2.4044	-1.2215	3.1450	-	-	-	*
		-7.27273	16.46465	17.00000	2.7093	-1.6632	3.6690	-	-	-	*
		-5.75758	16.46465	17.00000	2.8643	-2.2211	4.1454	-	-	-	*
		-4.24242	16.46465	17.00000	2.7802	-2.9258	4.5413	-	-	-	*
		-2.72727	16.46465	17.00000	2.4145	-3.9526	5.0175	-	-	-	*
		-1.21212	16.46465	17.00000	1.3554	-4.9926	5.4169	-	-	-	*
		0.30303	16.46465	17.00000	0.0	-6.8520	6.7102	-	-	-	*
		1.81818	16.46465	17.00000	0.0	-6.8520	6.7102	-	-	-	*
		3.33333	16.46465	17.00000	0.0	-6.8520	6.7102	-	-	-	*
		4.84848	16.46465	17.00000	0.0	-6.8520	6.7102	-	-	-	*
		6.36364	16.46465	17.00000	0.0	-6.8520	6.7102	-	-	-	*
		7.87879	16.46465	17.00000	0.0	-6.8520	6.7102	-	-	-	*
		9.39394	16.46465	17.00000	0.0	-6.8520	6.7102	-	-	-	*
		10.90909	16.46465	17.00000	0.0	-6.8520	6.7102	-	-	-	*
		12.42424	16.46465	17.00000	0.0	-6.8520	6.7102	-	-	-	*
		13.93939	16.46465	17.00000	0.0	-6.8520	6.7102	-	-	-	*
		15.45455	16.46465	17.00000	0.0	-6.8520	6.7102	-	-	-	*
		16.96970	16.46465	17.00000	0.0	-6.8520	6.7102	-	-	-	*
		18.48485	16.46465	17.00000	0.0	-6.8520	6.7102	-	-	-	*
		20.00000	16.46465	17.00000	0.0	-6.8520	6.7102	-	-	-	*
		21.51515	16.46465	17.00000	0.0	-6.8520	6.7102	-	-	-	*
		23.03030	16.46465	17.00000	0.0	-6.8520	6.7102	-	-	-	*
		24.54545	16.46465	17.00000	0.0	-6.8520	6.7102	-	-	-	*
		26.06061	16.46465	17.00000	0.0	-6.8520	6.7102	-	-	-	*
		27.57576	16.46465	17.00000	0.0	-6.8520	6.7102	-	-	-	*
		29.09091	16.46465	17.00000	0.0	-6.8520	6.7102	-	-	-	*
		30.60606	16.46465	17.00000	0.0	-6.8520	6.7102	-	-	-	*
		32.12121	16.46465	17.00000	0.0	-6.8520	6.7102	-	-	-	*
		33.63636	16.46465	17.00000	0.0	-6.8520	6.7102	-	-	-	*
		35.15152	16.46465	17.00000	0.0	-6.8520	6.7102	-	-	-	*
		36.66667	16.46465	17.00000	0.0	-6.8520	6.7102	-	-	-	*
		38.18182	16.46465	17.00000	0.0	-6.8520	6.7102	-	-	-	*
		39.69697	16.46465	17.00000	0.0	-6.8520	6.7102	-	-	-	*
		41.21212	16.46465	17.00000	0.0	-6.8520	6.7102	-	-	-	*
		42.72727	16.46465	17.00000	0.0	-6.8520	6.7102	-	-	-	*
		44.24242	16.46465	17.00000	0.0	-6.8520	6.7102	-	-	-	*
		45.75758	16.46465	17.00000	0.0	-6.8520	6.7102	-	-	-	*
		47.27273	16.46465	17.00000	0.0	-6.8520	6.7102	-	-	-	*
		48.78788	16.46465	17.00000	-0.92118	-5.2200	5.5096	-	-	-	*
		50.30303	16.46465	17.00000	-2.1972	-4.2595	5.1386	-	-	-	*
		51.81818	16.46465	17.00000	-2.7291	-3.1946	4.6813	-	-	-	*
		53.33333	16.46465	17.00000	-2.8498	-2.3980	4.2793	-	-	-	*
		54.84848	16.46465	17.00000	-2.7391	-1.8037	3.8511	-	-	-	*
		56.36364	16.46465	17.00000	-2.4480	-1.3288	3.3666	-	-	-	*
		57.87879	16.46465	17.00000	-2.0362	-0.95111	2.8873	-	-	-	*
		59.39394	16.46465	17.00000	-1.5544	-0.64693	2.4614	-	-	-	*
		60.90909	16.46465	17.00000	-1.0204	-0.39398	2.1201	-	-	-	*
		62.42424	16.46465	17.00000	-0.43295	-0.17073	1.8775	-	-	-	*
		63.93939	16.46465	17.00000	0.22000	0.047952	1.7345	-	-	-	*
		65.45455	16.46465	17.00000	0.74416	0.25405	1.6903	-	-	-	*
		66.96970	16.46465	17.00000	1.2267	0.62154	1.8816	-	-	-	*
		68.48485	16.46465	17.00000	1.8588	1.8836	2.6207	-	-	-	*
		70.00000	16.46465	17.00000	0.0	6.4421	5.2877	-	-	-	*
		71.51515	16.46465	17.00000	0.0	8.1354	6.2702	-	-	-	*
		73.03030	16.46465	17.00000	0.0	8.1354	6.2702	-	-	-	*
		74.54545	16.46465	17.00000	0.0	8.1354	6.2702	-	-	-	*
		76.06061	16.46465	17.00000	0.0	8.1354	6.2702	-	-	-	*
		77.57576	16.46465	17.00000	0.0	8.1354	6.2702	-	-	-	*
		79.09091	16.46465	17.00000	0.0	8.1354	6.2702	-	-	-	*
		80.60606	16.46465	17.00000	0.0	8.1354	6.2702	-	-	-	*
		82.12121	16.46465	17.00000	-0.50158	6.3534	5.2323	-	-	-	*
		83.63636	16.46465	17.00000	-3.9683	3.7233	4.7351	-	-	-	*
		85.15152	16.46465	17.00000	-4.6779	2.2790	4.7401	-	-	-	*
		86.66667	16.46465	17.00000	-4.4302	1.4576	4.4335	-	-	-	*
		88.18182	16.46465	17.00000	-3.9309	0.97631	3.9252	-	-	-	*
		89.69697	16.46465	17.00000	-3.3609	0.67042	3.3109	-	-	-	*
		91.21212	16.46465	17.00000	-2.7742	0.46237	2.6676	-	-	-	*
		92.72727	16.46465	17.00000	-2.1869	0.31300	2.0519	-	-	-	*
		94.24242	16.46465	17.00000	-1.6007	0.20074	1.5002	-	-	-	*
		95.75758	16.46465	17.00000	-1.0694	0.11934	1.0282	-	-	-	*
		97.27273	16.46465	17.00000	-0.70763	0.074194	0.63131	-	-	-	*
		98.78788	16.46465	17.00000	-0.40132	0.036703	0.28415	-	-	-	*
		100.30303	16.46465	17.00000	-0.061636	0.0051704	0.014309	-	-	-	*
		101.81818	16.46465	17.00000	0.0	0.0	0.0	-	-	-	*
		103.33333	16.46465	17.00000	0.0	0.0	0.0	-	-	-	*
		104.84848	16.46465	17.00000	0.0	0.0	0.0	-	-	-	*
		106.36364	16.46465	17.00000	0.0	0.0	0.0	-	-	-	*
		107.87879	16.46465	17.00000	0.0	0.0	0.0	-	-	-	*
		109.39394	16.46465	17.00000	0.0	0.0	0.0	-	-	-	*
		110.90909	16.46465	17.00000	0.0	0.0	0.0	-	-	-	*
		112.42424	16.46465	17.00000	0.0	0.0	0.0	-	-	-	*
		113.93939	16.46465	17.00000	0.0	0.0	0.0	-	-	-	*
		115.45455	16.46465	17.00000	0.0	0.0	0.0	-	-	-	*
		116.96970	16.46465	17.00000	0.0	0.0	0.0	-	-	-	*
		118.48485	16.46465	17.00000	0.0	0.0	0.0	-	-	-	*
		120.00000	16.46465	17.00000	0.0	0.0	0.0	-	-	-	*
		-30.00000	17.47475	17.00000	0.0	0.0	0.0	-	-	-	*
		-28.48485	17.47475	17.00000	0.0	0.0	0.0	-	-	-	*
		-26.96970	17.47475	17.00000	0.0	0.0	0.0	-	-	-	*
		-25.45455	17.47475	17.00000	0.0	0.0	0.0	-	-	-	*
		-23.93939	17.47475	17.00000	0.0	0.0	0.0	-	-	-	*
		-22.42424	17.47475	17.00000	0.0	0.0	0.0	-	-	-	*
		-20.90909	17.47475	17.00000	0.0	0.0	0.077210	-	-	-	*
		-19.39394	17.47475	17.00000	0.0	0.0	0.36963	-	-	-	*
		-17.87879	17.47475	17.00000	0.0	0.0	0.66035	-	-	-	*
		-16.36364	17.47475	17.00000	0.16131	-0.053969	0.98430	-	-	-	*
		-14.84848	17.47475	17.00000	0.51067	-0.18829	1.3034	-	-	-	*
		-13.33333	17.47475	17.00000	0.96063	-0.39444	1.6409	-	-	-	*
		-11.81818	17.47475	17.00000	1.3825	-0.64043	2.0238	-	-	-	*
		-10.30303	17.47475	17.00000	1.7651	-0.93790	2.4572	-	-	-	*

Type/No. Name	Dist.	Coordinates x	y	z	Displacements x	y	z	Horizontal displacement	Horizontal displacement	Angle of Line to x Axis	
		-8.78788	17.47475	17.00000	2.0872	-1.3003	2.9264	-	-	-	*
		-7.27273	17.47475	17.00000	2.3118	-1.7403	3.3987	-	-	-	*
		-5.75758	17.47475	17.00000	2.3789	-2.2620	3.8278	-	-	-	*
		-4.24242	17.47475	17.00000	2.3144	-2.9866	4.2934	-	-	-	*
		-2.72727	17.47475	17.00000	1.9121	-3.8384	4.7334	-	-	-	*
		-1.21212	17.47475	17.00000	1.0215	-4.6136	5.0874	-	-	-	*
		0.30303	17.47475	17.00000	0.0	-6.2300	6.2510	-	-	-	*
		1.81818	17.47475	17.00000	0.0	-6.2300	6.2510	-	-	-	*
		3.33333	17.47475	17.00000	0.0	-6.2300	6.2510	-	-	-	*
		4.84848	17.47475	17.00000	0.0	-6.2300	6.2510	-	-	-	*
		6.36364	17.47475	17.00000	0.0	-6.2300	6.2510	-	-	-	*
		7.87879	17.47475	17.00000	0.0	-6.2300	6.2510	-	-	-	*
		9.39394	17.47475	17.00000	0.0	-6.2300	6.2510	-	-	-	*
		10.90909	17.47475	17.00000	0.0	-6.2300	6.2510	-	-	-	*
		12.42424	17.47475	17.00000	0.0	-6.2300	6.2510	-	-	-	*
		13.93939	17.47475	17.00000	0.0	-6.2300	6.2510	-	-	-	*
		15.45455	17.47475	17.00000	0.0	-6.2300	6.2510	-	-	-	*
		16.96970	17.47475	17.00000	0.0	-6.2300	6.2510	-	-	-	*
		18.48485	17.47475	17.00000	0.0	-6.2300	6.2510	-	-	-	*
		20.00000	17.47475	17.00000	0.0	-6.2300	6.2510	-	-	-	*
		21.51515	17.47475	17.00000	0.0	-6.2300	6.2510	-	-	-	*
		23.03030	17.47475	17.00000	0.0	-6.2300	6.2510	-	-	-	*
		24.54545	17.47475	17.00000	0.0	-6.2300	6.2510	-	-	-	*
		26.06061	17.47475	17.00000	0.0	-6.2300	6.2510	-	-	-	*
		27.57576	17.47475	17.00000	0.0	-6.2300	6.2510	-	-	-	*
		29.09091	17.47475	17.00000	0.0	-6.2300	6.2510	-	-	-	*
		30.60606	17.47475	17.00000	0.0	-6.2300	6.2510	-	-	-	*
		32.12121	17.47475	17.00000	0.0	-6.2300	6.2510	-	-	-	*
		33.63636	17.47475	17.00000	0.0	-6.2300	6.2510	-	-	-	*
		35.15152	17.47475	17.00000	0.0	-6.2300	6.2510	-	-	-	*
		36.66667	17.47475	17.00000	0.0	-6.2300	6.2510	-	-	-	*
		38.18182	17.47475	17.00000	0.0	-6.2300	6.2510	-	-	-	*
		39.69697	17.47475	17.00000	0.0	-6.2300	6.2510	-	-	-	*
		41.21212	17.47475	17.00000	0.0	-6.2300	6.2510	-	-	-	*
		42.72727	17.47475	17.00000	0.0	-6.2300	6.2510	-	-	-	*
		44.24242	17.47475	17.00000	0.0	-6.2300	6.2510	-	-	-	*
		45.75758	17.47475	17.00000	0.0	-6.2300	6.2510	-	-	-	*
		47.27273	17.47475	17.00000	0.0	-6.2300	6.2510	-	-	-	*
		48.78788	17.47475	17.00000	-0.68717	-4.7750	5.1652	-	-	-	*
		50.30303	17.47475	17.00000	-1.7143	-4.0752	4.8430	-	-	-	*
		51.81818	17.47475	17.00000	-2.2439	-3.2193	4.4233	-	-	-	*
		53.33333	17.47475	17.00000	-2.3647	-2.4333	3.9514	-	-	-	*
		54.84848	17.47475	17.00000	-2.3382	-1.8780	3.5400	-	-	-	*
		56.36364	17.47475	17.00000	-2.1436	-1.4145	3.0858	-	-	-	*
		57.87879	17.47475	17.00000	-1.8290	-1.0308	2.6276	-	-	-	*
		59.39394	17.47475	17.00000	-1.4400	-0.71529	2.2043	-	-	-	*
		60.90909	17.47475	17.00000	-0.99939	-0.45407	1.8389	-	-	-	*
		62.42424	17.47475	17.00000	-0.51574	-0.23402	1.5365	-	-	-	*
		63.93939	17.47475	17.00000	-0.041959	-0.062349	1.2841	-	-	-	*
		65.45455	17.47475	17.00000	0.29497	0.034086	1.0581	-	-	-	*
		66.96970	17.47475	17.00000	0.51290	0.088902	0.96232	-	-	-	*
		68.48485	17.47475	17.00000	1.1104	0.38495	1.1756	-	-	-	*
		70.00000	17.47475	17.00000	0.0	7.0697	5.0456	-	-	-	*
		71.51515	17.47475	17.00000	0.0	8.8630	5.8094	-	-	-	*
		73.03030	17.47475	17.00000	0.0	8.8630	5.8094	-	-	-	*
		74.54545	17.47475	17.00000	0.0	8.8630	5.8094	-	-	-	*
		76.06061	17.47475	17.00000	0.0	8.8630	5.8094	-	-	-	*
		77.57576	17.47475	17.00000	0.0	8.8630	5.8094	-	-	-	*
		79.09091	17.47475	17.00000	0.0	8.8630	5.8094	-	-	-	*
		80.60606	17.47475	17.00000	0.0	8.8630	5.8094	-	-	-	*
		82.12121	17.47475	17.00000	-1.5424	6.6839	4.9247	-	-	-	*
		83.63636	17.47475	17.00000	-6.1104	1.9614	4.9932	-	-	-	*
		85.15152	17.47475	17.00000	-5.6977	0.94962	4.9748	-	-	-	*
		86.66667	17.47475	17.00000	-5.0036	0.56317	4.6241	-	-	-	*
		88.18182	17.47475	17.00000	-4.2935	0.36481	4.0728	-	-	-	*
		89.69697	17.47475	17.00000	-3.6070	0.24615	3.4213	-	-	-	*
		91.21212	17.47475	17.00000	-2.9485	0.16812	2.7474	-	-	-	*
		92.72727	17.47475	17.00000	-2.3134	0.11327	2.1079	-	-	-	*
		94.24242	17.47475	17.00000	-1.6935	0.072660	1.5385	-	-	-	*
		95.75758	17.47475	17.00000	-1.1247	0.042941	1.0544	-	-	-	*
		97.27273	17.47475	17.00000	-0.77647	0.026704	0.64991	-	-	-	*
		98.78788	17.47475	17.00000	-0.42690	0.013357	0.29894	-	-	-	*
		100.30303	17.47475	17.00000	-0.076355	0.0021912	0.016785	-	-	-	*
		101.81818	17.47475	17.00000	0.0	0.0	0.0	-	-	-	*
		103.33333	17.47475	17.00000	0.0	0.0	0.0	-	-	-	*
		104.84848	17.47475	17.00000	0.0	0.0	0.0	-	-	-	*
		106.36364	17.47475	17.00000	0.0	0.0	0.0	-	-	-	*
		107.87879	17.47475	17.00000	0.0	0.0	0.0	-	-	-	*
		109.39394	17.47475	17.00000	0.0	0.0	0.0	-	-	-	*
		110.90909	17.47475	17.00000	0.0	0.0	0.0	-	-	-	*
		112.42424	17.47475	17.00000	0.0	0.0	0.0	-	-	-	*
		113.93939	17.47475	17.00000	0.0	0.0	0.0	-	-	-	*
		115.45455	17.47475	17.00000	0.0	0.0	0.0	-	-	-	*
		116.96970	17.47475	17.00000	0.0	0.0	0.0	-	-	-	*
		118.48485	17.47475	17.00000	0.0	0.0	0.0	-	-	-	*
		120.00000	18.48485	17.00000	0.0	0.0	0.0	-	-	-	*
		-26.96970	18.48485	17.00000	0.0	0.0	0.0	-	-	-	*
		-25.45455	18.48485	17.00000	0.0	0.0	0.0	-	-	-	*
		-23.93939	18.48485	17.00000	0.0	0.0	0.0	-	-	-	*
		-22.42424	18.48485	17.00000	0.0	0.0	0.0	-	-	-	*
		-20.90909	18.48485	17.00000	0.0	0.0	0.021675	-	-	-	*
		-19.39394	18.48485	17.00000	0.0	0.0	0.31012	-	-	-	*
		-17.87879	18.48485	17.00000	0.0	0.0	0.59629	-	-	-	*
		-16.36364	18.48485	17.00000	0.098162	-0.038901	0.90459	-	-	-	*
		-14.84848	18.48485	17.00000	0.36932	-0.16129	1.2173	-	-	-	*
		-13.33333	18.48485	17.00000	0.78937	-0.38392	1.5349	-	-	-	*
		-11.81818	18.48485	17.00000	1.1736	-0.64400	1.8857	-	-	-	*
		-10.30303	18.48485	17.00000	1.5098	-0.95028	2.2769	-	-	-	*
		-8.78788	18.48485	17.00000	1.7766	-1.3110	2.6970	-	-	-	*
		-7.27273	18.48485	17.00000	1.9403	-1.7301	3.1183	-	-	-	*
		-5.75758	18.48485	17.00000	2.0013	-2.2541	3.5455	-	-	-	*
		-4.24242	18.48485	17.00000	1.9078	-2.9163	3.9894	-	-	-	*
		-2.72727	18.48485	17.00000	1.5200	-3.6143	4.3834	-	-	-	*
		-1.21212	18.48485	17.00000	0.78612	-4.2057	4.6889	-	-	-	*
		0.30303	18.48485	17.00000	0.0	-5.6316	5.6987	-	-	-	*
		1.81818	18.48485	17.00000	0.0	-5.6316	5.6987	-	-	-	*
		3.33333	18.48485	17.00000	0.0	-5.6316	5.6987	-	-	-	*
		4.84848	18.48485	17.00000	0.0	-5.6316	5.6987	-	-	-	*
		6.36364	18.48485	17.00000	0.0	-5.6316	5.6987	-	-	-	*
		7.87879	18.48485	17.00000	0.0	-5.6316	5.6987	-	-	-	*
		9.39394	18.48485	17.00000	0.0	-5.6316	5.6987	-	-	-	*
		10.90909	18.48485	17.00000	0.0	-5.6316	5.6987	-	-	-	*
		12.42424	18.48485	17.00000	0.0	-5.6316	5.6987	-	-	-	*
		13.93939	18.48485	17.00000	0.0	-5.6316	5.6987	-	-	-	*
		15.45455	18.48485	17.00000	0.0	-5.6316	5.6987	-	-	-	*
		16.96970	18.48485	17.00000	0.0	-5.6316	5.6987	-	-	-	*
		18.48485	18.48485	17.00000	0.0	-5.6316	5.6987	-	-	-	*
		20.00000	18.48485	17.00000	0.0	-5.6316	5.6987	-	-	-	*
		21.51515	18.48485	17.00000	0.0	-5.6316	5.6987	-	-	-	*
		23.03030	18.48485	17.00000	0.0	-5.6316	5.6987	-	-	-	*
		24.54545	18.48485	17.00000	0.0	-5.6316	5.6987	-	-	-	*
		26.06061	18.48485	17.00000	0.0	-5.6316	5.6987	-	-	-	*
		27.57576	18.48485	17.00000	0.0	-5.6316	5.6987	-	-	-	*
		29.09091	18.48485	17.00000	0.0	-5.6316	5.6987	-	-	-	*
		30.60606	18.48485	17.00000	0.0	-5.6316	5.6987	-	-	-	*
		32.12121	18.48485	17.00000	0.0	-5.6316	5.6987	-	-	-	*
		33.63636	18.48485	17.00000	0.0	-5.6316	5.6987	-	-	-	*
		35.15152	18.48485	17.00000	0.0	-5.6316	5.6987	-	-	-	*
		36.66667	18.48485	17.00000	0.0	-5.6316	5.6987	-	-	-	*
		38.18182	18.48485	17.00000	0.0	-5.6316	5.6987	-	-	-	*
		39.69697	18.48485	17.00000	0.0	-5.6316	5.6987	-	-	-	*
		41.21212	18.48485	17.00000	0.0	-5.6316	5.6987	-	-	-	*
		42.72727	18.48485	17.00000	0.0	-5.6316	5.6987	-	-	-	*
		44.24242	18.48485	17.00000	0.0	-5.6316	5.6987	-	-	-	*
		45.75758	18.48485	17.00000	0.0	-5.6316	5.6987	-	-	-	*
		47.27273	18.48485	17.00000	0.0	-5.6316	5.6987	-	-	-	*
		48.78788	18.48485	17.00000	-0.52552	-4.3255	4.7530	-	-	-	*
		50.30303	18.48485	17.00000	-1.3491	-3.7988	4.4796	-	-	-	*
		51.81818	18.48485	17.00000	-1.8327	-3.1126	4.1063	-	-	-	*

Oasys
GEA LIMITED
(GEOTECHNICAL &ENV ASSOC)
Job No. J15050A
Sheet No.
Rev.
Drg. Ref.
The Great Hall, Lincoln's Inn, Newman's Row, London, WC2A 3TL
Wall Movements Rev 3 Piling and Excavation
Damage Assessment
Made by MP
Date 08-Feb-2016
Checked

Type/No. Name	Dist.	Coordinates x	y	z	Displacements x	y	z	Horizontal displacement	Horizontal displacement	Angle of Line to x Axis	
		53.33333	18.48485	17.00000	-1.9994	-2.4311	3.6728	-	-	-	*
		54.84848	18.48485	17.00000	-1.7614	-1.8573	3.2313	-	-	-	*
		56.36364	18.48485	17.00000	-1.8346	-1.4225	2.8163	-	-	-	*
		57.87879	18.48485	17.00000	-1.5927	-1.0455	2.3925	-	-	-	*
		59.39394	18.48485	17.00000	-1.2733	-0.72472	1.9913	-	-	-	*
		60.90909	18.48485	17.00000	-0.90097	-0.45260	1.6291	-	-	-	*
		62.42424	18.48485	17.00000	-0.49009	-0.22033	1.3041	-	-	-	*
		63.93939	18.48485	17.00000	-0.16163	-0.065757	0.99410	-	-	-	*
		65.45455	18.48485	17.00000	0.0	0.0	0.67595	-	-	-	*
		66.96970	18.48485	17.00000	0.0	0.0	0.39050	-	-	-	*
		68.48485	18.48485	17.00000	0.0	0.0	0.10264	-	-	-	*
		70.00000	18.48485	17.00000	0.0	0.0	0.0	-	-	-	*
		71.51515	18.48485	17.00000			Point lies within an excavation.				*
		73.03030	18.48485	17.00000			Point lies within an excavation.				*
		74.54545	18.48485	17.00000			Point lies within an excavation.				*
		76.06061	18.48485	17.00000			Point lies within an excavation.				*
		77.57576	18.48485	17.00000			Point lies within an excavation.				*
		79.09091	18.48485	17.00000			Point lies within an excavation.				*
		80.60606	18.48485	17.00000			Point lies within an excavation.				*
		82.12121	18.48485	17.00000	-10.091		0.0	5.3817	-	-	*
		83.63636	19.49495	17.00000	-8.9150		0.0	6.0856	-	-	*
		85.15152	19.49495	17.00000	-7.8242		0.0	6.1230	-	-	*
		86.66667	19.49495	17.00000	-6.8080		0.0	5.7002	-	-	*
		88.18182	19.49495	17.00000	-5.8556		0.0	4.9924	-	-	*
		89.69697	19.49495	17.00000	-4.9559		0.0	4.1442	-	-	*
		91.21212	19.49495	17.00000	-4.0980		0.0	3.2696	-	-	*
		92.72727	19.49495	17.00000	-3.2709		0.0	2.4515	-	-	*
		94.24242	19.49495	17.00000	-2.4638		0.0	1.7423	-	-	*
		95.75758	19.49495	17.00000	-1.7088		0.0	1.1636	-	-	*
		97.27273	19.49495	17.00000	-1.1785		0.0	0.70625	-	-	*
		98.78788	19.49495	17.00000	-0.64824		0.0	0.33030	-	-	*
		100.30303	19.49495	17.00000	-0.11794		0.0	0.025700	-	-	*
		101.81818	19.49495	17.00000	0.0		0.0	0.0	-	-	*
		103.33333	19.49495	17.00000	0.0		0.0	0.0	-	-	*
		104.84848	19.49495	17.00000	0.0		0.0	0.0	-	-	*
		106.36364	19.49495	17.00000	0.0		0.0	0.0	-	-	*
		107.87879	19.49495	17.00000	0.0		0.0	0.0	-	-	*
		109.39394	19.49495	17.00000	0.0		0.0	0.0	-	-	*
		110.90909	19.49495	17.00000	0.0		0.0	0.0	-	-	*
		112.42424	19.49495	17.00000	0.0		0.0	0.0	-	-	*
		113.93939	19.49495	17.00000	0.0		0.0	0.0	-	-	*
		115.45455	19.49495	17.00000	0.0		0.0	0.0	-	-	*
		116.96970	19.49495	17.00000	0.0		0.0	0.0	-	-	*
		118.48485	19.49495	17.00000	0.0		0.0	0.0	-	-	*
		120.00000	19.49495	17.00000	0.0		0.0	0.0	-	-	*
		-30.00000	19.49495	17.00000	0.0		0.0	0.0	-	-	*
		-28.48485	19.49495	17.00000	0.0		0.0	0.0	-	-	*
		-26.96970	19.49495	17.00000	0.0		0.0	0.0	-	-	*
		-25.45455	19.49495	17.00000	0.0		0.0	0.0	-	-	*
		-23.93939	19.49495	17.00000	0.0		0.0	0.0	-	-	*
		-22.42424	19.49495	17.00000	0.0		0.0	0.0	-	-	*
		-20.90909	19.49495	17.00000	0.0		0.0	0.0	-	-	*
		-19.39394	19.49495	17.00000	0.0		0.0	0.24164	-	-	*
		-17.87879	19.49495	17.00000	0.0		0.0	0.52276	-	-	*
		-16.36364	19.49495	17.00000	0.031727		-0.014532	0.81109	-	-	*
		-14.84848	19.49495	17.00000	0.23874		-0.12051	1.1208	-	-	*
		-13.33333	19.49495	17.00000	0.61243		-0.34426	1.4210	-	-	*
		-11.81818	19.49495	17.00000	0.96295		-0.61069	1.7413	-	-	*
		-10.30303	19.49495	17.00000	1.2594		-0.91617	2.0916	-	-	*
		-8.78788	19.49495	17.00000	1.4823		-1.2642	2.4641	-	-	*
		-7.27273	19.49495	17.00000	1.6139		-1.6632	2.8431	-	-	*
		-5.75758	19.49495	17.00000	1.6767		-2.1827	3.2551	-	-	*
		-4.24242	19.49495	17.00000	1.5612		-2.7580	3.6492	-	-	*
		-2.72727	19.49495	17.00000	1.2116		-3.3297	3.9932	-	-	*
		-1.21212	19.49495	17.00000	0.61300		-3.7904	4.2513	-	-	*
		0.30303	19.49495	17.00000	0.0		-5.0548	5.0969	-	-	*
		1.81818	19.49495	17.00000	0.0		-5.0548	5.0969	-	-	*
		3.33333	19.49495	17.00000	0.0		-5.0548	5.0969	-	-	*
		4.84848	19.49495	17.00000	0.0		-5.0548	5.0969	-	-	*
		6.36364	19.49495	17.00000	0.0		-5.0548	5.0969	-	-	*
		7.87879	19.49495	17.00000	0.0		-5.0548	5.0969	-	-	*
		9.39394	19.49495	17.00000	0.0		-5.0548	5.0969	-	-	*
		10.90909	19.49495	17.00000	0.0		-5.0548	5.0969	-	-	*
		12.42424	19.49495	17.00000	0.0		-5.0548	5.0969	-	-	*
		13.93939	19.49495	17.00000	0.0		-5.0548	5.0969	-	-	*
		15.45455	19.49495	17.00000	0.0		-5.0548	5.0969	-	-	*
		16.96970	19.49495	17.00000	0.0		-5.0548	5.0969	-	-	*
		18.48485	19.49495	17.00000	0.0		-5.0548	5.0969	-	-	*
		20.00000	19.49495	17.00000	0.0		-5.0548	5.0969	-	-	*
		21.51515	19.49495	17.00000	0.0		-5.0548	5.0969	-	-	*
		23.03030	19.49495	17.00000	0.0		-5.0548	5.0969	-	-	*
		24.54545	19.49495	17.00000	0.0		-5.0548	5.0969	-	-	*
		26.06061	19.49495	17.00000	0.0		-5.0548	5.0969	-	-	*
		27.57576	19.49495	17.00000	0.0		-5.0548	5.0969	-	-	*
		29.09091	19.49495	17.00000	0.0		-5.0548	5.0969	-	-	*
		30.60606	19.49495	17.00000	0.0		-5.0548	5.0969	-	-	*
		32.12121	19.49495	17.00000	0.0		-5.0548	5.0969	-	-	*
		33.63636	19.49495	17.00000	0.0		-5.0548	5.0969	-	-	*
		35.15152	19.49495	17.00000	0.0		-5.0548	5.0969	-	-	*
		36.66667	19.49495	17.00000	0.0		-5.0548	5.0969	-	-	*
		38.18182	19.49495	17.00000	0.0		-5.0548	5.0969	-	-	*
		39.69697	19.49495	17.00000	0.0		-5.0548	5.0969	-	-	*
		41.21212	19.49495	17.00000	0.0		-5.0548	5.0969	-	-	*
		42.72727	19.49495	17.00000	0.0		-5.0548	5.0969	-	-	*
		44.24242	19.49495	17.00000	0.0		-5.0548	5.0969	-	-	*
		45.75758	19.49495	17.00000	0.0		-5.0548	5.0969	-	-	*
		47.27273	19.49495	17.00000	0.0		-5.0548	5.0969	-	-	*
		48.78788	19.49495	17.00000	-0.40808		-3.8820	4.3033	-	-	*
		50.30303	19.49495	17.00000	-1.0679		-3.4754	4.0757	-	-	*
		51.81818	19.49495	17.00000	-1.4887		-2.9223	3.7521	-	-	*
		53.33333	19.49495	17.00000	-1.6650		-2.3398	3.3685	-	-	*
		54.84848	19.49495	17.00000	-1.6460		-1.8013	2.9587	-	-	*
		56.36364	19.49495	17.00000	-1.5279		-1.3692	2.5696	-	-	*
		57.87879	19.49495	17.00000	-1.3303		-1.0093	2.1944	-	-	*
		59.39394	19.49495	17.00000	-1.0521		-0.69207	1.8364	-	-	*
		60.90909	19.49495	17.00000	-0.71519		-0.41524	1.5079	-	-	*
		62.42424	19.49495	17.00000	-0.33374		-0.17341	1.2042	-	-	*
		63.93939	19.49495	17.00000	-0.091519		-0.043034	0.90130	-	-	*
		65.45455	19.49495	17.00000	0.0		0.0	0.60087	-	-	*
		66.96970	19.49495	17.00000	0.0		0.0	0.32067	-	-	*
		68.48485	19.49495	17.00000	0.0		0.0	0.037417	-	-	*
		70.00000	19.49495	17.00000	0.0		0.0	0.0	-	-	*
		71.51515	19.49495	17.00000			Point lies within an excavation.				*
		73.03030	19.49495	17.00000			Point lies within an excavation.				*
		74.54545	19.49495	17.00000			Point lies within an excavation.				*
		76.06061	19.49495	17.00000			Point lies within an excavation.				*
		77.57576	19.49495	17.00000			Point lies within an excavation.				*
		79.09091	19.49495	17.00000			Point lies within an excavation.				*
		80.60606	19.49495	17.00000			Point lies within an excavation.				*
		82.12121	19.49495	17.00000	-10.091		0.0	5.3817	-	-	*
		83.63636	19.49495	17.00000	-8.9150		0.0	6.0856	-	-	*
		85.15152	19.49495	17.00000	-7.8242		0.0	6.1230	-	-	*
		86.66667	19.49495	17.00000	-6.8080		0.0	5.7002	-	-	*
		88.18182	19.49495	17.00000	-5.8556		0.0	4.9924	-	-	*
		89.69697	19.49495	17.00000	-4.9559		0.0	4.1442	-	-	*
		91.21212	19.49495	17.00000	-4.0980		0.0	3.2696	-	-	*
		92.72727	19.49495	17.00000	-3.2709		0.0	2.4515	-	-	*
		94.24242	19.49495	17.00000	-2.4638		0.0	1.7423	-	-	*
		95.75758	19.49495	17.00000	-1.7088		0.0	1.1636	-	-	*
		97.27273	19.49495	17.00000	-1.1785		0.0	0.70625	-	-	*
		98.78788	19.49495	17.00000	-0.64824		0.0	0.33030	-	-	*
		100.30303	19.49495	17.00000	-0.11794		0.0	0.025700	-	-	*
		101.81818	19.49495	17.00000	0.0		0.0	0.0	-	-	*
		103.33333	19.49495	17.00000	0.0		0.0	0.0	-	-	*
		104.84848	19.49495	17.00000	0.0		0.0	0.0	-	-	*
		106.36364	19.49495	17.00000	0.0		0.0	0.0	-	-	*
		107.87879	19.49495	17.00000	0.0		0.0	0.0	-	-	*
		109.39394	19.49495	17.00000	0.0		0.0	0.0	-	-	*
		110.90909	19.49495	17.00000	0.0		0.0	0.0	-	-	*
		112.42424	19.49495	17.00000	0.0		0.0	0.0	-	-	*
		113.93939	19.49495	17.00000	0.0		0.0	0.0	-	-	*

Type/No. Name	Dist.	Coordinates x	y	z	Displacements x	y	z	Horizontal displacement	Horizontal displacement	Angle of Line to x Axis	
		115.45455	19.49495	17.00000	0.0	0.0	0.0	-	-	-	*
		116.96970	19.49495	17.00000	0.0	0.0	0.0	-	-	-	*
		118.48485	19.49495	17.00000	0.0	0.0	0.0	-	-	-	*
		120.00000	19.49495	17.00000	0.0	0.0	0.0	-	-	-	*
		-30.00000	20.50505	17.00000	0.0	0.0	0.0	-	-	-	*
		-28.48485	20.50505	17.00000	0.0	0.0	0.0	-	-	-	*
		-26.96970	20.50505	17.00000	0.0	0.0	0.0	-	-	-	*
		-25.45455	20.50505	17.00000	0.0	0.0	0.0	-	-	-	*
		-23.93939	20.50505	17.00000	0.0	0.0	0.0	-	-	-	*
		-22.42424	20.50505	17.00000	0.0	0.0	0.0	-	-	-	*
		-20.90909	20.50505	17.00000	0.0	0.0	0.0	-	-	-	*
		-19.39394	20.50505	17.00000	0.0	0.0	0.16462	-	-	-	*
		-17.87879	20.50505	17.00000	0.0	0.0	0.44027	-	-	-	*
		-16.36364	20.50505	17.00000	0.0	0.0	0.71162	-	-	-	*
		-14.84848	20.50505	17.00000	0.15790	-0.090446	1.0138	-	-	-	*
		-13.33333	20.50505	17.00000	0.43403	-0.27686	1.3004	-	-	-	*
		-11.81818	20.50505	17.00000	0.75552	-0.54372	1.5936	-	-	-	*
		-10.30303	20.50505	17.00000	1.0197	-0.84176	1.9060	-	-	-	*
		-8.78788	20.50505	17.00000	1.2098	-1.1708	2.2339	-	-	-	*
		-7.27273	20.50505	17.00000	1.3496	-1.5782	2.5876	-	-	-	*
		-5.75758	20.50505	17.00000	1.3853	-2.0464	2.9494	-	-	-	*
		-4.24242	20.50505	17.00000	1.2678	-2.5417	3.2917	-	-	-	*
		-2.72727	20.50505	17.00000	0.96575	-3.0117	3.5856	-	-	-	*
		-1.21212	20.50505	17.00000	0.48127	-3.3769	3.7996	-	-	-	*
		0.30303	20.50505	17.00000	0.0	-4.4973	4.4821	-	-	-	*
		1.81818	20.50505	17.00000	0.0	-4.4973	4.4821	-	-	-	*
		3.33333	20.50505	17.00000	0.0	-4.4973	4.4821	-	-	-	*
		4.84848	20.50505	17.00000	0.0	-4.4973	4.4821	-	-	-	*
		6.36364	20.50505	17.00000	0.0	-4.4973	4.4821	-	-	-	*
		7.87879	20.50505	17.00000	0.0	-4.4973	4.4821	-	-	-	*
		9.39394	20.50505	17.00000	0.0	-4.4973	4.4821	-	-	-	*
		10.90909	20.50505	17.00000	0.0	-4.4973	4.4821	-	-	-	*
		12.42424	20.50505	17.00000	0.0	-4.4973	4.4821	-	-	-	*
		13.93939	20.50505	17.00000	0.0	-4.4973	4.4821	-	-	-	*
		15.45455	20.50505	17.00000	0.0	-4.4973	4.4821	-	-	-	*
		16.96970	20.50505	17.00000	0.0	-4.4973	4.4821	-	-	-	*
		18.48485	20.50505	17.00000	0.0	-4.4973	4.4821	-	-	-	*
		20.00000	20.50505	17.00000	0.0	-4.4973	4.4821	-	-	-	*
		21.51515	20.50505	17.00000	0.0	-4.4973	4.4821	-	-	-	*
		23.03030	20.50505	17.00000	0.0	-4.4973	4.4821	-	-	-	*
		24.54545	20.50505	17.00000	0.0	-4.4973	4.4821	-	-	-	*
		26.06061	20.50505	17.00000	0.0	-4.4973	4.4821	-	-	-	*
		27.57576	20.50505	17.00000	0.0	-4.4973	4.4821	-	-	-	*
		29.09091	20.50505	17.00000	0.0	-4.4973	4.4821	-	-	-	*
		30.60606	20.50505	17.00000	0.0	-4.4973	4.4821	-	-	-	*
		32.12121	20.50505	17.00000	0.0	-4.4973	4.4821	-	-	-	*
		33.63636	20.50505	17.00000	0.0	-4.4973	4.4821	-	-	-	*
		35.15152	20.50505	17.00000	0.0	-4.4973	4.4821	-	-	-	*
		36.66667	20.50505	17.00000	0.0	-4.4973	4.4821	-	-	-	*
		38.18182	20.50505	17.00000	0.0	-4.4973	4.4821	-	-	-	*
		39.69697	20.50505	17.00000	0.0	-4.4973	4.4821	-	-	-	*
		41.21212	20.50505	17.00000	0.0	-4.4973	4.4821	-	-	-	*
		42.72727	20.50505	17.00000	0.0	-4.4973	4.4821	-	-	-	*
		44.24242	20.50505	17.00000	0.0	-4.4973	4.4821	-	-	-	*
		45.75758	20.50505	17.00000	0.0	-4.4973	4.4821	-	-	-	*
		47.27273	20.50505	17.00000	0.0	-4.4973	4.4821	-	-	-	*
		48.78788	20.50505	17.00000	-0.31947	-3.4486	3.8412	-	-	-	*
		50.30303	20.50505	17.00000	-0.84710	-3.1283	3.6549	-	-	-	*
		51.81818	20.50505	17.00000	-1.2026	-2.6789	3.3803	-	-	-	*
		53.33333	20.50505	17.00000	-1.3696	-2.1840	3.0484	-	-	-	*
		54.84848	20.50505	17.00000	-1.3727	-1.7047	2.6894	-	-	-	*
		56.36364	20.50505	17.00000	-1.2516	-1.2727	2.3286	-	-	-	*
		57.87879	20.50505	17.00000	-1.0813	-0.93091	1.9968	-	-	-	*
		59.39394	20.50505	17.00000	-0.83589	-0.62395	1.6790	-	-	-	*
		60.90909	20.50505	17.00000	-0.52908	-0.34858	1.3810	-	-	-	*
		62.42424	20.50505	17.00000	-0.20856	-0.12298	1.0949	-	-	-	*
		63.93939	20.50505	17.00000	-0.019918	-0.010628	0.79453	-	-	-	*
		65.45455	20.50505	17.00000	0.0	0.0	0.51672	-	-	-	*
		66.96970	20.50505	17.00000	0.0	0.0	0.24219	-	-	-	*
		68.48485	20.50505	17.00000	0.0	0.0	0.0	-	-	-	*
		70.00000	20.50505	17.00000	0.0	0.0	0.0	-	-	-	*
		71.51515	20.50505	17.00000			Point lies within an excavation.				*
		73.03030	20.50505	17.00000			Point lies within an excavation.				*
		74.54545	20.50505	17.00000			Point lies within an excavation.				*
		76.06061	20.50505	17.00000			Point lies within an excavation.				*
		77.57576	20.50505	17.00000			Point lies within an excavation.				*
		79.09091	20.50505	17.00000			Point lies within an excavation.				*
		80.60606	20.50505	17.00000			Point lies within an excavation.				*
		82.12121	20.50505	17.00000	-10.091	0.0	5.3817	-	-	-	*
		83.63636	20.50505	17.00000	-8.9150	0.0	6.0856	-	-	-	*
		85.15152	20.50505	17.00000	-7.8242	0.0	6.1230	-	-	-	*
		86.66667	20.50505	17.00000	-6.8080	0.0	5.7002	-	-	-	*
		88.18182	20.50505	17.00000	-5.8556	0.0	4.9924	-	-	-	*
		89.69697	20.50505	17.00000	-4.9559	0.0	4.1442	-	-	-	*
		91.21212	20.50505	17.00000	-4.0980	0.0	3.2696	-	-	-	*
		92.72727	20.50505	17.00000	-3.2709	0.0	2.4515	-	-	-	*
		94.24242	20.50505	17.00000	-2.4638	0.0	1.7423	-	-	-	*
		95.75758	20.50505	17.00000	-1.7088	0.0	1.1636	-	-	-	*
		97.27273	20.50505	17.00000	-1.1785	0.0	0.70625	-	-	-	*
		98.78788	20.50505	17.00000	-0.64824	0.0	0.33030	-	-	-	*
		100.30303	20.50505	17.00000	-0.11794	0.0	0.025700	-	-	-	*
		101.81818	20.50505	17.00000	0.0	0.0	0.0	-	-	-	*
		103.33333	20.50505	17.00000	0.0	0.0	0.0	-	-	-	*
		104.84848	20.50505	17.00000	0.0	0.0	0.0	-	-	-	*
		106.36364	20.50505	17.00000	0.0	0.0	0.0	-	-	-	*
		107.87879	20.50505	17.00000	0.0	0.0	0.0	-	-	-	*
		109.39394	20.50505	17.00000	0.0	0.0	0.0	-	-	-	*
		110.90909	20.50505	17.00000	0.0	0.0	0.0	-	-	-	*
		112.42424	20.50505	17.00000	0.0	0.0	0.0	-	-	-	*
		113.93939	20.50505	17.00000	0.0	0.0	0.0	-	-	-	*
		115.45455	20.50505	17.00000	0.0	0.0	0.0	-	-	-	*
		116.96970	20.50505	17.00000	0.0	0.0	0.0	-	-	-	*
		118.48485	20.50505	17.00000	0.0	0.0	0.0	-	-	-	*
		120.00000	20.50505	17.00000	0.0	0.0	0.0	-	-	-	*
		-30.00000	21.51515	17.00000	0.0	0.0	0.0	-	-	-	*
		-28.48485	21.51515	17.00000	0.0	0.0	0.0	-	-	-	*
		-26.96970	21.51515	17.00000	0.0	0.0	0.0	-	-	-	*
		-25.45455	21.51515	17.00000	0.0	0.0	0.0	-	-	-	*
		-23.93939	21.51515	17.00000	0.0	0.0	0.0	-	-	-	*
		-22.42424	21.51515	17.00000	0.0	0.0	0.0	-	-	-	*
		-20.90909	21.51515	17.00000	0.0	0.0	0.0	-	-	-	*
		-19.39394	21.51515	17.00000	0.0	0.0	0.079523	-	-	-	*
		-17.87879	21.51515	17.00000	0.0	0.0	0.34937	-	-	-	*
		-16.36364	21.51515	17.00000	0.0	0.0	0.61420	-	-	-	*
		-14.84848	21.51515	17.00000	0.077925	-0.049936	0.89507	-	-	-	*
		-13.33333	21.51515	17.00000	0.25738	-0.18368	1.1736	-	-	-	*
		-11.81818	21.51515	17.00000	0.55493	-0.44679	1.4444	-	-	-	*
		-10.30303	21.51515	17.00000	0.79403	-0.73331	1.7234	-	-	-	*
		-8.78788	21.51515	17.00000	0.97938	-1.0604	2.0179	-	-	-	*
		-7.27273	21.51515	17.00000	1.1044	-1.4449	2.3298	-	-	-	*
		-5.75758	21.51515	17.00000	1.1268	-1.8622	2.6417	-	-	-	*
		-4.24242	21.51515	17.00000	1.0198	-2.2872	2.9334	-	-	-	*
		-2.72727	21.51515	17.00000	0.76696	-2.6758	3.1798	-	-	-	*
		-1.21212	21.51515	17.00000	0.37826	-2.9694	3.3543	-	-	-	*
		0.30303	21.51515	17.00000	0.0	-3.9569	3.8839	-	-	-	*
		1.81818	21.51515	17.00000	0.0	-3.9569	3.8839	-	-	-	*
		3.33333	21.51515	17.00000	0.0	-3.9569	3.8839	-	-	-	*
		4.84848	21.51515	17.00000	0.0	-3.9569	3.8839	-	-	-	*
		6.36364	21.51515	17.00000	0.0	-3.9569	3.8839	-	-	-	*
		7.87879	21.51515	17.00000	0.0	-3.9569	3.8839	-	-	-	*
		9.39394	21.51515	17.00000	0.0	-3.9569	3.8839	-	-	-	*
		10.90909	21.51515	17.00000	0.0	-3.9569	3.8839	-	-	-	*
		12.42424	21.51515	17.00000	0.0	-3.9569	3.8839	-	-	-	*
		13.93939	21.51515	17.00000	0.0	-3.9569	3.8839	-	-	-	*
		15.45455	21.51515	17.00000	0.0	-3.9569	3.8839	-	-	-	*
		16.96970	21.51515	17.00000	0.0	-3.9569	3.8839	-	-	-	*
		18.48485	21.51515	17.00000	0.0	-3.9569	3.8839	-	-	-	*
		20.00000	21.51515	17.00000	0.0	-3.9569	3.8839	-	-	-	*
		21.51515	21.51515	17.00000	0.0	-3.9569	3.8839	-	-	-	*
		23.03030	21.51515	17.00000	0.0	-3.9569	3.8839	-	-	-	*
		24.54545	21.51515	17.00000	0.0	-3.9569	3.8839	-	-	-	*

Oasys
GEA LIMITED
(GEOTECHNICAL &ENV ASSOC)
The Great Hall, Lincoln's Inn, Newman's Row, London, WC2A 3TL
Wall Movements Rev 3 Piling and Excavation
Damage Assessment
Job No. J15050A | Sheet No. | Rev.
Drg. Ref.
Made by MP | Date 08-Feb-2016 | Checked

Type/No. Name	Dist.	Coordinates x	y	z	Displacements x	y	z	Horizontal displacement	Horizontal displacement	Angle of Line to x Axis	
		26.06061	21.51515	17.00000	0.0	-3.9569	3.8839	-	-	-	*
		27.57576	21.51515	17.00000	0.0	-3.9569	3.8839	-	-	-	*
		29.09091	21.51515	17.00000	0.0	-3.9569	3.8839	-	-	-	*
		30.60606	21.51515	17.00000	0.0	-3.9569	3.8839	-	-	-	*
		32.12121	21.51515	17.00000	0.0	-3.9569	3.8839	-	-	-	*
		33.63636	21.51515	17.00000	0.0	-3.9569	3.8839	-	-	-	*
		35.15152	21.51515	17.00000	0.0	-3.9569	3.8839	-	-	-	*
		36.66667	21.51515	17.00000	0.0	-3.9569	3.8839	-	-	-	*
		38.18182	21.51515	17.00000	0.0	-3.9569	3.8839	-	-	-	*
		39.69697	21.51515	17.00000	0.0	-3.9569	3.8839	-	-	-	*
		41.21212	21.51515	17.00000	0.0	-3.9569	3.8839	-	-	-	*
		42.72727	21.51515	17.00000	0.0	-3.9569	3.8839	-	-	-	*
		44.24242	21.51515	17.00000	0.0	-3.9569	3.8839	-	-	-	*
		45.75758	21.51515	17.00000	0.0	-3.9569	3.8839	-	-	-	*
		47.27273	21.51515	17.00000	0.0	-3.9569	3.8839	-	-	-	*
		48.78788	21.51515	17.00000	-0.25059	-3.0264	3.3869	-	-	-	*
		50.30303	21.51515	17.00000	-0.67051	-2.7703	3.2370	-	-	-	*
		51.81818	21.51515	17.00000	-0.96386	-2.4020	3.0081	-	-	-	*
		53.33333	21.51515	17.00000	-1.1109	-1.9819	2.7264	-	-	-	*
		54.84848	21.51515	17.00000	-1.1222	-1.5592	2.4179	-	-	-	*
		56.36364	21.51515	17.00000	-1.0231	-1.1640	2.1043	-	-	-	*
		57.87879	21.51515	17.00000	-0.84873	-0.81749	1.8034	-	-	-	*
		59.39394	21.51515	17.00000	-0.62829	-0.52469	1.5214	-	-	-	*
		60.90909	21.51515	17.00000	-0.34594	-0.25499	1.2492	-	-	-	*
		62.42424	21.51515	17.00000	-0.11529	-0.082647	0.97544	-	-	-	*
		63.93939	21.51515	17.00000	0.0	0.0	0.68731	-	-	-	*
		65.45455	21.51515	17.00000	0.0	0.0	0.42408	-	-	-	*
		66.96970	21.51515	17.00000	0.0	0.0	0.15553	-	-	-	*
		68.48485	21.51515	17.00000	0.0	0.0	0.0	-	-	-	*
		70.00000	21.51515	17.00000	0.0	0.0	0.0	-	-	-	*
		71.51515	21.51515	17.00000			Point lies within an excavation.				*
		73.03030	21.51515	17.00000			Point lies within an excavation.				*
		74.54545	21.51515	17.00000			Point lies within an excavation.				*
		76.06061	21.51515	17.00000			Point lies within an excavation.				*
		77.57576	21.51515	17.00000			Point lies within an excavation.				*
		79.09091	21.51515	17.00000			Point lies within an excavation.				*
		80.60606	21.51515	17.00000			Point lies within an excavation.				*
		82.12121	21.51515	17.00000	-10.091	0.0	5.3817	-	-	-	*
		83.63636	21.51515	17.00000	-8.9150	0.0	6.0856	-	-	-	*
		85.15152	21.51515	17.00000	-7.8242	0.0	6.1230	-	-	-	*
		86.66667	21.51515	17.00000	-6.8080	0.0	5.7002	-	-	-	*
		88.18182	21.51515	17.00000	-5.8556	0.0	4.9924	-	-	-	*
		89.69697	21.51515	17.00000	-4.9559	0.0	4.1442	-	-	-	*
		91.21212	21.51515	17.00000	-4.0980	0.0	3.2696	-	-	-	*
		92.72727	21.51515	17.00000	-3.2709	0.0	2.4515	-	-	-	*
		94.24242	21.51515	17.00000	-2.4638	0.0	1.7423	-	-	-	*
		95.75758	21.51515	17.00000	-1.7088	0.0	1.1636	-	-	-	*
		97.27273	21.51515	17.00000	-1.1785	0.0	0.70625	-	-	-	*
		98.78788	21.51515	17.00000	-0.64824	0.0	0.33030	-	-	-	*
		100.30303	21.51515	17.00000	-0.11794	0.0	0.025700	-	-	-	*
		101.81818	21.51515	17.00000	0.0	0.0	0.0	-	-	-	*
		103.33333	21.51515	17.00000	0.0	0.0	0.0	-	-	-	*
		104.84848	21.51515	17.00000	0.0	0.0	0.0	-	-	-	*
		106.36364	21.51515	17.00000	0.0	0.0	0.0	-	-	-	*
		107.87879	21.51515	17.00000	0.0	0.0	0.0	-	-	-	*
		109.39394	21.51515	17.00000	0.0	0.0	0.0	-	-	-	*
		110.90909	21.51515	17.00000	0.0	0.0	0.0	-	-	-	*
		112.42424	21.51515	17.00000	0.0	0.0	0.0	-	-	-	*
		113.93939	21.51515	17.00000	0.0	0.0	0.0	-	-	-	*
		115.45455	21.51515	17.00000	0.0	0.0	0.0	-	-	-	*
		116.96970	21.51515	17.00000	0.0	0.0	0.0	-	-	-	*
		118.48485	21.51515	17.00000	0.0	0.0	0.0	-	-	-	*
		120.00000	21.51515	17.00000	0.0	0.0	0.0	-	-	-	*
		-30.00000	22.52525	17.00000	0.0	0.0	0.0	-	-	-	*
		-28.48485	22.52525	17.00000	0.0	0.0	0.0	-	-	-	*
		-26.96970	22.52525	17.00000	0.0	0.0	0.0	-	-	-	*
		-25.45455	22.52525	17.00000	0.0	0.0	0.0	-	-	-	*
		-23.93939	22.52525	17.00000	0.0	0.0	0.0	-	-	-	*
		-22.42424	22.52525	17.00000	0.0	0.0	0.0	-	-	-	*
		-20.90909	22.52525	17.00000	0.0	0.0	0.0	-	-	-	*
		-19.39394	22.52525	17.00000	0.0	0.0	0.0	-	-	-	*
		-17.87879	22.52525	17.00000	0.0	0.0	0.25063	-	-	-	*
		-16.36364	22.52525	17.00000	0.0	0.0	0.50873	-	-	-	*
		-14.84848	22.52525	17.00000	0.0	0.0	0.75990	-	-	-	*
		-13.33333	22.52525	17.00000	0.15006	-0.11845	1.0393	-	-	-	*
		-11.81818	22.52525	17.00000	0.36335	-0.32359	1.2941	-	-	-	*
		-10.30303	22.52525	17.00000	0.58730	-0.59997	1.5462	-	-	-	*
		-8.78788	22.52525	17.00000	0.76945	-0.92157	1.8090	-	-	-	*
		-7.27273	22.52525	17.00000	0.87967	-1.2731	2.0780	-	-	-	*
		-5.75758	22.52525	17.00000	0.89862	-1.6427	2.3430	-	-	-	*
		-4.24242	22.52525	17.00000	0.80907	-2.0073	2.5876	-	-	-	*
		-2.72727	22.52525	17.00000	0.61803	-2.3307	2.7907	-	-	-	*
		-1.21212	22.52525	17.00000	0.29588	-2.5692	2.9308	-	-	-	*
		0.30303	22.52525	17.00000	0.0	-3.4314	3.3247	-	-	-	*
		1.81818	22.52525	17.00000	0.0	-3.4314	3.3247	-	-	-	*
		3.33333	22.52525	17.00000	0.0	-3.4314	3.3247	-	-	-	*
		4.84848	22.52525	17.00000	0.0	-3.4314	3.3247	-	-	-	*
		6.36364	22.52525	17.00000	0.0	-3.4314	3.3247	-	-	-	*
		7.87879	22.52525	17.00000	0.0	-3.4314	3.3247	-	-	-	*
		9.39394	22.52525	17.00000	0.0	-3.4314	3.3247	-	-	-	*
		10.90909	22.52525	17.00000	0.0	-3.4314	3.3247	-	-	-	*
		12.42424	22.52525	17.00000	0.0	-3.4314	3.3247	-	-	-	*
		13.93939	22.52525	17.00000	0.0	-3.4314	3.3247	-	-	-	*
		15.45455	22.52525	17.00000	0.0	-3.4314	3.3247	-	-	-	*
		16.96970	22.52525	17.00000	0.0	-3.4314	3.3247	-	-	-	*
		18.48485	22.52525	17.00000	0.0	-3.4314	3.3247	-	-	-	*
		20.00000	22.52525	17.00000	0.0	-3.4314	3.3247	-	-	-	*
		21.51515	22.52525	17.00000	0.0	-3.4314	3.3247	-	-	-	*
		23.03030	22.52525	17.00000	0.0	-3.4314	3.3247	-	-	-	*
		24.54545	22.52525	17.00000	0.0	-3.4314	3.3247	-	-	-	*
		26.06061	22.52525	17.00000	0.0	-3.4314	3.3247	-	-	-	*
		27.57576	22.52525	17.00000	0.0	-3.4314	3.3247	-	-	-	*
		29.09091	22.52525	17.00000	0.0	-3.4314	3.3247	-	-	-	*
		30.60606	22.52525	17.00000	0.0	-3.4314	3.3247	-	-	-	*
		32.12121	22.52525	17.00000	0.0	-3.4314	3.3247	-	-	-	*
		33.63636	22.52525	17.00000	0.0	-3.4314	3.3247	-	-	-	*
		35.15152	22.52525	17.00000	0.0	-3.4314	3.3247	-	-	-	*
		36.66667	22.52525	17.00000	0.0	-3.4314	3.3247	-	-	-	*
		38.18182	22.52525	17.00000	0.0	-3.4314	3.3247	-	-	-	*
		39.69697	22.52525	17.00000	0.0	-3.4314	3.3247	-	-	-	*
		41.21212	22.52525	17.00000	0.0	-3.4314	3.3247	-	-	-	*
		42.72727	22.52525	17.00000	0.0	-3.4314	3.3247	-	-	-	*
		44.24242	22.52525	17.00000	0.0	-3.4314	3.3247	-	-	-	*
		45.75758	22.52525	17.00000	0.0	-3.4314	3.3247	-	-	-	*
		47.27273	22.52525	17.00000	0.0	-3.4314	3.3247	-	-	-	*
		48.78788	22.52525	17.00000	-0.19575	-2.6150	2.9560	-	-	-	*
		50.30303	22.52525	17.00000	-0.52689	-2.4080	2.8172	-	-	-	*
		51.81818	22.52525	17.00000	-0.88318	-2.1038	2.6496	-	-	-	*
		53.33333	22.52525	17.00000	-0.88505	-1.7466	2.4144	-	-	-	*
		54.84848	22.52525	17.00000	-0.89501	-1.3755	2.1532	-	-	-	*
		56.36364	22.52525	17.00000	-0.80837	-1.0173	1.8840	-	-	-	*
		57.87879	22.52525	17.00000	-0.64451	-0.68669	1.6190	-	-	-	*
		59.39394	22.52525	17.00000	-0.43137	-0.39848	1.3643	-	-	-	*
		60.90909	22.52525	17.00000	-0.18736	-0.15276	1.1118	-	-	-	*
		62.42424	22.52525	17.00000	-0.044469	-0.032449	0.84367	-	-	-	*
		63.93939	22.52525	17.00000	0.0	0.0	0.57982	-	-	-	*
		65.45455	22.52525	17.00000	0.0	0.0	0.32352	-	-	-	*
		66.96970	22.52525	17.00000	0.0	0.0	0.061197	-	-	-	*
		68.48485	22.52525	17.00000	0.0	0.0	0.0	-	-	-	*
		70.00000	22.52525	17.00000	0.0	0.0	0.0	-	-	-	*
		71.51515	22.52525	17.00000			Point lies within an excavation.				*
		73.03030	22.52525	17.00000			Point lies within an excavation.				*
		74.54545	22.52525	17.00000			Point lies within an excavation.				*
		76.06061	22.52525	17.00000			Point lies within an excavation.				*
		77.57576	22.52525	17.00000			Point lies within an excavation.				*
		79.09091	22.52525	17.00000			Point lies within an excavation.				*
		80.60606	22.52525	17.00000			Point lies within an excavation.				*
		82.12121	22.52525	17.00000	-10.091	0.0	5.3817	-	-	-	*
		83.63636	22.52525	17.00000	-8.9150	0.0	6.0856	-	-	-	*
		85.15152	22.52525	17.00000	-7.8242	0.0	6.1230	-	-	-	*
		86.66667	22.52525	17.00000	-6.8080	0.0	5.7002	-	-	-	*

Type/No.		Coordinates			Displacements					Angle of Line
Name	Dist.	x	y	z	x	y	z	Horizontal displacement	Horizontal displacement	to x Axis
		88.18182	22.52525	17.00000	-5.8556	0.0	4.9924	-	-	- *
		89.69697	22.52525	17.00000	-4.9559	0.0	4.1442	-	-	- *
		91.21212	22.52525	17.00000	-4.0980	0.0	3.2696	-	-	- *
		92.72727	22.52525	17.00000	-3.2709	0.0	2.4515	-	-	- *
		94.24242	22.52525	17.00000	-2.4638	0.0	1.7423	-	-	- *
		95.75758	22.52525	17.00000	-1.7088	0.0	1.1636	-	-	- *
		97.27273	22.52525	17.00000	-1.1785	0.0	0.70625	-	-	- *
		98.78788	22.52525	17.00000	-0.64824	0.0	0.33030	-	-	- *
		100.30303	22.52525	17.00000	-0.11794	0.0	0.025700	-	-	- *
		101.81818	22.52525	17.00000	0.0	0.0	0.0	-	-	- *
		103.33333	22.52525	17.00000	0.0	0.0	0.0	-	-	- *
		104.84848	22.52525	17.00000	0.0	0.0	0.0	-	-	- *
		106.36364	22.52525	17.00000	0.0	0.0	0.0	-	-	- *
		107.87879	22.52525	17.00000	0.0	0.0	0.0	-	-	- *
		109.39394	22.52525	17.00000	0.0	0.0	0.0	-	-	- *
		110.90909	22.52525	17.00000	0.0	0.0	0.0	-	-	- *
		112.42424	22.52525	17.00000	0.0	0.0	0.0	-	-	- *
		113.93939	22.52525	17.00000	0.0	0.0	0.0	-	-	- *
		115.45455	22.52525	17.00000	0.0	0.0	0.0	-	-	- *
		116.96970	22.52525	17.00000	0.0	0.0	0.0	-	-	- *
		118.48485	22.52525	17.00000	0.0	0.0	0.0	-	-	- *
		120.00000	22.52525	17.00000	0.0	0.0	0.0	-	-	- *
		-30.00000	23.53535	17.00000	0.0	0.0	0.0	-	-	- *
		-28.48485	23.53535	17.00000	0.0	0.0	0.0	-	-	- *
		-26.96970	23.53535	17.00000	0.0	0.0	0.0	-	-	- *
		-25.45455	23.53535	17.00000	0.0	0.0	0.0	-	-	- *
		-23.93939	23.53535	17.00000	0.0	0.0	0.0	-	-	- *
		-22.42424	23.53535	17.00000	0.0	0.0	0.0	-	-	- *
		-20.90909	23.53535	17.00000	0.0	0.0	0.0	-	-	- *
		-19.39394	23.53535	17.00000	0.0	0.0	0.0	-	-	- *
		-17.87879	23.53535	17.00000	0.0	0.0	0.14458	-	-	- *
		-16.36364	23.53535	17.00000	0.0	0.0	0.39584	-	-	- *
		-14.84848	23.53535	17.00000	0.0	0.0	0.63946	-	-	- *
		-13.33333	23.53535	17.00000	0.0666596	-0.057616	0.89493	-	-	- *
		-11.81818	23.53535	17.00000	0.18186	-0.17751	1.1411	-	-	- *
		-10.30303	23.53535	17.00000	0.40301	-0.45121	1.3750	-	-	- *
		-8.78788	23.53535	17.00000	0.57230	-0.75122	1.6070	-	-	- *
		-7.27273	23.53535	17.00000	0.67494	-1.0705	1.8380	-	-	- *
		-5.75758	23.53535	17.00000	0.69733	-1.3971	2.0612	-	-	- *
		-4.24242	23.53535	17.00000	0.62900	-1.7103	2.2637	-	-	- *
		-2.72727	23.53535	17.00000	0.46839	-1.9811	2.4290	-	-	- *
		-1.21212	23.53535	17.00000	0.22871	-2.1766	2.5400	-	-	- *
		0.30303	23.53535	17.00000	0.0	-2.9188	2.8202	-	-	- *
		1.81818	23.53535	17.00000	0.0	-2.9188	2.8202	-	-	- *
		3.33333	23.53535	17.00000	0.0	-2.9188	2.8202	-	-	- *
		4.84848	23.53535	17.00000	0.0	-2.9188	2.8202	-	-	- *
		6.36364	23.53535	17.00000	0.0	-2.9188	2.8202	-	-	- *
		7.87879	23.53535	17.00000	0.0	-2.9188	2.8202	-	-	- *
		9.39394	23.53535	17.00000	0.0	-2.9188	2.8202	-	-	- *
		10.90909	23.53535	17.00000	0.0	-2.9188	2.8202	-	-	- *
		12.42424	23.53535	17.00000	0.0	-2.9188	2.8202	-	-	- *
		13.93939	23.53535	17.00000	0.0	-2.9188	2.8202	-	-	- *
		15.45455	23.53535	17.00000	0.0	-2.9188	2.8202	-	-	- *
		16.96970	23.53535	17.00000	0.0	-2.9188	2.8202	-	-	- *
		18.48485	23.53535	17.00000	0.0	-2.9188	2.8202	-	-	- *
		20.00000	23.53535	17.00000	0.0	-2.9188	2.8202	-	-	- *
		21.51515	23.53535	17.00000	0.0	-2.9188	2.8202	-	-	- *
		23.03030	23.53535	17.00000	0.0	-2.9188	2.8202	-	-	- *
		24.54545	23.53535	17.00000	0.0	-2.9188	2.8202	-	-	- *
		26.06061	23.53535	17.00000	0.0	-2.9188	2.8202	-	-	- *
		27.57576	23.53535	17.00000	0.0	-2.9188	2.8202	-	-	- *
		29.09091	23.53535	17.00000	0.0	-2.9188	2.8202	-	-	- *
		30.60606	23.53535	17.00000	0.0	-2.9188	2.8202	-	-	- *
		32.12121	23.53535	17.00000	0.0	-2.9188	2.8202	-	-	- *
		33.63636	23.53535	17.00000	0.0	-2.9188	2.8202	-	-	- *
		35.15152	23.53535	17.00000	0.0	-2.9188	2.8202	-	-	- *
		36.66667	23.53535	17.00000	0.0	-2.9188	2.8202	-	-	- *
		38.18182	23.53535	17.00000	0.0	-2.9188	2.8202	-	-	- *
		39.69697	23.53535	17.00000	0.0	-2.9188	2.8202	-	-	- *
		41.21212	23.53535	17.00000	0.0	-2.9188	2.8202	-	-	- *
		42.72727	23.53535	17.00000	0.0	-2.9188	2.8202	-	-	- *
		44.24242	23.53535	17.00000	0.0	-2.9188	2.8202	-	-	- *
		45.75758	23.53535	17.00000	0.0	-2.9188	2.8202	-	-	- *
		47.27273	23.53535	17.00000	0.0	-2.9188	2.8202	-	-	- *
		48.78788	23.53535	17.00000	-0.15120	-2.2137	2.5594	-	-	- *
		50.30303	23.53535	17.00000	-0.40825	-2.0449	2.4662	-	-	- *
		51.81818	23.53535	17.00000	-0.59308	-1.7918	2.3145	-	-	- *
		53.33333	23.53535	17.00000	-0.68763	-1.4873	2.1206	-	-	- *
		54.84848	23.53535	17.00000	-0.68985	-1.1620	1.9017	-	-	- *
		56.36364	23.53535	17.00000	-0.60835	-0.83905	1.6720	-	-	- *
		57.87879	23.53535	17.00000	-0.45634	-0.53287	1.4400	-	-	- *
		59.39394	23.53535	17.00000	-0.24720	-0.25026	1.2069	-	-	- *
		60.90909	23.53535	17.00000	-0.10172	-0.090900	0.96645	-	-	- *
		62.42424	23.53535	17.00000	0.0	0.0	0.70610	-	-	- *
		63.93939	23.53535	17.00000	0.0	0.0	0.46488	-	-	- *
		65.45455	23.53535	17.00000	0.0	0.0	0.21562	-	-	- *
		66.96970	23.53535	17.00000	0.0	0.0	0.0	-	-	- *
		68.48485	23.53535	17.00000	0.0	0.0	0.0	-	-	- *
		70.00000	23.53535	17.00000	0.0	0.0	0.0	-	-	- *
		71.51515	23.53535	17.00000				Point lies within an excavation.		*
		73.03030	23.53535	17.00000				Point lies within an excavation.		*
		74.54545	23.53535	17.00000				Point lies within an excavation.		*
		76.06061	23.53535	17.00000				Point lies within an excavation.		*
		77.57576	23.53535	17.00000				Point lies within an excavation.		*
		79.09091	23.53535	17.00000				Point lies within an excavation.		*
		80.60606	23.53535	17.00000				Point lies within an excavation.		*
		82.12121	23.53535	17.00000	-10.091	0.0	5.3817	-	-	- *
		83.63636	23.53535	17.00000	-8.9150	0.0	6.0856	-	-	- *
		85.15152	23.53535	17.00000	-7.8242	0.0	6.1230	-	-	- *
		86.66667	23.53535	17.00000	-6.8080	0.0	5.7002	-	-	- *
		88.18182	23.53535	17.00000	-5.8556	0.0	4.9924	-	-	- *
		89.69697	23.53535	17.00000	-4.9559	0.0	4.1442	-	-	- *
		91.21212	23.53535	17.00000	-4.0301	0.0	3.4121	-	-	- *
		92.72727	23.53535	17.00000	-3.2709	0.0	2.4515	-	-	- *
		94.24242	23.53535	17.00000	-2.4638	0.0	1.7423	-	-	- *
		95.75758	23.53535	17.00000	-1.7088	0.0	1.1636	-	-	- *
		97.27273	23.53535	17.00000	-1.1785	0.0	0.70625	-	-	- *
		98.78788	23.53535	17.00000	-0.64824	0.0	0.33030	-	-	- *
		100.30303	23.53535	17.00000	-0.11794	0.0	0.025700	-	-	- *
		101.81818	23.53535	17.00000	0.0	0.0	0.0	-	-	- *
		103.33333	23.53535	17.00000	0.0	0.0	0.0	-	-	- *
		104.84848	23.53535	17.00000	0.0	0.0	0.0	-	-	- *
		106.36364	23.53535	17.00000	0.0	0.0	0.0	-	-	- *
		107.87879	23.53535	17.00000	0.0	0.0	0.0	-	-	- *
		109.39394	23.53535	17.00000	0.0	0.0	0.0	-	-	- *
		110.90909	23.53535	17.00000	0.0	0.0	0.0	-	-	- *
		112.42424	23.53535	17.00000	0.0	0.0	0.0	-	-	- *
		113.93939	23.53535	17.00000	0.0	0.0	0.0	-	-	- *
		115.45455	23.53535	17.00000	0.0	0.0	0.0	-	-	- *
		116.96970	23.53535	17.00000	0.0	0.0	0.0	-	-	- *
		118.48485	23.53535	17.00000	0.0	0.0	0.0	-	-	- *
		120.00000	23.53535	17.00000	0.0	0.0	0.0	-	-	- *
		-30.00000	24.54545	17.00000	0.0	0.0	0.0	-	-	- *
		-28.48485	24.54545	17.00000	0.0	0.0	0.0	-	-	- *
		-26.96970	24.54545	17.00000	0.0	0.0	0.0	-	-	- *
		-25.45455	24.54545	17.00000	0.0	0.0	0.0	-	-	- *
		-23.93939	24.54545	17.00000	0.0	0.0	0.0	-	-	- *
		-22.42424	24.54545	17.00000	0.0	0.0	0.0	-	-	- *
		-20.90909	24.54545	17.00000	0.0	0.0	0.0	-	-	- *
		-19.39394	24.54545	17.00000	0.0	0.0	0.0	-	-	- *
		-17.87879	24.54545	17.00000	0.0	0.0	0.031753	-	-	- *
		-16.36364	24.54545	17.00000	0.0	0.0	0.27613	-	-	- *
		-14.84848	24.54545	17.00000	0.0	0.0	0.51225	-	-	- *
		-13.33333	24.54545	17.00000	0.0	0.0	0.73849	-	-	- *
		-11.81818	24.54545	17.00000	0.10050	-0.10668	0.98318	-	-	- *
		-10.30303	24.54545	17.00000	0.22650	-0.27579	1.2044	-	-	- *
		-8.78788	24.54545	17.00000	0.38816	-0.55413	1.4129	-	-	- *
		-7.27273	24.54545	17.00000	0.48883	-0.84324	1.6126	-	-	- *
		-5.75758	24.54545	17.00000	0.51934	-1.1316	1.8004	-	-	- *
		-4.24242	24.54545	17.00000	0.47392	-1.4014	1.9673	-	-	- *
		-2.72727	24.54545	17.00000	0.35424	-1.6295	2.1008	-	-	- *

Oasys

GEA LIMITED
(GEOTECHNICAL &ENV ASSOC) *J15050A*

The Great Hall, Lincoln's Inn, Newman's Row, London, WC2A 3TL
Wall Movements Rev 3 Piling and Excavation
Damage Assessment

Job No. | Sheet No. | Rev.
Drg. Ref.
Made by MP | Date 08-Feb-2016 | Checked

Type/No.		Coordinates			Displacements					Angle of Line
Name	Dist.	x	y	z	x	y	z	Horizontal displacement	Horizontal displacement	to x Axis
		-1.21212	24.54545	17.00000	0.17302	-1.7907	2.1882	-	-	- *
		0.30303	24.54545	17.00000	0.0	-2.4168	2.3787	-	-	- *
		1.81818	24.54545	17.00000	0.0	-2.4168	2.3787	-	-	- *
		3.33333	24.54545	17.00000	0.0	-2.4168	2.3787	-	-	- *
		4.84848	24.54545	17.00000	0.0	-2.4168	2.3787	-	-	- *
		6.36364	24.54545	17.00000	0.0	-2.4168	2.3787	-	-	- *
		7.87879	24.54545	17.00000	0.0	-2.4168	2.3787	-	-	- *
		9.39394	24.54545	17.00000	0.0	-2.4168	2.3787	-	-	- *
		10.90909	24.54545	17.00000	0.0	-2.4168	2.3787	-	-	- *
		12.42424	24.54545	17.00000	0.0	-2.4168	2.3787	-	-	- *
		13.93939	24.54545	17.00000	0.0	-2.4168	2.3787	-	-	- *
		15.45455	24.54545	17.00000	0.0	-2.4168	2.3787	-	-	- *
		16.96970	24.54545	17.00000	0.0	-2.4168	2.3787	-	-	- *
		18.48485	24.54545	17.00000	0.0	-2.4168	2.3787	-	-	- *
		20.00000	24.54545	17.00000	0.0	-2.4168	2.3787	-	-	- *
		21.51515	24.54545	17.00000	0.0	-2.4168	2.3787	-	-	- *
		23.03030	24.54545	17.00000	0.0	-2.4168	2.3787	-	-	- *
		24.54545	24.54545	17.00000	0.0	-2.4168	2.3787	-	-	- *
		26.06061	24.54545	17.00000	0.0	-2.4168	2.3787	-	-	- *
		27.57576	24.54545	17.00000	0.0	-2.4168	2.3787	-	-	- *
		29.09091	24.54545	17.00000	0.0	-2.4168	2.3787	-	-	- *
		30.60606	24.54545	17.00000	0.0	-2.4168	2.3787	-	-	- *
		32.12121	24.54545	17.00000	0.0	-2.4168	2.3787	-	-	- *
		33.63636	24.54545	17.00000	0.0	-2.4168	2.3787	-	-	- *
		35.15152	24.54545	17.00000	0.0	-2.4168	2.3787	-	-	- *
		36.66667	24.54545	17.00000	0.0	-2.4168	2.3787	-	-	- *
		38.18182	24.54545	17.00000	0.0	-2.4168	2.3787	-	-	- *
		39.69697	24.54545	17.00000	0.0	-2.4168	2.3787	-	-	- *
		41.21212	24.54545	17.00000	0.0	-2.4168	2.3787	-	-	- *
		42.72727	24.54545	17.00000	0.0	-2.4168	2.3787	-	-	- *
		44.24242	24.54545	17.00000	0.0	-2.4168	2.3787	-	-	- *
		45.75758	24.54545	17.00000	0.0	-2.4168	2.3787	-	-	- *
		47.27273	24.54545	17.00000	0.0	-2.4168	2.3787	-	-	- *
		48.78788	24.54545	17.00000	-0.11435	-1.8208	2.2029	-	-	- *
		50.30303	24.54545	17.00000	-0.30885	-1.6824	2.1305	-	-	- *
		51.81818	24.54545	17.00000	-0.44757	-1.4706	2.0086	-	-	- *
		53.33333	24.54545	17.00000	-0.51438	-1.2100	1.8498	-	-	- *
		54.84848	24.54545	17.00000	-0.51879	-0.92470	1.6667	-	-	- *
		56.36364	24.54545	17.00000	-0.42292	-0.63437	1.4697	-	-	- *
		57.87879	24.54545	17.00000	-0.27734	-0.35221	1.2638	-	-	- *
		59.39394	24.54545	17.00000	-0.12896	-0.14200	1.0470	-	-	- *
		60.90909	24.54545	17.00000	-0.021548	-0.020941	0.80912	-	-	- *
		62.42424	24.54545	17.00000	0.0	0.0	0.57667	-	-	- *
		63.93939	24.54545	17.00000	0.0	0.0	0.34314	-	-	- *
		65.45455	24.54545	17.00000	0.0	0.0	0.10093	-	-	- *
		66.96970	24.54545	17.00000	0.0	0.0	0.0	-	-	- *
		68.48485	24.54545	17.00000	0.0	0.0	0.0	-	-	- *
		70.00000	24.54545	17.00000	0.0	0.0	0.0	-	-	- *
		71.51515	24.54545	17.00000				Point lies within an excavation.		*
		73.03030	24.54545	17.00000				Point lies within an excavation.		*
		74.54545	24.54545	17.00000				Point lies within an excavation.		*
		76.06061	24.54545	17.00000				Point lies within an excavation.		*
		77.57576	24.54545	17.00000				Point lies within an excavation.		*
		79.09091	24.54545	17.00000				Point lies within an excavation.		*
		80.60606	24.54545	17.00000				Point lies within an excavation.		*
		82.12121	24.54545	17.00000	-10.091	0.0	5.3817	-	-	- *
		83.63636	24.54545	17.00000	-8.9150	0.0	6.0856	-	-	- *
		85.15152	24.54545	17.00000	-7.8242	0.0	6.1230	-	-	- *
		86.66667	24.54545	17.00000	-6.8080	0.0	5.7002	-	-	- *
		88.18182	24.54545	17.00000	-5.8556	0.0	4.9924	-	-	- *
		89.69697	24.54545	17.00000	-4.9559	0.0	4.1442	-	-	- *
		91.21212	24.54545	17.00000	-4.0980	0.0	3.2696	-	-	- *
		92.72727	24.54545	17.00000	-3.2709	0.0	2.4515	-	-	- *
		94.24242	24.54545	17.00000	-2.4638	0.0	1.7423	-	-	- *
		95.75758	24.54545	17.00000	-1.7088	0.0	1.1636	-	-	- *
		97.27273	24.54545	17.00000	-1.1785	0.0	0.70625	-	-	- *
		98.78788	24.54545	17.00000	-0.64824	0.0	0.33030	-	-	- *
		100.30303	24.54545	17.00000	-0.11794	0.0	0.025700	-	-	- *
		101.81818	24.54545	17.00000	0.0	0.0	0.0	-	-	- *
		103.33333	24.54545	17.00000	0.0	0.0	0.0	-	-	- *
		104.84848	24.54545	17.00000	0.0	0.0	0.0	-	-	- *
		106.36364	24.54545	17.00000	0.0	0.0	0.0	-	-	- *
		107.87879	24.54545	17.00000	0.0	0.0	0.0	-	-	- *
		109.39394	24.54545	17.00000	0.0	0.0	0.0	-	-	- *
		110.90909	24.54545	17.00000	0.0	0.0	0.0	-	-	- *
		112.42424	24.54545	17.00000	0.0	0.0	0.0	-	-	- *
		113.93939	24.54545	17.00000	0.0	0.0	0.0	-	-	- *
		115.45455	24.54545	17.00000	0.0	0.0	0.0	-	-	- *
		116.96970	24.54545	17.00000	0.0	0.0	0.0	-	-	- *
		118.48485	24.54545	17.00000	0.0	0.0	0.0	-	-	- *
		120.00000	24.54545	17.00000	0.0	0.0	0.0	-	-	- *
		-30.00000	25.55556	17.00000	0.0	0.0	0.0	-	-	- *
		-28.48485	25.55556	17.00000	0.0	0.0	0.0	-	-	- *
		-26.96970	25.55556	17.00000	0.0	0.0	0.0	-	-	- *
		-25.45455	25.55556	17.00000	0.0	0.0	0.0	-	-	- *
		-23.93939	25.55556	17.00000	0.0	0.0	0.0	-	-	- *
		-22.42424	25.55556	17.00000	0.0	0.0	0.0	-	-	- *
		-20.90909	25.55556	17.00000	0.0	0.0	0.0	-	-	- *
		-19.39394	25.55556	17.00000	0.0	0.0	0.0	-	-	- *
		-17.87879	25.55556	17.00000	0.0	0.0	0.0	-	-	- *
		-16.36364	25.55556	17.00000	0.0	0.0	0.15019	-	-	- *
		-14.84848	25.55556	17.00000	0.0	0.0	0.37890	-	-	- *
		-13.33333	25.55556	17.00000	0.0	0.0	0.59721	-	-	- *
		-11.81818	25.55556	17.00000	0.0221927	-0.0251150	0.81332	-	-	- *
		-10.30303	25.55556	17.00000	0.11275	-0.14835	1.0308	-	-	- *
		-8.78788	25.55556	17.00000	0.21656	-0.33405	1.2244	-	-	- *
		-7.27273	25.55556	17.00000	0.31952	-0.59554	1.4011	-	-	- *
		-5.75758	25.55556	17.00000	0.36124	-0.85050	1.5613	-	-	- *
		-4.24242	25.55556	17.00000	0.33919	-1.0838	1.6997	-	-	- *
		-2.72727	25.55556	17.00000	0.25690	-1.2769	1.8078	-	-	- *
		-1.21212	25.55556	17.00000	0.12612	-1.4104	1.8767	-	-	- *
		0.30303	25.55556	17.00000	0.0	-1.9233	2.0018	-	-	- *
		1.81818	25.55556	17.00000	0.0	-1.9233	2.0018	-	-	- *
		3.33333	25.55556	17.00000	0.0	-1.9233	2.0018	-	-	- *
		4.84848	25.55556	17.00000	0.0	-1.9233	2.0018	-	-	- *
		6.36364	25.55556	17.00000	0.0	-1.9233	2.0018	-	-	- *
		7.87879	25.55556	17.00000	0.0	-1.9233	2.0018	-	-	- *
		9.39394	25.55556	17.00000	0.0	-1.9233	2.0018	-	-	- *
		10.90909	25.55556	17.00000	0.0	-1.9233	2.0018	-	-	- *
		12.42424	25.55556	17.00000	0.0	-1.9233	2.0018	-	-	- *
		13.93939	25.55556	17.00000	0.0	-1.9233	2.0018	-	-	- *
		15.45455	25.55556	17.00000	0.0	-1.9233	2.0018	-	-	- *
		16.96970	25.55556	17.00000	0.0	-1.9233	2.0018	-	-	- *
		18.48485	25.55556	17.00000	0.0	-1.9233	2.0018	-	-	- *
		20.00000	25.55556	17.00000	0.0	-1.9233	2.0018	-	-	- *
		21.51515	25.55556	17.00000	0.0	-1.9233	2.0018	-	-	- *
		23.03030	25.55556	17.00000	0.0	-1.9233	2.0018	-	-	- *
		24.54545	25.55556	17.00000	0.0	-1.9233	2.0018	-	-	- *
		26.06061	25.55556	17.00000	0.0	-1.9233	2.0018	-	-	- *
		27.57576	25.55556	17.00000	0.0	-1.9233	2.0018	-	-	- *
		29.09091	25.55556	17.00000	0.0	-1.9233	2.0018	-	-	- *
		30.60606	25.55556	17.00000	0.0	-1.9233	2.0018	-	-	- *
		32.12121	25.55556	17.00000	0.0	-1.9233	2.0018	-	-	- *
		33.63636	25.55556	17.00000	0.0	-1.9233	2.0018	-	-	- *
		35.15152	25.55556	17.00000	0.0	-1.9233	2.0018	-	-	- *
		36.66667	25.55556	17.00000	0.0	-1.9233	2.0018	-	-	- *
		38.18182	25.55556	17.00000	0.0	-1.9233	2.0018	-	-	- *
		39.69697	25.55556	17.00000	0.0	-1.9233	2.0018	-	-	- *
		41.21212	25.55556	17.00000	0.0	-1.9233	2.0018	-	-	- *
		42.72727	25.55556	17.00000	0.0	-1.9233	2.0018	-	-	- *
		44.24242	25.55556	17.00000	0.0	-1.9233	2.0018	-	-	- *
		45.75758	25.55556	17.00000	0.0	-1.9233	2.0018	-	-	- *
		47.27273	25.55556	17.00000	0.0	-1.9233	2.0018	-	-	- *
		48.78788	25.55556	17.00000	-0.083395	-1.4348	1.8879	-	-	- *
		50.30303	25.55556	17.00000	-0.22444	-1.3211	1.8315	-	-	- *
		51.81818	25.55556	17.00000	-0.32188	-1.1428	1.7334	-	-	- *
		53.33333	25.55556	17.00000	-0.36148	-0.91876	1.6026	-	-	- *
		54.84848	25.55556	17.00000	-0.33755	-0.66816	1.4478	-	-	- *
		56.36364	25.55556	17.00000	-0.25126	-0.40723	1.2754	-	-	- *
		57.87879	25.55556	17.00000	-0.13453	-0.18460	1.0870	-	-	- *
		59.39394	25.55556	17.00000	-0.049257	-0.058602	0.87739	-	-	- *

Type/No. Name	Dist.	Coordinates x	y	z	Displacements x	y	z	Horizontal displacement	Horizontal displacement	Angle of Line to x Axis	
		60.90909	25.55556	17.00000	0.0	0.0	0.65622	-	-	-	*
		62.42424	25.55556	17.00000	0.0	0.0	0.44115	-	-	-	*
		63.93939	25.55556	17.00000	0.0	0.0	0.21518	-	-	-	*
		65.45455	25.55556	17.00000	0.0	0.0	0.0	-	-	-	*
		66.96970	25.55556	17.00000	0.0	0.0	0.0	-	-	-	*
		68.48485	25.55556	17.00000	0.0	0.0	0.0	-	-	-	*
		70.00000	25.55556	17.00000	0.0	0.0	0.0	-	-	-	*
		71.51515	25.55556	17.00000		Point lies within an excavation.					*
		73.03030	25.55556	17.00000		Point lies within an excavation.					*
		74.54545	25.55556	17.00000		Point lies within an excavation.					*
		76.06061	25.55556	17.00000		Point lies within an excavation.					*
		77.57576	25.55556	17.00000		Point lies within an excavation.					*
		79.09091	25.55556	17.00000		Point lies within an excavation.					*
		80.60606	25.55556	17.00000		Point lies within an excavation.					*
		82.12121	25.55556	17.00000	-10.091	0.0	5.3817	-	-	-	*
		83.63636	25.55556	17.00000	-8.9150	0.0	6.0856	-	-	-	*
		85.15152	25.55556	17.00000	-7.8242	0.0	6.1230	-	-	-	*
		86.66667	25.55556	17.00000	-6.8080	0.0	5.7002	-	-	-	*
		88.18182	25.55556	17.00000	-5.8556	0.0	4.9924	-	-	-	*
		89.69697	25.55556	17.00000	-4.9559	0.0	4.1442	-	-	-	*
		91.21212	25.55556	17.00000	-4.0980	0.0	3.2696	-	-	-	*
		92.72727	25.55556	17.00000	-3.2709	0.0	2.4515	-	-	-	*
		94.24242	25.55556	17.00000	-2.4638	0.0	1.7423	-	-	-	*
		95.75758	25.55556	17.00000	-1.7088	0.0	1.1636	-	-	-	*
		97.27273	25.55556	17.00000	-1.1785	0.0	0.70625	-	-	-	*
		98.78788	25.55556	17.00000	-0.64824	0.0	0.33030	-	-	-	*
		100.30303	25.55556	17.00000	-0.11794	0.0	0.025700	-	-	-	*
		101.81818	25.55556	17.00000	0.0	0.0	0.0	-	-	-	*
		103.33333	25.55556	17.00000	0.0	0.0	0.0	-	-	-	*
		104.84848	25.55556	17.00000	0.0	0.0	0.0	-	-	-	*
		106.36364	25.55556	17.00000	0.0	0.0	0.0	-	-	-	*
		107.87879	25.55556	17.00000	0.0	0.0	0.0	-	-	-	*
		109.39394	25.55556	17.00000	0.0	0.0	0.0	-	-	-	*
		110.90909	25.55556	17.00000	0.0	0.0	0.0	-	-	-	*
		112.42424	25.55556	17.00000	0.0	0.0	0.0	-	-	-	*
		113.93939	25.55556	17.00000	0.0	0.0	0.0	-	-	-	*
		115.45455	25.55556	17.00000	0.0	0.0	0.0	-	-	-	*
		116.96970	25.55556	17.00000	0.0	0.0	0.0	-	-	-	*
		118.48485	25.55556	17.00000	0.0	0.0	0.0	-	-	-	*
		120.00000	25.55556	17.00000	0.0	0.0	0.0	-	-	-	*
		-30.00000	26.56566	17.00000	0.0	0.0	0.0	-	-	-	*
		-28.48485	26.56566	17.00000	0.0	0.0	0.0	-	-	-	*
		-26.96970	26.56566	17.00000	0.0	0.0	0.0	-	-	-	*
		-25.45455	26.56566	17.00000	0.0	0.0	0.0	-	-	-	*
		-23.93939	26.56566	17.00000	0.0	0.0	0.0	-	-	-	*
		-22.42424	26.56566	17.00000	0.0	0.0	0.0	-	-	-	*
		-20.90909	26.56566	17.00000	0.0	0.0	0.0	-	-	-	*
		-19.39394	26.56566	17.00000	0.0	0.0	0.0	-	-	-	*
		-17.87879	26.56566	17.00000	0.0	0.0	0.0	-	-	-	*
		-16.36364	26.56566	17.00000	0.0	0.0	0.018553	-	-	-	*
		-14.84848	26.56566	17.00000	0.0	0.0	0.24002	-	-	-	*
		-13.33333	26.56566	17.00000	0.0	0.0	0.45064	-	-	-	*
		-11.81818	26.56566	17.00000	0.0	0.0	0.64859	-	-	-	*
		-10.30303	26.56566	17.00000	0.033358	-0.047159	0.84722	-	-	-	*
		-8.78788	26.56566	17.00000	0.10178	-0.16870	1.0358	-	-	-	*
		-7.27273	26.56566	17.00000	0.16502	-0.33051	1.1989	-	-	-	*
		-5.75758	26.56566	17.00000	0.21997	-0.55649	1.3401	-	-	-	*
		-4.24242	26.56566	17.00000	0.22108	-0.75904	1.4577	-	-	-	*
		-2.72727	26.56566	17.00000	0.17287	-0.92326	1.5471	-	-	-	*
		-1.21212	26.56566	17.00000	0.086062	-1.0342	1.6024	-	-	-	*
		0.30303	26.56566	17.00000	0.0	-1.4361	1.6839	-	-	-	*
		1.81818	26.56566	17.00000	0.0	-1.4361	1.6839	-	-	-	*
		3.33333	26.56566	17.00000	0.0	-1.4361	1.6839	-	-	-	*
		4.84848	26.56566	17.00000	0.0	-1.4361	1.6839	-	-	-	*
		6.36364	26.56566	17.00000	0.0	-1.4361	1.6839	-	-	-	*
		7.87879	26.56566	17.00000	0.0	-1.4361	1.6839	-	-	-	*
		9.39394	26.56566	17.00000	0.0	-1.4361	1.6839	-	-	-	*
		10.90909	26.56566	17.00000	0.0	-1.4361	1.6839	-	-	-	*
		12.42424	26.56566	17.00000	0.0	-1.4361	1.6839	-	-	-	*
		13.93939	26.56566	17.00000	0.0	-1.4361	1.6839	-	-	-	*
		15.45455	26.56566	17.00000	0.0	-1.4361	1.6839	-	-	-	*
		16.96970	26.56566	17.00000	0.0	-1.4361	1.6839	-	-	-	*
		18.48485	26.56566	17.00000	0.0	-1.4361	1.6839	-	-	-	*
		20.00000	26.56566	17.00000	0.0	-1.4361	1.6839	-	-	-	*
		21.51515	26.56566	17.00000	0.0	-1.4361	1.6839	-	-	-	*
		23.03030	26.56566	17.00000	0.0	-1.4361	1.6839	-	-	-	*
		24.54545	26.56566	17.00000	0.0	-1.4361	1.6839	-	-	-	*
		26.06061	26.56566	17.00000	0.0	-1.4361	1.6839	-	-	-	*
		27.57576	26.56566	17.00000	0.0	-1.4361	1.6839	-	-	-	*
		29.09091	26.56566	17.00000	0.0	-1.4361	1.6839	-	-	-	*
		30.60606	26.56566	17.00000	0.0	-1.4361	1.6839	-	-	-	*
		32.12121	26.56566	17.00000	0.0	-1.4361	1.6839	-	-	-	*
		33.63636	26.56566	17.00000	0.0	-1.4361	1.6839	-	-	-	*
		35.15152	26.56566	17.00000	0.0	-1.4361	1.6839	-	-	-	*
		36.66667	26.56566	17.00000	0.0	-1.4361	1.6839	-	-	-	*
		38.18182	26.56566	17.00000	0.0	-1.4361	1.6839	-	-	-	*
		39.69697	26.56566	17.00000	0.0	-1.4361	1.6839	-	-	-	*
		41.21212	26.56566	17.00000	0.0	-1.4361	1.6839	-	-	-	*
		42.72727	26.56566	17.00000	0.0	-1.4361	1.6839	-	-	-	*
		44.24242	26.56566	17.00000	0.0	-1.4361	1.6839	-	-	-	*
		45.75758	26.56566	17.00000	0.0	-1.4361	1.6839	-	-	-	*
		47.27273	26.56566	17.00000	0.0	-1.4361	1.6839	-	-	-	*
		48.78788	26.56566	17.00000	-0.057008	-1.0539	1.6111	-	-	-	*
		50.30303	26.56566	17.00000	-0.15183	-0.96029	1.5662	-	-	-	*
		51.81818	26.56566	17.00000	-0.21221	-0.80955	1.4858	-	-	-	*
		53.33333	26.56566	17.00000	-0.22562	-0.61618	1.3755	-	-	-	*
		54.84848	26.56566	17.00000	-0.18589	-0.39535	1.2406	-	-	-	*
		56.36364	26.56566	17.00000	-0.11685	-0.20351	1.0838	-	-	-	*
		57.87879	26.56566	17.00000	-0.054689	-0.080636	0.90306	-	-	-	*
		59.39394	26.56566	17.00000	0.0	0.0	0.70146	-	-	-	*
		60.90909	26.56566	17.00000	0.0	0.0	0.50743	-	-	-	*
		62.42424	26.56566	17.00000	0.0	0.0	0.30016	-	-	-	*
		63.93939	26.56566	17.00000	0.0	0.0	0.081562	-	-	-	*
		65.45455	26.56566	17.00000	0.0	0.0	0.0	-	-	-	*
		66.96970	26.56566	17.00000	0.0	0.0	0.0	-	-	-	*
		68.48485	26.56566	17.00000	0.0	0.0	0.0	-	-	-	*
		70.00000	26.56566	17.00000	0.0	0.0	0.0	-	-	-	*
		71.51515	26.56566	17.00000		Point lies within an excavation.					*
		73.03030	26.56566	17.00000		Point lies within an excavation.					*
		74.54545	26.56566	17.00000		Point lies within an excavation.					*
		76.06061	26.56566	17.00000		Point lies within an excavation.					*
		77.57576	26.56566	17.00000		Point lies within an excavation.					*
		79.09091	26.56566	17.00000		Point lies within an excavation.					*
		80.60606	26.56566	17.00000		Point lies within an excavation.					*
		82.12121	26.56566	17.00000	-10.091	0.0	5.3817	-	-	-	*
		83.63636	26.56566	17.00000	-8.9150	0.0	6.0856	-	-	-	*
		85.15152	26.56566	17.00000	-7.8242	0.0	6.1230	-	-	-	*
		86.66667	26.56566	17.00000	-6.8080	0.0	5.7002	-	-	-	*
		88.18182	26.56566	17.00000	-5.8556	0.0	4.9924	-	-	-	*
		89.69697	26.56566	17.00000	-4.9559	0.0	4.1442	-	-	-	*
		91.21212	26.56566	17.00000	-4.0980	0.0	3.2696	-	-	-	*
		92.72727	26.56566	17.00000	-3.2709	0.0	2.4515	-	-	-	*
		94.24242	26.56566	17.00000	-2.4638	0.0	1.7423	-	-	-	*
		95.75758	26.56566	17.00000	-1.7088	0.0	1.1636	-	-	-	*
		97.27273	26.56566	17.00000	-1.1785	0.0	0.70625	-	-	-	*
		98.78788	26.56566	17.00000	-0.64824	0.0	0.33030	-	-	-	*
		100.30303	26.56566	17.00000	-0.11794	0.0	0.025700	-	-	-	*
		101.81818	26.56566	17.00000	0.0	0.0	0.0	-	-	-	*
		103.33333	26.56566	17.00000	0.0	0.0	0.0	-	-	-	*
		104.84848	26.56566	17.00000	0.0	0.0	0.0	-	-	-	*
		106.36364	26.56566	17.00000	0.0	0.0	0.0	-	-	-	*
		107.87879	26.56566	17.00000	0.0	0.0	0.0	-	-	-	*
		109.39394	26.56566	17.00000	0.0	0.0	0.0	-	-	-	*
		110.90909	26.56566	17.00000	0.0	0.0	0.0	-	-	-	*
		112.42424	26.56566	17.00000	0.0	0.0	0.0	-	-	-	*
		113.93939	26.56566	17.00000	0.0	0.0	0.0	-	-	-	*
		115.45455	26.56566	17.00000	0.0	0.0	0.0	-	-	-	*
		116.96970	26.56566	17.00000	0.0	0.0	0.0	-	-	-	*
		118.48485	26.56566	17.00000	0.0	0.0	0.0	-	-	-	*
		120.00000	26.56566	17.00000	0.0	0.0	0.0	-	-	-	*
		-30.00000	27.57576	17.00000	0.0	0.0	0.0	-	-	-	*

Oasys

GEA LIMITED
(GEOTECHNICAL &ENV ASSOC)

Job No. J15050A | Sheet No. | Rev.

The Great Hall, Lincoln's Inn, Newman's Row, London, WC2A 3TL
Wall Movements Rev 3 Piling and Excavation
Damage Assessment

Drg. Ref.

Made by MP | Date 08-Feb-2016 | Checked

Type/No. Name	Dist.	Coordinates x	y	z	Displacements x	y	z	Horizontal displacement	Horizontal displacement	Angle of Line to x Axis	
		-28.48485	27.57576	17.00000	0.0	0.0	0.0	-	-	-	*
		-26.96970	27.57576	17.00000	0.0	0.0	0.0	-	-	-	*
		-25.45455	27.57576	17.00000	0.0	0.0	0.0	-	-	-	*
		-23.93939	27.57576	17.00000	0.0	0.0	0.0	-	-	-	*
		-22.42424	27.57576	17.00000	0.0	0.0	0.0	-	-	-	*
		-20.90909	27.57576	17.00000	0.0	0.0	0.0	-	-	-	*
		-19.39394	27.57576	17.00000	0.0	0.0	0.0	-	-	-	*
		-17.87879	27.57576	17.00000	0.0	0.0	0.0	-	-	-	*
		-16.36364	27.57576	17.00000	0.0	0.0	0.0	-	-	-	*
		-14.84848	27.57576	17.00000	0.0	0.0	0.096133	-	-	-	*
		-13.33333	27.57576	17.00000	0.0	0.0	0.29936	-	-	-	*
		-11.81818	27.57576	17.00000	0.0	0.0	0.48964	-	-	-	*
		-10.30303	27.57576	17.00000	0.0	0.0	0.66499	-	-	-	*
		-8.78788	27.57576	17.00000	0.026046	-0.046165	0.83786	-	-	-	*
		-7.27273	27.57576	17.00000	0.073767	-0.15798	0.99748	-	-	-	*
		-5.75758	27.57576	17.00000	0.098390	-0.26617	1.1288	-	-	-	*
		-4.24242	27.57576	17.00000	0.11652	-0.42779	1.2238	-	-	-	*
		-2.72727	27.57576	17.00000	0.099471	-0.56809	1.3109	-	-	-	*
		-1.21212	27.57576	17.00000	0.051388	-0.66033	1.3572	-	-	-	*
		0.30303	27.57576	17.00000	0.0	-0.95292	1.4124	-	-	-	*
		1.81818	27.57576	17.00000	0.0	-0.95292	1.4124	-	-	-	*
		3.33333	27.57576	17.00000	0.0	-0.95292	1.4124	-	-	-	*
		4.84848	27.57576	17.00000	0.0	-0.95292	1.4124	-	-	-	*
		6.36364	27.57576	17.00000	0.0	-0.95292	1.4124	-	-	-	*
		7.87879	27.57576	17.00000	0.0	-0.95292	1.4124	-	-	-	*
		9.39394	27.57576	17.00000	0.0	-0.95292	1.4124	-	-	-	*
		10.90909	27.57576	17.00000	0.0	-0.95292	1.4124	-	-	-	*
		12.42424	27.57576	17.00000	0.0	-0.95292	1.4124	-	-	-	*
		13.93939	27.57576	17.00000	0.0	-0.95292	1.4124	-	-	-	*
		15.45455	27.57576	17.00000	0.0	-0.95292	1.4124	-	-	-	*
		16.96970	27.57576	17.00000	0.0	-0.95292	1.4124	-	-	-	*
		18.48485	27.57576	17.00000	0.0	-0.95292	1.4124	-	-	-	*
		20.00000	27.57576	17.00000	0.0	-0.95292	1.4124	-	-	-	*
		21.51515	27.57576	17.00000	0.0	-0.95292	1.4124	-	-	-	*
		23.03030	27.57576	17.00000	0.0	-0.95292	1.4124	-	-	-	*
		24.54545	27.57576	17.00000	0.0	-0.95292	1.4124	-	-	-	*
		26.06061	27.57576	17.00000	0.0	-0.95292	1.4124	-	-	-	*
		27.57576	27.57576	17.00000	0.0	-0.95292	1.4124	-	-	-	*
		29.09091	27.57576	17.00000	0.0	-0.95292	1.4124	-	-	-	*
		30.60606	27.57576	17.00000	0.0	-0.95292	1.4124	-	-	-	*
		32.12121	27.57576	17.00000	0.0	-0.95292	1.4124	-	-	-	*
		33.63636	27.57576	17.00000	0.0	-0.95292	1.4124	-	-	-	*
		35.15152	27.57576	17.00000	0.0	-0.95292	1.4124	-	-	-	*
		36.66667	27.57576	17.00000	0.0	-0.95292	1.4124	-	-	-	*
		38.18182	27.57576	17.00000	0.0	-0.95292	1.4124	-	-	-	*
		39.69697	27.57576	17.00000	0.0	-0.95292	1.4124	-	-	-	*
		41.21212	27.57576	17.00000	0.0	-0.95292	1.4124	-	-	-	*
		42.72727	27.57576	17.00000	0.0	-0.95292	1.4124	-	-	-	*
		44.24242	27.57576	17.00000	0.0	-0.95292	1.4124	-	-	-	*
		45.75758	27.57576	17.00000	0.0	-0.95292	1.4124	-	-	-	*
		47.27273	27.57576	17.00000	0.0	-0.95292	1.4124	-	-	-	*
		48.78788	27.57576	17.00000	-0.034204	-0.67619	1.3643	-	-	-	*
		50.30303	27.57576	17.00000	-0.088602	-0.59923	1.3271	-	-	-	*
		51.81818	27.57576	17.00000	-0.11552	-0.47126	1.2583	-	-	-	*
		53.33333	27.57576	17.00000	-0.10394	-0.30356	1.1609	-	-	-	*
		54.84848	27.57576	17.00000	-0.080548	-0.18888	1.0370	-	-	-	*
		56.36364	27.57576	17.00000	-0.041637	-0.077542	0.88569	-	-	-	*
		57.87879	27.57576	17.00000	0.0	0.0	0.71113	-	-	-	*
		59.39394	27.57576	17.00000	0.0	0.0	0.54033	-	-	-	*
		60.90909	27.57576	17.00000	0.0	0.0	0.35402	-	-	-	*
		62.42424	27.57576	17.00000	0.0	0.0	0.15424	-	-	-	*
		63.93939	27.57576	17.00000	0.0	0.0	0.0	-	-	-	*
		65.45455	27.57576	17.00000	0.0	0.0	0.0	-	-	-	*
		66.96970	27.57576	17.00000	0.0	0.0	0.0	-	-	-	*
		68.48485	27.57576	17.00000	0.0	0.0	0.0	-	-	-	*
		70.00000	27.57576	17.00000	0.0	0.0	0.0	-	-	-	*
		71.51515	27.57576	17.00000		Point lies within an excavation.					*
		73.03030	27.57576	17.00000		Point lies within an excavation.					*
		74.54545	27.57576	17.00000		Point lies within an excavation.					*
		76.06061	27.57576	17.00000		Point lies within an excavation.					*
		77.57576	27.57576	17.00000		Point lies within an excavation.					*
		79.09091	27.57576	17.00000		Point lies within an excavation.					*
		80.60606	27.57576	17.00000		Point lies within an excavation.					*
		82.12121	27.57576	17.00000	-10.091	0.0	5.3817	-	-	-	*
		83.63636	27.57576	17.00000	-8.9150	0.0	6.0856	-	-	-	*
		85.15152	27.57576	17.00000	-7.8242	0.0	6.1230	-	-	-	*
		86.66667	27.57576	17.00000	-6.8080	0.0	5.7002	-	-	-	*
		88.18182	27.57576	17.00000	-5.8556	0.0	4.9924	-	-	-	*
		89.69697	27.57576	17.00000	-4.9559	0.0	4.1442	-	-	-	*
		91.21212	27.57576	17.00000	-4.0980	0.0	3.2696	-	-	-	*
		92.72727	27.57576	17.00000	-3.2709	0.0	2.4515	-	-	-	*
		94.24242	27.57576	17.00000	-2.4638	0.0	1.7423	-	-	-	*
		95.75758	27.57576	17.00000	-1.7088	0.0	1.1636	-	-	-	*
		97.27273	27.57576	17.00000	-1.1785	0.0	0.70625	-	-	-	*
		98.78788	27.57576	17.00000	-0.64824	0.0	0.33030	-	-	-	*
		100.30303	27.57576	17.00000	-0.11794	0.0	0.025700	-	-	-	*
		101.81818	27.57576	17.00000	0.0	0.0	0.0	-	-	-	*
		103.33333	27.57576	17.00000	0.0	0.0	0.0	-	-	-	*
		104.84848	27.57576	17.00000	0.0	0.0	0.0	-	-	-	*
		106.36364	27.57576	17.00000	0.0	0.0	0.0	-	-	-	*
		107.87879	27.57576	17.00000	0.0	0.0	0.0	-	-	-	*
		109.39394	27.57576	17.00000	0.0	0.0	0.0	-	-	-	*
		110.90909	27.57576	17.00000	0.0	0.0	0.0	-	-	-	*
		112.42424	27.57576	17.00000	0.0	0.0	0.0	-	-	-	*
		113.93939	27.57576	17.00000	0.0	0.0	0.0	-	-	-	*
		115.45455	27.57576	17.00000	0.0	0.0	0.0	-	-	-	*
		116.96970	27.57576	17.00000	0.0	0.0	0.0	-	-	-	*
		118.48485	27.57576	17.00000	0.0	0.0	0.0	-	-	-	*
		120.00000	27.57576	17.00000	0.0	0.0	0.0	-	-	-	*
		-30.00000	28.58586	17.00000	0.0	0.0	0.0	-	-	-	*
		-28.48485	28.58586	17.00000	0.0	0.0	0.0	-	-	-	*
		-26.96970	28.58586	17.00000	0.0	0.0	0.0	-	-	-	*
		-25.45455	28.58586	17.00000	0.0	0.0	0.0	-	-	-	*
		-23.93939	28.58586	17.00000	0.0	0.0	0.0	-	-	-	*
		-22.42424	28.58586	17.00000	0.0	0.0	0.0	-	-	-	*
		-20.90909	28.58586	17.00000	0.0	0.0	0.0	-	-	-	*
		-19.39394	28.58586	17.00000	0.0	0.0	0.0	-	-	-	*
		-17.87879	28.58586	17.00000	0.0	0.0	0.0	-	-	-	*
		-16.36364	28.58586	17.00000	0.0	0.0	0.0	-	-	-	*
		-14.84848	28.58586	17.00000	0.0	0.0	0.0	-	-	-	*
		-13.33333	28.58586	17.00000	0.0	0.0	0.14386	-	-	-	*
		-11.81818	28.58586	17.00000	0.0	0.0	0.32687	-	-	-	*
		-10.30303	28.58586	17.00000	0.0	0.0	0.49491	-	-	-	*
		-8.78788	28.58586	17.00000	0.0	0.0	0.64598	-	-	-	*
		-7.27273	28.58586	17.00000	0.006272332	-0.014306	0.78417	-	-	-	*
		-5.75758	28.58586	17.00000	0.037822	-0.10895	0.91537	-	-	-	*
		-4.24242	28.58586	17.00000	0.049450	-0.19332	1.0158	-	-	-	*
		-2.72727	28.58586	17.00000	0.043089	-0.26144	1.0870	-	-	-	*
		-1.21212	28.58586	17.00000	0.022458	-0.30730	1.1285	-	-	-	*
		0.30303	28.58586	17.00000	0.0	0.0	-0.48424	1.1678	-	-	*
		1.81818	28.58586	17.00000	0.0	0.0	-0.48424	1.1678	-	-	*
		3.33333	28.58586	17.00000	0.0	0.0	-0.48424	1.1678	-	-	*
		4.84848	28.58586	17.00000	0.0	0.0	-0.48424	1.1678	-	-	*
		6.36364	28.58586	17.00000	0.0	0.0	-0.48424	1.1678	-	-	*
		7.87879	28.58586	17.00000	0.0	0.0	-0.48424	1.1678	-	-	*
		9.39394	28.58586	17.00000	0.0	0.0	-0.48424	1.1678	-	-	*
		10.90909	28.58586	17.00000	0.0	0.0	-0.48424	1.1678	-	-	*
		12.42424	28.58586	17.00000	0.0	0.0	-0.48424	1.1678	-	-	*
		13.93939	28.58586	17.00000	0.0	0.0	-0.48424	1.1678	-	-	*
		15.45455	28.58586	17.00000	0.0	0.0	-0.48424	1.1678	-	-	*
		16.96970	28.58586	17.00000	0.0	0.0	-0.48424	1.1678	-	-	*
		18.48485	28.58586	17.00000	0.0	0.0	-0.48424	1.1678	-	-	*
		20.00000	28.58586	17.00000	0.0	0.0	-0.48424	1.1678	-	-	*
		21.51515	28.58586	17.00000	0.0	0.0	-0.48424	1.1678	-	-	*
		23.03030	28.58586	17.00000	0.0	0.0	-0.48424	1.1678	-	-	*
		24.54545	28.58586	17.00000	0.0	0.0	-0.48424	1.1678	-	-	*
		26.06061	28.58586	17.00000	0.0	0.0	-0.48424	1.1678	-	-	*
		27.57576	28.58586	17.00000	0.0	0.0	-0.48424	1.1678	-	-	*
		29.09091	28.58586	17.00000	0.0	0.0	-0.48424	1.1678	-	-	*
		30.60606	28.58586	17.00000	0.0	0.0	-0.48424	1.1678	-	-	*
		32.12121	28.58586	17.00000	0.0	0.0	-0.48424	1.1678	-	-	*

Type/No.		Coordinates			Displacements					Angle of Line	
Name	Dist.	x	y	z	x	y	z	Horizontal displacement	Horizontal displacement	to x Axis	
		33.63636	28.58586	17.00000	0.0	-0.48424	1.1678	-	-	-	*
		35.15152	28.58586	17.00000	0.0	-0.48424	1.1678	-	-	-	*
		36.66667	28.58586	17.00000	0.0	-0.48424	1.1678	-	-	-	*
		38.18182	28.58586	17.00000	0.0	-0.48424	1.1678	-	-	-	*
		39.69697	28.58586	17.00000	0.0	-0.48424	1.1678	-	-	-	*
		41.21212	28.58586	17.00000	0.0	-0.48424	1.1678	-	-	-	*
		42.72727	28.58586	17.00000	0.0	-0.48424	1.1678	-	-	-	*
		44.24242	28.58586	17.00000	0.0	-0.48424	1.1678	-	-	-	*
		45.75758	28.58586	17.00000	0.0	-0.48424	1.1678	-	-	-	*
		47.27273	28.58586	17.00000	0.0	-0.48424	1.1678	-	-	-	*
		48.78788	28.58586	17.00000	-0.014983	-0.31541	1.1347	-	-	-	*
		50.30303	28.58586	17.00000	-0.028430	-0.27677	1.1016	-	-	-	*
		51.81818	28.58586	17.00000	-0.049333	-0.21430	1.0387	-	-	-	*
		53.33333	28.58586	17.00000	-0.043045	-0.13386	0.94648	-	-	-	*
		54.84848	28.58586	17.00000	-0.017144	-0.041520	0.82422	-	-	-	*
		56.36364	28.58586	17.00000	0.0	0.0	0.68494	-	-	-	*
		57.87879	28.58586	17.00000	0.0	0.0	0.53901	-	-	-	*
		59.39394	28.58586	17.00000	0.0	0.0	0.37551	-	-	-	*
		60.90909	28.58586	17.00000	0.0	0.0	0.19650	-	-	-	*
		62.42424	28.58586	17.00000	0.0	0.0	0.0038677	-	-	-	*
		63.93939	28.58586	17.00000	0.0	0.0	0.0	-	-	-	*
		65.45455	28.58586	17.00000	0.0	0.0	0.0	-	-	-	*
		66.96970	28.58586	17.00000	0.0	0.0	0.0	-	-	-	*
		68.48485	28.58586	17.00000	0.0	0.0	0.0	-	-	-	*
		70.00000	28.58586	17.00000	0.0	0.0	0.0	-	-	-	*
		71.51515	28.58586	17.00000		Point lies within an excavation.					*
		73.03030	28.58586	17.00000		Point lies within an excavation.					*
		74.54545	28.58586	17.00000		Point lies within an excavation.					*
		76.06061	28.58586	17.00000		Point lies within an excavation.					*
		77.57576	28.58586	17.00000		Point lies within an excavation.					*
		79.09091	28.58586	17.00000		Point lies within an excavation.					*
		80.60606	28.58586	17.00000		Point lies within an excavation.					*
		82.12121	28.58586	17.00000	-10.091	0.0	5.3817	-	-	-	*
		83.63636	28.58586	17.00000	-8.9150	0.0	6.0856	-	-	-	*
		85.15152	28.58586	17.00000	-7.8242	0.0	6.1230	-	-	-	*
		86.66667	28.58586	17.00000	-6.8080	0.0	5.7002	-	-	-	*
		88.18182	28.58586	17.00000	-5.8556	0.0	4.9924	-	-	-	*
		89.69697	28.58586	17.00000	-4.9559	0.0	4.1442	-	-	-	*
		91.21212	28.58586	17.00000	-4.0980	0.0	3.2696	-	-	-	*
		92.72727	28.58586	17.00000	-3.2709	0.0	2.4515	-	-	-	*
		94.24242	28.58586	17.00000	-2.4638	0.0	1.7423	-	-	-	*
		95.75758	28.58586	17.00000	-1.7088	0.0	1.1636	-	-	-	*
		97.27273	28.58586	17.00000	-1.1785	0.0	0.70625	-	-	-	*
		98.78788	28.58586	17.00000	-0.64824	0.0	0.33030	-	-	-	*
		100.30303	28.58586	17.00000	-0.11794	0.0	0.025700	-	-	-	*
		101.81818	28.58586	17.00000	0.0	0.0	0.0	-	-	-	*
		103.33333	28.58586	17.00000	0.0	0.0	0.0	-	-	-	*
		104.84848	28.58586	17.00000	0.0	0.0	0.0	-	-	-	*
		106.36364	28.58586	17.00000	0.0	0.0	0.0	-	-	-	*
		107.87879	28.58586	17.00000	0.0	0.0	0.0	-	-	-	*
		109.39394	28.58586	17.00000	0.0	0.0	0.0	-	-	-	*
		110.90909	28.58586	17.00000	0.0	0.0	0.0	-	-	-	*
		112.42424	28.58586	17.00000	0.0	0.0	0.0	-	-	-	*
		113.93939	28.58586	17.00000	0.0	0.0	0.0	-	-	-	*
		115.45455	28.58586	17.00000	0.0	0.0	0.0	-	-	-	*
		116.96970	28.58586	17.00000	0.0	0.0	0.0	-	-	-	*
		118.48485	28.58586	17.00000	0.0	0.0	0.0	-	-	-	*
		120.00000	28.58586	17.00000	0.0	0.0	0.0	-	-	-	*
		-30.00000	29.59596	17.00000	0.0	0.0	0.0	-	-	-	*
		-28.48485	29.59596	17.00000	0.0	0.0	0.0	-	-	-	*
		-26.96970	29.59596	17.00000	0.0	0.0	0.0	-	-	-	*
		-25.45455	29.59596	17.00000	0.0	0.0	0.0	-	-	-	*
		-23.93939	29.59596	17.00000	0.0	0.0	0.0	-	-	-	*
		-22.42424	29.59596	17.00000	0.0	0.0	0.0	-	-	-	*
		-20.90909	29.59596	17.00000	0.0	0.0	0.0	-	-	-	*
		-19.39394	29.59596	17.00000	0.0	0.0	0.0	-	-	-	*
		-17.87879	29.59596	17.00000	0.0	0.0	0.0	-	-	-	*
		-16.36364	29.59596	17.00000	0.0	0.0	0.0	-	-	-	*
		-14.84848	29.59596	17.00000	0.0	0.0	0.0	-	-	-	*
		-13.33333	29.59596	17.00000	0.0	0.0	0.16072	-	-	-	*
		-10.30303	29.59596	17.00000	0.0	0.0	0.32191	-	-	-	*
		-8.78788	29.59596	17.00000	0.0	0.0	0.46633	-	-	-	*
		-7.27273	29.59596	17.00000	0.0	0.0	0.59206	-	-	-	*
		-5.75758	29.59596	17.00000	0.0	0.0	0.69720	-	-	-	*
		-4.24242	29.59596	17.00000	0.0043439	-0.018017	0.78707	-	-	-	*
		-2.72727	29.59596	17.00000	0.011525	-0.074360	0.85850	-	-	-	*
		-1.21212	29.59596	17.00000	0.0075952	-0.11026	0.89899	-	-	-	*
		0.30303	29.59596	17.00000	0.0	-0.18121	0.92351	-	-	-	*
		1.81818	29.59596	17.00000	0.0	-0.18121	0.92351	-	-	-	*
		3.33333	29.59596	17.00000	0.0	-0.18121	0.92351	-	-	-	*
		4.84848	29.59596	17.00000	0.0	-0.18121	0.92351	-	-	-	*
		6.36364	29.59596	17.00000	0.0	-0.18121	0.92351	-	-	-	*
		7.87879	29.59596	17.00000	0.0	-0.18121	0.92351	-	-	-	*
		9.39394	29.59596	17.00000	0.0	-0.18121	0.92351	-	-	-	*
		10.90909	29.59596	17.00000	0.0	-0.18121	0.92351	-	-	-	*
		12.42424	29.59596	17.00000	0.0	-0.18121	0.92351	-	-	-	*
		13.93939	29.59596	17.00000	0.0	-0.18121	0.92351	-	-	-	*
		15.45455	29.59596	17.00000	0.0	-0.18121	0.92351	-	-	-	*
		16.96970	29.59596	17.00000	0.0	-0.18121	0.92351	-	-	-	*
		18.48485	29.59596	17.00000	0.0	-0.18121	0.92351	-	-	-	*
		20.00000	29.59596	17.00000	0.0	-0.18121	0.92351	-	-	-	*
		21.51515	29.59596	17.00000	0.0	-0.18121	0.92351	-	-	-	*
		23.03030	29.59596	17.00000	0.0	-0.18121	0.92351	-	-	-	*
		24.54545	29.59596	17.00000	0.0	-0.18121	0.92351	-	-	-	*
		26.06061	29.59596	17.00000	0.0	-0.18121	0.92351	-	-	-	*
		27.57576	29.59596	17.00000	0.0	-0.18121	0.92351	-	-	-	*
		29.09091	29.59596	17.00000	0.0	-0.18121	0.92351	-	-	-	*
		30.60606	29.59596	17.00000	0.0	-0.18121	0.92351	-	-	-	*
		32.12121	29.59596	17.00000	0.0	-0.18121	0.92351	-	-	-	*
		33.63636	29.59596	17.00000	0.0	-0.18121	0.92351	-	-	-	*
		35.15152	29.59596	17.00000	0.0	-0.18121	0.92351	-	-	-	*
		36.66667	29.59596	17.00000	0.0	-0.18121	0.92351	-	-	-	*
		38.18182	29.59596	17.00000	0.0	-0.18121	0.92351	-	-	-	*
		39.69697	29.59596	17.00000	0.0	-0.18121	0.92351	-	-	-	*
		41.21212	29.59596	17.00000	0.0	-0.18121	0.92351	-	-	-	*
		42.72727	29.59596	17.00000	0.0	-0.18121	0.92351	-	-	-	*
		44.24242	29.59596	17.00000	0.0	-0.18121	0.92351	-	-	-	*
		45.75758	29.59596	17.00000	0.0	-0.18121	0.92351	-	-	-	*
		47.27273	29.59596	17.00000	0.0	-0.18121	0.92351	-	-	-	*
		48.78788	29.59596	17.00000	-0.0051962	-0.11605	0.90486	-	-	-	*
		50.30303	29.59596	17.00000	-0.011344	-0.086671	0.87292	-	-	-	*
		51.81818	29.59596	17.00000	-0.00777199	-0.035577	0.81025	-	-	-	*
		53.33333	29.59596	17.00000	0.0	0.0	0.72271	-	-	-	*
		54.84848	29.59596	17.00000	0.0	0.0	0.62365	-	-	-	*
		56.36364	29.59596	17.00000	0.0	0.0	0.50350	-	-	-	*
		57.87879	29.59596	17.00000	0.0	0.0	0.36412	-	-	-	*
		59.39394	29.59596	17.00000	0.0	0.0	0.20744	-	-	-	*
		60.90909	29.59596	17.00000	0.0	0.0	0.035313	-	-	-	*
		62.42424	29.59596	17.00000	0.0	0.0	0.0	-	-	-	*
		63.93939	29.59596	17.00000	0.0	0.0	0.0	-	-	-	*
		65.45455	29.59596	17.00000	0.0	0.0	0.0	-	-	-	*
		66.96970	29.59596	17.00000	0.0	0.0	0.0	-	-	-	*
		68.48485	29.59596	17.00000	0.0	0.0	0.0	-	-	-	*
		70.00000	29.59596	17.00000	0.0	0.0	0.0	-	-	-	*
		71.51515	29.59596	17.00000		Point lies within an excavation.					*
		73.03030	29.59596	17.00000		Point lies within an excavation.					*
		74.54545	29.59596	17.00000		Point lies within an excavation.					*
		76.06061	29.59596	17.00000		Point lies within an excavation.					*
		77.57576	29.59596	17.00000		Point lies within an excavation.					*
		79.09091	29.59596	17.00000		Point lies within an excavation.					*
		80.60606	29.59596	17.00000		Point lies within an excavation.					*
		82.12121	29.59596	17.00000	-10.091	0.0	5.3817	-	-	-	*
		83.63636	29.59596	17.00000	-8.9150	0.0	6.0856	-	-	-	*
		85.15152	29.59596	17.00000	-7.8242	0.0	6.1230	-	-	-	*
		86.66667	29.59596	17.00000	-6.8080	0.0	5.7002	-	-	-	*
		88.18182	29.59596	17.00000	-5.8556	0.0	4.9924	-	-	-	*
		89.69697	29.59596	17.00000	-4.9559	0.0	4.1442	-	-	-	*
		91.21212	29.59596	17.00000	-4.0980	0.0	3.2696	-	-	-	*
		92.72727	29.59596	17.00000	-3.2709	0.0	2.4515	-	-	-	*
		94.24242	29.59596	17.00000	-2.4638	0.0	1.7423	-	-	-	*

Oasys
GEA LIMITED
(GEOTECHNICAL &ENV ASSOC) J15050A
The Great Hall, Lincoln's Inn, Newman's Row, London, WC2A 3TL
Wall Movements Rev 3 Piling and Excavation
Damage Assessment
Job No. | Sheet No. | Rev.
Drg. Ref.
Made by MP | Date 08-Feb-2016 | Checked

Type/No.		Coordinates			Displacements					Angle of Line	
Name	Dist.	x	y	z	x	y	z	Horizontal displacement	Horizontal displacement	to x Axis	
		95.75758	29.59596	17.00000	-1.7088	0.0	1.1636	-	-	-	*
		97.27273	29.59596	17.00000	-1.1785	0.0	0.70625	-	-	-	*
		98.78788	29.59596	17.00000	-0.64824	0.0	0.33030	-	-	-	*
		100.30303	29.59596	17.00000	-0.11794	0.0	0.025700	-	-	-	*
		101.81818	29.59596	17.00000	0.0	0.0	0.0	-	-	-	*
		103.33333	29.59596	17.00000	0.0	0.0	0.0	-	-	-	*
		104.84848	29.59596	17.00000	0.0	0.0	0.0	-	-	-	*
		106.36364	29.59596	17.00000	0.0	0.0	0.0	-	-	-	*
		107.87879	29.59596	17.00000	0.0	0.0	0.0	-	-	-	*
		109.39394	29.59596	17.00000	0.0	0.0	0.0	-	-	-	*
		110.90909	29.59596	17.00000	0.0	0.0	0.0	-	-	-	*
		112.42424	29.59596	17.00000	0.0	0.0	0.0	-	-	-	*
		113.93939	29.59596	17.00000	0.0	0.0	0.0	-	-	-	*
		115.45455	29.59596	17.00000	0.0	0.0	0.0	-	-	-	*
		116.96970	29.59596	17.00000	0.0	0.0	0.0	-	-	-	*
		118.48485	29.59596	17.00000	0.0	0.0	0.0	-	-	-	*
		120.00000	29.59596	17.00000	0.0	0.0	0.0	-	-	-	*
		-30.00000	30.60606	17.00000	0.0	0.0	0.0	-	-	-	*
		-28.48485	30.60606	17.00000	0.0	0.0	0.0	-	-	-	*
		-26.96970	30.60606	17.00000	0.0	0.0	0.0	-	-	-	*
		-25.45455	30.60606	17.00000	0.0	0.0	0.0	-	-	-	*
		-23.93939	30.60606	17.00000	0.0	0.0	0.0	-	-	-	*
		-22.42424	30.60606	17.00000	0.0	0.0	0.0	-	-	-	*
		-20.90909	30.60606	17.00000	0.0	0.0	0.0	-	-	-	*
		-19.39394	30.60606	17.00000	0.0	0.0	0.0	-	-	-	*
		-17.87879	30.60606	17.00000	0.0	0.0	0.0	-	-	-	*
		-16.36364	30.60606	17.00000	0.0	0.0	0.0	-	-	-	*
		-14.84848	30.60606	17.00000	0.0	0.0	0.0	-	-	-	*
		-13.33333	30.60606	17.00000	0.0	0.0	0.0	-	-	-	*
		-11.81818	30.60606	17.00000	0.0	0.0	0.0	-	-	-	*
		-10.30303	30.60606	17.00000	0.0	0.0	0.14635	-	-	-	*
		-8.78788	30.60606	17.00000	0.0	0.0	0.28460	-	-	-	*
		-7.27273	30.60606	17.00000	0.0	0.0	0.40461	-	-	-	*
		-5.75758	30.60606	17.00000	0.0	0.0	0.50469	-	-	-	*
		-4.24242	30.60606	17.00000	0.0	0.0	0.58328	-	-	-	*
		-2.72727	30.60606	17.00000	0.0	0.0	0.63902	-	-	-	*
		-1.21212	30.60606	17.00000	0.0	0.0	0.67090	-	-	-	*
		0.30303	30.60606	17.00000	0.0	0.0	0.67879	-	-	-	*
		1.81818	30.60606	17.00000	0.0	0.0	0.67879	-	-	-	*
		3.33333	30.60606	17.00000	0.0	0.0	0.67879	-	-	-	*
		4.84848	30.60606	17.00000	0.0	0.0	0.67879	-	-	-	*
		6.36364	30.60606	17.00000	0.0	0.0	0.67879	-	-	-	*
		7.87879	30.60606	17.00000	0.0	0.0	0.67879	-	-	-	*
		9.39394	30.60606	17.00000	0.0	0.0	0.67879	-	-	-	*
		10.90909	30.60606	17.00000	0.0	0.0	0.67879	-	-	-	*
		12.42424	30.60606	17.00000	0.0	0.0	0.67879	-	-	-	*
		13.93939	30.60606	17.00000	0.0	0.0	0.67879	-	-	-	*
		15.45455	30.60606	17.00000	0.0	0.0	0.67879	-	-	-	*
		16.96970	30.60606	17.00000	0.0	0.0	0.67879	-	-	-	*
		18.48485	30.60606	17.00000	0.0	0.0	0.67879	-	-	-	*
		20.00000	30.60606	17.00000	0.0	0.0	0.67879	-	-	-	*
		21.51515	30.60606	17.00000	0.0	0.0	0.67879	-	-	-	*
		23.03030	30.60606	17.00000	0.0	0.0	0.67879	-	-	-	*
		24.54545	30.60606	17.00000	0.0	0.0	0.67879	-	-	-	*
		26.06061	30.60606	17.00000	0.0	0.0	0.67879	-	-	-	*
		27.57576	30.60606	17.00000	0.0	0.0	0.67879	-	-	-	*
		29.09091	30.60606	17.00000	0.0	0.0	0.67879	-	-	-	*
		30.60606	30.60606	17.00000	0.0	0.0	0.67879	-	-	-	*
		32.12121	30.60606	17.00000	0.0	0.0	0.67879	-	-	-	*
		33.63636	30.60606	17.00000	0.0	0.0	0.67879	-	-	-	*
		35.15152	30.60606	17.00000	0.0	0.0	0.67879	-	-	-	*
		36.66667	30.60606	17.00000	0.0	0.0	0.67879	-	-	-	*
		38.18182	30.60606	17.00000	0.0	0.0	0.67879	-	-	-	*
		39.69697	30.60606	17.00000	0.0	0.0	0.67879	-	-	-	*
		41.21212	30.60606	17.00000	0.0	0.0	0.67879	-	-	-	*
		42.72727	30.60606	17.00000	0.0	0.0	0.67879	-	-	-	*
		44.24242	30.60606	17.00000	0.0	0.0	0.67879	-	-	-	*
		45.75758	30.60606	17.00000	0.0	0.0	0.67879	-	-	-	*
		47.27273	30.60606	17.00000	0.0	0.0	0.67879	-	-	-	*
		48.78788	30.60606	17.00000	0.0	0.0	0.67545	-	-	-	*
		50.30303	30.60606	17.00000	0.0	0.0	0.65039	-	-	-	*
		51.81818	30.60606	17.00000	0.0	0.0	0.60124	-	-	-	*
		53.33333	30.60606	17.00000	0.0	0.0	0.52893	-	-	-	*
		54.84848	30.60606	17.00000	0.0	0.0	0.43471	-	-	-	*
		56.36364	30.60606	17.00000	0.0	0.0	0.32012	-	-	-	*
		57.87879	30.60606	17.00000	0.0	0.0	0.18680	-	-	-	*
		59.39394	30.60606	17.00000	0.0	0.0	0.036481	-	-	-	*
		60.90909	30.60606	17.00000	0.0	0.0	0.0	-	-	-	*
		62.42424	30.60606	17.00000	0.0	0.0	0.0	-	-	-	*
		63.93939	30.60606	17.00000	0.0	0.0	0.0	-	-	-	*
		65.45455	30.60606	17.00000	0.0	0.0	0.0	-	-	-	*
		66.96970	30.60606	17.00000	0.0	0.0	0.0	-	-	-	*
		68.48485	30.60606	17.00000	0.0	0.0	0.0	-	-	-	*
		70.00000	30.60606	17.00000	0.0	0.0	0.0	-	-	-	*
		71.51515	30.60606	17.00000		Point lies within an excavation.					*
		73.03030	30.60606	17.00000		Point lies within an excavation.					*
		74.54545	30.60606	17.00000		Point lies within an excavation.					*
		76.06061	30.60606	17.00000		Point lies within an excavation.					*
		77.57576	30.60606	17.00000		Point lies within an excavation.					*
		79.09091	30.60606	17.00000		Point lies within an excavation.					*
		80.60606	30.60606	17.00000		Point lies within an excavation.					*
		82.12121	30.60606	17.00000	-10.091	0.0	5.3817	-	-	-	*
		83.63636	30.60606	17.00000	-8.9150	0.0	6.0856	-	-	-	*
		85.15152	30.60606	17.00000	-7.8242	0.0	6.1230	-	-	-	*
		86.66667	30.60606	17.00000	-6.8080	0.0	5.7002	-	-	-	*
		88.18182	30.60606	17.00000	-5.8556	0.0	4.9924	-	-	-	*
		89.69697	30.60606	17.00000	-4.9559	0.0	4.1442	-	-	-	*
		91.21212	30.60606	17.00000	-4.0980	0.0	3.2696	-	-	-	*
		92.72727	30.60606	17.00000	-3.2709	0.0	2.4515	-	-	-	*
		94.24242	30.60606	17.00000	-2.4638	0.0	1.7423	-	-	-	*
		95.75758	30.60606	17.00000	-1.7088	0.0	1.1636	-	-	-	*
		97.27273	30.60606	17.00000	-1.1785	0.0	0.70625	-	-	-	*
		98.78788	30.60606	17.00000	-0.64824	0.0	0.33030	-	-	-	*
		100.30303	30.60606	17.00000	-0.11794	0.0	0.025700	-	-	-	*
		101.81818	30.60606	17.00000	0.0	0.0	0.0	-	-	-	*
		103.33333	30.60606	17.00000	0.0	0.0	0.0	-	-	-	*
		104.84848	30.60606	17.00000	0.0	0.0	0.0	-	-	-	*
		106.36364	30.60606	17.00000	0.0	0.0	0.0	-	-	-	*
		107.87879	30.60606	17.00000	0.0	0.0	0.0	-	-	-	*
		109.39394	30.60606	17.00000	0.0	0.0	0.0	-	-	-	*
		110.90909	30.60606	17.00000	0.0	0.0	0.0	-	-	-	*
		112.42424	30.60606	17.00000	0.0	0.0	0.0	-	-	-	*
		113.93939	30.60606	17.00000	0.0	0.0	0.0	-	-	-	*
		115.45455	30.60606	17.00000	0.0	0.0	0.0	-	-	-	*
		116.96970	30.60606	17.00000	0.0	0.0	0.0	-	-	-	*
		118.48485	30.60606	17.00000	0.0	0.0	0.0	-	-	-	*
		120.00000	30.60606	17.00000	0.0	0.0	0.0	-	-	-	*
		-30.00000	31.61616	17.00000	0.0	0.0	0.0	-	-	-	*
		-28.48485	31.61616	17.00000	0.0	0.0	0.0	-	-	-	*
		-26.96970	31.61616	17.00000	0.0	0.0	0.0	-	-	-	*
		-25.45455	31.61616	17.00000	0.0	0.0	0.0	-	-	-	*
		-23.93939	31.61616	17.00000	0.0	0.0	0.0	-	-	-	*
		-22.42424	31.61616	17.00000	0.0	0.0	0.0	-	-	-	*
		-20.90909	31.61616	17.00000	0.0	0.0	0.0	-	-	-	*
		-19.39394	31.61616	17.00000	0.0	0.0	0.0	-	-	-	*
		-17.87879	31.61616	17.00000	0.0	0.0	0.0	-	-	-	*
		-16.36364	31.61616	17.00000	0.0	0.0	0.0	-	-	-	*
		-14.84848	31.61616	17.00000	0.0	0.0	0.0	-	-	-	*
		-13.33333	31.61616	17.00000	0.0	0.0	0.0	-	-	-	*
		-11.81818	31.61616	17.00000	0.0	0.0	0.0	-	-	-	*
		-10.30303	31.61616	17.00000	0.0	0.0	0.0	-	-	-	*
		-8.78788	31.61616	17.00000	0.0	0.0	0.10107	-	-	-	*
		-7.27273	31.61616	17.00000	0.0	0.0	0.21581	-	-	-	*
		-5.75758	31.61616	17.00000	0.0	0.0	0.31127	-	-	-	*
		-4.24242	31.61616	17.00000	0.0	0.0	0.38606	-	-	-	*
		-2.72727	31.61616	17.00000	0.0	0.0	0.43903	-	-	-	*
		-1.21212	31.61616	17.00000	0.0	0.0	0.46928	-	-	-	*
		0.30303	31.61616	17.00000	0.0	0.0	0.47677	-	-	-	*
		1.81818	31.61616	17.00000	0.0	0.0	0.47677	-	-	-	*
		3.33333	31.61616	17.00000	0.0	0.0	0.47677	-	-	-	*
		4.84848	31.61616	17.00000	0.0	0.0	0.47677	-	-	-	*

Type/No.		Coordinates			Displacements					Angle of Line
Name	Dist.	x	y	z	x	y	z	Horizontal displacement	Horizontal displacement	to x Axis
		6.36364	31.61616	17.00000	0.0	0.0	0.47677	-	-	- *
		7.87879	31.61616	17.00000	0.0	0.0	0.47677	-	-	- *
		9.39394	31.61616	17.00000	0.0	0.0	0.47677	-	-	- *
		10.90909	31.61616	17.00000	0.0	0.0	0.47677	-	-	- *
		12.42424	31.61616	17.00000	0.0	0.0	0.47677	-	-	- *
		13.93939	31.61616	17.00000	0.0	0.0	0.47677	-	-	- *
		15.45455	31.61616	17.00000	0.0	0.0	0.47677	-	-	- *
		16.96970	31.61616	17.00000	0.0	0.0	0.47677	-	-	- *
		18.48485	31.61616	17.00000	0.0	0.0	0.47677	-	-	- *
		20.00000	31.61616	17.00000	0.0	0.0	0.47677	-	-	- *
		21.51515	31.61616	17.00000	0.0	0.0	0.47677	-	-	- *
		23.03030	31.61616	17.00000	0.0	0.0	0.47677	-	-	- *
		24.54545	31.61616	17.00000	0.0	0.0	0.47677	-	-	- *
		26.06061	31.61616	17.00000	0.0	0.0	0.47677	-	-	- *
		27.57576	31.61616	17.00000	0.0	0.0	0.47677	-	-	- *
		29.09091	31.61616	17.00000	0.0	0.0	0.47677	-	-	- *
		30.60606	31.61616	17.00000	0.0	0.0	0.47677	-	-	- *
		32.12121	31.61616	17.00000	0.0	0.0	0.47677	-	-	- *
		33.63636	31.61616	17.00000	0.0	0.0	0.47677	-	-	- *
		35.15152	31.61616	17.00000	0.0	0.0	0.47677	-	-	- *
		36.66667	31.61616	17.00000	0.0	0.0	0.47677	-	-	- *
		38.18182	31.61616	17.00000	0.0	0.0	0.47677	-	-	- *
		39.69697	31.61616	17.00000	0.0	0.0	0.47677	-	-	- *
		41.21212	31.61616	17.00000	0.0	0.0	0.47677	-	-	- *
		42.72727	31.61616	17.00000	0.0	0.0	0.47677	-	-	- *
		44.24242	31.61616	17.00000	0.0	0.0	0.47677	-	-	- *
		45.75758	31.61616	17.00000	0.0	0.0	0.47677	-	-	- *
		47.27273	31.61616	17.00000	0.0	0.0	0.47677	-	-	- *
		48.78788	31.61616	17.00000	0.0	0.0	0.47360	-	-	- *
		50.30303	31.61616	17.00000	0.0	0.0	0.44982	-	-	- *
		51.81818	31.61616	17.00000	0.0	0.0	0.40314	-	-	- *
		53.33333	31.61616	17.00000	0.0	0.0	0.33435	-	-	- *
		54.84848	31.61616	17.00000	0.0	0.0	0.24454	-	-	- *
		56.36364	31.61616	17.00000	0.0	0.0	0.13505	-	-	- *
		57.87879	31.61616	17.00000	0.0	0.0	0.00735051	-	-	- *
		59.39394	31.61616	17.00000	0.0	0.0	0.0	-	-	- *
		60.90909	31.61616	17.00000	0.0	0.0	0.0	-	-	- *
		62.42424	31.61616	17.00000	0.0	0.0	0.0	-	-	- *
		63.93939	31.61616	17.00000	0.0	0.0	0.0	-	-	- *
		65.45455	31.61616	17.00000	0.0	0.0	0.0	-	-	- *
		66.96970	31.61616	17.00000	0.0	0.0	0.0	-	-	- *
		68.48485	31.61616	17.00000	0.0	0.0	0.0	-	-	- *
		70.00000	31.61616	17.00000	0.0	0.0	0.0	-	-	- *
		71.51515	31.61616	17.00000	Point lies within an excavation.					*
		73.03030	31.61616	17.00000	Point lies within an excavation.					*
		74.54545	31.61616	17.00000	Point lies within an excavation.					*
		76.06061	31.61616	17.00000	Point lies within an excavation.					*
		77.57576	31.61616	17.00000	Point lies within an excavation.					*
		79.09091	31.61616	17.00000	Point lies within an excavation.					*
		80.60606	31.61616	17.00000	Point lies within an excavation.					*
		82.12121	31.61616	17.00000	-10.091	0.0	5.3817	-	-	- *
		83.63636	31.61616	17.00000	-8.9150	0.0	6.0856	-	-	- *
		85.15152	31.61616	17.00000	-7.8242	0.0	6.1230	-	-	- *
		86.66667	31.61616	17.00000	-6.8080	0.0	5.7002	-	-	- *
		88.18182	31.61616	17.00000	-5.8556	0.0	4.9924	-	-	- *
		89.69697	31.61616	17.00000	-4.9559	0.0	4.1442	-	-	- *
		91.21212	31.61616	17.00000	-4.0980	0.0	3.2696	-	-	- *
		92.72727	31.61616	17.00000	-3.2709	0.0	2.4515	-	-	- *
		94.24242	31.61616	17.00000	-2.4638	0.0	1.7423	-	-	- *
		95.75758	31.61616	17.00000	-1.7088	0.0	1.1636	-	-	- *
		97.27273	31.61616	17.00000	-1.1785	0.0	0.70625	-	-	- *
		98.78788	31.61616	17.00000	-0.64824	0.0	0.33030	-	-	- *
		100.30303	31.61616	17.00000	-0.11794	0.0	0.025700	-	-	- *
		101.81818	31.61616	17.00000	0.0	0.0	0.0	-	-	- *
		103.33333	31.61616	17.00000	0.0	0.0	0.0	-	-	- *
		104.84848	31.61616	17.00000	0.0	0.0	0.0	-	-	- *
		106.36364	31.61616	17.00000	0.0	0.0	0.0	-	-	- *
		107.87879	31.61616	17.00000	0.0	0.0	0.0	-	-	- *
		109.39394	31.61616	17.00000	0.0	0.0	0.0	-	-	- *
		110.90909	31.61616	17.00000	0.0	0.0	0.0	-	-	- *
		112.42424	31.61616	17.00000	0.0	0.0	0.0	-	-	- *
		113.93939	31.61616	17.00000	0.0	0.0	0.0	-	-	- *
		115.45455	31.61616	17.00000	0.0	0.0	0.0	-	-	- *
		116.96970	31.61616	17.00000	0.0	0.0	0.0	-	-	- *
		118.48485	31.61616	17.00000	0.0	0.0	0.0	-	-	- *
		120.00000	31.61616	17.00000	0.0	0.0	0.0	-	-	- *
		-30.00000	32.62626	17.00000	0.0	0.0	0.0	-	-	- *
		-28.48485	32.62626	17.00000	0.0	0.0	0.0	-	-	- *
		-26.96970	32.62626	17.00000	0.0	0.0	0.0	-	-	- *
		-25.45455	32.62626	17.00000	0.0	0.0	0.0	-	-	- *
		-23.93939	32.62626	17.00000	0.0	0.0	0.0	-	-	- *
		-22.42424	32.62626	17.00000	0.0	0.0	0.0	-	-	- *
		-20.90909	32.62626	17.00000	0.0	0.0	0.0	-	-	- *
		-19.39394	32.62626	17.00000	0.0	0.0	0.0	-	-	- *
		-17.87879	32.62626	17.00000	0.0	0.0	0.0	-	-	- *
		-16.36364	32.62626	17.00000	0.0	0.0	0.0	-	-	- *
		-14.84848	32.62626	17.00000	0.0	0.0	0.0	-	-	- *
		-13.33333	32.62626	17.00000	0.0	0.0	0.0	-	-	- *
		-11.81818	32.62626	17.00000	0.0	0.0	0.0	-	-	- *
		-10.30303	32.62626	17.00000	0.0	0.0	0.0	-	-	- *
		-8.78788	32.62626	17.00000	0.0	0.0	0.0	-	-	- *
		-7.27273	32.62626	17.00000	0.0	0.0	0.025825	-	-	- *
		-5.75758	32.62626	17.00000	0.0	0.0	0.11705	-	-	- *
		-4.24242	32.62626	17.00000	0.0	0.0	0.18839	-	-	- *
		-2.72727	32.62626	17.00000	0.0	0.0	0.23884	-	-	- *
		-1.21212	32.62626	17.00000	0.0	0.0	0.26763	-	-	- *
		0.30303	32.62626	17.00000	0.0	0.0	0.27475	-	-	- *
		1.81818	32.62626	17.00000	0.0	0.0	0.27475	-	-	- *
		3.33333	32.62626	17.00000	0.0	0.0	0.27475	-	-	- *
		4.84848	32.62626	17.00000	0.0	0.0	0.27475	-	-	- *
		6.36364	32.62626	17.00000	0.0	0.0	0.27475	-	-	- *
		7.87879	32.62626	17.00000	0.0	0.0	0.27475	-	-	- *
		9.39394	32.62626	17.00000	0.0	0.0	0.27475	-	-	- *
		10.90909	32.62626	17.00000	0.0	0.0	0.27475	-	-	- *
		12.42424	32.62626	17.00000	0.0	0.0	0.27475	-	-	- *
		13.93939	32.62626	17.00000	0.0	0.0	0.27475	-	-	- *
		15.45455	32.62626	17.00000	0.0	0.0	0.27475	-	-	- *
		16.96970	32.62626	17.00000	0.0	0.0	0.27475	-	-	- *
		18.48485	32.62626	17.00000	0.0	0.0	0.27475	-	-	- *
		20.00000	32.62626	17.00000	0.0	0.0	0.27475	-	-	- *
		21.51515	32.62626	17.00000	0.0	0.0	0.27475	-	-	- *
		23.03030	32.62626	17.00000	0.0	0.0	0.27475	-	-	- *
		24.54545	32.62626	17.00000	0.0	0.0	0.27475	-	-	- *
		26.06061	32.62626	17.00000	0.0	0.0	0.27475	-	-	- *
		27.57576	32.62626	17.00000	0.0	0.0	0.27475	-	-	- *
		29.09091	32.62626	17.00000	0.0	0.0	0.27475	-	-	- *
		30.60606	32.62626	17.00000	0.0	0.0	0.27475	-	-	- *
		32.12121	32.62626	17.00000	0.0	0.0	0.27475	-	-	- *
		33.63636	32.62626	17.00000	0.0	0.0	0.27475	-	-	- *
		35.15152	32.62626	17.00000	0.0	0.0	0.27475	-	-	- *
		36.66667	32.62626	17.00000	0.0	0.0	0.27475	-	-	- *
		38.18182	32.62626	17.00000	0.0	0.0	0.27475	-	-	- *
		39.69697	32.62626	17.00000	0.0	0.0	0.27475	-	-	- *
		41.21212	32.62626	17.00000	0.0	0.0	0.27475	-	-	- *
		42.72727	32.62626	17.00000	0.0	0.0	0.27475	-	-	- *
		44.24242	32.62626	17.00000	0.0	0.0	0.27475	-	-	- *
		45.75758	32.62626	17.00000	0.0	0.0	0.27475	-	-	- *
		47.27273	32.62626	17.00000	0.0	0.0	0.27475	-	-	- *
		48.78788	32.62626	17.00000	0.0	0.0	0.27174	-	-	- *
		50.30303	32.62626	17.00000	0.0	0.0	0.24911	-	-	- *
		51.81818	32.62626	17.00000	0.0	0.0	0.20466	-	-	- *
		53.33333	32.62626	17.00000	0.0	0.0	0.13907	-	-	- *
		54.84848	32.62626	17.00000	0.0	0.0	0.053303	-	-	- *
		56.36364	32.62626	17.00000	0.0	0.0	0.0	-	-	- *
		57.87879	32.62626	17.00000	0.0	0.0	0.0	-	-	- *
		59.39394	32.62626	17.00000	0.0	0.0	0.0	-	-	- *
		60.90909	32.62626	17.00000	0.0	0.0	0.0	-	-	- *
		62.42424	32.62626	17.00000	0.0	0.0	0.0	-	-	- *
		63.93939	32.62626	17.00000	0.0	0.0	0.0	-	-	- *
		65.45455	32.62626	17.00000	0.0	0.0	0.0	-	-	- *
		66.96970	32.62626	17.00000	0.0	0.0	0.0	-	-	- *

Oasys

GEA LIMITED
(GEOTECHNICAL &ENV ASSOC) *J15050A*

Job No. | Sheet No. | Rev.

The Great Hall, Lincoln's Inn, Newman's Row, London, WC2A 3TL
Wall Movements Rev 3 Piling and Excavation
Damage Assessment

Drg. Ref.

Made by MP | Date 08-Feb-2016 | Checked

Type/No.		Coordinates			Displacements					Angle of Line
Name	Dist.	x	y	z	x	y	z	Horizontal displacement	Horizontal displacement	to x Axis
		68.48485	32.62626	17.00000	0.0	0.0	0.0	-	-	- *
		70.00000	32.62626	17.00000	0.0	0.0	0.0	-	-	- *
		71.51515	32.62626	17.00000	Point lies within an excavation.					*
		73.03030	32.62626	17.00000	Point lies within an excavation.					*
		74.54545	32.62626	17.00000	Point lies within an excavation.					*
		76.06061	32.62626	17.00000	Point lies within an excavation.					*
		77.57576	32.62626	17.00000	Point lies within an excavation.					*
		79.09091	32.62626	17.00000	Point lies within an excavation.					*
		80.60606	32.62626	17.00000	Point lies within an excavation.					*
		82.12121	32.62626	17.00000	-10.091	0.0	5.3817	-	-	- *
		83.63636	32.62626	17.00000	-8.9150	0.0	6.0856	-	-	- *
		85.15152	32.62626	17.00000	-7.8242	0.0	6.1230	-	-	- *
		86.66667	32.62626	17.00000	-6.8080	0.0	5.7002	-	-	- *
		88.18182	32.62626	17.00000	-5.8556	0.0	4.9924	-	-	- *
		89.69697	32.62626	17.00000	-4.9559	0.0	4.1442	-	-	- *
		91.21212	32.62626	17.00000	-4.0980	0.0	3.2696	-	-	- *
		92.72727	32.62626	17.00000	-3.2709	0.0	2.4515	-	-	- *
		94.24242	32.62626	17.00000	-2.4638	0.0	1.7423	-	-	- *
		95.75758	32.62626	17.00000	-1.7088	0.0	1.1636	-	-	- *
		97.27273	32.62626	17.00000	-1.1785	0.0	0.70625	-	-	- *
		98.78788	32.62626	17.00000	-0.64824	0.0	0.33030	-	-	- *
		100.30303	32.62626	17.00000	-0.11794	0.0	0.025700	-	-	- *
		101.81818	32.62626	17.00000	0.0	0.0	0.0	-	-	- *
		103.33333	32.62626	17.00000	0.0	0.0	0.0	-	-	- *
		104.84848	32.62626	17.00000	0.0	0.0	0.0	-	-	- *
		106.36364	32.62626	17.00000	0.0	0.0	0.0	-	-	- *
		107.87879	32.62626	17.00000	0.0	0.0	0.0	-	-	- *
		109.39394	32.62626	17.00000	0.0	0.0	0.0	-	-	- *
		110.90909	32.62626	17.00000	0.0	0.0	0.0	-	-	- *
		112.42424	32.62626	17.00000	0.0	0.0	0.0	-	-	- *
		113.93939	32.62626	17.00000	0.0	0.0	0.0	-	-	- *
		115.45455	32.62626	17.00000	0.0	0.0	0.0	-	-	- *
		116.96970	32.62626	17.00000	0.0	0.0	0.0	-	-	- *
		118.48485	32.62626	17.00000	0.0	0.0	0.0	-	-	- *
		120.00000	32.62626	17.00000	0.0	0.0	0.0	-	-	- *
		-30.00000	33.63636	17.00000	0.0	0.0	0.0	-	-	- *
		-28.48485	33.63636	17.00000	0.0	0.0	0.0	-	-	- *
		-26.96970	33.63636	17.00000	0.0	0.0	0.0	-	-	- *
		-25.45455	33.63636	17.00000	0.0	0.0	0.0	-	-	- *
		-23.93939	33.63636	17.00000	0.0	0.0	0.0	-	-	- *
		-22.42424	33.63636	17.00000	0.0	0.0	0.0	-	-	- *
		-20.90909	33.63636	17.00000	0.0	0.0	0.0	-	-	- *
		-19.39394	33.63636	17.00000	0.0	0.0	0.0	-	-	- *
		-17.87879	33.63636	17.00000	0.0	0.0	0.0	-	-	- *
		-16.36364	33.63636	17.00000	0.0	0.0	0.0	-	-	- *
		-14.84848	33.63636	17.00000	0.0	0.0	0.0	-	-	- *
		-13.33333	33.63636	17.00000	0.0	0.0	0.0	-	-	- *
		-11.81818	33.63636	17.00000	0.0	0.0	0.0	-	-	- *
		-10.30303	33.63636	17.00000	0.0	0.0	0.0	-	-	- *
		-8.78788	33.63636	17.00000	0.0	0.0	0.0	-	-	- *
		-7.27273	33.63636	17.00000	0.0	0.0	0.0	-	-	- *
		-5.75758	33.63636	17.00000	0.0	0.0	0.0	-	-	- *
		-4.24242	33.63636	17.00000	0.0	0.0	0.0	-	-	- *
		-2.72727	33.63636	17.00000	0.0	0.0	0.038485	-	-	- *
		-1.21212	33.63636	17.00000	0.0	0.0	0.065942	-	-	- *
		0.30303	33.63636	17.00000	0.0	0.0	0.072727	-	-	- *
		1.81818	33.63636	17.00000	0.0	0.0	0.072727	-	-	- *
		3.33333	33.63636	17.00000	0.0	0.0	0.072727	-	-	- *
		4.84848	33.63636	17.00000	0.0	0.0	0.072727	-	-	- *
		6.36364	33.63636	17.00000	0.0	0.0	0.072727	-	-	- *
		7.87879	33.63636	17.00000	0.0	0.0	0.072727	-	-	- *
		9.39394	33.63636	17.00000	0.0	0.0	0.072727	-	-	- *
		10.90909	33.63636	17.00000	0.0	0.0	0.072727	-	-	- *
		12.42424	33.63636	17.00000	0.0	0.0	0.072727	-	-	- *
		13.93939	33.63636	17.00000	0.0	0.0	0.072727	-	-	- *
		15.45455	33.63636	17.00000	0.0	0.0	0.072727	-	-	- *
		16.96970	33.63636	17.00000	0.0	0.0	0.072727	-	-	- *
		18.48485	33.63636	17.00000	0.0	0.0	0.072727	-	-	- *
		20.00000	33.63636	17.00000	0.0	0.0	0.072727	-	-	- *
		21.51515	33.63636	17.00000	0.0	0.0	0.072727	-	-	- *
		23.03030	33.63636	17.00000	0.0	0.0	0.072727	-	-	- *
		24.54545	33.63636	17.00000	0.0	0.0	0.072727	-	-	- *
		26.06061	33.63636	17.00000	0.0	0.0	0.072727	-	-	- *
		27.57576	33.63636	17.00000	0.0	0.0	0.072727	-	-	- *
		29.09091	33.63636	17.00000	0.0	0.0	0.072727	-	-	- *
		30.60606	33.63636	17.00000	0.0	0.0	0.072727	-	-	- *
		32.12121	33.63636	17.00000	0.0	0.0	0.072727	-	-	- *
		33.63636	33.63636	17.00000	0.0	0.0	0.072727	-	-	- *
		35.15152	33.63636	17.00000	0.0	0.0	0.072727	-	-	- *
		36.66667	33.63636	17.00000	0.0	0.0	0.072727	-	-	- *
		38.18182	33.63636	17.00000	0.0	0.0	0.072727	-	-	- *
		39.69697	33.63636	17.00000	0.0	0.0	0.072727	-	-	- *
		41.21212	33.63636	17.00000	0.0	0.0	0.072727	-	-	- *
		42.72727	33.63636	17.00000	0.0	0.0	0.072727	-	-	- *
		44.24242	33.63636	17.00000	0.0	0.0	0.072727	-	-	- *
		45.75758	33.63636	17.00000	0.0	0.0	0.072727	-	-	- *
		47.27273	33.63636	17.00000	0.0	0.0	0.072727	-	-	- *
		48.78788	33.63636	17.00000	0.0	0.0	0.069859	-	-	- *
		50.30303	33.63636	17.00000	0.0	0.0	0.048282	-	-	- *
		51.81818	33.63636	17.00000	0.0	0.0	0.0058642	-	-	- *
		53.33333	33.63636	17.00000	0.0	0.0	0.0	-	-	- *
		54.84848	33.63636	17.00000	0.0	0.0	0.0	-	-	- *
		56.36364	33.63636	17.00000	0.0	0.0	0.0	-	-	- *
		57.87879	33.63636	17.00000	0.0	0.0	0.0	-	-	- *
		59.39394	33.63636	17.00000	0.0	0.0	0.0	-	-	- *
		60.90909	33.63636	17.00000	0.0	0.0	0.0	-	-	- *
		62.42424	33.63636	17.00000	0.0	0.0	0.0	-	-	- *
		63.93939	33.63636	17.00000	0.0	0.0	0.0	-	-	- *
		65.45455	33.63636	17.00000	0.0	0.0	0.0	-	-	- *
		66.96970	33.63636	17.00000	0.0	0.0	0.0	-	-	- *
		68.48485	33.63636	17.00000	0.0	0.0	0.0	-	-	- *
		70.00000	33.63636	17.00000	0.0	0.0	0.0	-	-	- *
		71.51515	33.63636	17.00000	Point lies within an excavation.					*
		73.03030	33.63636	17.00000	Point lies within an excavation.					*
		74.54545	33.63636	17.00000	Point lies within an excavation.					*
		76.06061	33.63636	17.00000	Point lies within an excavation.					*
		77.57576	33.63636	17.00000	Point lies within an excavation.					*
		79.09091	33.63636	17.00000	Point lies within an excavation.					*
		80.60606	33.63636	17.00000	Point lies within an excavation.					*
		82.12121	33.63636	17.00000	-10.091	0.0	5.3817	-	-	- *
		83.63636	33.63636	17.00000	-8.9150	0.0	6.0856	-	-	- *
		85.15152	33.63636	17.00000	-7.8242	0.0	6.1230	-	-	- *
		86.66667	33.63636	17.00000	-6.8080	0.0	5.7002	-	-	- *
		88.18182	33.63636	17.00000	-5.8556	0.0	4.9924	-	-	- *
		89.69697	33.63636	17.00000	-4.9559	0.0	4.1442	-	-	- *
		91.21212	33.63636	17.00000	-4.0980	0.0	3.2696	-	-	- *
		92.72727	33.63636	17.00000	-3.2709	0.0	2.4515	-	-	- *
		94.24242	33.63636	17.00000	-2.4638	0.0	1.7423	-	-	- *
		95.75758	33.63636	17.00000	-1.7088	0.0	1.1636	-	-	- *
		97.27273	33.63636	17.00000	-1.1785	0.0	0.70625	-	-	- *
		98.78788	33.63636	17.00000	-0.64824	0.0	0.33030	-	-	- *
		100.30303	33.63636	17.00000	-0.11794	0.0	0.025700	-	-	- *
		101.81818	33.63636	17.00000	0.0	0.0	0.0	-	-	- *
		103.33333	33.63636	17.00000	0.0	0.0	0.0	-	-	- *
		104.84848	33.63636	17.00000	0.0	0.0	0.0	-	-	- *
		106.36364	33.63636	17.00000	0.0	0.0	0.0	-	-	- *
		107.87879	33.63636	17.00000	0.0	0.0	0.0	-	-	- *
		109.39394	33.63636	17.00000	0.0	0.0	0.0	-	-	- *
		110.90909	33.63636	17.00000	0.0	0.0	0.0	-	-	- *
		112.42424	33.63636	17.00000	0.0	0.0	0.0	-	-	- *
		113.93939	33.63636	17.00000	0.0	0.0	0.0	-	-	- *
		115.45455	33.63636	17.00000	0.0	0.0	0.0	-	-	- *
		116.96970	33.63636	17.00000	0.0	0.0	0.0	-	-	- *
		118.48485	33.63636	17.00000	0.0	0.0	0.0	-	-	- *
		120.00000	33.63636	17.00000	0.0	0.0	0.0	-	-	- *
		-30.00000	34.64646	17.00000	0.0	0.0	0.0	-	-	- *
		-28.48485	34.64646	17.00000	0.0	0.0	0.0	-	-	- *
		-26.96970	34.64646	17.00000	0.0	0.0	0.0	-	-	- *
		-25.45455	34.64646	17.00000	0.0	0.0	0.0	-	-	- *
		-23.93939	34.64646	17.00000	0.0	0.0	0.0	-	-	- *
		-22.42424	34.64646	17.00000	0.0	0.0	0.0	-	-	- *

Type/No.		Coordinates			Displacements					Angle of Line	
Name	Dist.	x	y	z	x	y	z	Horizontal displacement	Horizontal displacement	to x Axis	
		-20.90909	34.64646	17.00000	0.0	0.0	0.0	-	-	-	*
		-19.39394	34.64646	17.00000	0.0	0.0	0.0	-	-	-	*
		-17.87879	34.64646	17.00000	0.0	0.0	0.0	-	-	-	*
		-16.36364	34.64646	17.00000	0.0	0.0	0.0	-	-	-	*
		-14.84848	34.64646	17.00000	0.0	0.0	0.0	-	-	-	*
		-13.33333	34.64646	17.00000	0.0	0.0	0.0	-	-	-	*
		-11.81818	34.64646	17.00000	0.0	0.0	0.0	-	-	-	*
		-10.30303	34.64646	17.00000	0.0	0.0	0.0	-	-	-	*
		-8.78788	34.64646	17.00000	0.0	0.0	0.0	-	-	-	*
		-7.27273	34.64646	17.00000	0.0	0.0	0.0	-	-	-	*
		-5.75758	34.64646	17.00000	0.0	0.0	0.0	-	-	-	*
		-4.24242	34.64646	17.00000	0.0	0.0	0.0	-	-	-	*
		-2.72727	34.64646	17.00000	0.0	0.0	0.0	-	-	-	*
		-1.21212	34.64646	17.00000	0.0	0.0	0.0	-	-	-	*
		0.30303	34.64646	17.00000	0.0	0.0	0.0	-	-	-	*
		1.81818	34.64646	17.00000	0.0	0.0	0.0	-	-	-	*
		3.33333	34.64646	17.00000	0.0	0.0	0.0	-	-	-	*
		4.84848	34.64646	17.00000	0.0	0.0	0.0	-	-	-	*
		6.36364	34.64646	17.00000	0.0	0.0	0.0	-	-	-	*
		7.87879	34.64646	17.00000	0.0	0.0	0.0	-	-	-	*
		9.39394	34.64646	17.00000	0.0	0.0	0.0	-	-	-	*
		10.90909	34.64646	17.00000	0.0	0.0	0.0	-	-	-	*
		12.42424	34.64646	17.00000	0.0	0.0	0.0	-	-	-	*
		13.93939	34.64646	17.00000	0.0	0.0	0.0	-	-	-	*
		15.45455	34.64646	17.00000	0.0	0.0	0.0	-	-	-	*
		16.96970	34.64646	17.00000	0.0	0.0	0.0	-	-	-	*
		18.48485	34.64646	17.00000	0.0	0.0	0.0	-	-	-	*
		20.00000	34.64646	17.00000	0.0	0.0	0.0	-	-	-	*
		21.51515	34.64646	17.00000	0.0	0.0	0.0	-	-	-	*
		23.03030	34.64646	17.00000	0.0	0.0	0.0	-	-	-	*
		24.54545	34.64646	17.00000	0.0	0.0	0.0	-	-	-	*
		26.06061	34.64646	17.00000	0.0	0.0	0.0	-	-	-	*
		27.57576	34.64646	17.00000	0.0	0.0	0.0	-	-	-	*
		29.09091	34.64646	17.00000	0.0	0.0	0.0	-	-	-	*
		30.60606	34.64646	17.00000	0.0	0.0	0.0	-	-	-	*
		32.12121	34.64646	17.00000	0.0	0.0	0.0	-	-	-	*
		33.63636	34.64646	17.00000	0.0	0.0	0.0	-	-	-	*
		35.15152	34.64646	17.00000	0.0	0.0	0.0	-	-	-	*
		36.66667	34.64646	17.00000	0.0	0.0	0.0	-	-	-	*
		38.18182	34.64646	17.00000	0.0	0.0	0.0	-	-	-	*
		39.69697	34.64646	17.00000	0.0	0.0	0.0	-	-	-	*
		41.21212	34.64646	17.00000	0.0	0.0	0.0	-	-	-	*
		42.72727	34.64646	17.00000	0.0	0.0	0.0	-	-	-	*
		44.24242	34.64646	17.00000	0.0	0.0	0.0	-	-	-	*
		45.75758	34.64646	17.00000	0.0	0.0	0.0	-	-	-	*
		47.27273	34.64646	17.00000	0.0	0.0	0.0	-	-	-	*
		48.78788	34.64646	17.00000	0.0	0.0	0.0	-	-	-	*
		50.30303	34.64646	17.00000	0.0	0.0	0.0	-	-	-	*
		51.81818	34.64646	17.00000	0.0	0.0	0.0	-	-	-	*
		53.33333	34.64646	17.00000	0.0	0.0	0.0	-	-	-	*
		54.84848	34.64646	17.00000	0.0	0.0	0.0	-	-	-	*
		56.36364	34.64646	17.00000	0.0	0.0	0.0	-	-	-	*
		57.87879	34.64646	17.00000	0.0	0.0	0.0	-	-	-	*
		59.39394	34.64646	17.00000	0.0	0.0	0.0	-	-	-	*
		60.90909	34.64646	17.00000	0.0	0.0	0.0	-	-	-	*
		62.42424	34.64646	17.00000	0.0	0.0	0.0	-	-	-	*
		63.93939	34.64646	17.00000	0.0	0.0	0.0	-	-	-	*
		65.45455	34.64646	17.00000	0.0	0.0	0.0	-	-	-	*
		66.96970	34.64646	17.00000	0.0	0.0	0.0	-	-	-	*
		68.48485	34.64646	17.00000	0.0	0.0	0.0	-	-	-	*
		70.00000	34.64646	17.00000	0.0	0.0	0.0	-	-	-	*
		71.51515	34.64646	17.00000				Point lies within an excavation.			*
		73.03030	34.64646	17.00000				Point lies within an excavation.			*
		74.54545	34.64646	17.00000				Point lies within an excavation.			*
		76.06061	34.64646	17.00000				Point lies within an excavation.			*
		77.57576	34.64646	17.00000				Point lies within an excavation.			*
		79.09091	34.64646	17.00000				Point lies within an excavation.			*
		80.60606	34.64646	17.00000				Point lies within an excavation.			*
		82.12121	34.64646	17.00000	-10.091	0.0	5.3817	-	-	-	*
		83.63636	34.64646	17.00000	-8.9150	0.0	6.0856	-	-	-	*
		85.15152	34.64646	17.00000	-7.8242	0.0	6.1230	-	-	-	*
		86.66667	34.64646	17.00000	-6.8080	0.0	5.7002	-	-	-	*
		88.18182	34.64646	17.00000	-5.8556	0.0	4.9924	-	-	-	*
		89.69697	34.64646	17.00000	-4.9559	0.0	4.1442	-	-	-	*
		91.21212	34.64646	17.00000	-4.0980	0.0	3.2696	-	-	-	*
		92.72727	34.64646	17.00000	-3.2709	0.0	2.4515	-	-	-	*
		94.24242	34.64646	17.00000	-2.4638	0.0	1.7423	-	-	-	*
		95.75758	34.64646	17.00000	-1.7088	0.0	1.1636	-	-	-	*
		97.27273	34.64646	17.00000	-1.1785	0.0	0.70625	-	-	-	*
		98.78788	34.64646	17.00000	-0.64824	0.0	0.33030	-	-	-	*
		100.30303	34.64646	17.00000	-0.11794	0.0	0.025700	-	-	-	*
		101.81818	34.64646	17.00000	0.0	0.0	0.0	-	-	-	*
		103.33333	34.64646	17.00000	0.0	0.0	0.0	-	-	-	*
		104.84848	34.64646	17.00000	0.0	0.0	0.0	-	-	-	*
		106.36364	34.64646	17.00000	0.0	0.0	0.0	-	-	-	*
		107.87879	34.64646	17.00000	0.0	0.0	0.0	-	-	-	*
		109.39394	34.64646	17.00000	0.0	0.0	0.0	-	-	-	*
		110.90909	34.64646	17.00000	0.0	0.0	0.0	-	-	-	*
		112.42424	34.64646	17.00000	0.0	0.0	0.0	-	-	-	*
		113.93939	34.64646	17.00000	0.0	0.0	0.0	-	-	-	*
		115.45455	34.64646	17.00000	0.0	0.0	0.0	-	-	-	*
		116.96970	34.64646	17.00000	0.0	0.0	0.0	-	-	-	*
		118.48485	34.64646	17.00000	0.0	0.0	0.0	-	-	-	*
		120.00000	34.64646	17.00000	0.0	0.0	0.0	-	-	-	*
		-30.00000	35.65657	17.00000	0.0	0.0	0.0	-	-	-	*
		-28.48485	35.65657	17.00000	0.0	0.0	0.0	-	-	-	*
		-26.96970	35.65657	17.00000	0.0	0.0	0.0	-	-	-	*
		-25.45455	35.65657	17.00000	0.0	0.0	0.0	-	-	-	*
		-23.93939	35.65657	17.00000	0.0	0.0	0.0	-	-	-	*
		-22.42424	35.65657	17.00000	0.0	0.0	0.0	-	-	-	*
		-20.90909	35.65657	17.00000	0.0	0.0	0.0	-	-	-	*
		-19.39394	35.65657	17.00000	0.0	0.0	0.0	-	-	-	*
		-17.87879	35.65657	17.00000	0.0	0.0	0.0	-	-	-	*
		-16.36364	35.65657	17.00000	0.0	0.0	0.0	-	-	-	*
		-14.84848	35.65657	17.00000	0.0	0.0	0.0	-	-	-	*
		-13.33333	35.65657	17.00000	0.0	0.0	0.0	-	-	-	*
		-11.81818	35.65657	17.00000	0.0	0.0	0.0	-	-	-	*
		-10.30303	35.65657	17.00000	0.0	0.0	0.0	-	-	-	*
		-8.78788	35.65657	17.00000	0.0	0.0	0.0	-	-	-	*
		-7.27273	35.65657	17.00000	0.0	0.0	0.0	-	-	-	*
		-5.75758	35.65657	17.00000	0.0	0.0	0.0	-	-	-	*
		-4.24242	35.65657	17.00000	0.0	0.0	0.0	-	-	-	*
		-2.72727	35.65657	17.00000	0.0	0.0	0.0	-	-	-	*
		-1.21212	35.65657	17.00000	0.0	0.0	0.0	-	-	-	*
		0.30303	35.65657	17.00000	0.0	0.0	0.0	-	-	-	*
		1.81818	35.65657	17.00000	0.0	0.0	0.0	-	-	-	*
		3.33333	35.65657	17.00000	0.0	0.0	0.0	-	-	-	*
		4.84848	35.65657	17.00000	0.0	0.0	0.0	-	-	-	*
		6.36364	35.65657	17.00000	0.0	0.0	0.0	-	-	-	*
		7.87879	35.65657	17.00000	0.0	0.0	0.0	-	-	-	*
		9.39394	35.65657	17.00000	0.0	0.0	0.0	-	-	-	*
		10.90909	35.65657	17.00000	0.0	0.0	0.0	-	-	-	*
		12.42424	35.65657	17.00000	0.0	0.0	0.0	-	-	-	*
		13.93939	35.65657	17.00000	0.0	0.0	0.0	-	-	-	*
		15.45455	35.65657	17.00000	0.0	0.0	0.0	-	-	-	*
		16.96970	35.65657	17.00000	0.0	0.0	0.0	-	-	-	*
		18.48485	35.65657	17.00000	0.0	0.0	0.0	-	-	-	*
		20.00000	35.65657	17.00000	0.0	0.0	0.0	-	-	-	*
		21.51515	35.65657	17.00000	0.0	0.0	0.0	-	-	-	*
		23.03030	35.65657	17.00000	0.0	0.0	0.0	-	-	-	*
		24.54545	35.65657	17.00000	0.0	0.0	0.0	-	-	-	*
		26.06061	35.65657	17.00000	0.0	0.0	0.0	-	-	-	*
		27.57576	35.65657	17.00000	0.0	0.0	0.0	-	-	-	*
		29.09091	35.65657	17.00000	0.0	0.0	0.0	-	-	-	*
		30.60606	35.65657	17.00000	0.0	0.0	0.0	-	-	-	*
		32.12121	35.65657	17.00000	0.0	0.0	0.0	-	-	-	*
		33.63636	35.65657	17.00000	0.0	0.0	0.0	-	-	-	*
		35.15152	35.65657	17.00000	0.0	0.0	0.0	-	-	-	*
		36.66667	35.65657	17.00000	0.0	0.0	0.0	-	-	-	*
		38.18182	35.65657	17.00000	0.0	0.0	0.0	-	-	-	*
		39.69697	35.65657	17.00000	0.0	0.0	0.0	-	-	-	*

Oasys
GEA LIMITED
(GEOTECHNICAL &ENV ASSOC) J15050A
The Great Hall, Lincoln's Inn, Newman's Row, London, WC2A 3TL
Wall Movements Rev 3 Piling and Excavation
Damage Assessment
Job No. | Sheet No. | Rev.
Drg. Ref.
Made by MP | Date 08-Feb-2016 | Checked

Type/No.		Coordinates			Displacements					Angle of Line	
Name	Dist.	x	y	z	x	y	z	Horizontal displacement	Horizontal displacement	to x Axis	
		41.21212	35.65657	17.00000	0.0	0.0	0.0	-	-	-	*
		42.72727	35.65657	17.00000	0.0	0.0	0.0	-	-	-	*
		44.24242	35.65657	17.00000	0.0	0.0	0.0	-	-	-	*
		45.75758	35.65657	17.00000	0.0	0.0	0.0	-	-	-	*
		47.27273	35.65657	17.00000	0.0	0.0	0.0	-	-	-	*
		48.78788	35.65657	17.00000	0.0	0.0	0.0	-	-	-	*
		50.30303	35.65657	17.00000	0.0	0.0	0.0	-	-	-	*
		51.81818	35.65657	17.00000	0.0	0.0	0.0	-	-	-	*
		53.33333	35.65657	17.00000	0.0	0.0	0.0	-	-	-	*
		54.84848	35.65657	17.00000	0.0	0.0	0.0	-	-	-	*
		56.36364	35.65657	17.00000	0.0	0.0	0.0	-	-	-	*
		57.87879	35.65657	17.00000	0.0	0.0	0.0	-	-	-	*
		59.39394	35.65657	17.00000	0.0	0.0	0.0	-	-	-	*
		60.90909	35.65657	17.00000	0.0	0.0	0.0	-	-	-	*
		62.42424	35.65657	17.00000	0.0	0.0	0.0	-	-	-	*
		63.93939	35.65657	17.00000	0.0	0.0	0.0	-	-	-	*
		65.45455	35.65657	17.00000	0.0	0.0	0.0	-	-	-	*
		66.96970	35.65657	17.00000	0.0	0.0	0.0	-	-	-	*
		68.48485	35.65657	17.00000	0.0	0.0	0.0	-	-	-	*
		70.00000	35.65657	17.00000	0.0	0.0	0.0	-	-	-	*
		71.51515	35.65657	17.00000				Point lies within an excavation.			*
		73.03030	35.65657	17.00000				Point lies within an excavation.			*
		74.54545	35.65657	17.00000				Point lies within an excavation.			*
		76.06061	35.65657	17.00000				Point lies within an excavation.			*
		77.57576	35.65657	17.00000				Point lies within an excavation.			*
		79.09091	35.65657	17.00000				Point lies within an excavation.			*
		80.60606	35.65657	17.00000				Point lies within an excavation.			*
		82.12121	35.65657	17.00000	-10.091	0.0	5.3817	-	-	-	*
		83.63636	35.65657	17.00000	-8.9150	0.0	6.0856	-	-	-	*
		85.15152	35.65657	17.00000	-7.8242	0.0	6.1230	-	-	-	*
		86.66667	35.65657	17.00000	-6.8080	0.0	5.7002	-	-	-	*
		88.18182	35.65657	17.00000	-5.8556	0.0	4.9924	-	-	-	*
		89.69697	35.65657	17.00000	-4.9559	0.0	4.1442	-	-	-	*
		91.21212	35.65657	17.00000	-4.0980	0.0	3.2696	-	-	-	*
		92.72727	35.65657	17.00000	-3.2709	0.0	2.4515	-	-	-	*
		94.24242	35.65657	17.00000	-2.4638	0.0	1.7423	-	-	-	*
		95.75758	35.65657	17.00000	-1.7088	0.0	1.1636	-	-	-	*
		97.27273	35.65657	17.00000	-1.1785	0.0	0.70625	-	-	-	*
		98.78788	35.65657	17.00000	-0.64824	0.0	0.33030	-	-	-	*
		100.30303	35.65657	17.00000	-0.11794	0.0	0.025700	-	-	-	*
		101.81818	35.65657	17.00000	0.0	0.0	0.0	-	-	-	*
		103.33333	35.65657	17.00000	0.0	0.0	0.0	-	-	-	*
		104.84848	35.65657	17.00000	0.0	0.0	0.0	-	-	-	*
		106.36364	35.65657	17.00000	0.0	0.0	0.0	-	-	-	*
		107.87879	35.65657	17.00000	0.0	0.0	0.0	-	-	-	*
		109.39394	35.65657	17.00000	0.0	0.0	0.0	-	-	-	*
		110.90909	35.65657	17.00000	0.0	0.0	0.0	-	-	-	*
		112.42424	35.65657	17.00000	0.0	0.0	0.0	-	-	-	*
		113.93939	35.65657	17.00000	0.0	0.0	0.0	-	-	-	*
		115.45455	35.65657	17.00000	0.0	0.0	0.0	-	-	-	*
		116.96970	35.65657	17.00000	0.0	0.0	0.0	-	-	-	*
		118.48485	35.65657	17.00000	0.0	0.0	0.0	-	-	-	*
		120.00000	35.65657	17.00000	0.0	0.0	0.0	-	-	-	*
		-30.00000	36.66667	17.00000	0.0	0.0	0.0	-	-	-	*
		-28.48485	36.66667	17.00000	0.0	0.0	0.0	-	-	-	*
		-26.96970	36.66667	17.00000	0.0	0.0	0.0	-	-	-	*
		-25.45455	36.66667	17.00000	0.0	0.0	0.0	-	-	-	*
		-23.93939	36.66667	17.00000	0.0	0.0	0.0	-	-	-	*
		-22.42424	36.66667	17.00000	0.0	0.0	0.0	-	-	-	*
		-20.90909	36.66667	17.00000	0.0	0.0	0.0	-	-	-	*
		-19.39394	36.66667	17.00000	0.0	0.0	0.0	-	-	-	*
		-17.87879	36.66667	17.00000	0.0	0.0	0.0	-	-	-	*
		-16.36364	36.66667	17.00000	0.0	0.0	0.0	-	-	-	*
		-14.84848	36.66667	17.00000	0.0	0.0	0.0	-	-	-	*
		-13.33333	36.66667	17.00000	0.0	0.0	0.0	-	-	-	*
		-11.81818	36.66667	17.00000	0.0	0.0	0.0	-	-	-	*
		-10.30303	36.66667	17.00000	0.0	0.0	0.0	-	-	-	*
		-8.78788	36.66667	17.00000	0.0	0.0	0.0	-	-	-	*
		-7.27273	36.66667	17.00000	0.0	0.0	0.0	-	-	-	*
		-5.75758	36.66667	17.00000	0.0	0.0	0.0	-	-	-	*
		-4.24242	36.66667	17.00000	0.0	0.0	0.0	-	-	-	*
		-2.72727	36.66667	17.00000	0.0	0.0	0.0	-	-	-	*
		-1.21212	36.66667	17.00000	0.0	0.0	0.0	-	-	-	*
		0.30303	36.66667	17.00000	0.0	0.0	0.0	-	-	-	*
		1.81818	36.66667	17.00000	0.0	0.0	0.0	-	-	-	*
		3.33333	36.66667	17.00000	0.0	0.0	0.0	-	-	-	*
		4.84848	36.66667	17.00000	0.0	0.0	0.0	-	-	-	*
		6.36364	36.66667	17.00000	0.0	0.0	0.0	-	-	-	*
		7.87879	36.66667	17.00000	0.0	0.0	0.0	-	-	-	*
		9.39394	36.66667	17.00000	0.0	0.0	0.0	-	-	-	*
		10.90909	36.66667	17.00000	0.0	0.0	0.0	-	-	-	*
		12.42424	36.66667	17.00000	0.0	0.0	0.0	-	-	-	*
		13.93939	36.66667	17.00000	0.0	0.0	0.0	-	-	-	*
		15.45455	36.66667	17.00000	0.0	0.0	0.0	-	-	-	*
		16.96970	36.66667	17.00000	0.0	0.0	0.0	-	-	-	*
		18.48485	36.66667	17.00000	0.0	0.0	0.0	-	-	-	*
		20.00000	36.66667	17.00000	0.0	0.0	0.0	-	-	-	*
		21.51515	36.66667	17.00000	0.0	0.0	0.0	-	-	-	*
		23.03030	36.66667	17.00000	0.0	0.0	0.0	-	-	-	*
		24.54545	36.66667	17.00000	0.0	0.0	0.0	-	-	-	*
		26.06061	36.66667	17.00000	0.0	0.0	0.0	-	-	-	*
		27.57576	36.66667	17.00000	0.0	0.0	0.0	-	-	-	*
		29.09091	36.66667	17.00000	0.0	0.0	0.0	-	-	-	*
		30.60606	36.66667	17.00000	0.0	0.0	0.0	-	-	-	*
		32.12121	36.66667	17.00000	0.0	0.0	0.0	-	-	-	*
		33.63636	36.66667	17.00000	0.0	0.0	0.0	-	-	-	*
		35.15152	36.66667	17.00000	0.0	0.0	0.0	-	-	-	*
		36.66667	36.66667	17.00000	0.0	0.0	0.0	-	-	-	*
		38.18182	36.66667	17.00000	0.0	0.0	0.0	-	-	-	*
		39.69697	36.66667	17.00000	0.0	0.0	0.0	-	-	-	*

Type/No.		Coordinates			Displacements					Angle of Line	
Name	Dist.	x	y	z	x	y	z	Horizontal displacement	Horizontal displacement	to x Axis	
		103.33333	36.66667	17.00000	0.0	0.0	0.0	-	-	-	*
		104.84848	36.66667	17.00000	0.0	0.0	0.0	-	-	-	*
		106.36364	36.66667	17.00000	0.0	0.0	0.0	-	-	-	*
		107.87879	36.66667	17.00000	0.0	0.0	0.0	-	-	-	*
		109.39394	36.66667	17.00000	0.0	0.0	0.0	-	-	-	*
		110.90909	36.66667	17.00000	0.0	0.0	0.0	-	-	-	*
		112.42424	36.66667	17.00000	0.0	0.0	0.0	-	-	-	*
		113.93939	36.66667	17.00000	0.0	0.0	0.0	-	-	-	*
		115.45455	36.66667	17.00000	0.0	0.0	0.0	-	-	-	*
		116.96970	36.66667	17.00000	0.0	0.0	0.0	-	-	-	*
		118.48485	36.66667	17.00000	0.0	0.0	0.0	-	-	-	*
		120.00000	36.66667	17.00000	0.0	0.0	0.0	-	-	-	*
		-30.00000	37.67677	17.00000	0.0	0.0	0.0	-	-	-	*
		-28.48485	37.67677	17.00000	0.0	0.0	0.0	-	-	-	*
		-26.96970	37.67677	17.00000	0.0	0.0	0.0	-	-	-	*
		-25.45455	37.67677	17.00000	0.0	0.0	0.0	-	-	-	*
		-23.93939	37.67677	17.00000	0.0	0.0	0.0	-	-	-	*
		-22.42424	37.67677	17.00000	0.0	0.0	0.0	-	-	-	*
		-20.90909	37.67677	17.00000	0.0	0.0	0.0	-	-	-	*
		-19.39394	37.67677	17.00000	0.0	0.0	0.0	-	-	-	*
		-17.87879	37.67677	17.00000	0.0	0.0	0.0	-	-	-	*
		-16.36364	37.67677	17.00000	0.0	0.0	0.0	-	-	-	*
		-14.84848	37.67677	17.00000	0.0	0.0	0.0	-	-	-	*
		-13.33333	37.67677	17.00000	0.0	0.0	0.0	-	-	-	*
		-11.81818	37.67677	17.00000	0.0	0.0	0.0	-	-	-	*
		-10.30303	37.67677	17.00000	0.0	0.0	0.0	-	-	-	*
		-8.78788	37.67677	17.00000	0.0	0.0	0.0	-	-	-	*
		-7.27273	37.67677	17.00000	0.0	0.0	0.0	-	-	-	*
		-5.75758	37.67677	17.00000	0.0	0.0	0.0	-	-	-	*
		-4.24242	37.67677	17.00000	0.0	0.0	0.0	-	-	-	*
		-2.72727	37.67677	17.00000	0.0	0.0	0.0	-	-	-	*
		-1.21212	37.67677	17.00000	0.0	0.0	0.0	-	-	-	*
		0.30303	37.67677	17.00000	0.0	0.0	0.0	-	-	-	*
		1.81818	37.67677	17.00000	0.0	0.0	0.0	-	-	-	*
		3.33333	37.67677	17.00000	0.0	0.0	0.0	-	-	-	*
		4.84848	37.67677	17.00000	0.0	0.0	0.0	-	-	-	*
		6.36364	37.67677	17.00000	0.0	0.0	0.0	-	-	-	*
		7.87879	37.67677	17.00000	0.0	0.0	0.0	-	-	-	*
		9.39394	37.67677	17.00000	0.0	0.0	0.0	-	-	-	*
		10.90909	37.67677	17.00000	0.0	0.0	0.0	-	-	-	*
		12.42424	37.67677	17.00000	0.0	0.0	0.0	-	-	-	*
		13.93939	37.67677	17.00000	0.0	0.0	0.0	-	-	-	*
		15.45455	37.67677	17.00000	0.0	0.0	0.0	-	-	-	*
		16.96970	37.67677	17.00000	0.0	0.0	0.0	-	-	-	*
		18.48485	37.67677	17.00000	0.0	0.0	0.0	-	-	-	*
		20.00000	37.67677	17.00000	0.0	0.0	0.0	-	-	-	*
		21.51515	37.67677	17.00000	0.0	0.0	0.0	-	-	-	*
		23.03030	37.67677	17.00000	0.0	0.0	0.0	-	-	-	*
		24.54545	37.67677	17.00000	0.0	0.0	0.0	-	-	-	*
		26.06061	37.67677	17.00000	0.0	0.0	0.0	-	-	-	*
		27.57576	37.67677	17.00000	0.0	0.0	0.0	-	-	-	*
		29.09091	37.67677	17.00000	0.0	0.0	0.0	-	-	-	*
		30.60606	37.67677	17.00000	0.0	0.0	0.0	-	-	-	*
		32.12121	37.67677	17.00000	0.0	0.0	0.0	-	-	-	*
		33.63636	37.67677	17.00000	0.0	0.0	0.0	-	-	-	*
		35.15152	37.67677	17.00000	0.0	0.0	0.0	-	-	-	*
		36.66667	37.67677	17.00000	0.0	0.0	0.0	-	-	-	*
		38.18182	37.67677	17.00000	0.0	0.0	0.0	-	-	-	*
		39.69697	37.67677	17.00000	0.0	0.0	0.0	-	-	-	*
		41.21212	37.67677	17.00000	0.0	0.0	0.0	-	-	-	*
		42.72727	37.67677	17.00000	0.0	0.0	0.0	-	-	-	*
		44.24242	37.67677	17.00000	0.0	0.0	0.0	-	-	-	*
		45.75758	37.67677	17.00000	0.0	0.0	0.0	-	-	-	*
		47.27273	37.67677	17.00000	0.0	0.0	0.0	-	-	-	*
		48.78788	37.67677	17.00000	0.0	0.0	0.0	-	-	-	*
		50.30303	37.67677	17.00000	0.0	0.0	0.0	-	-	-	*
		51.81818	37.67677	17.00000	0.0	0.0	0.0	-	-	-	*
		53.33333	37.67677	17.00000	0.0	0.0	0.0	-	-	-	*
		54.84848	37.67677	17.00000	0.0	0.0	0.0	-	-	-	*
		56.36364	37.67677	17.00000	0.0	0.0	0.0	-	-	-	*
		57.87879	37.67677	17.00000	0.0	0.0	0.0	-	-	-	*
		59.39394	37.67677	17.00000	0.0	0.0	0.0	-	-	-	*
		60.90909	37.67677	17.00000	0.0	0.0	0.0	-	-	-	*
		62.42424	37.67677	17.00000	0.0	0.0	0.0	-	-	-	*
		63.93939	37.67677	17.00000	0.0	0.0	0.0	-	-	-	*
		65.45455	37.67677	17.00000	0.0	0.0	0.0	-	-	-	*
		66.96970	37.67677	17.00000	0.0	0.0	0.0	-	-	-	*
		68.48485	37.67677	17.00000	0.0	0.0	0.0	-	-	-	*
		70.00000	37.67677	17.00000	0.0	0.0	0.0	-	-	-	*
		71.51515	37.67677	17.00000				Point lies within an excavation.			*
		73.03030	37.67677	17.00000				Point lies within an excavation.			*
		74.54545	37.67677	17.00000				Point lies within an excavation.			*
		76.06061	37.67677	17.00000				Point lies within an excavation.			*
		77.57576	37.67677	17.00000				Point lies within an excavation.			*
		79.09091	37.67677	17.00000				Point lies within an excavation.			*
		80.60606	37.67677	17.00000				Point lies within an excavation.			*
		82.12121	37.67677	17.00000	-10.091	0.0	5.3817	-	-	-	*
		83.63636	37.67677	17.00000	-8.9150	0.0	6.0856	-	-	-	*
		85.15152	37.67677	17.00000	-7.8242	0.0	6.1230	-	-	-	*
		86.66667	37.67677	17.00000	-6.8080	0.0	5.7002	-	-	-	*
		88.18182	37.67677	17.00000	-5.8556	0.0	4.9924	-	-	-	*
		89.69697	37.67677	17.00000	-4.9559	0.0	4.1442	-	-	-	*
		91.21212	37.67677	17.00000	-4.0980	0.0	3.2696	-	-	-	*
		92.72727	37.67677	17.00000	-3.2709	0.0	2.4515	-	-	-	*
		94.24242	37.67677	17.00000	-2.4638	0.0	1.7423	-	-	-	*
		95.75758	37.67677	17.00000	-1.7088	0.0	1.1636	-	-	-	*
		97.27273	37.67677	17.00000	-1.1785	0.0	0.70625	-	-	-	*
		98.78788	37.67677	17.00000	-0.64824	0.0	0.33030	-	-	-	*
		100.30303	37.67677	17.00000	-0.11794	0.0	0.025700	-	-	-	*
		101.81818	37.67677	17.00000	0.0	0.0	0.0	-	-	-	*
		103.33333	37.67677	17.00000	0.0	0.0	0.0	-	-	-	*
		104.84848	37.67677	17.00000	0.0	0.0	0.0	-	-	-	*
		106.36364	37.67677	17.00000	0.0	0.0	0.0	-	-	-	*
		107.87879	37.67677	17.00000	0.0	0.0	0.0	-	-	-	*
		109.39394	37.67677	17.00000	0.0	0.0	0.0	-	-	-	*
		110.90909	37.67677	17.00000	0.0	0.0	0.0	-	-	-	*
		112.42424	37.67677	17.00000	0.0	0.0	0.0	-	-	-	*
		113.93939	37.67677	17.00000	0.0	0.0	0.0	-	-	-	*
		115.45455	37.67677	17.00000	0.0	0.0	0.0	-	-	-	*
		116.96970	37.67677	17.00000	0.0	0.0	0.0	-	-	-	*
		118.48485	37.67677	17.00000	0.0	0.0	0.0	-	-	-	*
		120.00000	37.67677	17.00000	0.0	0.0	0.0	-	-	-	*
		-30.00000	38.68687	17.00000	0.0	0.0	0.0	-	-	-	*
		-28.48485	38.68687	17.00000	0.0	0.0	0.0	-	-	-	*
		-26.96970	38.68687	17.00000	0.0	0.0	0.0	-	-	-	*
		-25.45455	38.68687	17.00000	0.0	0.0	0.0	-	-	-	*
		-23.93939	38.68687	17.00000	0.0	0.0	0.0	-	-	-	*
		-22.42424	38.68687	17.00000	0.0	0.0	0.0	-	-	-	*
		-20.90909	38.68687	17.00000	0.0	0.0	0.0	-	-	-	*
		-19.39394	38.68687	17.00000	0.0	0.0	0.0	-	-	-	*
		-17.87879	38.68687	17.00000	0.0	0.0	0.0	-	-	-	*
		-16.36364	38.68687	17.00000	0.0	0.0	0.0	-	-	-	*
		-14.84848	38.68687	17.00000	0.0	0.0	0.0	-	-	-	*
		-13.33333	38.68687	17.00000	0.0	0.0	0.0	-	-	-	*
		-11.81818	38.68687	17.00000	0.0	0.0	0.0	-	-	-	*
		-10.30303	38.68687	17.00000	0.0	0.0	0.0	-	-	-	*
		-8.78788	38.68687	17.00000	0.0	0.0	0.0	-	-	-	*
		-7.27273	38.68687	17.00000	0.0	0.0	0.0	-	-	-	*
		-5.75758	38.68687	17.00000	0.0	0.0	0.0	-	-	-	*
		-4.24242	38.68687	17.00000	0.0	0.0	0.0	-	-	-	*
		-2.72727	38.68687	17.00000	0.0	0.0	0.0	-	-	-	*
		-1.21212	38.68687	17.00000	0.0	0.0	0.0	-	-	-	*
		0.30303	38.68687	17.00000	0.0	0.0	0.0	-	-	-	*
		1.81818	38.68687	17.00000	0.0	0.0	0.0	-	-	-	*
		3.33333	38.68687	17.00000	0.0	0.0	0.0	-	-	-	*
		4.84848	38.68687	17.00000	0.0	0.0	0.0	-	-	-	*
		6.36364	38.68687	17.00000	0.0	0.0	0.0	-	-	-	*
		7.87879	38.68687	17.00000	0.0	0.0	0.0	-	-	-	*
		9.39394	38.68687	17.00000	0.0	0.0	0.0	-	-	-	*
		10.90909	38.68687	17.00000	0.0	0.0	0.0	-	-	-	*
		12.42424	38.68687	17.00000	0.0	0.0	0.0	-	-	-	*

Oasys
GEA LIMITED
(GEOTECHNICAL &ENV ASSOC) J15050A
The Great Hall, Lincoln's Inn, Newman's Row, London, WC2A 3TL
Wall Movements Rev 3 Piling and Excavation
Damage Assessment
Job No. | Sheet No. | Rev.
Drg. Ref.
Made by MP | Date 08-Feb-2016 | Checked

Type/No.		Coordinates			Displacements					Angle of Line	
Name	Dist.	x	y	z	x	y	z	Horizontal displacement	Horizontal displacement	to x Axis	
		13.93939	38.68687	17.00000	0.0	0.0	0.0	-	-	-	*
		15.45455	38.68687	17.00000	0.0	0.0	0.0	-	-	-	*
		16.96970	38.68687	17.00000	0.0	0.0	0.0	-	-	-	*
		18.48485	38.68687	17.00000	0.0	0.0	0.0	-	-	-	*
		20.00000	38.68687	17.00000	0.0	0.0	0.0	-	-	-	*
		21.51515	38.68687	17.00000	0.0	0.0	0.0	-	-	-	*
		23.03030	38.68687	17.00000	0.0	0.0	0.0	-	-	-	*
		24.54545	38.68687	17.00000	0.0	0.0	0.0	-	-	-	*
		26.06061	38.68687	17.00000	0.0	0.0	0.0	-	-	-	*
		27.57576	38.68687	17.00000	0.0	0.0	0.0	-	-	-	*
		29.09091	38.68687	17.00000	0.0	0.0	0.0	-	-	-	*
		30.60606	38.68687	17.00000	0.0	0.0	0.0	-	-	-	*
		32.12121	38.68687	17.00000	0.0	0.0	0.0	-	-	-	*
		33.63636	38.68687	17.00000	0.0	0.0	0.0	-	-	-	*
		35.15152	38.68687	17.00000	0.0	0.0	0.0	-	-	-	*
		36.66667	38.68687	17.00000	0.0	0.0	0.0	-	-	-	*
		38.18182	38.68687	17.00000	0.0	0.0	0.0	-	-	-	*
		39.69697	38.68687	17.00000	0.0	0.0	0.0	-	-	-	*
		41.21212	38.68687	17.00000	0.0	0.0	0.0	-	-	-	*
		42.72727	38.68687	17.00000	0.0	0.0	0.0	-	-	-	*
		44.24242	38.68687	17.00000	0.0	0.0	0.0	-	-	-	*
		45.75758	38.68687	17.00000	0.0	0.0	0.0	-	-	-	*
		47.27273	38.68687	17.00000	0.0	0.0	0.0	-	-	-	*
		48.78788	38.68687	17.00000	0.0	0.0	0.0	-	-	-	*
		50.30303	38.68687	17.00000	0.0	0.0	0.0	-	-	-	*
		51.81818	38.68687	17.00000	0.0	0.0	0.0	-	-	-	*
		53.33333	38.68687	17.00000	0.0	0.0	0.0	-	-	-	*
		54.84848	38.68687	17.00000	0.0	0.0	0.0	-	-	-	*
		56.36364	38.68687	17.00000	0.0	0.0	0.0	-	-	-	*
		57.87879	38.68687	17.00000	0.0	0.0	0.0	-	-	-	*
		59.39394	38.68687	17.00000	0.0	0.0	0.0	-	-	-	*
		60.90909	38.68687	17.00000	0.0	0.0	0.0	-	-	-	*
		62.42424	38.68687	17.00000	0.0	0.0	0.0	-	-	-	*
		63.93939	38.68687	17.00000	0.0	0.0	0.0	-	-	-	*
		65.45455	38.68687	17.00000	0.0	0.0	0.0	-	-	-	*
		66.96970	38.68687	17.00000	0.0	0.0	0.0	-	-	-	*
		68.48485	38.68687	17.00000	0.0	0.0	0.0	-	-	-	*
		70.00000	38.68687	17.00000	0.0	0.0	0.0	-	-	-	*
		71.51515	38.68687	17.00000				Point lies within an excavation.			*
		73.03030	38.68687	17.00000				Point lies within an excavation.			*
		74.54545	38.68687	17.00000				Point lies within an excavation.			*
		76.06061	38.68687	17.00000				Point lies within an excavation.			*
		77.57576	38.68687	17.00000				Point lies within an excavation.			*
		79.09091	38.68687	17.00000				Point lies within an excavation.			*
		80.60606	38.68687	17.00000				Point lies within an excavation.			*
		82.12121	38.68687	17.00000	-10.091	0.0	5.3817	-	-	-	*
		83.63636	38.68687	17.00000	-8.9150	0.0	6.0856	-	-	-	*
		85.15152	38.68687	17.00000	-7.8242	0.0	6.1230	-	-	-	*
		86.66667	38.68687	17.00000	-6.8080	0.0	5.7002	-	-	-	*
		88.18182	38.68687	17.00000	-5.8556	0.0	4.9924	-	-	-	*
		89.69697	38.68687	17.00000	-4.9559	0.0	4.1442	-	-	-	*
		91.21212	38.68687	17.00000	-4.0980	0.0	3.2696	-	-	-	*
		92.72727	38.68687	17.00000	-3.2709	0.0	2.4515	-	-	-	*
		94.24242	38.68687	17.00000	-2.4638	0.0	1.7423	-	-	-	*
		95.75758	38.68687	17.00000	-1.7088	0.0	1.1636	-	-	-	*
		97.27273	38.68687	17.00000	-1.1785	0.0	0.70625	-	-	-	*
		98.78788	38.68687	17.00000	-0.64824	0.0	0.33030	-	-	-	*
		100.30303	38.68687	17.00000	-0.11794	0.0	0.025700	-	-	-	*
		101.81818	38.68687	17.00000	0.0	0.0	0.0	-	-	-	*
		103.33333	38.68687	17.00000	0.0	0.0	0.0	-	-	-	*
		104.84848	38.68687	17.00000	0.0	0.0	0.0	-	-	-	*
		106.36364	38.68687	17.00000	0.0	0.0	0.0	-	-	-	*
		107.87879	38.68687	17.00000	0.0	0.0	0.0	-	-	-	*
		109.39394	38.68687	17.00000	0.0	0.0	0.0	-	-	-	*
		110.90909	38.68687	17.00000	0.0	0.0	0.0	-	-	-	*
		112.42424	38.68687	17.00000	0.0	0.0	0.0	-	-	-	*
		113.93939	38.68687	17.00000	0.0	0.0	0.0	-	-	-	*
		115.45455	38.68687	17.00000	0.0	0.0	0.0	-	-	-	*
		116.96970	38.68687	17.00000	0.0	0.0	0.0	-	-	-	*
		118.48485	38.68687	17.00000	0.0	0.0	0.0	-	-	-	*
		120.00000	38.68687	17.00000	0.0	0.0	0.0	-	-	-	*
		-30.00000	39.69697	17.00000	0.0	0.0	0.0	-	-	-	*
		-28.48485	39.69697	17.00000	0.0	0.0	0.0	-	-	-	*
		-26.96970	39.69697	17.00000	0.0	0.0	0.0	-	-	-	*
		-25.45455	39.69697	17.00000	0.0	0.0	0.0	-	-	-	*
		-23.93939	39.69697	17.00000	0.0	0.0	0.0	-	-	-	*
		-22.42424	39.69697	17.00000	0.0	0.0	0.0	-	-	-	*
		-20.90909	39.69697	17.00000	0.0	0.0	0.0	-	-	-	*
		-19.39394	39.69697	17.00000	0.0	0.0	0.0	-	-	-	*
		-17.87879	39.69697	17.00000	0.0	0.0	0.0	-	-	-	*
		-16.36364	39.69697	17.00000	0.0	0.0	0.0	-	-	-	*
		-14.84848	39.69697	17.00000	0.0	0.0	0.0	-	-	-	*
		-13.33333	39.69697	17.00000	0.0	0.0	0.0	-	-	-	*
		-11.81818	39.69697	17.00000	0.0	0.0	0.0	-	-	-	*
		-10.30303	39.69697	17.00000	0.0	0.0	0.0	-	-	-	*
		-8.78788	39.69697	17.00000	0.0	0.0	0.0	-	-	-	*
		-7.27273	39.69697	17.00000	0.0	0.0	0.0	-	-	-	*
		-5.75758	39.69697	17.00000	0.0	0.0	0.0	-	-	-	*
		-4.24242	39.69697	17.00000	0.0	0.0	0.0	-	-	-	*
		-2.72727	39.69697	17.00000	0.0	0.0	0.0	-	-	-	*
		-1.21212	39.69697	17.00000	0.0	0.0	0.0	-	-	-	*
		0.30303	39.69697	17.00000	0.0	0.0	0.0	-	-	-	*
		1.81818	39.69697	17.00000	0.0	0.0	0.0	-	-	-	*
		3.33333	39.69697	17.00000	0.0	0.0	0.0	-	-	-	*
		4.84848	39.69697	17.00000	0.0	0.0	0.0	-	-	-	*
		6.36364	39.69697	17.00000	0.0	0.0	0.0	-	-	-	*
		7.87879	39.69697	17.00000	0.0	0.0	0.0	-	-	-	*
		9.39394	39.69697	17.00000	0.0	0.0	0.0	-	-	-	*
		10.90909	39.69697	17.00000	0.0	0.0	0.0	-	-	-	*
		12.42424	39.69697	17.00000	0.0	0.0	0.0	-	-	-	*
		13.93939	39.69697	17.00000	0.0	0.0	0.0	-	-	-	*
		15.45455	39.69697	17.00000	0.0	0.0	0.0	-	-	-	*
		16.96970	39.69697	17.00000	0.0	0.0	0.0	-	-	-	*
		18.48485	39.69697	17.00000	0.0	0.0	0.0	-	-	-	*
		20.00000	39.69697	17.00000	0.0	0.0	0.0	-	-	-	*
		21.51515	39.69697	17.00000	0.0	0.0	0.0	-	-	-	*
		23.03030	39.69697	17.00000	0.0	0.0	0.0	-	-	-	*
		24.54545	39.69697	17.00000	0.0	0.0	0.0	-	-	-	*
		26.06061	39.69697	17.00000	0.0	0.0	0.0	-	-	-	*
		27.57576	39.69697	17.00000	0.0	0.0	0.0	-	-	-	*
		29.09091	39.69697	17.00000	0.0	0.0	0.0	-	-	-	*
		30.60606	39.69697	17.00000	0.0	0.0	0.0	-	-	-	*
		32.12121	39.69697	17.00000	0.0	0.0	0.0	-	-	-	*
		33.63636	39.69697	17.00000	0.0	0.0	0.0	-	-	-	*
		35.15152	39.69697	17.00000	0.0	0.0	0.0	-	-	-	*
		36.66667	39.69697	17.00000	0.0	0.0	0.0	-	-	-	*
		38.18182	39.69697	17.00000	0.0	0.0	0.0	-	-	-	*
		39.69697	39.69697	17.00000	0.0	0.0	0.0	-	-	-	*
		41.21212	39.69697	17.00000	0.0	0.0	0.0	-	-	-	*
		42.72727	39.69697	17.00000	0.0	0.0	0.0	-	-	-	*
		44.24242	39.69697	17.00000	0.0	0.0	0.0	-	-	-	*
		45.75758	39.69697	17.00000	0.0	0.0	0.0	-	-	-	*
		47.27273	39.69697	17.00000	0.0	0.0	0.0	-	-	-	*
		48.78788	39.69697	17.00000	0.0	0.0	0.0	-	-	-	*
		50.30303	39.69697	17.00000	0.0	0.0	0.0	-	-	-	*
		51.81818	39.69697	17.00000	0.0	0.0	0.0	-	-	-	*
		53.33333	39.69697	17.00000	0.0	0.0	0.0	-	-	-	*
		54.84848	39.69697	17.00000	0.0	0.0	0.0	-	-	-	*
		56.36364	39.69697	17.00000	0.0	0.0	0.0	-	-	-	*
		57.87879	39.69697	17.00000	0.0	0.0	0.0	-	-	-	*
		59.39394	39.69697	17.00000	0.0	0.0	0.0	-	-	-	*
		60.90909	39.69697	17.00000	0.0	0.0	0.0	-	-	-	*
		62.42424	39.69697	17.00000	0.0	0.0	0.0	-	-	-	*
		63.93939	39.69697	17.00000	0.0	0.0	0.0	-	-	-	*
		65.45455	39.69697	17.00000	0.0	0.0	0.0	-	-	-	*
		66.96970	39.69697	17.00000	0.0	0.0	0.0	-	-	-	*
		68.48485	39.69697	17.00000	0.0	0.0	0.0	-	-	-	*
		70.00000	39.69697	17.00000	0.0	0.0	0.0	-	-	-	*
		71.51515	39.69697	17.00000				Point lies within an excavation.			*
		73.03030	39.69697	17.00000				Point lies within an excavation.			*
		74.54545	39.69697	17.00000				Point lies within an excavation.			*

Type/No. Name	Dist.	Coordinates x	y	z	Displacements x	y	z	Horizontal displacement	Horizontal displacement	Angle of Line to x Axis	
		76.06061	39.69697	17.00000			Point lies within an excavation.				*
		77.57576	39.69697	17.00000			Point lies within an excavation.				*
		79.09091	39.69697	17.00000			Point lies within an excavation.				*
		80.60606	39.69697	17.00000			Point lies within an excavation.				*
		82.12121	39.69697	17.00000	-10.091	0.0	5.3817	-	-	-	*
		83.63636	39.69697	17.00000	-8.9150	0.0	6.0856	-	-	-	*
		85.15152	39.69697	17.00000	-7.8242	0.0	6.1230	-	-	-	*
		86.66667	39.69697	17.00000	-6.8080	0.0	5.7002	-	-	-	*
		88.18182	39.69697	17.00000	-5.8556	0.0	4.9924	-	-	-	*
		89.69697	39.69697	17.00000	-4.9559	0.0	4.1442	-	-	-	*
		91.21212	39.69697	17.00000	-4.0980	0.0	3.2696	-	-	-	*
		92.72727	39.69697	17.00000	-3.2709	0.0	2.4515	-	-	-	*
		94.24242	39.69697	17.00000	-2.4638	0.0	1.7423	-	-	-	*
		95.75758	39.69697	17.00000	-1.7088	0.0	1.1636	-	-	-	*
		97.27273	39.69697	17.00000	-1.1785	0.0	0.70625	-	-	-	*
		98.78788	39.69697	17.00000	-0.64824	0.0	0.33030	-	-	-	*
		100.30303	39.69697	17.00000	-0.11794	0.0	0.025700	-	-	-	*
		101.81818	39.69697	17.00000	0.0	0.0	0.0	-	-	-	*
		103.33333	39.69697	17.00000	0.0	0.0	0.0	-	-	-	*
		104.84848	39.69697	17.00000	0.0	0.0	0.0	-	-	-	*
		106.36364	39.69697	17.00000	0.0	0.0	0.0	-	-	-	*
		107.87879	39.69697	17.00000	0.0	0.0	0.0	-	-	-	*
		109.39394	39.69697	17.00000	0.0	0.0	0.0	-	-	-	*
		110.90909	39.69697	17.00000	0.0	0.0	0.0	-	-	-	*
		112.42424	39.69697	17.00000	0.0	0.0	0.0	-	-	-	*
		113.93939	39.69697	17.00000	0.0	0.0	0.0	-	-	-	*
		115.45455	39.69697	17.00000	0.0	0.0	0.0	-	-	-	*
		116.96970	39.69697	17.00000	0.0	0.0	0.0	-	-	-	*
		118.48485	39.69697	17.00000	0.0	0.0	0.0	-	-	-	*
		120.00000	39.69697	17.00000	0.0	0.0	0.0	-	-	-	*
		-30.00000	40.70707	17.00000	0.0	0.0	0.0	-	-	-	*
		-28.48485	40.70707	17.00000	0.0	0.0	0.0	-	-	-	*
		-26.96970	40.70707	17.00000	0.0	0.0	0.0	-	-	-	*
		-25.45455	40.70707	17.00000	0.0	0.0	0.0	-	-	-	*
		-23.93939	40.70707	17.00000	0.0	0.0	0.0	-	-	-	*
		-22.42424	40.70707	17.00000	0.0	0.0	0.0	-	-	-	*
		-20.90909	40.70707	17.00000	0.0	0.0	0.0	-	-	-	*
		-19.39394	40.70707	17.00000	0.0	0.0	0.0	-	-	-	*
		-17.87879	40.70707	17.00000	0.0	0.0	0.0	-	-	-	*
		-16.36364	40.70707	17.00000	0.0	0.0	0.0	-	-	-	*
		-14.84848	40.70707	17.00000	0.0	0.0	0.0	-	-	-	*
		-13.33333	40.70707	17.00000	0.0	0.0	0.0	-	-	-	*
		-11.81818	40.70707	17.00000	0.0	0.0	0.0	-	-	-	*
		-10.30303	40.70707	17.00000	0.0	0.0	0.0	-	-	-	*
		-8.78788	40.70707	17.00000	0.0	0.0	0.0	-	-	-	*
		-7.27273	40.70707	17.00000	0.0	0.0	0.0	-	-	-	*
		-5.75758	40.70707	17.00000	0.0	0.0	0.0	-	-	-	*
		-4.24242	40.70707	17.00000	0.0	0.0	0.0	-	-	-	*
		-2.72727	40.70707	17.00000	0.0	0.0	0.0	-	-	-	*
		-1.21212	40.70707	17.00000	0.0	0.0	0.0	-	-	-	*
		0.30303	40.70707	17.00000	0.0	0.0	0.0	-	-	-	*
		1.81818	40.70707	17.00000	0.0	0.0	0.0	-	-	-	*
		3.33333	40.70707	17.00000	0.0	0.0	0.0	-	-	-	*
		4.84848	40.70707	17.00000	0.0	0.0	0.0	-	-	-	*
		6.36364	40.70707	17.00000	0.0	0.0	0.0	-	-	-	*
		7.87879	40.70707	17.00000	0.0	0.0	0.0	-	-	-	*
		9.39394	40.70707	17.00000	0.0	0.0	0.0	-	-	-	*
		10.90909	40.70707	17.00000	0.0	0.0	0.0	-	-	-	*
		12.42424	40.70707	17.00000	0.0	0.0	0.0	-	-	-	*
		13.93939	40.70707	17.00000	0.0	0.0	0.0	-	-	-	*
		15.45455	40.70707	17.00000	0.0	0.0	0.0	-	-	-	*
		16.96970	40.70707	17.00000	0.0	0.0	0.0	-	-	-	*
		18.48485	40.70707	17.00000	0.0	0.0	0.0	-	-	-	*
		20.00000	40.70707	17.00000	0.0	0.0	0.0	-	-	-	*
		21.51515	40.70707	17.00000	0.0	0.0	0.0	-	-	-	*
		23.03030	40.70707	17.00000	0.0	0.0	0.0	-	-	-	*
		24.54545	40.70707	17.00000	0.0	0.0	0.0	-	-	-	*
		26.06061	40.70707	17.00000	0.0	0.0	0.0	-	-	-	*
		27.57576	40.70707	17.00000	0.0	0.0	0.0	-	-	-	*
		29.09091	40.70707	17.00000	0.0	0.0	0.0	-	-	-	*
		30.60606	40.70707	17.00000	0.0	0.0	0.0	-	-	-	*
		32.12121	40.70707	17.00000	0.0	0.0	0.0	-	-	-	*
		33.63636	40.70707	17.00000	0.0	0.0	0.0	-	-	-	*
		35.15152	40.70707	17.00000	0.0	0.0	0.0	-	-	-	*
		36.66667	40.70707	17.00000	0.0	0.0	0.0	-	-	-	*
		38.18182	40.70707	17.00000	0.0	0.0	0.0	-	-	-	*
		39.69697	40.70707	17.00000	0.0	0.0	0.0	-	-	-	*
		41.21212	40.70707	17.00000	0.0	0.0	0.0	-	-	-	*
		42.72727	40.70707	17.00000	0.0	0.0	0.0	-	-	-	*
		44.24242	40.70707	17.00000	0.0	0.0	0.0	-	-	-	*
		45.75758	40.70707	17.00000	0.0	0.0	0.0	-	-	-	*
		47.27273	40.70707	17.00000	0.0	0.0	0.0	-	-	-	*
		48.78788	40.70707	17.00000	0.0	0.0	0.0	-	-	-	*
		50.30303	40.70707	17.00000	0.0	0.0	0.0	-	-	-	*
		51.81818	40.70707	17.00000	0.0016484	-64.104E-6	422.14E-6	-	-	-	*
		53.33333	40.70707	17.00000	0.0079218	-336.08E-6	0.0084468	-	-	-	*
		54.84848	40.70707	17.00000	0.015444	-720.74E-6	0.019500	-	-	-	*
		56.36364	40.70707	17.00000	0.024630	-0.0012771	0.034509	-	-	-	*
		57.87879	40.70707	17.00000	0.045079	-0.0026296	0.055702	-	-	-	*
		59.39394	40.70707	17.00000	0.072790	-0.0048527	0.085875	-	-	-	*
		60.90909	40.70707	17.00000	0.11064	-0.0086052	0.12886	-	-	-	*
		62.42424	40.70707	17.00000	0.16522	-0.015420	0.19056	-	-	-	*
		63.93939	40.70707	17.00000	0.24946	-0.029104	0.28148	-	-	-	*
		65.45455	40.70707	17.00000	0.39250	-0.061056	0.42417	-	-	-	*
		66.96970	40.70707	17.00000	0.67451	-0.15739	0.68177	-	-	-	*
		68.48485	40.70707	17.00000	1.3841	-0.64590	1.3303	-	-	-	*
		70.00000	40.70707	17.00000	0.0	-6.9537	5.1075	-	-	-	*
		71.51515	40.70707	17.00000	0.0	-8.7291	5.9196	-	-	-	*
		73.03030	40.70707	17.00000	0.0	-8.7291	5.9196	-	-	-	*
		74.54545	40.70707	17.00000	0.0	-8.7291	5.9196	-	-	-	*
		76.06061	40.70707	17.00000	0.0	-8.7291	5.9196	-	-	-	*
		77.57576	40.70707	17.00000	0.0	-8.7291	5.9196	-	-	-	*
		79.09091	40.70707	17.00000	0.0	-8.7291	5.9196	-	-	-	*
		80.60606	40.70707	17.00000	0.0	-8.7291	5.9196	-	-	-	*
		82.12121	40.70707	17.00000	-1.1486	-6.7003	5.0106	-	-	-	*
		83.63636	40.70707	17.00000	-5.7179	-2.4707	4.9418	-	-	-	*
		85.15152	40.70707	17.00000	-5.5405	-1.2431	4.9349	-	-	-	*
		86.66667	40.70707	17.00000	-4.9178	-0.74512	4.5940	-	-	-	*
		88.18182	40.70707	17.00000	-4.2395	-0.48491	4.0506	-	-	-	*
		89.69697	40.70707	17.00000	-3.5703	-0.32798	3.4054	-	-	-	*
		91.21212	40.70707	17.00000	-2.9225	-0.22432	2.7364	-	-	-	*
		92.72727	40.70707	17.00000	-2.2946	-0.15124	2.1005	-	-	-	*
		94.24242	40.70707	17.00000	-1.6799	-0.097024	1.5337	-	-	-	*
		95.75758	40.70707	17.00000	-1.1163	-0.057372	1.0512	-	-	-	*
		97.27273	40.70707	17.00000	-0.77075	-0.035683	0.64774	-	-	-	*
		98.78788	40.70707	17.00000	-0.42337	-0.017831	0.29727	-	-	-	*
		100.30303	40.70707	17.00000	-0.074618	-0.0028826	0.016500	-	-	-	*
		101.81818	40.70707	17.00000	0.0	0.0	0.0	-	-	-	*
		103.33333	40.70707	17.00000	0.0	0.0	0.0	-	-	-	*
		104.84848	40.70707	17.00000	0.0	0.0	0.0	-	-	-	*
		106.36364	40.70707	17.00000	0.0	0.0	0.0	-	-	-	*
		107.87879	40.70707	17.00000	0.0	0.0	0.0	-	-	-	*
		109.39394	40.70707	17.00000	0.0	0.0	0.0	-	-	-	*
		110.90909	40.70707	17.00000	0.0	0.0	0.0	-	-	-	*
		112.42424	40.70707	17.00000	0.0	0.0	0.0	-	-	-	*
		113.93939	40.70707	17.00000	0.0	0.0	0.0	-	-	-	*
		115.45455	40.70707	17.00000	0.0	0.0	0.0	-	-	-	*
		116.96970	40.70707	17.00000	0.0	0.0	0.0	-	-	-	*
		118.48485	40.70707	17.00000	0.0	0.0	0.0	-	-	-	*
		120.00000	40.70707	17.00000	0.0	0.0	0.0	-	-	-	*
		-30.00000	41.71717	17.00000	0.0	0.0	0.0	-	-	-	*
		-28.48485	41.71717	17.00000	0.0	0.0	0.0	-	-	-	*
		-26.96970	41.71717	17.00000	0.0	0.0	0.0	-	-	-	*
		-25.45455	41.71717	17.00000	0.0	0.0	0.0	-	-	-	*
		-23.93939	41.71717	17.00000	0.0	0.0	0.0	-	-	-	*
		-22.42424	41.71717	17.00000	0.0	0.0	0.0	-	-	-	*
		-20.90909	41.71717	17.00000	0.0	0.0	0.0	-	-	-	*
		-19.39394	41.71717	17.00000	0.0	0.0	0.0	-	-	-	*
		-17.87879	41.71717	17.00000	0.0	0.0	0.0	-	-	-	*
		-16.36364	41.71717	17.00000	0.0	0.0	0.0	-	-	-	*
		-14.84848	41.71717	17.00000	0.0	0.0	0.0	-	-	-	*

Oasys
GEA LIMITED
(GEOTECHNICAL &ENV ASSOC)
The Great Hall, Lincoln's Inn, Newman's Row, London, WC2A 3TL
Wall Movements Rev 3 Piling and Excavation
Damage Assessment

Job No. J15050A | Sheet No. | Rev.
Drg. Ref.
Made by MP | Date 08-Feb-2016 | Checked

Type/No. Name	Dist.	Coordinates x	y	z	Displacements x	y	z	Horizontal displacement	Horizontal displacement	Angle of Line to x Axis	
		-13.33333	41.71717	17.00000	0.0	0.0	0.0	-	-	-	*
		-11.81818	41.71717	17.00000	0.0	0.0	0.0	-	-	-	*
		-10.30303	41.71717	17.00000	0.0	0.0	0.0	-	-	-	*
		-8.78788	41.71717	17.00000	0.0	0.0	0.0	-	-	-	*
		-7.27273	41.71717	17.00000	0.0	0.0	0.0	-	-	-	*
		-5.75758	41.71717	17.00000	0.0	0.0	0.0	-	-	-	*
		-4.24242	41.71717	17.00000	0.0	0.0	0.0	-	-	-	*
		-2.72727	41.71717	17.00000	0.0	0.0	0.0	-	-	-	*
		-1.21212	41.71717	17.00000	0.0	0.0	0.0	-	-	-	*
		0.30303	41.71717	17.00000	0.0	0.0	0.0	-	-	-	*
		1.81818	41.71717	17.00000	0.0	0.0	0.0	-	-	-	*
		3.33333	41.71717	17.00000	0.0	0.0	0.0	-	-	-	*
		4.84848	41.71717	17.00000	0.0	0.0	0.0	-	-	-	*
		6.36364	41.71717	17.00000	0.0	0.0	0.0	-	-	-	*
		7.87879	41.71717	17.00000	0.0	0.0	0.0	-	-	-	*
		9.39394	41.71717	17.00000	0.0	0.0	0.0	-	-	-	*
		10.90909	41.71717	17.00000	0.0	0.0	0.0	-	-	-	*
		12.42424	41.71717	17.00000	0.0	0.0	0.0	-	-	-	*
		13.93939	41.71717	17.00000	0.0	0.0	0.0	-	-	-	*
		15.45455	41.71717	17.00000	0.0	0.0	0.0	-	-	-	*
		16.96970	41.71717	17.00000	0.0	0.0	0.0	-	-	-	*
		18.48485	41.71717	17.00000	0.0	0.0	0.0	-	-	-	*
		20.00000	41.71717	17.00000	0.0	0.0	0.0	-	-	-	*
		21.51515	41.71717	17.00000	0.0	0.0	0.0	-	-	-	*
		23.03030	41.71717	17.00000	0.0	0.0	0.0	-	-	-	*
		24.54545	41.71717	17.00000	0.0	0.0	0.0	-	-	-	*
		26.06061	41.71717	17.00000	0.0	0.0	0.0	-	-	-	*
		27.57576	41.71717	17.00000	0.0	0.0	0.0	-	-	-	*
		29.09091	41.71717	17.00000	0.0	0.0	0.0	-	-	-	*
		30.60606	41.71717	17.00000	0.0	0.0	0.0	-	-	-	*
		32.12121	41.71717	17.00000	0.0	0.0	0.0	-	-	-	*
		33.63636	41.71717	17.00000	0.0	0.0	0.0	-	-	-	*
		35.15152	41.71717	17.00000	0.0	0.0	0.0	-	-	-	*
		36.66667	41.71717	17.00000	0.0	0.0	0.0	-	-	-	*
		38.18182	41.71717	17.00000	0.0	0.0	0.0	-	-	-	*
		39.69697	41.71717	17.00000	0.0	0.0	0.0	-	-	-	*
		41.21212	41.71717	17.00000	0.0	0.0	0.0	-	-	-	*
		42.72727	41.71717	17.00000	0.0	0.0	0.0	-	-	-	*
		44.24242	41.71717	17.00000	0.0	0.0	0.0	-	-	-	*
		45.75758	41.71717	17.00000	0.0	0.0	0.0	-	-	-	*
		47.27273	41.71717	17.00000	0.0	0.0	0.0	-	-	-	*
		48.78788	41.71717	17.00000	0.0	0.0	0.0	-	-	-	*
		50.30303	41.71717	17.00000	0.0	0.0	0.0	-	-	-	*
		51.81818	41.71717	17.00000	0.0033775	-318.98E-6	902.80E-6	-	-	-	*
		53.33333	41.71717	17.00000	0.018384	-0.0018942	0.019405	-	-	-	*
		54.84848	41.71717	17.00000	0.036316	-0.0041158	0.045811	-	-	-	*
		56.36364	41.71717	17.00000	0.058107	-0.0073171	0.081472	-	-	-	*
		57.87879	41.71717	17.00000	0.10506	-0.014883	0.13163	-	-	-	*
		59.39394	41.71717	17.00000	0.16973	-0.027480	0.20277	-	-	-	*
		60.90909	41.71717	17.00000	0.25674	-0.048494	0.30364	-	-	-	*
		62.42424	41.71717	17.00000	0.37925	-0.085964	0.44730	-	-	-	*
		63.93939	41.71717	17.00000	0.56077	-0.15889	0.65607	-	-	-	*
		65.45455	41.71717	17.00000	0.84488	-0.31918	0.97457	-	-	-	*
		66.96970	41.71717	17.00000	1.3034	-0.73858	1.5105	-	-	-	*
		68.48485	41.71717	17.00000	1.8881	-2.1399	2.6187	-	-	-	*
		70.00000	41.71717	17.00000	0.0	-6.3333	5.3068	-	-	-	*
		71.51515	41.71717	17.00000	0.0	-8.0087	6.3166	-	-	-	*
		73.03030	41.71717	17.00000	0.0	-8.0087	6.3166	-	-	-	*
		74.54545	41.71717	17.00000	0.0	-8.0087	6.3166	-	-	-	*
		76.06061	41.71717	17.00000	0.0	-8.0087	6.3166	-	-	-	*
		77.57576	41.71717	17.00000	0.0	-8.0087	6.3166	-	-	-	*
		79.09091	41.71717	17.00000	0.0	-8.0087	6.3166	-	-	-	*
		80.60606	41.71717	17.00000	0.0	-8.0087	6.3166	-	-	-	*
		82.12121	41.71717	17.00000	-0.44165	-6.2567	5.2557	-	-	-	*
		83.63636	41.71717	17.00000	-3.6869	-3.8690	4.7258	-	-	-	*
		85.15152	41.71717	17.00000	-4.4756	-2.4386	4.6946	-	-	-	*
		86.66667	41.71717	17.00000	-4.3082	-1.5853	4.3936	-	-	-	*
		88.18182	41.71717	17.00000	-3.8520	-1.0700	3.8926	-	-	-	*
		89.69697	41.71717	17.00000	-3.3069	-0.73776	3.2856	-	-	-	*
		91.21212	41.71717	17.00000	-2.7358	-0.50996	2.6486	-	-	-	*
		92.72727	41.71717	17.00000	-2.1587	-0.34596	2.0381	-	-	-	*
		94.24242	41.71717	17.00000	-1.5797	-0.22158	1.4904	-	-	-	*
		95.75758	41.71717	17.00000	-1.0573	-0.13197	1.0213	-	-	-	*
		97.27273	41.71717	17.00000	-0.72889	-0.081952	0.62628	-	-	-	*
		98.78788	41.71717	17.00000	-0.39523	-0.040427	0.28007	-	-	-	*
		100.30303	41.71717	17.00000	-0.057718	-0.0054150	0.013628	-	-	-	*
		101.81818	41.71717	17.00000	0.0	0.0	0.0	-	-	-	*
		103.33333	41.71717	17.00000	0.0	0.0	0.0	-	-	-	*
		104.84848	41.71717	17.00000	0.0	0.0	0.0	-	-	-	*
		106.36364	41.71717	17.00000	0.0	0.0	0.0	-	-	-	*
		107.87879	41.71717	17.00000	0.0	0.0	0.0	-	-	-	*
		109.39394	41.71717	17.00000	0.0	0.0	0.0	-	-	-	*
		110.90909	41.71717	17.00000	0.0	0.0	0.0	-	-	-	*
		112.42424	41.71717	17.00000	0.0	0.0	0.0	-	-	-	*
		113.93939	41.71717	17.00000	0.0	0.0	0.0	-	-	-	*
		115.45455	41.71717	17.00000	0.0	0.0	0.0	-	-	-	*
		116.96970	41.71717	17.00000	0.0	0.0	0.0	-	-	-	*
		118.48485	41.71717	17.00000	0.0	0.0	0.0	-	-	-	*
		120.00000	41.71717	17.00000	0.0	0.0	0.0	-	-	-	*
		-30.00000	42.72727	17.00000	0.0	0.0	0.0	-	-	-	*
		-28.48485	42.72727	17.00000	0.0	0.0	0.0	-	-	-	*
		-26.96970	42.72727	17.00000	0.0	0.0	0.0	-	-	-	*
		-25.45455	42.72727	17.00000	0.0	0.0	0.0	-	-	-	*
		-23.93939	42.72727	17.00000	0.0	0.0	0.0	-	-	-	*
		-22.42424	42.72727	17.00000	0.0	0.0	0.0	-	-	-	*
		-20.90909	42.72727	17.00000	0.0	0.0	0.0	-	-	-	*
		-19.39394	42.72727	17.00000	0.0	0.0	0.0	-	-	-	*
		-17.87879	42.72727	17.00000	0.0	0.0	0.0	-	-	-	*
		-16.36364	42.72727	17.00000	0.0	0.0	0.0	-	-	-	*
		-14.84848	42.72727	17.00000	0.0	0.0	0.0	-	-	-	*
		-13.33333	42.72727	17.00000	0.0	0.0	0.0	-	-	-	*
		-11.81818	42.72727	17.00000	0.0	0.0	0.0	-	-	-	*
		-10.30303	42.72727	17.00000	0.0	0.0	0.0	-	-	-	*
		-8.78788	42.72727	17.00000	0.0	0.0	0.0	-	-	-	*
		-7.27273	42.72727	17.00000	0.0	0.0	0.0	-	-	-	*
		-5.75758	42.72727	17.00000	0.0	0.0	0.0	-	-	-	*
		-4.24242	42.72727	17.00000	0.0	0.0	0.0	-	-	-	*
		-2.72727	42.72727	17.00000	0.0	0.0	0.0	-	-	-	*
		-1.21212	42.72727	17.00000	0.0	0.0	0.0	-	-	-	*
		0.30303	42.72727	17.00000	0.0	0.0	0.0	-	-	-	*
		1.81818	42.72727	17.00000	0.0	0.0	0.0	-	-	-	*
		3.33333	42.72727	17.00000	0.0	0.0	0.0	-	-	-	*
		4.84848	42.72727	17.00000	0.0	0.0	0.0	-	-	-	*
		6.36364	42.72727	17.00000	0.0	0.0	0.0	-	-	-	*
		7.87879	42.72727	17.00000	0.0	0.0	0.0	-	-	-	*
		9.39394	42.72727	17.00000	0.0	0.0	0.0	-	-	-	*
		10.90909	42.72727	17.00000	0.0	0.0	0.0	-	-	-	*
		12.42424	42.72727	17.00000	0.0	0.0	0.0	-	-	-	*
		13.93939	42.72727	17.00000	0.0	0.0	0.0	-	-	-	*
		15.45455	42.72727	17.00000	0.0	0.0	0.0	-	-	-	*
		16.96970	42.72727	17.00000	0.0	0.0	0.0	-	-	-	*
		18.48485	42.72727	17.00000	0.0	0.0	0.0	-	-	-	*
		20.00000	42.72727	17.00000	0.0	0.0	0.0	-	-	-	*
		21.51515	42.72727	17.00000	0.0	0.0	0.0	-	-	-	*
		23.03030	42.72727	17.00000	0.0	0.0	0.0	-	-	-	*
		24.54545	42.72727	17.00000	0.0	0.0	0.0	-	-	-	*
		26.06061	42.72727	17.00000	0.0	0.0	0.0	-	-	-	*
		27.57576	42.72727	17.00000	0.0	0.0	0.0	-	-	-	*
		29.09091	42.72727	17.00000	0.0	0.0	0.0	-	-	-	*
		30.60606	42.72727	17.00000	0.0	0.0	0.0	-	-	-	*
		32.12121	42.72727	17.00000	0.0	0.0	0.0	-	-	-	*
		33.63636	42.72727	17.00000	0.0	0.0	0.0	-	-	-	*
		35.15152	42.72727	17.00000	0.0	0.0	0.0	-	-	-	*
		36.66667	42.72727	17.00000	0.0	0.0	0.0	-	-	-	*
		38.18182	42.72727	17.00000	0.0	0.0	0.0	-	-	-	*
		39.69697	42.72727	17.00000	0.0	0.0	0.0	-	-	-	*
		41.21212	42.72727	17.00000	0.0	0.0	0.0	-	-	-	*
		42.72727	42.72727	17.00000	0.0	0.0	0.0	-	-	-	*
		44.24242	42.72727	17.00000	0.0	0.0	0.0	-	-	-	*
		45.75758	42.72727	17.00000	0.0	0.0	0.0	-	-	-	*
		47.27273	42.72727	17.00000	0.0	0.0	0.0	-	-	-	*

Type/No.		Coordinates			Displacements					Angle of Line to x Axis	
Name	Dist.	x	y	z	x	y	z	Horizontal displacement	Horizontal displacement		
		48.78788	42.72727	17.00000	0.0	0.0	0.0	-	-	-	*
		50.30303	42.72727	17.00000	0.0	0.0	0.0	-	-	-	*
		51.81818	42.72727	17.00000	0.0035823	-537.34E-6	0.0010595	-	-	-	*
		53.33333	42.72727	17.00000	0.026775	-0.0043814	0.027642	-	-	-	*
		54.84848	42.72727	17.00000	0.054313	-0.0097764	0.068374	-	-	-	*
		56.36364	42.72727	17.00000	0.087495	-0.017499	0.12282	-	-	-	*
		57.87879	42.72727	17.00000	0.15458	-0.034781	0.19883	-	-	-	*
		59.39394	42.72727	17.00000	0.25029	-0.064361	0.30594	-	-	-	*
		60.90909	42.72727	17.00000	0.37568	-0.11270	0.45651	-	-	-	*
		62.42424	42.72727	17.00000	0.54519	-0.19627	0.66817	-	-	-	*
		63.93939	42.72727	17.00000	0.77968	-0.35086	0.96889	-	-	-	*
		65.45455	42.72727	17.00000	1.1017	-0.66102	1.4083	-	-	-	*
		66.96970	42.72727	17.00000	1.4851	-1.3366	2.0824	-	-	-	*
		68.48485	42.72727	17.00000	1.6957	-3.0523	3.3668	-	-	-	*
		70.00000	42.72727	17.00000	0.0	-5.7507	5.2970	-	-	-	*
		71.51515	42.72727	17.00000	0.0	-7.3260	6.4015	-	-	-	*
		73.03030	42.72727	17.00000	0.0	-7.3260	6.4015	-	-	-	*
		74.54545	42.72727	17.00000	0.0	-7.3260	6.4015	-	-	-	*
		76.06061	42.72727	17.00000	0.0	-7.3260	6.4015	-	-	-	*
		77.57576	42.72727	17.00000	0.0	-7.3260	6.4015	-	-	-	*
		79.09091	42.72727	17.00000	0.0	-7.3260	6.4015	-	-	-	*
		80.60606	42.72727	17.00000	0.0	-7.3260	6.4015	-	-	-	*
		82.12121	42.72727	17.00000	-0.25373	-5.7089	5.2612	-	-	-	*
		83.63636	42.72727	17.00000	-2.6193	-4.3656	4.7990	-	-	-	*
		85.15152	42.72727	17.00000	-3.4157	-2.9559	4.4244	-	-	-	*
		86.66667	42.72727	17.00000	-3.5970	-2.1021	4.1452	-	-	-	*
		88.18182	42.72727	17.00000	-3.3700	-1.4868	3.6834	-	-	-	*
		89.69697	42.72727	17.00000	-2.9688	-1.0519	3.1184	-	-	-	*
		91.21212	42.72727	17.00000	-2.4912	-0.73752	2.5202	-	-	-	*
		92.72727	42.72727	17.00000	-1.9775	-0.502277	1.9429	-	-	-	*
		94.24242	42.72727	17.00000	-1.4432	-0.32150	1.4215	-	-	-	*
		95.75758	42.72727	17.00000	-0.98028	-0.19433	0.97185	-	-	-	*
		97.27273	42.72727	17.00000	-0.67171	-0.11995	0.58947	-	-	-	*
		98.78788	42.72727	17.00000	-0.35398	-0.057505	0.24968	-	-	-	*
		100.30303	42.72727	17.00000	-0.029478	-0.0043924	0.0084211	-	-	-	*
		101.81818	42.72727	17.00000	0.0	0.0	0.0	-	-	-	*
		103.33333	42.72727	17.00000	0.0	0.0	0.0	-	-	-	*
		104.84848	42.72727	17.00000	0.0	0.0	0.0	-	-	-	*
		106.36364	42.72727	17.00000	0.0	0.0	0.0	-	-	-	*
		107.87879	42.72727	17.00000	0.0	0.0	0.0	-	-	-	*
		109.39394	42.72727	17.00000	0.0	0.0	0.0	-	-	-	*
		110.90909	42.72727	17.00000	0.0	0.0	0.0	-	-	-	*
		112.42424	42.72727	17.00000	0.0	0.0	0.0	-	-	-	*
		113.93939	42.72727	17.00000	0.0	0.0	0.0	-	-	-	*
		115.45455	42.72727	17.00000	0.0	0.0	0.0	-	-	-	*
		116.96970	42.72727	17.00000	0.0	0.0	0.0	-	-	-	*
		118.48485	42.72727	17.00000	0.0	0.0	0.0	-	-	-	*
		120.00000	42.72727	17.00000	0.0	0.0	0.0	-	-	-	*
		-30.00000	43.73737	17.00000	0.0	0.0	0.0	-	-	-	*
		-28.48485	43.73737	17.00000	0.0	0.0	0.0	-	-	-	*
		-26.96970	43.73737	17.00000	0.0	0.0	0.0	-	-	-	*
		-25.45455	43.73737	17.00000	0.0	0.0	0.0	-	-	-	*
		-23.93939	43.73737	17.00000	0.0	0.0	0.0	-	-	-	*
		-22.42424	43.73737	17.00000	0.0	0.0	0.0	-	-	-	*
		-20.90909	43.73737	17.00000	0.0	0.0	0.0	-	-	-	*
		-19.39394	43.73737	17.00000	0.0	0.0	0.0	-	-	-	*
		-17.87879	43.73737	17.00000	0.0	0.0	0.0	-	-	-	*
		-16.36364	43.73737	17.00000	0.0	0.0	0.0	-	-	-	*
		-14.84848	43.73737	17.00000	0.0	0.0	0.0	-	-	-	*
		-13.33333	43.73737	17.00000	0.0	0.0	0.0	-	-	-	*
		-11.81818	43.73737	17.00000	0.0	0.0	0.0	-	-	-	*
		-10.30303	43.73737	17.00000	0.0	0.0	0.0	-	-	-	*
		-8.78788	43.73737	17.00000	0.0	0.0	0.0	-	-	-	*
		-7.27273	43.73737	17.00000	0.0	0.0	0.0	-	-	-	*
		-5.75758	43.73737	17.00000	0.0	0.0	0.0	-	-	-	*
		-4.24242	43.73737	17.00000	0.0	0.0	0.0	-	-	-	*
		-2.72727	43.73737	17.00000	0.0	0.0	0.0	-	-	-	*
		-1.21212	43.73737	17.00000	0.0	0.0	0.0	-	-	-	*
		0.30303	43.73737	17.00000	0.0	0.0	0.0	-	-	-	*
		1.81818	43.73737	17.00000	0.0	0.0	0.0	-	-	-	*
		3.33333	43.73737	17.00000	0.0	0.0	0.0	-	-	-	*
		4.84848	43.73737	17.00000	0.0	0.0	0.0	-	-	-	*
		6.36364	43.73737	17.00000	0.0	0.0	0.0	-	-	-	*
		7.87879	43.73737	17.00000	0.0	0.0	0.0	-	-	-	*
		9.39394	43.73737	17.00000	0.0	0.0	0.0	-	-	-	*
		10.90909	43.73737	17.00000	0.0	0.0	0.0	-	-	-	*
		12.42424	43.73737	17.00000	0.0	0.0	0.0	-	-	-	*
		13.93939	43.73737	17.00000	0.0	0.0	0.0	-	-	-	*
		15.45455	43.73737	17.00000	0.0	0.0	0.0	-	-	-	*
		16.96970	43.73737	17.00000	0.0	0.0	0.0	-	-	-	*
		18.48485	43.73737	17.00000	0.0	0.0	0.0	-	-	-	*
		20.00000	43.73737	17.00000	0.0	0.0	0.0	-	-	-	*
		21.51515	43.73737	17.00000	0.0	0.0	0.0	-	-	-	*
		23.03030	43.73737	17.00000	0.0	0.0	0.0	-	-	-	*
		24.54545	43.73737	17.00000	0.0	0.0	0.0	-	-	-	*
		26.06061	43.73737	17.00000	0.0	0.0	0.0	-	-	-	*
		27.57576	43.73737	17.00000	0.0	0.0	0.0	-	-	-	*
		29.09091	43.73737	17.00000	0.0	0.0	0.0	-	-	-	*
		30.60606	43.73737	17.00000	0.0	0.0	0.0	-	-	-	*
		32.12121	43.73737	17.00000	0.0	0.0	0.0	-	-	-	*
		33.63636	43.73737	17.00000	0.0	0.0	0.0	-	-	-	*
		35.15152	43.73737	17.00000	0.0	0.0	0.0	-	-	-	*
		36.66667	43.73737	17.00000	0.0	0.0	0.0	-	-	-	*
		38.18182	43.73737	17.00000	0.0	0.0	0.0	-	-	-	*
		39.69697	43.73737	17.00000	0.0	0.0	0.0	-	-	-	*
		41.21212	43.73737	17.00000	0.0	0.0	0.0	-	-	-	*
		42.72727	43.73737	17.00000	0.0	0.0	0.0	-	-	-	*
		44.24242	43.73737	17.00000	0.0	0.0	0.0	-	-	-	*
		45.75758	43.73737	17.00000	0.0	0.0	0.0	-	-	-	*
		47.27273	43.73737	17.00000	0.0	0.0	0.0	-	-	-	*
		48.78788	43.73737	17.00000	0.0	0.0	0.0	-	-	-	*
		50.30303	43.73737	17.00000	0.0014798	-304.18E-6	643.08E-6	-	-	-	*
		51.81818	43.73737	17.00000	0.0	0.0	0.0	-	-	-	*
		53.33333	43.73737	17.00000	0.032054	-0.0071878	0.031694	-	-	-	*
		54.84848	43.73737	17.00000	0.068036	-0.016782	0.085297	-	-	-	*
		56.36364	43.73737	17.00000	0.11088	-0.030390	0.15584	-	-	-	*
		57.87879	43.73737	17.00000	0.18912	-0.058313	0.25327	-	-	-	*
		59.39394	43.73737	17.00000	0.30805	-0.10855	0.38926	-	-	-	*
		60.90909	43.73737	17.00000	0.45837	-0.18844	0.57823	-	-	-	*
		62.42424	43.73737	17.00000	0.65096	-0.32114	0.83943	-	-	-	*
		63.93939	43.73737	17.00000	0.89494	-0.55188	1.2004	-	-	-	*
		65.45455	43.73737	17.00000	1.1799	-0.97014	1.7029	-	-	-	*
		66.96970	43.73737	17.00000	1.4671	-1.8095	2.4812	-	-	-	*
		68.48485	43.73737	17.00000	1.3630	-3.3620	3.6691	-	-	-	*
		70.00000	43.73737	17.00000	0.0	-5.2026	5.1228	-	-	-	*
		71.51515	43.73737	17.00000	0.0	-6.6779	6.2410	-	-	-	*
		73.03030	43.73737	17.00000	0.0	-6.6779	6.2410	-	-	-	*
		74.54545	43.73737	17.00000	0.0	-6.6779	6.2410	-	-	-	*
		76.06061	43.73737	17.00000	0.0	-6.6779	6.2410	-	-	-	*
		77.57576	43.73737	17.00000	0.0	-6.6779	6.2410	-	-	-	*
		79.09091	43.73737	17.00000	0.0	-6.6779	6.2410	-	-	-	*
		80.60606	43.73737	17.00000	0.0	-6.6779	6.2410	-	-	-	*
		82.12121	43.73737	17.00000	-0.16784	-5.1751	5.0961	-	-	-	*
		83.63636	43.73737	17.00000	-1.8969	-4.3323	4.7029	-	-	-	*
		85.15152	43.73737	17.00000	-2.6711	-3.1677	4.2377	-	-	-	*
		86.66667	43.73737	17.00000	-2.9143	-2.3340	3.8590	-	-	-	*
		88.18182	43.73737	17.00000	-2.8618	-1.7302	3.4337	-	-	-	*
		89.69697	43.73737	17.00000	-2.5928	-1.2590	2.9128	-	-	-	*
		91.21212	43.73737	17.00000	-2.2097	-0.89650	2.3583	-	-	-	*
		92.72727	43.73737	17.00000	-1.7636	-0.61445	1.8198	-	-	-	*
		94.24242	43.73737	17.00000	-1.2781	-0.39019	1.3305	-	-	-	*
		95.75758	43.73737	17.00000	-0.88918	-0.24155	0.90490	-	-	-	*
		97.27273	43.73737	17.00000	-0.60202	-0.14732	0.53842	-	-	-	*
		98.78788	43.73737	17.00000	-0.30162	-0.067148	0.20646	-	-	-	*
		100.30303	43.73737	17.00000	0.0	0.0	0.0	-	-	-	*
		101.81818	43.73737	17.00000	0.0	0.0	0.0	-	-	-	*
		103.33333	43.73737	17.00000	0.0	0.0	0.0	-	-	-	*
		104.84848	43.73737	17.00000	0.0	0.0	0.0	-	-	-	*
		106.36364	43.73737	17.00000	0.0	0.0	0.0	-	-	-	*
		107.87879	43.73737	17.00000	0.0	0.0	0.0	-	-	-	*
		109.39394	43.73737	17.00000	0.0	0.0	0.0	-	-	-	*

Oasys
GEA LIMITED
(GEOTECHNICAL &ENV ASSOC) J15050A
The Great Hall, Lincoln's Inn, Newman's Row, London, WC2A 3TL
Wall Movements Rev 3 Piling and Excavation
Damage Assessment
Job No. | Sheet No. | Rev.
Drg. Ref.
Made by MP | Date 08-Feb-2016 | Checked

Type/No.		Coordinates			Displacements					Angle of Line to x Axis	
Name	Dist.	x	y	z	x	y	z	Horizontal displacement	Horizontal displacement		
		110.90909	43.73737	17.00000	0.0	0.0	0.0	-	-	-	*
		112.42424	43.73737	17.00000	0.0	0.0	0.0	-	-	-	*
		113.93939	43.73737	17.00000	0.0	0.0	0.0	-	-	-	*
		115.45455	43.73737	17.00000	0.0	0.0	0.0	-	-	-	*
		116.96970	43.73737	17.00000	0.0	0.0	0.0	-	-	-	*
		118.48485	43.73737	17.00000	0.0	0.0	0.0	-	-	-	*
		120.00000	43.73737	17.00000	0.0	0.0	0.0	-	-	-	*
		-30.00000	44.74747	17.00000	0.0	0.0	0.0	-	-	-	*
		-28.48485	44.74747	17.00000	0.0	0.0	0.0	-	-	-	*
		-26.96970	44.74747	17.00000	0.0	0.0	0.0	-	-	-	*
		-25.45455	44.74747	17.00000	0.0	0.0	0.0	-	-	-	*
		-23.93939	44.74747	17.00000	0.0	0.0	0.0	-	-	-	*
		-22.42424	44.74747	17.00000	0.0	0.0	0.0	-	-	-	*
		-20.90909	44.74747	17.00000	0.0	0.0	0.0	-	-	-	*
		-19.39394	44.74747	17.00000	0.0	0.0	0.0	-	-	-	*
		-17.87879	44.74747	17.00000	0.0	0.0	0.0	-	-	-	*
		-16.36364	44.74747	17.00000	0.0	0.0	0.0	-	-	-	*
		-14.84848	44.74747	17.00000	0.0	0.0	0.0	-	-	-	*
		-13.33333	44.74747	17.00000	0.0	0.0	0.0	-	-	-	*
		-11.81818	44.74747	17.00000	0.0	0.0	0.0	-	-	-	*
		-10.30303	44.74747	17.00000	0.0	0.0	0.0	-	-	-	*
		-8.78788	44.74747	17.00000	0.0	0.0	0.0	-	-	-	*
		-7.27273	44.74747	17.00000	0.0	0.0	0.0	-	-	-	*
		-5.75758	44.74747	17.00000	0.0	0.0	0.0	-	-	-	*
		-4.24242	44.74747	17.00000	0.0	0.0	0.0	-	-	-	*
		-2.72727	44.74747	17.00000	0.0	0.0	0.0	-	-	-	*
		-1.21212	44.74747	17.00000	0.0	0.0	0.0	-	-	-	*
		0.30303	44.74747	17.00000	0.0	0.0	0.0	-	-	-	*
		1.81818	44.74747	17.00000	0.0	0.0	0.0	-	-	-	*
		3.33333	44.74747	17.00000	0.0	0.0	0.0	-	-	-	*
		4.84848	44.74747	17.00000	0.0	0.0	0.0	-	-	-	*
		6.36364	44.74747	17.00000	0.0	0.0	0.0	-	-	-	*
		7.87879	44.74747	17.00000	0.0	0.0	0.0	-	-	-	*
		9.39394	44.74747	17.00000	0.0	0.0	0.0	-	-	-	*
		10.90909	44.74747	17.00000	0.0	0.0	0.0	-	-	-	*
		12.42424	44.74747	17.00000	0.0	0.0	0.0	-	-	-	*
		13.93939	44.74747	17.00000	0.0	0.0	0.0	-	-	-	*
		15.45455	44.74747	17.00000	0.0	0.0	0.0	-	-	-	*
		16.96970	44.74747	17.00000	0.0	0.0	0.0	-	-	-	*
		18.48485	44.74747	17.00000	0.0	0.0	0.0	-	-	-	*
		20.00000	44.74747	17.00000	0.0	0.0	0.0	-	-	-	*
		21.51515	44.74747	17.00000	0.0	0.0	0.0	-	-	-	*
		23.03030	44.74747	17.00000	0.0	0.0	0.0	-	-	-	*
		24.54545	44.74747	17.00000	0.0	0.0	0.0	-	-	-	*
		26.06061	44.74747	17.00000	0.0	0.0	0.0	-	-	-	*
		27.57576	44.74747	17.00000	0.0	0.0	0.0	-	-	-	*
		29.09091	44.74747	17.00000	0.0	0.0	0.0	-	-	-	*
		30.60606	44.74747	17.00000	0.0	0.0	0.0	-	-	-	*
		32.12121	44.74747	17.00000	0.0	0.0	0.0	-	-	-	*
		33.63636	44.74747	17.00000	0.0	0.0	0.0	-	-	-	*
		35.15152	44.74747	17.00000	0.0	0.0	0.0	-	-	-	*
		36.66667	44.74747	17.00000	0.0	0.0	0.0	-	-	-	*
		38.18182	44.74747	17.00000	0.0	0.0	0.0	-	-	-	*
		39.69697	44.74747	17.00000	0.0	0.0	0.0	-	-	-	*
		41.21212	44.74747	17.00000	0.0	0.0	0.0	-	-	-	*
		42.72727	44.74747	17.00000	0.0	0.0	0.0	-	-	-	*
		44.24242	44.74747	17.00000	0.0	0.0	0.0	-	-	-	*
		45.75758	44.74747	17.00000	0.0	0.0	0.0	-	-	-	*
		47.27273	44.74747	17.00000	0.0	0.0	0.0	-	-	-	*
		48.78788	44.74747	17.00000	0.0	0.0	0.0	-	-	-	*
		50.30303	44.74747	17.00000	0.0	0.0	0.0	-	-	-	*
		51.81818	44.74747	17.00000	0.0	0.0	0.0	-	-	-	*
		53.33333	44.74747	17.00000	0.033395	-0.0095126	0.030242	-	-	-	*
		54.84848	44.74747	17.00000	0.076426	-0.023947	0.095053	-	-	-	*
		56.36364	44.74747	17.00000	0.12692	-0.044188	0.17854	-	-	-	*
		57.87879	44.74747	17.00000	0.20598	-0.080642	0.29217	-	-	-	*
		59.39394	44.74747	17.00000	0.33983	-0.15212	0.44882	-	-	-	*
		60.90909	44.74747	17.00000	0.50209	-0.26220	0.66353	-	-	-	*
		62.42424	44.74747	17.00000	0.69737	-0.43702	0.95466	-	-	-	*
		63.93939	44.74747	17.00000	0.92134	-0.72172	1.3453	-	-	-	*
		65.45455	44.74747	17.00000	1.1508	-1.2020	1.8767	-	-	-	*
		66.96970	44.74747	17.00000	1.3327	-2.0879	2.6810	-	-	-	*
		68.48485	44.74747	17.00000	1.0744	-3.3663	3.7019	-	-	-	*
		70.00000	44.74747	17.00000	0.0	-4.6857	4.8245	-	-	-	*
		71.51515	44.74747	17.00000	0.0	-6.0611	5.8953	-	-	-	*
		73.03030	44.74747	17.00000	0.0	-6.0611	5.8953	-	-	-	*
		74.54545	44.74747	17.00000	0.0	-6.0611	5.8953	-	-	-	*
		76.06061	44.74747	17.00000	0.0	-6.0611	5.8953	-	-	-	*
		77.57576	44.74747	17.00000	0.0	-6.0611	5.8953	-	-	-	*
		79.09091	44.74747	17.00000	0.0	-6.0611	5.8953	-	-	-	*
		80.60606	44.74747	17.00000	0.0	-6.0611	5.8953	-	-	-	*
		82.12121	44.74747	17.00000	-0.11913	-4.6661	4.8042	-	-	-	*
		83.63636	44.74747	17.00000	-1.4106	-4.0926	4.4749	-	-	-	*
		85.15152	44.74747	17.00000	-2.1311	-3.2102	4.0446	-	-	-	*
		86.66667	44.74747	17.00000	-2.3319	-2.3723	3.5539	-	-	-	*
		88.18182	44.74747	17.00000	-2.3759	-1.8246	3.1543	-	-	-	*
		89.69697	44.74747	17.00000	-2.2105	-1.3634	2.6785	-	-	-	*
		91.21212	44.74747	17.00000	-1.9114	-0.98503	2.1706	-	-	-	*
		92.72727	44.74747	17.00000	-1.5297	-0.67700	1.6748	-	-	-	*
		94.24242	44.74747	17.00000	-1.0930	-0.42385	1.2213	-	-	-	*
		95.75758	44.74747	17.00000	-0.78816	-0.27198	0.82303	-	-	-	*
		97.27273	44.74747	17.00000	-0.52279	-0.16251	0.47446	-	-	-	*
		98.78788	44.74747	17.00000	-0.24035	-0.067969	0.15072	-	-	-	*
		100.30303	44.74747	17.00000	0.0	0.0	0.0	-	-	-	*
		101.81818	44.74747	17.00000	0.0	0.0	0.0	-	-	-	*
		103.33333	44.74747	17.00000	0.0	0.0	0.0	-	-	-	*
		104.84848	44.74747	17.00000	0.0	0.0	0.0	-	-	-	*
		106.36364	44.74747	17.00000	0.0	0.0	0.0	-	-	-	*
		107.87879	44.74747	17.00000	0.0	0.0	0.0	-	-	-	*
		109.39394	44.74747	17.00000	0.0	0.0	0.0	-	-	-	*
		110.90909	44.74747	17.00000	0.0	0.0	0.0	-	-	-	*
		112.42424	44.74747	17.00000	0.0	0.0	0.0	-	-	-	*
		113.93939	44.74747	17.00000	0.0	0.0	0.0	-	-	-	*
		115.45455	44.74747	17.00000	0.0	0.0	0.0	-	-	-	*
		116.96970	44.74747	17.00000	0.0	0.0	0.0	-	-	-	*
		118.48485	44.74747	17.00000	0.0	0.0	0.0	-	-	-	*
		120.00000	44.74747	17.00000	0.0	0.0	0.0	-	-	-	*
		-30.00000	45.75758	17.00000	0.0	0.0	0.0	-	-	-	*
		-28.48485	45.75758	17.00000	0.0	0.0	0.0	-	-	-	*
		-26.96970	45.75758	17.00000	0.0	0.0	0.0	-	-	-	*
		-25.45455	45.75758	17.00000	0.0	0.0	0.0	-	-	-	*
		-23.93939	45.75758	17.00000	0.0	0.0	0.0	-	-	-	*
		-22.42424	45.75758	17.00000	0.0	0.0	0.0	-	-	-	*
		-20.90909	45.75758	17.00000	0.0	0.0	0.0	-	-	-	*
		-19.39394	45.75758	17.00000	0.0	0.0	0.0	-	-	-	*
		-17.87879	45.75758	17.00000	0.0	0.0	0.0	-	-	-	*
		-16.36364	45.75758	17.00000	0.0	0.0	0.0	-	-	-	*
		-14.84848	45.75758	17.00000	0.0	0.0	0.0	-	-	-	*
		-13.33333	45.75758	17.00000	0.0	0.0	0.0	-	-	-	*
		-11.81818	45.75758	17.00000	0.0	0.0	0.0	-	-	-	*
		-10.30303	45.75758	17.00000	0.0	0.0	0.0	-	-	-	*
		-8.78788	45.75758	17.00000	0.0	0.0	0.0	-	-	-	*
		-7.27273	45.75758	17.00000	0.0	0.0	0.0	-	-	-	*
		-5.75758	45.75758	17.00000	0.0	0.0	0.0	-	-	-	*
		-4.24242	45.75758	17.00000	0.0	0.0	0.0	-	-	-	*
		-2.72727	45.75758	17.00000	0.0	0.0	0.0	-	-	-	*
		-1.21212	45.75758	17.00000	0.0	0.0	0.0	-	-	-	*
		0.30303	45.75758	17.00000	0.0	0.0	0.0	-	-	-	*
		1.81818	45.75758	17.00000	0.0	0.0	0.0	-	-	-	*
		3.33333	45.75758	17.00000	0.0	0.0	0.0	-	-	-	*
		4.84848	45.75758	17.00000	0.0	0.0	0.0	-	-	-	*
		6.36364	45.75758	17.00000	0.0	0.0	0.0	-	-	-	*
		7.87879	45.75758	17.00000	0.0	0.0	0.0	-	-	-	*
		9.39394	45.75758	17.00000	0.0	0.0	0.0	-	-	-	*
		10.90909	45.75758	17.00000	0.0	0.0	0.0	-	-	-	*
		12.42424	45.75758	17.00000	0.0	0.0	0.0	-	-	-	*
		13.93939	45.75758	17.00000	0.0	0.0	0.0	-	-	-	*
		15.45455	45.75758	17.00000	0.0	0.0	0.0	-	-	-	*
		16.96970	45.75758	17.00000	0.0	0.0	0.0	-	-	-	*
		18.48485	45.75758	17.00000	0.0	0.0	0.0	-	-	-	*
		20.00000	45.75758	17.00000	0.0	0.0	0.0	-	-	-	*

Type/No.		Coordinates			Displacements					Angle of Line to x Axis	
Name	Dist.	x	y	z	x	y	z	Horizontal displacement	Horizontal displacement		
		21.51515	45.75758	17.00000	0.0	0.0	0.0	-	-	-	*
		23.03030	45.75758	17.00000	0.0	0.0	0.0	-	-	-	*
		24.54545	45.75758	17.00000	0.0	0.0	0.0	-	-	-	*
		26.06061	45.75758	17.00000	0.0	0.0	0.0	-	-	-	*
		27.57576	45.75758	17.00000	0.0	0.0	0.0	-	-	-	*
		29.09091	45.75758	17.00000	0.0	0.0	0.0	-	-	-	*
		30.60606	45.75758	17.00000	0.0	0.0	0.0	-	-	-	*
		32.12121	45.75758	17.00000	0.0	0.0	0.0	-	-	-	*
		33.63636	45.75758	17.00000	0.0	0.0	0.0	-	-	-	*
		35.15152	45.75758	17.00000	0.0	0.0	0.0	-	-	-	*
		36.66667	45.75758	17.00000	0.0	0.0	0.0	-	-	-	*
		38.18182	45.75758	17.00000	0.0	0.0	0.0	-	-	-	*
		39.69697	45.75758	17.00000	0.0	0.0	0.0	-	-	-	*
		41.21212	45.75758	17.00000	0.0	0.0	0.0	-	-	-	*
		42.72727	45.75758	17.00000	0.0	0.0	0.0	-	-	-	*
		44.24242	45.75758	17.00000	0.0	0.0	0.0	-	-	-	*
		45.75758	45.75758	17.00000	0.0	0.0	0.0	-	-	-	*
		47.27273	45.75758	17.00000	0.0	0.0	0.0	-	-	-	*
		48.78788	45.75758	17.00000	0.0	0.0	0.0	-	-	-	*
		50.30303	45.75758	17.00000	0.0	0.0	0.0	-	-	-	*
		51.81818	45.75758	17.00000	0.0	0.0	0.0	-	-	-	*
		53.33333	45.75758	17.00000	0.030228	-0.010442	0.022100	-	-	-	*
		54.84848	45.75758	17.00000	0.078818	-0.029951	0.096499	-	-	-	*
		56.36364	45.75758	17.00000	0.13489	-0.056954	0.18969	-	-	-	*
		57.87879	45.75758	17.00000	0.20388	-0.096841	0.31410	-	-	-	*
		59.39394	45.75758	17.00000	0.34549	-0.18755	0.48305	-	-	-	*
		60.90909	45.75758	17.00000	0.50922	-0.32251	0.71103	-	-	-	*
		62.42424	45.75758	17.00000	0.69349	-0.52705	1.0140	-	-	-	*
		63.93939	45.75758	17.00000	0.88373	-0.83954	1.4088	-	-	-	*
		65.45455	45.75758	17.00000	1.0876	-1.3777	1.9717	-	-	-	*
		66.96970	45.75758	17.00000	1.1515	-2.1878	2.7030	-	-	-	*
		68.48485	45.75758	17.00000	0.84661	-3.2171	3.5613	-	-	-	*
		70.00000	45.75758	17.00000	0.0	-4.1970	4.4382	-	-	-	*
		71.51515	45.75758	17.00000	0.0	-5.4724	5.4182	-	-	-	*
		73.03030	45.75758	17.00000	0.0	-5.4724	5.4182	-	-	-	*
		74.54545	45.75758	17.00000	0.0	-5.4724	5.4182	-	-	-	*
		76.06061	45.75758	17.00000	0.0	-5.4724	5.4182	-	-	-	*
		77.57576	45.75758	17.00000	0.0	-5.4724	5.4182	-	-	-	*
		79.09091	45.75758	17.00000	0.0	-5.4724	5.4182	-	-	-	*
		80.60606	45.75758	17.00000	0.0	-5.4724	5.4182	-	-	-	*
		82.12121	45.75758	17.00000	-0.088046	-4.1822	4.4228	-	-	-	*
		83.63636	45.75758	17.00000	-1.0712	-3.7692	4.1508	-	-	-	*
		85.15152	45.75758	17.00000	-1.6942	-3.0951	3.7667	-	-	-	*
		86.66667	45.75758	17.00000	-1.9356	-2.3881	3.3134	-	-	-	*
		88.18182	45.75758	17.00000	-1.9380	-1.8050	2.8555	-	-	-	*
		89.69697	45.75758	17.00000	-1.8440	-1.3794	2.4249	-	-	-	*
		91.21212	45.75758	17.00000	-1.6123	-1.0077	1.9647	-	-	-	*
		92.72727	45.75758	17.00000	-1.2872	-0.69086	1.5137	-	-	-	*
		94.24242	45.75758	17.00000	-0.89823	-0.42244	1.0982	-	-	-	*
		95.75758	45.75758	17.00000	-0.68116	-0.28507	0.72887	-	-	-	*
		97.27273	45.75758	17.00000	-0.43696	-0.16473	0.39884	-	-	-	*
		98.78788	45.75758	17.00000	-0.17235	-0.059111	0.082582	-	-	-	*
		100.30303	45.75758	17.00000	0.0	0.0	0.0	-	-	-	*
		101.81818	45.75758	17.00000	0.0	0.0	0.0	-	-	-	*
		103.33333	45.75758	17.00000	0.0	0.0	0.0	-	-	-	*
		104.84848	45.75758	17.00000	0.0	0.0	0.0	-	-	-	*
		106.36364	45.75758	17.00000	0.0	0.0	0.0	-	-	-	*
		107.87879	45.75758	17.00000	0.0	0.0	0.0	-	-	-	*
		109.39394	45.75758	17.00000	0.0	0.0	0.0	-	-	-	*
		110.90909	45.75758	17.00000	0.0	0.0	0.0	-	-	-	*
		112.42424	45.75758	17.00000	0.0	0.0	0.0	-	-	-	*
		113.93939	45.75758	17.00000	0.0	0.0	0.0	-	-	-	*
		115.45455	45.75758	17.00000	0.0	0.0	0.0	-	-	-	*
		116.96970	45.75758	17.00000	0.0	0.0	0.0	-	-	-	*
		118.48485	45.75758	17.00000	0.0	0.0	0.0	-	-	-	*
		120.00000	45.75758	17.00000	0.0	0.0	0.0	-	-	-	*
		-30.00000	46.76768	17.00000	0.0	0.0	0.0	-	-	-	*
		-28.48485	46.76768	17.00000	0.0	0.0	0.0	-	-	-	*
		-26.96970	46.76768	17.00000	0.0	0.0	0.0	-	-	-	*
		-25.45455	46.76768	17.00000	0.0	0.0	0.0	-	-	-	*
		-23.93939	46.76768	17.00000	0.0	0.0	0.0	-	-	-	*
		-22.42424	46.76768	17.00000	0.0	0.0	0.0	-	-	-	*
		-20.90909	46.76768	17.00000	0.0	0.0	0.0	-	-	-	*
		-19.39394	46.76768	17.00000	0.0	0.0	0.0	-	-	-	*
		-17.87879	46.76768	17.00000	0.0	0.0	0.0	-	-	-	*
		-16.36364	46.76768	17.00000	0.0	0.0	0.0	-	-	-	*
		-14.84848	46.76768	17.00000	0.0	0.0	0.0	-	-	-	*
		-13.33333	46.76768	17.00000	0.0	0.0	0.0	-	-	-	*
		-11.81818	46.76768	17.00000	0.0	0.0	0.0	-	-	-	*
		-10.30303	46.76768	17.00000	0.0	0.0	0.0	-	-	-	*
		-8.78788	46.76768	17.00000	0.0	0.0	0.0	-	-	-	*
		-7.27273	46.76768	17.00000	0.0	0.0	0.0	-	-	-	*
		-5.75758	46.76768	17.00000	0.0	0.0	0.0	-	-	-	*
		-4.24242	46.76768	17.00000	0.0	0.0	0.0	-	-	-	*
		-2.72727	46.76768	17.00000	0.0	0.0	0.0	-	-	-	*
		-1.21212	46.76768	17.00000	0.0	0.0	0.0	-	-	-	*
		0.30303	46.76768	17.00000	0.0	0.0	0.0	-	-	-	*
		1.81818	46.76768	17.00000	0.0	0.0	0.0	-	-	-	*
		3.33333	46.76768	17.00000	0.0	0.0	0.0	-	-	-	*
		4.84848	46.76768	17.00000	0.0	0.0	0.0	-	-	-	*
		6.36364	46.76768	17.00000	0.0	0.0	0.0	-	-	-	*
		7.87879	46.76768	17.00000	0.0	0.0	0.0	-	-	-	*
		9.39394	46.76768	17.00000	0.0	0.0	0.0	-	-	-	*
		10.90909	46.76768	17.00000	0.0	0.0	0.0	-	-	-	*
		12.42424	46.76768	17.00000	0.0	0.0	0.0	-	-	-	*
		13.93939	46.76768	17.00000	0.0	0.0	0.0	-	-	-	*
		15.45455	46.76768	17.00000	0.0	0.0	0.0	-	-	-	*
		16.96970	46.76768	17.00000	0.0	0.0	0.0	-	-	-	*
		18.48485	46.76768	17.00000	0.0	0.0	0.0	-	-	-	*
		20.00000	46.76768	17.00000	0.0	0.0	0.0	-	-	-	*
		21.51515	46.76768	17.00000	0.0	0.0	0.0	-	-	-	*
		23.03030	46.76768	17.00000	0.0	0.0	0.0	-	-	-	*
		24.54545	46.76768	17.00000	0.0	0.0	0.0	-	-	-	*
		26.06061	46.76768	17.00000	0.0	0.0	0.0	-	-	-	*
		27.57576	46.76768	17.00000	0.0	0.0	0.0	-	-	-	*
		29.09091	46.76768	17.00000	0.0	0.0	0.0	-	-	-	*
		30.60606	46.76768	17.00000	0.0	0.0	0.0	-	-	-	*
		32.12121	46.76768	17.00000	0.0	0.0	0.0	-	-	-	*
		33.63636	46.76768	17.00000	0.0	0.0	0.0	-	-	-	*
		35.15152	46.76768	17.00000	0.0	0.0	0.0	-	-	-	*
		36.66667	46.76768	17.00000	0.0	0.0	0.0	-	-	-	*
		38.18182	46.76768	17.00000	0.0	0.0	0.0	-	-	-	*
		39.69697	46.76768	17.00000	0.0	0.0	0.0	-	-	-	*
		41.21212	46.76768	17.00000	0.0	0.0	0.0	-	-	-	*
		42.72727	46.76768	17.00000	0.0	0.0	0.0	-	-	-	*
		44.24242	46.76768	17.00000	0.0	0.0	0.0	-	-	-	*
		45.75758	46.76768	17.00000	0.0	0.0	0.0	-	-	-	*
		47.27273	46.76768	17.00000	0.0	0.0	0.0	-	-	-	*
		48.78788	46.76768	17.00000	0.0	0.0	0.0	-	-	-	*
		50.30303	46.76768	17.00000	0.0	0.0	0.0	-	-	-	*
		51.81818	46.76768	17.00000	0.0	0.0	0.0	-	-	-	*
		53.33333	46.76768	17.00000	0.022240	-0.0090310	0.0061535	-	-	-	*
		54.84848	46.76768	17.00000	0.074929	-0.033468	0.088819	-	-	-	*
		56.36364	46.76768	17.00000	0.13463	-0.066818	0.18876	-	-	-	*
		57.87879	46.76768	17.00000	0.20199	-0.11278	0.31892	-	-	-	*
		59.39394	46.76768	17.00000	0.32710	-0.20872	0.49248	-	-	-	*
		60.90909	46.76768	17.00000	0.48525	-0.36124	0.72268	-	-	-	*
		62.42424	46.76768	17.00000	0.65154	-0.58204	1.0224	-	-	-	*
		63.93939	46.76768	17.00000	0.82866	-0.92534	1.4224	-	-	-	*
		65.45455	46.76768	17.00000	0.97627	-1.4536	1.9545	-	-	-	*
		66.96970	46.76768	17.00000	0.96849	-2.1630	2.5972	-	-	-	*
		68.48485	46.76768	17.00000	0.66888	-2.9877	3.3084	-	-	-	*
		70.00000	46.76768	17.00000	0.0	-3.7331	3.9954	-	-	-	*
		71.51515	46.76768	17.00000	0.0	-4.9084	4.8569	-	-	-	*
		73.03030	46.76768	17.00000	0.0	-4.9084	4.8569	-	-	-	*
		74.54545	46.76768	17.00000	0.0	-4.9084	4.8569	-	-	-	*
		76.06061	46.76768	17.00000	0.0	-4.9084	4.8569	-	-	-	*
		77.57576	46.76768	17.00000	0.0	-4.9084	4.8569	-	-	-	*
		79.09091	46.76768	17.00000	0.0	-4.9084	4.8569	-	-	-	*
		80.60606	46.76768	17.00000	0.0	-4.9084	4.8569	-	-	-	*
		82.12121	46.76768	17.00000	-0.066655	-3.7215	3.9838	-	-	-	*

Oasys
GEA LIMITED
(GEOTECHNICAL &ENV ASSOC) J15050A
The Great Hall, Lincoln's Inn, Newman's Row, London, WC2A 3TL
Wall Movements Rev 3 Piling and Excavation
Damage Assessment
Job No. | Sheet No. | Rev.
Drg. Ref.
Made by MP | Date 08-Feb-2016 | Checked

Type/No.		Coordinates			Displacements					Angle of Line to x Axis	
Name	Dist.	x	y	z	x	y	z	Horizontal displacement	Horizontal displacement		
		83.63636	46.76768	17.00000	-0.82498	-3.4119	3.7623	-	-	-	*
		85.15152	46.76768	17.00000	-1.3452	-2.8888	3.4281	-	-	-	*
		86.66667	46.76768	17.00000	-1.5863	-2.3005	3.0213	-	-	-	*
		88.18182	46.76768	17.00000	-1.5972	-1.7485	2.5778	-	-	-	*
		89.69697	46.76768	17.00000	-1.5059	-1.3241	2.1608	-	-	-	*
		91.21212	46.76768	17.00000	-1.3240	-0.97268	1.7483	-	-	-	*
		92.72727	46.76768	17.00000	-1.0450	-0.65929	1.3423	-	-	-	*
		94.24242	46.76768	17.00000	-0.76616	-0.42354	0.96520	-	-	-	*
		95.75758	46.76768	17.00000	-0.57165	-0.28121	0.62483	-	-	-	*
		97.27273	46.76768	17.00000	-0.34720	-0.15385	0.31255	-	-	-	*
		98.78788	46.76768	17.00000	-0.099728	-0.040203	0.021894	-	-	-	*
		100.30303	46.76768	17.00000	0.0	0.0	0.0	-	-	-	*
		101.81818	46.76768	17.00000	0.0	0.0	0.0	-	-	-	*
		103.33333	46.76768	17.00000	0.0	0.0	0.0	-	-	-	*
		104.84848	46.76768	17.00000	0.0	0.0	0.0	-	-	-	*
		106.36364	46.76768	17.00000	0.0	0.0	0.0	-	-	-	*
		107.87879	46.76768	17.00000	0.0	0.0	0.0	-	-	-	*
		109.39394	46.76768	17.00000	0.0	0.0	0.0	-	-	-	*
		110.90909	46.76768	17.00000	0.0	0.0	0.0	-	-	-	*
		112.42424	46.76768	17.00000	0.0	0.0	0.0	-	-	-	*
		113.93939	46.76768	17.00000	0.0	0.0	0.0	-	-	-	*
		115.45455	46.76768	17.00000	0.0	0.0	0.0	-	-	-	*
		116.96970	46.76768	17.00000	0.0	0.0	0.0	-	-	-	*
		118.48485	46.76768	17.00000	0.0	0.0	0.0	-	-	-	*
		120.00000	46.76768	17.00000	0.0	0.0	0.0	-	-	-	*
		-30.00000	47.77778	17.00000	0.0	0.0	0.0	-	-	-	*
		-28.48485	47.77778	17.00000	0.0	0.0	0.0	-	-	-	*
		-26.96970	47.77778	17.00000	0.0	0.0	0.0	-	-	-	*
		-25.45455	47.77778	17.00000	0.0	0.0	0.0	-	-	-	*
		-23.93939	47.77778	17.00000	0.0	0.0	0.0	-	-	-	*
		-22.42424	47.77778	17.00000	0.0	0.0	0.0	-	-	-	*
		-20.90909	47.77778	17.00000	0.0	0.0	0.0	-	-	-	*
		-19.39394	47.77778	17.00000	0.0	0.0	0.0	-	-	-	*
		-17.87879	47.77778	17.00000	0.0	0.0	0.0	-	-	-	*
		-16.36364	47.77778	17.00000	0.0	0.0	0.0	-	-	-	*
		-14.84848	47.77778	17.00000	0.0	0.0	0.0	-	-	-	*
		-13.33333	47.77778	17.00000	0.0	0.0	0.0	-	-	-	*
		-11.81818	47.77778	17.00000	0.0	0.0	0.0	-	-	-	*
		-10.30303	47.77778	17.00000	0.0	0.0	0.0	-	-	-	*
		-8.78788	47.77778	17.00000	0.0	0.0	0.0	-	-	-	*
		-7.27273	47.77778	17.00000	0.0	0.0	0.0	-	-	-	*
		-5.75758	47.77778	17.00000	0.0	0.0	0.0	-	-	-	*
		-4.24242	47.77778	17.00000	0.0	0.0	0.0	-	-	-	*
		-2.72727	47.77778	17.00000	0.0	0.0	0.0	-	-	-	*
		-1.21212	47.77778	17.00000	0.0	0.0	0.0	-	-	-	*
		0.30303	47.77778	17.00000	0.0	0.0	0.0	-	-	-	*
		1.81818	47.77778	17.00000	0.0	0.0	0.0	-	-	-	*
		3.33333	47.77778	17.00000	0.0	0.0	0.0	-	-	-	*
		4.84848	47.77778	17.00000	0.0	0.0	0.0	-	-	-	*
		6.36364	47.77778	17.00000	0.0	0.0	0.0	-	-	-	*
		7.87879	47.77778	17.00000	0.0	0.0	0.0	-	-	-	*
		9.39394	47.77778	17.00000	0.0	0.0	0.0	-	-	-	*
		10.90909	47.77778	17.00000	0.0	0.0	0.0	-	-	-	*
		12.42424	47.77778	17.00000	0.0	0.0	0.0	-	-	-	*
		13.93939	47.77778	17.00000	0.0	0.0	0.0	-	-	-	*
		15.45455	47.77778	17.00000	0.0	0.0	0.0	-	-	-	*
		16.96970	47.77778	17.00000	0.0	0.0	0.0	-	-	-	*
		18.48485	47.77778	17.00000	0.0	0.0	0.0	-	-	-	*
		20.00000	47.77778	17.00000	0.0	0.0	0.0	-	-	-	*
		21.51515	47.77778	17.00000	0.0	0.0	0.0	-	-	-	*
		23.03030	47.77778	17.00000	0.0	0.0	0.0	-	-	-	*
		24.54545	47.77778	17.00000	0.0	0.0	0.0	-	-	-	*
		26.06061	47.77778	17.00000	0.0	0.0	0.0	-	-	-	*
		27.57576	47.77778	17.00000	0.0	0.0	0.0	-	-	-	*
		29.09091	47.77778	17.00000	0.0	0.0	0.0	-	-	-	*
		30.60606	47.77778	17.00000	0.0	0.0	0.0	-	-	-	*
		32.12121	47.77778	17.00000	0.0	0.0	0.0	-	-	-	*
		33.63636	47.77778	17.00000	0.0	0.0	0.0	-	-	-	*
		35.15152	47.77778	17.00000	0.0	0.0	0.0	-	-	-	*
		36.66667	47.77778	17.00000	0.0	0.0	0.0	-	-	-	*
		38.18182	47.77778	17.00000	0.0	0.0	0.0	-	-	-	*
		39.69697	47.77778	17.00000	0.0	0.0	0.0	-	-	-	*
		41.21212	47.77778	17.00000	0.0	0.0	0.0	-	-	-	*
		42.72727	47.77778	17.00000	0.0	0.0	0.0	-	-	-	*
		44.24242	47.77778	17.00000	0.0	0.0	0.0	-	-	-	*
		45.75758	47.77778	17.00000	0.0	0.0	0.0	-	-	-	*
		47.27273	47.77778	17.00000	0.0	0.0	0.0	-	-	-	*
		48.78788	47.77778	17.00000	0.0	0.0	0.0	-	-	-	*
		50.30303	47.77778	17.00000	0.0	0.0	0.0	-	-	-	*
		51.81818	47.77778	17.00000	0.0	0.0	0.0	-	-	-	*
		53.33333	47.77778	17.00000	0.0093641	-0.0043699	0.0030433	-	-	-	*
		54.84848	47.77778	17.00000	0.0644818	-0.033273	0.071395	-	-	-	*
		56.36364	47.77778	17.00000	0.12647	-0.072136	0.17576	-	-	-	*
		57.87879	47.77778	17.00000	0.19432	-0.12469	0.30749	-	-	-	*
		59.39394	47.77778	17.00000	0.28799	-0.21119	0.47924	-	-	-	*
		60.90909	47.77778	17.00000	0.43679	-0.37370	0.70275	-	-	-	*
		62.42424	47.77778	17.00000	0.58793	-0.60361	0.99077	-	-	-	*
		63.93939	47.77778	17.00000	0.74922	-0.96150	1.3772	-	-	-	*
		65.45455	47.77778	17.00000	0.84565	-1.4470	1.8535	-	-	-	*
		66.96970	47.77778	17.00000	0.80017	-2.0538	2.4044	-	-	-	*
		68.48485	47.77778	17.00000	0.52887	-2.7149	2.9863	-	-	-	*
		70.00000	47.77778	17.00000	0.0	-3.2907	3.5234	-	-	-	*
		71.51515	47.77778	17.00000	0.0	-4.3660	4.2519	-	-	-	*
		73.03030	47.77778	17.00000	0.0	-4.3660	4.2519	-	-	-	*
		74.54545	47.77778	17.00000	0.0	-4.3660	4.2519	-	-	-	*
		76.06061	47.77778	17.00000	0.0	-4.3660	4.2519	-	-	-	*
		77.57576	47.77778	17.00000	0.0	-4.3660	4.2519	-	-	-	*
		79.09091	47.77778	17.00000	0.0	-4.3660	4.2519	-	-	-	*
		80.60606	47.77778	17.00000	0.0	-4.3660	4.2519	-	-	-	*
		82.12121	47.77778	17.00000	-0.051141	-3.2816	3.5148	-	-	-	*
		83.63636	47.77778	17.00000	-0.64015	-3.0427	3.3369	-	-	-	*
		85.15152	47.77778	17.00000	-1.0656	-2.6298	3.0923	-	-	-	*
		86.66667	47.77778	17.00000	-1.2849	-2.1415	2.6958	-	-	-	*
		88.18182	47.77778	17.00000	-1.3169	-1.6569	2.3008	-	-	-	*
		89.69697	47.77778	17.00000	-1.2056	-1.2183	1.8962	-	-	-	*
		91.21212	47.77778	17.00000	-1.0533	-0.88934	1.5278	-	-	-	*
		92.72727	47.77778	17.00000	-0.80965	-0.58704	1.1657	-	-	-	*
		94.24242	47.77778	17.00000	-0.63749	-0.40501	0.82579	-	-	-	*
		95.75758	47.77778	17.00000	-0.46248	-0.26146	0.51283	-	-	-	*
		97.27273	47.77778	17.00000	-0.25587	-0.13031	0.21604	-	-	-	*
		98.78788	47.77778	17.00000	-0.024370	-0.011290	0.0078169	-	-	-	*
		100.30303	47.77778	17.00000	0.0	0.0	0.0	-	-	-	*
		101.81818	47.77778	17.00000	0.0	0.0	0.0	-	-	-	*
		103.33333	47.77778	17.00000	0.0	0.0	0.0	-	-	-	*
		104.84848	47.77778	17.00000	0.0	0.0	0.0	-	-	-	*
		106.36364	47.77778	17.00000	0.0	0.0	0.0	-	-	-	*
		107.87879	47.77778	17.00000	0.0	0.0	0.0	-	-	-	*
		109.39394	47.77778	17.00000	0.0	0.0	0.0	-	-	-	*
		110.90909	47.77778	17.00000	0.0	0.0	0.0	-	-	-	*
		112.42424	47.77778	17.00000	0.0	0.0	0.0	-	-	-	*
		113.93939	47.77778	17.00000	0.0	0.0	0.0	-	-	-	*
		115.45455	47.77778	17.00000	0.0	0.0	0.0	-	-	-	*
		116.96970	47.77778	17.00000	0.0	0.0	0.0	-	-	-	*
		118.48485	47.77778	17.00000	0.0	0.0	0.0	-	-	-	*
		120.00000	47.77778	17.00000	0.0	0.0	0.0	-	-	-	*
		-30.00000	48.78788	17.00000	0.0	0.0	0.0	-	-	-	*
		-28.48485	48.78788	17.00000	0.0	0.0	0.0	-	-	-	*
		-26.96970	48.78788	17.00000	0.0	0.0	0.0	-	-	-	*
		-25.45455	48.78788	17.00000	0.0	0.0	0.0	-	-	-	*
		-23.93939	48.78788	17.00000	0.0	0.0	0.0	-	-	-	*
		-22.42424	48.78788	17.00000	0.0	0.0	0.0	-	-	-	*
		-20.90909	48.78788	17.00000	0.0	0.0	0.0	-	-	-	*
		-19.39394	48.78788	17.00000	0.0	0.0	0.0	-	-	-	*
		-17.87879	48.78788	17.00000	0.0	0.0	0.0	-	-	-	*
		-16.36364	48.78788	17.00000	0.0	0.0	0.0	-	-	-	*
		-14.84848	48.78788	17.00000	0.0	0.0	0.0	-	-	-	*
		-13.33333	48.78788	17.00000	0.0	0.0	0.0	-	-	-	*
		-11.81818	48.78788	17.00000	0.0	0.0	0.0	-	-	-	*
		-10.30303	48.78788	17.00000	0.0	0.0	0.0	-	-	-	*
		-8.78788	48.78788	17.00000	0.0	0.0	0.0	-	-	-	*
		-7.27273	48.78788	17.00000	0.0	0.0	0.0	-	-	-	*

Type/No. Name	Dist.	Coordinates x	y	z	Displacements x	y	z	Horizontal displacement	Horizontal displacement	Angle of Line to x Axis	
		-5.75758	48.78788	17.00000	0.0	0.0	0.0	-	-	-	*
		-4.24242	48.78788	17.00000	0.0	0.0	0.0	-	-	-	*
		-2.72727	48.78788	17.00000	0.0	0.0	0.0	-	-	-	*
		-1.21212	48.78788	17.00000	0.0	0.0	0.0	-	-	-	*
		0.30303	48.78788	17.00000	0.0	0.0	0.0	-	-	-	*
		1.81818	48.78788	17.00000	0.0	0.0	0.0	-	-	-	*
		3.33333	48.78788	17.00000	0.0	0.0	0.0	-	-	-	*
		4.84848	48.78788	17.00000	0.0	0.0	0.0	-	-	-	*
		6.36364	48.78788	17.00000	0.0	0.0	0.0	-	-	-	*
		7.87879	48.78788	17.00000	0.0	0.0	0.0	-	-	-	*
		9.39394	48.78788	17.00000	0.0	0.0	0.0	-	-	-	*
		10.90909	48.78788	17.00000	0.0	0.0	0.0	-	-	-	*
		12.42424	48.78788	17.00000	0.0	0.0	0.0	-	-	-	*
		13.93939	48.78788	17.00000	0.0	0.0	0.0	-	-	-	*
		15.45455	48.78788	17.00000	0.0	0.0	0.0	-	-	-	*
		16.96970	48.78788	17.00000	0.0	0.0	0.0	-	-	-	*
		18.48485	48.78788	17.00000	0.0	0.0	0.0	-	-	-	*
		20.00000	48.78788	17.00000	0.0	0.0	0.0	-	-	-	*
		21.51515	48.78788	17.00000	0.0	0.0	0.0	-	-	-	*
		23.03030	48.78788	17.00000	0.0	0.0	0.0	-	-	-	*
		24.54545	48.78788	17.00000	0.0	0.0	0.0	-	-	-	*
		26.06061	48.78788	17.00000	0.0	0.0	0.0	-	-	-	*
		27.57576	48.78788	17.00000	0.0	0.0	0.0	-	-	-	*
		29.09091	48.78788	17.00000	0.0	0.0	0.0	-	-	-	*
		30.60606	48.78788	17.00000	0.0	0.0	0.0	-	-	-	*
		32.12121	48.78788	17.00000	0.0	0.0	0.0	-	-	-	*
		33.63636	48.78788	17.00000	0.0	0.0	0.0	-	-	-	*
		35.15152	48.78788	17.00000	0.0	0.0	0.0	-	-	-	*
		36.66667	48.78788	17.00000	0.0	0.0	0.0	-	-	-	*
		38.18182	48.78788	17.00000	0.0	0.0	0.0	-	-	-	*
		39.69697	48.78788	17.00000	0.0	0.0	0.0	-	-	-	*
		41.21212	48.78788	17.00000	0.0	0.0	0.0	-	-	-	*
		42.72727	48.78788	17.00000	0.0	0.0	0.0	-	-	-	*
		44.24242	48.78788	17.00000	0.0	0.0	0.0	-	-	-	*
		45.75758	48.78788	17.00000	0.0	0.0	0.0	-	-	-	*
		47.27273	48.78788	17.00000	0.0	0.0	0.0	-	-	-	*
		48.78788	48.78788	17.00000	0.0	0.0	0.0	-	-	-	*
		50.30303	48.78788	17.00000	0.0	0.0	0.0	-	-	-	*
		51.81818	48.78788	17.00000	0.0	0.0	0.0	-	-	-	*
		53.33333	48.78788	17.00000	0.0	0.0	0.0	-	-	-	*
		54.84848	48.78788	17.00000	0.048818	-0.028314	0.043607	-	-	-	*
		56.36364	48.78788	17.00000	0.11107	-0.071581	0.15097	-	-	-	*
		57.87879	48.78788	17.00000	0.17791	-0.12898	0.28123	-	-	-	*
		59.39394	48.78788	17.00000	0.24759	-0.20514	0.44643	-	-	-	*
		60.90909	48.78788	17.00000	0.37024	-0.35790	0.65682	-	-	-	*
		62.42424	48.78788	17.00000	0.52052	-0.60380	0.93252	-	-	-	*
		63.93939	48.78788	17.00000	0.64962	-0.94195	1.2800	-	-	-	*
		65.45455	48.78788	17.00000	0.71150	-1.3756	1.6947	-	-	-	*
		66.96970	48.78788	17.00000	0.65082	-1.8874	2.1573	-	-	-	*
		68.48485	48.78788	17.00000	0.41689	-2.4180	2.6276	-	-	-	*
		70.00000	48.78788	17.00000	0.0	-2.8666	3.0451	-	-	-	*
		71.51515	48.78788	17.00000	0.0	-3.8420	3.6374	-	-	-	*
		73.03030	48.78788	17.00000	0.0	-3.8420	3.6374	-	-	-	*
		74.54545	48.78788	17.00000	0.0	-3.8420	3.6374	-	-	-	*
		76.06061	48.78788	17.00000	0.0	-3.8420	3.6374	-	-	-	*
		77.57576	48.78788	17.00000	0.0	-3.8420	3.6374	-	-	-	*
		79.09091	48.78788	17.00000	0.0	-3.8420	3.6374	-	-	-	*
		80.60606	48.78788	17.00000	0.0	-3.8420	3.6374	-	-	-	*
		82.12121	48.78788	17.00000	-0.039439	-2.8593	3.0388	-	-	-	*
		83.63636	48.78788	17.00000	-0.49738	-2.6711	2.8980	-	-	-	*
		85.15152	48.78788	17.00000	-0.83921	-2.3401	2.6600	-	-	-	*
		86.66667	48.78788	17.00000	-1.0268	-1.9335	2.3539	-	-	-	*
		88.18182	48.78788	17.00000	-1.0632	-1.5115	2.0095	-	-	-	*
		89.69697	48.78788	17.00000	-0.97420	-1.1123	1.6527	-	-	-	*
		91.21212	48.78788	17.00000	-0.80361	-0.76660	1.3088	-	-	-	*
		92.72727	48.78788	17.00000	-0.63348	-0.51895	0.98801	-	-	-	*
		94.24242	48.78788	17.00000	-0.51457	-0.36937	0.68258	-	-	-	*
		95.75758	48.78788	17.00000	-0.35587	-0.22732	0.39400	-	-	-	*
		97.27273	48.78788	17.00000	-0.16492	-0.094893	0.10901	-	-	-	*
		98.78788	48.78788	17.00000	0.0	0.0	0.0	-	-	-	*
		100.30303	48.78788	17.00000	0.0	0.0	0.0	-	-	-	*
		101.81818	48.78788	17.00000	0.0	0.0	0.0	-	-	-	*
		103.33333	48.78788	17.00000	0.0	0.0	0.0	-	-	-	*
		104.84848	48.78788	17.00000	0.0	0.0	0.0	-	-	-	*
		106.36364	48.78788	17.00000	0.0	0.0	0.0	-	-	-	*
		107.87879	48.78788	17.00000	0.0	0.0	0.0	-	-	-	*
		109.39394	48.78788	17.00000	0.0	0.0	0.0	-	-	-	*
		110.90909	48.78788	17.00000	0.0	0.0	0.0	-	-	-	*
		112.42424	48.78788	17.00000	0.0	0.0	0.0	-	-	-	*
		113.93939	48.78788	17.00000	0.0	0.0	0.0	-	-	-	*
		115.45455	48.78788	17.00000	0.0	0.0	0.0	-	-	-	*
		116.96970	48.78788	17.00000	0.0	0.0	0.0	-	-	-	*
		118.48485	48.78788	17.00000	0.0	0.0	0.0	-	-	-	*
		120.00000	48.78788	17.00000	0.0	0.0	0.0	-	-	-	*
		-30.00000	49.79798	17.00000	0.0	0.0	0.0	-	-	-	*
		-28.48485	49.79798	17.00000	0.0	0.0	0.0	-	-	-	*
		-26.96970	49.79798	17.00000	0.0	0.0	0.0	-	-	-	*
		-25.45455	49.79798	17.00000	0.0	0.0	0.0	-	-	-	*
		-23.93939	49.79798	17.00000	0.0	0.0	0.0	-	-	-	*
		-22.42424	49.79798	17.00000	0.0	0.0	0.0	-	-	-	*
		-20.90909	49.79798	17.00000	0.0	0.0	0.0	-	-	-	*
		-19.39394	49.79798	17.00000	0.0	0.0	0.0	-	-	-	*
		-17.87879	49.79798	17.00000	0.0	0.0	0.0	-	-	-	*
		-16.36364	49.79798	17.00000	0.0	0.0	0.0	-	-	-	*
		-14.84848	49.79798	17.00000	0.0	0.0	0.0	-	-	-	*
		-13.33333	49.79798	17.00000	0.0	0.0	0.0	-	-	-	*
		-11.81818	49.79798	17.00000	0.0	0.0	0.0	-	-	-	*
		-10.30303	49.79798	17.00000	0.0	0.0	0.0	-	-	-	*
		-8.78788	49.79798	17.00000	0.0	0.0	0.0	-	-	-	*
		-7.27273	49.79798	17.00000	0.0	0.0	0.0	-	-	-	*
		-5.75758	49.79798	17.00000	0.0	0.0	0.0	-	-	-	*
		-4.24242	49.79798	17.00000	0.0	0.0	0.0	-	-	-	*
		-2.72727	49.79798	17.00000	0.0	0.0	0.0	-	-	-	*
		-1.21212	49.79798	17.00000	0.0	0.0	0.0	-	-	-	*
		0.30303	49.79798	17.00000	0.0	0.0	0.0	-	-	-	*
		1.81818	49.79798	17.00000	0.0	0.0	0.0	-	-	-	*
		3.33333	49.79798	17.00000	0.0	0.0	0.0	-	-	-	*
		4.84848	49.79798	17.00000	0.0	0.0	0.0	-	-	-	*
		6.36364	49.79798	17.00000	0.0	0.0	0.0	-	-	-	*
		7.87879	49.79798	17.00000	0.0	0.0	0.0	-	-	-	*
		9.39394	49.79798	17.00000	0.0	0.0	0.0	-	-	-	*
		10.90909	49.79798	17.00000	0.0	0.0	0.0	-	-	-	*
		12.42424	49.79798	17.00000	0.0	0.0	0.0	-	-	-	*
		13.93939	49.79798	17.00000	0.0	0.0	0.0	-	-	-	*
		15.45455	49.79798	17.00000	0.0	0.0	0.0	-	-	-	*
		16.96970	49.79798	17.00000	0.0	0.0	0.0	-	-	-	*
		18.48485	49.79798	17.00000	0.0	0.0	0.0	-	-	-	*
		20.00000	49.79798	17.00000	0.0	0.0	0.0	-	-	-	*
		21.51515	49.79798	17.00000	0.0	0.0	0.0	-	-	-	*
		23.03030	49.79798	17.00000	0.0	0.0	0.0	-	-	-	*
		24.54545	49.79798	17.00000	0.0	0.0	0.0	-	-	-	*
		26.06061	49.79798	17.00000	0.0	0.0	0.0	-	-	-	*
		27.57576	49.79798	17.00000	0.0	0.0	0.0	-	-	-	*
		29.09091	49.79798	17.00000	0.0	0.0	0.0	-	-	-	*
		30.60606	49.79798	17.00000	0.0	0.0	0.0	-	-	-	*
		32.12121	49.79798	17.00000	0.0	0.0	0.0	-	-	-	*
		33.63636	49.79798	17.00000	0.0	0.0	0.0	-	-	-	*
		35.15152	49.79798	17.00000	0.0	0.0	0.0	-	-	-	*
		36.66667	49.79798	17.00000	0.0	0.0	0.0	-	-	-	*
		38.18182	49.79798	17.00000	0.0	0.0	0.0	-	-	-	*
		39.69697	49.79798	17.00000	0.0	0.0	0.0	-	-	-	*
		41.21212	49.79798	17.00000	0.0	0.0	0.0	-	-	-	*
		42.72727	49.79798	17.00000	0.0	0.0	0.0	-	-	-	*
		44.24242	49.79798	17.00000	0.0	0.0	0.0	-	-	-	*
		45.75758	49.79798	17.00000	0.0	0.0	0.0	-	-	-	*
		47.27273	49.79798	17.00000	0.0	0.0	0.0	-	-	-	*
		48.78788	49.79798	17.00000	0.0	0.0	0.0	-	-	-	*
		50.30303	49.79798	17.00000	0.0	0.0	0.0	-	-	-	*
		51.81818	49.79798	17.00000	0.0	0.0	0.0	-	-	-	*
		53.33333	49.79798	17.00000	0.0	0.0	0.0	-	-	-	*
		54.84848	49.79798	17.00000	0.027456	-0.017755	0.0077773	-	-	-	*

Oasys
GEA LIMITED
(GEOTECHNICAL &ENV ASSOC) J15050A
The Great Hall, Lincoln's Inn, Newman's Row, London, WC2A 3TL
Wall Movements Rev 3 Piling and Excavation
Damage Assessment
Job No. | Sheet No. | Rev.
Drg. Ref.
Made by MP | Date 08-Feb-2016 | Checked

Type/No. Name	Dist.	Coordinates x	y	z	Displacements x	y	z	Horizontal displacement	Horizontal displacement	Angle of Line to x Axis	
		56.36364	49.79798	17.00000	0.089320	-0.064178	0.11459	-	-	-	*
		57.87879	49.79798	17.00000	0.13418	-0.12463	0.24173	-	-	-	*
		59.39394	49.79798	17.00000	0.21976	-0.20302	0.39745	-	-	-	*
		60.90909	49.79798	17.00000	0.29976	-0.32308	0.59404	-	-	-	*
		62.42424	49.79798	17.00000	0.43581	-0.56365	0.84364	-	-	-	*
		63.93939	49.79798	17.00000	0.54071	-0.87414	1.1477	-	-	-	*
		65.45455	49.79798	17.00000	0.58166	-1.2538	1.5003	-	-	-	*
		66.96970	49.79798	17.00000	0.52003	-1.6814	1.8818	-	-	-	*
		68.48485	49.79798	17.00000	0.32587	-2.1073	2.2572	-	-	-	*
		70.00000	49.79798	17.00000	0.0	-2.4576	2.5788	-	-	-	*
		71.51515	49.79798	17.00000	0.0	-3.3330	3.0410	-	-	-	*
		73.03030	49.79798	17.00000	0.0	-3.3330	3.0410	-	-	-	*
		74.54545	49.79798	17.00000	0.0	-3.3330	3.0410	-	-	-	*
		76.06061	49.79798	17.00000	0.0	-3.3330	3.0410	-	-	-	*
		77.57576	49.79798	17.00000	0.0	-3.3330	3.0410	-	-	-	*
		79.09091	49.79798	17.00000	0.0	-3.3330	3.0410	-	-	-	*
		80.60606	49.79798	17.00000	0.0	-3.3330	3.0410	-	-	-	*
		82.12121	49.79798	17.00000	-0.030331	-2.4518	2.5744	-	-	-	*
		83.63636	49.79798	17.00000	-0.38432	-2.3012	2.4646	-	-	-	*
		85.15152	49.79798	17.00000	-0.65363	-2.0321	2.2688	-	-	-	*
		86.66667	49.79798	17.00000	-0.80564	-1.6915	2.0108	-	-	-	*
		88.18182	49.79798	17.00000	-0.83580	-1.3247	1.7158	-	-	-	*
		89.69697	49.79798	17.00000	-0.75763	-0.96444	1.4065	-	-	-	*
		91.21212	49.79798	17.00000	-0.59091	-0.62849	1.1003	-	-	-	*
		92.72727	49.79798	17.00000	-0.50592	-0.46209	0.81208	-	-	-	*
		94.24242	49.79798	17.00000	-0.39887	-0.31923	0.53711	-	-	-	*
		95.75758	49.79798	17.00000	-0.25340	-0.18047	0.26845	-	-	-	*
		97.27273	49.79798	17.00000	-0.075849	-0.048660	0.019273	-	-	-	*
		98.78788	49.79798	17.00000	0.0	0.0	0.0	-	-	-	*
		100.30303	49.79798	17.00000	0.0	0.0	0.0	-	-	-	*
		101.81818	49.79798	17.00000	0.0	0.0	0.0	-	-	-	*
		103.33333	49.79798	17.00000	0.0	0.0	0.0	-	-	-	*
		104.84848	49.79798	17.00000	0.0	0.0	0.0	-	-	-	*
		106.36364	49.79798	17.00000	0.0	0.0	0.0	-	-	-	*
		107.87879	49.79798	17.00000	0.0	0.0	0.0	-	-	-	*
		109.39394	49.79798	17.00000	0.0	0.0	0.0	-	-	-	*
		110.90909	49.79798	17.00000	0.0	0.0	0.0	-	-	-	*
		112.42424	49.79798	17.00000	0.0	0.0	0.0	-	-	-	*
		113.93939	49.79798	17.00000	0.0	0.0	0.0	-	-	-	*
		115.45455	49.79798	17.00000	0.0	0.0	0.0	-	-	-	*
		116.96970	49.79798	17.00000	0.0	0.0	0.0	-	-	-	*
		118.48485	49.79798	17.00000	0.0	0.0	0.0	-	-	-	*
		120.00000	49.79798	17.00000	0.0	0.0	0.0	-	-	-	*
		-30.00000	50.80808	17.00000	0.0	0.0	0.0	-	-	-	*
		-28.48485	50.80808	17.00000	0.0	0.0	0.0	-	-	-	*
		-26.96970	50.80808	17.00000	0.0	0.0	0.0	-	-	-	*
		-25.45455	50.80808	17.00000	0.0	0.0	0.0	-	-	-	*
		-23.93939	50.80808	17.00000	0.0	0.0	0.0	-	-	-	*
		-22.42424	50.80808	17.00000	0.0	0.0	0.0	-	-	-	*
		-20.90909	50.80808	17.00000	0.0	0.0	0.0	-	-	-	*
		-19.39394	50.80808	17.00000	0.0	0.0	0.0	-	-	-	*
		-17.87879	50.80808	17.00000	0.0	0.0	0.0	-	-	-	*
		-16.36364	50.80808	17.00000	0.0	0.0	0.0	-	-	-	*
		-14.84848	50.80808	17.00000	0.0	0.0	0.0	-	-	-	*
		-13.33333	50.80808	17.00000	0.0	0.0	0.0	-	-	-	*
		-11.81818	50.80808	17.00000	0.0	0.0	0.0	-	-	-	*
		-10.30303	50.80808	17.00000	0.0	0.0	0.0	-	-	-	*
		-8.78788	50.80808	17.00000	0.0	0.0	0.0	-	-	-	*
		-7.27273	50.80808	17.00000	0.0	0.0	0.0	-	-	-	*
		-5.75758	50.80808	17.00000	0.0	0.0	0.0	-	-	-	*
		-4.24242	50.80808	17.00000	0.0	0.0	0.0	-	-	-	*
		-2.72727	50.80808	17.00000	0.0	0.0	0.0	-	-	-	*
		-1.21212	50.80808	17.00000	0.0	0.0	0.0	-	-	-	*
		0.30303	50.80808	17.00000	0.0	0.0	0.0	-	-	-	*
		1.81818	50.80808	17.00000	0.0	0.0	0.0	-	-	-	*
		3.33333	50.80808	17.00000	0.0	0.0	0.0	-	-	-	*
		4.84848	50.80808	17.00000	0.0	0.0	0.0	-	-	-	*
		6.36364	50.80808	17.00000	0.0	0.0	0.0	-	-	-	*
		7.87879	50.80808	17.00000	0.0	0.0	0.0	-	-	-	*
		9.39394	50.80808	17.00000	0.0	0.0	0.0	-	-	-	*
		10.90909	50.80808	17.00000	0.0	0.0	0.0	-	-	-	*
		12.42424	50.80808	17.00000	0.0	0.0	0.0	-	-	-	*
		13.93939	50.80808	17.00000	0.0	0.0	0.0	-	-	-	*
		15.45455	50.80808	17.00000	0.0	0.0	0.0	-	-	-	*
		16.96970	50.80808	17.00000	0.0	0.0	0.0	-	-	-	*
		18.48485	50.80808	17.00000	0.0	0.0	0.0	-	-	-	*
		20.00000	50.80808	17.00000	0.0	0.0	0.0	-	-	-	*
		21.51515	50.80808	17.00000	0.0	0.0	0.0	-	-	-	*
		23.03030	50.80808	17.00000	0.0	0.0	0.0	-	-	-	*
		24.54545	50.80808	17.00000	0.0	0.0	0.0	-	-	-	*
		26.06061	50.80808	17.00000	0.0	0.0	0.0	-	-	-	*
		27.57576	50.80808	17.00000	0.0	0.0	0.0	-	-	-	*
		29.09091	50.80808	17.00000	0.0	0.0	0.0	-	-	-	*
		30.60606	50.80808	17.00000	0.0	0.0	0.0	-	-	-	*
		32.12121	50.80808	17.00000	0.0	0.0	0.0	-	-	-	*
		33.63636	50.80808	17.00000	0.0	0.0	0.0	-	-	-	*
		35.15152	50.80808	17.00000	0.0	0.0	0.0	-	-	-	*
		36.66667	50.80808	17.00000	0.0	0.0	0.0	-	-	-	*
		38.18182	50.80808	17.00000	0.0	0.0	0.0	-	-	-	*
		39.69697	50.80808	17.00000	0.0	0.0	0.0	-	-	-	*
		41.21212	50.80808	17.00000	0.0	0.0	0.0	-	-	-	*
		42.72727	50.80808	17.00000	0.0	0.0	0.0	-	-	-	*
		44.24242	50.80808	17.00000	0.0	0.0	0.0	-	-	-	*
		45.75758	50.80808	17.00000	0.0	0.0	0.0	-	-	-	*
		47.27273	50.80808	17.00000	0.0	0.0	0.0	-	-	-	*
		48.78788	50.80808	17.00000	0.0	0.0	0.0	-	-	-	*
		50.30303	50.80808	17.00000	0.0	0.0	0.0	-	-	-	*
		51.81818	50.80808	17.00000	0.0	0.0	0.0	-	-	-	*
		53.33333	50.80808	17.00000	0.0	0.0	0.0	-	-	-	*
		54.84848	50.80808	17.00000	0.00137792	-983.822e-6	0.0012281	-	-	-	*
		56.36364	50.80808	17.00000	0.062187	-0.049289	0.066438	-	-	-	*
		57.87879	50.80808	17.00000	0.12456	-0.11107	0.19026	-	-	-	*
		59.39394	50.80808	17.00000	0.18742	-0.19099	0.33580	-	-	-	*
		60.90909	50.80808	17.00000	0.25822	-0.30700	0.51544	-	-	-	*
		62.42424	50.80808	17.00000	0.34080	-0.48620	0.73464	-	-	-	*
		63.93939	50.80808	17.00000	0.42909	-0.76520	0.99472	-	-	-	*
		65.45455	50.80808	17.00000	0.45954	-1.0927	1.2885	-	-	-	*
		66.96970	50.80808	17.00000	0.40575	-1.4472	1.5979	-	-	-	*
		68.48485	50.80808	17.00000	0.25066	-1.7880	1.8937	-	-	-	*
		70.00000	50.80808	17.00000	0.0	-2.0605	2.1388	-	-	-	*
		71.51515	50.80808	17.00000	0.0	-2.8359	2.4838	-	-	-	*
		73.03030	50.80808	17.00000	0.0	-2.8359	2.4838	-	-	-	*
		74.54545	50.80808	17.00000	0.0	-2.8359	2.4838	-	-	-	*
		76.06061	50.80808	17.00000	0.0	-2.8359	2.4838	-	-	-	*
		77.57576	50.80808	17.00000	0.0	-2.8359	2.4838	-	-	-	*
		79.09091	50.80808	17.00000	0.0	-2.8359	2.4838	-	-	-	*
		80.60606	50.80808	17.00000	0.0	-2.8359	2.4838	-	-	-	*
		82.12121	50.80808	17.00000	-0.0230056	-2.0558	2.1357	-	-	-	*
		83.63636	50.80808	17.00000	-0.29280	-1.9339	2.0514	-	-	-	*
		85.15152	50.80808	17.00000	-0.49935	-1.7125	1.8927	-	-	-	*
		86.66667	50.80808	17.00000	-0.61528	-1.4250	1.6785	-	-	-	*
		88.18182	50.80808	17.00000	-0.63243	-1.1057	1.4297	-	-	-	*
		89.69697	50.80808	17.00000	-0.55664	-0.78163	1.1651	-	-	-	*
		91.21212	50.80808	17.00000	-0.47911	-0.56211	0.89916	-	-	-	*
		92.72727	50.80808	17.00000	-0.39103	-0.39398	0.63962	-	-	-	*
		94.24242	50.80808	17.00000	-0.29118	-0.25707	0.38955	-	-	-	*
		95.75758	50.80808	17.00000	-0.15613	-0.12266	0.13506	-	-	-	*
		97.27273	50.80808	17.00000	0.0	0.0	0.0	-	-	-	*
		98.78788	50.80808	17.00000	0.0	0.0	0.0	-	-	-	*
		100.30303	50.80808	17.00000	0.0	0.0	0.0	-	-	-	*
		101.81818	50.80808	17.00000	0.0	0.0	0.0	-	-	-	*
		103.33333	50.80808	17.00000	0.0	0.0	0.0	-	-	-	*
		104.84848	50.80808	17.00000	0.0	0.0	0.0	-	-	-	*
		106.36364	50.80808	17.00000	0.0	0.0	0.0	-	-	-	*
		107.87879	50.80808	17.00000	0.0	0.0	0.0	-	-	-	*
		109.39394	50.80808	17.00000	0.0	0.0	0.0	-	-	-	*
		110.90909	50.80808	17.00000	0.0	0.0	0.0	-	-	-	*
		112.42424	50.80808	17.00000	0.0	0.0	0.0	-	-	-	*
		113.93939	50.80808	17.00000	0.0	0.0	0.0	-	-	-	*
		115.45455	50.80808	17.00000	0.0	0.0	0.0	-	-	-	*
		116.96970	50.80808	17.00000	0.0	0.0	0.0	-	-	-	*

Type/No.		Coordinates			Displacements					Angle of Line to x Axis	
Name	Dist.	x	y	z	x	y	z	Horizontal displacement	Horizontal displacement		
		118.48485	50.80808	17.00000	0.0	0.0	0.0	-	-	-	*
		120.00000	50.80808	17.00000	0.0	0.0	0.0	-	-	-	*
		-30.00000	51.81818	17.00000	0.0	0.0	0.0	-	-	-	*
		-28.48485	51.81818	17.00000	0.0	0.0	0.0	-	-	-	*
		-26.96970	51.81818	17.00000	0.0	0.0	0.0	-	-	-	*
		-25.45455	51.81818	17.00000	0.0	0.0	0.0	-	-	-	*
		-23.93939	51.81818	17.00000	0.0	0.0	0.0	-	-	-	*
		-22.42424	51.81818	17.00000	0.0	0.0	0.0	-	-	-	*
		-20.90909	51.81818	17.00000	0.0	0.0	0.0	-	-	-	*
		-19.39394	51.81818	17.00000	0.0	0.0	0.0	-	-	-	*
		-17.87879	51.81818	17.00000	0.0	0.0	0.0	-	-	-	*
		-16.36364	51.81818	17.00000	0.0	0.0	0.0	-	-	-	*
		-14.84848	51.81818	17.00000	0.0	0.0	0.0	-	-	-	*
		-13.33333	51.81818	17.00000	0.0	0.0	0.0	-	-	-	*
		-11.81818	51.81818	17.00000	0.0	0.0	0.0	-	-	-	*
		-10.30303	51.81818	17.00000	0.0	0.0	0.0	-	-	-	*
		-8.78788	51.81818	17.00000	0.0	0.0	0.0	-	-	-	*
		-7.27273	51.81818	17.00000	0.0	0.0	0.0	-	-	-	*
		-5.75758	51.81818	17.00000	0.0	0.0	0.0	-	-	-	*
		-4.24242	51.81818	17.00000	0.0	0.0	0.0	-	-	-	*
		-2.72727	51.81818	17.00000	0.0	0.0	0.0	-	-	-	*
		-1.21212	51.81818	17.00000	0.0	0.0	0.0	-	-	-	*
		0.30303	51.81818	17.00000	0.0	0.0	0.0	-	-	-	*
		1.81818	51.81818	17.00000	0.0	0.0	0.0	-	-	-	*
		3.33333	51.81818	17.00000	0.0	0.0	0.0	-	-	-	*
		4.84848	51.81818	17.00000	0.0	0.0	0.0	-	-	-	*
		6.36364	51.81818	17.00000	0.0	0.0	0.0	-	-	-	*
		7.87879	51.81818	17.00000	0.0	0.0	0.0	-	-	-	*
		9.39394	51.81818	17.00000	0.0	0.0	0.0	-	-	-	*
		10.90909	51.81818	17.00000	0.0	0.0	0.0	-	-	-	*
		12.42424	51.81818	17.00000	0.0	0.0	0.0	-	-	-	*
		13.93939	51.81818	17.00000	0.0	0.0	0.0	-	-	-	*
		15.45455	51.81818	17.00000	0.0	0.0	0.0	-	-	-	*
		16.96970	51.81818	17.00000	0.0	0.0	0.0	-	-	-	*
		18.48485	51.81818	17.00000	0.0	0.0	0.0	-	-	-	*
		20.00000	51.81818	17.00000	0.0	0.0	0.0	-	-	-	*
		21.51515	51.81818	17.00000	0.0	0.0	0.0	-	-	-	*
		23.03030	51.81818	17.00000	0.0	0.0	0.0	-	-	-	*
		24.54545	51.81818	17.00000	0.0	0.0	0.0	-	-	-	*
		26.06061	51.81818	17.00000	0.0	0.0	0.0	-	-	-	*
		27.57576	51.81818	17.00000	0.0	0.0	0.0	-	-	-	*
		29.09091	51.81818	17.00000	0.0	0.0	0.0	-	-	-	*
		30.60606	51.81818	17.00000	0.0	0.0	0.0	-	-	-	*
		32.12121	51.81818	17.00000	0.0	0.0	0.0	-	-	-	*
		33.63636	51.81818	17.00000	0.0	0.0	0.0	-	-	-	*
		35.15152	51.81818	17.00000	0.0	0.0	0.0	-	-	-	*
		36.66667	51.81818	17.00000	0.0	0.0	0.0	-	-	-	*
		38.18182	51.81818	17.00000	0.0	0.0	0.0	-	-	-	*
		39.69697	51.81818	17.00000	0.0	0.0	0.0	-	-	-	*
		41.21212	51.81818	17.00000	0.0	0.0	0.0	-	-	-	*
		42.72727	51.81818	17.00000	0.0	0.0	0.0	-	-	-	*
		44.24242	51.81818	17.00000	0.0	0.0	0.0	-	-	-	*
		45.75758	51.81818	17.00000	0.0	0.0	0.0	-	-	-	*
		47.27273	51.81818	17.00000	0.0	0.0	0.0	-	-	-	*
		48.78788	51.81818	17.00000	0.0	0.0	0.0	-	-	-	*
		50.30303	51.81818	17.00000	0.0	0.0	0.0	-	-	-	*
		51.81818	51.81818	17.00000	0.0	0.0	0.0	-	-	-	*
		53.33333	51.81818	17.00000	0.0	0.0	0.0	-	-	-	*
		54.84848	51.81818	17.00000	0.0	0.0	0.0	-	-	-	*
		56.36364	51.81818	17.00000	0.030664	-0.026575	0.0096580	-	-	-	*
		57.87879	51.81818	17.00000	0.090397	-0.088137	0.12731	-	-	-	*
		59.39394	51.81818	17.00000	0.15426	-0.17189	0.26414	-	-	-	*
		60.90909	51.81818	17.00000	0.21788	-0.28324	0.42467	-	-	-	*
		62.42424	51.81818	17.00000	0.27208	-0.42444	0.61409	-	-	-	*
		63.93939	51.81818	17.00000	0.31854	-0.62115	0.83264	-	-	-	*
		65.45455	51.81818	17.00000	0.34618	-0.90007	1.0733	-	-	-	*
		66.96970	51.81818	17.00000	0.30552	-1.1915	1.3204	-	-	-	*
		68.48485	51.81818	17.00000	0.18750	-1.4625	1.5504	-	-	-	*
		70.00000	51.81818	17.00000	0.0	-1.6719	1.7347	-	-	-	*
		71.51515	51.81818	17.00000	0.0	-2.3473	1.9801	-	-	-	*
		73.03030	51.81818	17.00000	0.0	-2.3473	1.9801	-	-	-	*
		74.54545	51.81818	17.00000	0.0	-2.3473	1.9801	-	-	-	*
		76.06061	51.81818	17.00000	0.0	-2.3473	1.9801	-	-	-	*
		77.57576	51.81818	17.00000	0.0	-2.3473	1.9801	-	-	-	*
		79.09091	51.81818	17.00000	0.0	-2.3473	1.9801	-	-	-	*
		80.60606	51.81818	17.00000	0.0	-2.3473	1.9801	-	-	-	*
		82.12121	51.81818	17.00000	-0.017110	-1.6682	1.7326	-	-	-	*
		83.63636	51.81818	17.00000	-0.21721	-1.5688	1.6686	-	-	-	*
		85.15152	51.81818	17.00000	-0.36922	-1.3846	1.5415	-	-	-	*
		86.66667	51.81818	17.00000	-0.45009	-1.1398	1.3660	-	-	-	*
		88.18182	51.81818	17.00000	-0.45022	-0.86072	1.1584	-	-	-	*
		89.69697	51.81818	17.00000	-0.42756	-0.65648	0.93385	-	-	-	*
		91.21212	51.81818	17.00000	-0.37878	-0.48594	0.70344	-	-	-	*
		92.72727	51.81818	17.00000	-0.29689	-0.32709	0.47221	-	-	-	*
		94.24242	51.81818	17.00000	-0.19175	-0.18510	0.23855	-	-	-	*
		95.75758	51.81818	17.00000	-0.064686	-0.055567	0.018594	-	-	-	*
		97.27273	51.81818	17.00000	0.0	0.0	0.0	-	-	-	*
		98.78788	51.81818	17.00000	0.0	0.0	0.0	-	-	-	*
		100.30303	51.81818	17.00000	0.0	0.0	0.0	-	-	-	*
		101.81818	51.81818	17.00000	0.0	0.0	0.0	-	-	-	*
		103.33333	51.81818	17.00000	0.0	0.0	0.0	-	-	-	*
		104.84848	51.81818	17.00000	0.0	0.0	0.0	-	-	-	*
		106.36364	51.81818	17.00000	0.0	0.0	0.0	-	-	-	*
		107.87879	51.81818	17.00000	0.0	0.0	0.0	-	-	-	*
		109.39394	51.81818	17.00000	0.0	0.0	0.0	-	-	-	*
		110.90909	51.81818	17.00000	0.0	0.0	0.0	-	-	-	*
		112.42424	51.81818	17.00000	0.0	0.0	0.0	-	-	-	*
		113.93939	51.81818	17.00000	0.0	0.0	0.0	-	-	-	*
		115.45455	51.81818	17.00000	0.0	0.0	0.0	-	-	-	*
		116.96970	51.81818	17.00000	0.0	0.0	0.0	-	-	-	*
		118.48485	51.81818	17.00000	0.0	0.0	0.0	-	-	-	*
		120.00000	51.81818	17.00000	0.0	0.0	0.0	-	-	-	*
		-30.00000	52.82828	17.00000	0.0	0.0	0.0	-	-	-	*
		-28.48485	52.82828	17.00000	0.0	0.0	0.0	-	-	-	*
		-26.96970	52.82828	17.00000	0.0	0.0	0.0	-	-	-	*
		-25.45455	52.82828	17.00000	0.0	0.0	0.0	-	-	-	*
		-23.93939	52.82828	17.00000	0.0	0.0	0.0	-	-	-	*
		-22.42424	52.82828	17.00000	0.0	0.0	0.0	-	-	-	*
		-20.90909	52.82828	17.00000	0.0	0.0	0.0	-	-	-	*
		-19.39394	52.82828	17.00000	0.0	0.0	0.0	-	-	-	*
		-17.87879	52.82828	17.00000	0.0	0.0	0.0	-	-	-	*
		-16.36364	52.82828	17.00000	0.0	0.0	0.0	-	-	-	*
		-14.84848	52.82828	17.00000	0.0	0.0	0.0	-	-	-	*
		-13.33333	52.82828	17.00000	0.0	0.0	0.0	-	-	-	*
		-11.81818	52.82828	17.00000	0.0	0.0	0.0	-	-	-	*
		-10.30303	52.82828	17.00000	0.0	0.0	0.0	-	-	-	*
		-8.78788	52.82828	17.00000	0.0	0.0	0.0	-	-	-	*
		-7.27273	52.82828	17.00000	0.0	0.0	0.0	-	-	-	*
		-5.75758	52.82828	17.00000	0.0	0.0	0.0	-	-	-	*
		-4.24242	52.82828	17.00000	0.0	0.0	0.0	-	-	-	*
		-2.72727	52.82828	17.00000	0.0	0.0	0.0	-	-	-	*
		-1.21212	52.82828	17.00000	0.0	0.0	0.0	-	-	-	*
		0.30303	52.82828	17.00000	0.0	0.0	0.0	-	-	-	*
		1.81818	52.82828	17.00000	0.0	0.0	0.0	-	-	-	*
		3.33333	52.82828	17.00000	0.0	0.0	0.0	-	-	-	*
		4.84848	52.82828	17.00000	0.0	0.0	0.0	-	-	-	*
		6.36364	52.82828	17.00000	0.0	0.0	0.0	-	-	-	*
		7.87879	52.82828	17.00000	0.0	0.0	0.0	-	-	-	*
		9.39394	52.82828	17.00000	0.0	0.0	0.0	-	-	-	*
		10.90909	52.82828	17.00000	0.0	0.0	0.0	-	-	-	*
		12.42424	52.82828	17.00000	0.0	0.0	0.0	-	-	-	*
		13.93939	52.82828	17.00000	0.0	0.0	0.0	-	-	-	*
		15.45455	52.82828	17.00000	0.0	0.0	0.0	-	-	-	*
		16.96970	52.82828	17.00000	0.0	0.0	0.0	-	-	-	*
		18.48485	52.82828	17.00000	0.0	0.0	0.0	-	-	-	*
		20.00000	52.82828	17.00000	0.0	0.0	0.0	-	-	-	*
		21.51515	52.82828	17.00000	0.0	0.0	0.0	-	-	-	*
		23.03030	52.82828	17.00000	0.0	0.0	0.0	-	-	-	*
		24.54545	52.82828	17.00000	0.0	0.0	0.0	-	-	-	*
		26.06061	52.82828	17.00000	0.0	0.0	0.0	-	-	-	*
		27.57576	52.82828	17.00000	0.0	0.0	0.0	-	-	-	*

Oasys
GEA LIMITED
(GEOTECHNICAL &ENV ASSOC) J15050A
The Great Hall, Lincoln's Inn, Newman's Row, London, WC2A 3TL
Wall Movements Rev 3 Piling and Excavation
Damage Assessment
Job No. | Sheet No. | Rev.
Drg. Ref.
Made by MP | Date 08-Feb-2016 | Checked

Type/No.		Coordinates			Displacements					Angle of Line to x Axis	
Name	Dist.	x	y	z	x	y	z	Horizontal displacement	Horizontal displacement		
		29.09091	52.82828	17.00000	0.0	0.0	0.0	-	-	-	*
		30.60606	52.82828	17.00000	0.0	0.0	0.0	-	-	-	*
		32.12121	52.82828	17.00000	0.0	0.0	0.0	-	-	-	*
		33.63636	52.82828	17.00000	0.0	0.0	0.0	-	-	-	*
		35.15152	52.82828	17.00000	0.0	0.0	0.0	-	-	-	*
		36.66667	52.82828	17.00000	0.0	0.0	0.0	-	-	-	*
		38.18182	52.82828	17.00000	0.0	0.0	0.0	-	-	-	*
		39.69697	52.82828	17.00000	0.0	0.0	0.0	-	-	-	*
		41.21212	52.82828	17.00000	0.0	0.0	0.0	-	-	-	*
		42.72727	52.82828	17.00000	0.0	0.0	0.0	-	-	-	*
		44.24242	52.82828	17.00000	0.0	0.0	0.0	-	-	-	*
		45.75758	52.82828	17.00000	0.0	0.0	0.0	-	-	-	*
		47.27273	52.82828	17.00000	0.0	0.0	0.0	-	-	-	*
		48.78788	52.82828	17.00000	0.0	0.0	0.0	-	-	-	*
		50.30303	52.82828	17.00000	0.0	0.0	0.0	-	-	-	*
		51.81818	52.82828	17.00000	0.0	0.0	0.0	-	-	-	*
		53.33333	52.82828	17.00000	0.0	0.0	0.0	-	-	-	*
		54.84848	52.82828	17.00000	0.0	0.0	0.0	-	-	-	*
		56.36364	52.82828	17.00000	0.0	0.0	0.0	-	-	-	*
		57.87879	52.82828	17.00000	0.054137	-0.057295	0.052618	-	-	-	*
		59.39394	52.82828	17.00000	0.11463	-0.13864	0.18187	-	-	-	*
		60.90909	52.82828	17.00000	0.17220	-0.24299	0.32543	-	-	-	*
		62.42424	52.82828	17.00000	0.21961	-0.37187	0.48800	-	-	-	*
		63.93939	52.82828	17.00000	0.24760	-0.52409	0.66959	-	-	-	*
		65.45455	52.82828	17.00000	0.24590	-0.69399	0.86412	-	-	-	*
		66.96970	52.82828	17.00000	0.21696	-0.91845	1.0589	-	-	-	*
		68.48485	52.82828	17.00000	0.13363	-1.1314	1.2353	-	-	-	*
		70.00000	52.82828	17.00000	0.0	-1.2887	1.3719	-	-	-	*
		71.51515	52.82828	17.00000	0.0	-1.8641	1.5382	-	-	-	*
		73.03030	52.82828	17.00000	0.0	-1.8641	1.5382	-	-	-	*
		74.54545	52.82828	17.00000	0.0	-1.8641	1.5382	-	-	-	*
		76.06061	52.82828	17.00000	0.0	-1.8641	1.5382	-	-	-	*
		77.57576	52.82828	17.00000	0.0	-1.8641	1.5382	-	-	-	*
		79.09091	52.82828	17.00000	0.0	-1.8641	1.5382	-	-	-	*
		80.60606	52.82828	17.00000	0.0	-1.8641	1.5382	-	-	-	*
		82.12121	52.82828	17.00000	-0.012149	-1.2858	1.3706	-	-	-	*
		83.63636	52.82828	17.00000	-0.15361	-1.2042	1.3224	-	-	-	*
		85.15152	52.82828	17.00000	-0.25781	-1.0494	1.2213	-	-	-	*
		86.66667	52.82828	17.00000	-0.31366	-0.86223	1.0782	-	-	-	*
		88.18182	52.82828	17.00000	-0.34188	-0.70945	0.90576	-	-	-	*
		89.69697	52.82828	17.00000	-0.33039	-0.55064	0.71510	-	-	-	*
		91.21212	52.82828	17.00000	-0.28306	-0.39418	0.51393	-	-	-	*
		92.72727	52.82828	17.00000	-0.20526	-0.24546	0.30437	-	-	-	*
		94.24242	52.82828	17.00000	-0.10253	-0.10743	0.081640	-	-	-	*
		95.75758	52.82828	17.00000	0.0	0.0	0.0	-	-	-	*
		97.27273	52.82828	17.00000	0.0	0.0	0.0	-	-	-	*
		98.78788	52.82828	17.00000	0.0	0.0	0.0	-	-	-	*
		100.30303	52.82828	17.00000	0.0	0.0	0.0	-	-	-	*
		101.81818	52.82828	17.00000	0.0	0.0	0.0	-	-	-	*
		103.33333	52.82828	17.00000	0.0	0.0	0.0	-	-	-	*
		104.84848	52.82828	17.00000	0.0	0.0	0.0	-	-	-	*
		106.36364	52.82828	17.00000	0.0	0.0	0.0	-	-	-	*
		107.87879	52.82828	17.00000	0.0	0.0	0.0	-	-	-	*
		109.39394	52.82828	17.00000	0.0	0.0	0.0	-	-	-	*
		110.90909	52.82828	17.00000	0.0	0.0	0.0	-	-	-	*
		112.42424	52.82828	17.00000	0.0	0.0	0.0	-	-	-	*
		113.93939	52.82828	17.00000	0.0	0.0	0.0	-	-	-	*
		115.45455	52.82828	17.00000	0.0	0.0	0.0	-	-	-	*
		116.96970	52.82828	17.00000	0.0	0.0	0.0	-	-	-	*
		118.48485	52.82828	17.00000	0.0	0.0	0.0	-	-	-	*
		120.00000	52.82828	17.00000	0.0	0.0	0.0	-	-	-	*
		-30.00000	53.83838	17.00000	0.0	0.0	0.0	-	-	-	*
		-28.48485	53.83838	17.00000	0.0	0.0	0.0	-	-	-	*
		-26.96970	53.83838	17.00000	0.0	0.0	0.0	-	-	-	*
		-25.45455	53.83838	17.00000	0.0	0.0	0.0	-	-	-	*
		-23.93939	53.83838	17.00000	0.0	0.0	0.0	-	-	-	*
		-22.42424	53.83838	17.00000	0.0	0.0	0.0	-	-	-	*
		-20.90909	53.83838	17.00000	0.0	0.0	0.0	-	-	-	*
		-19.39394	53.83838	17.00000	0.0	0.0	0.0	-	-	-	*
		-17.87879	53.83838	17.00000	0.0	0.0	0.0	-	-	-	*
		-16.36364	53.83838	17.00000	0.0	0.0	0.0	-	-	-	*
		-14.84848	53.83838	17.00000	0.0	0.0	0.0	-	-	-	*
		-13.33333	53.83838	17.00000	0.0	0.0	0.0	-	-	-	*
		-11.81818	53.83838	17.00000	0.0	0.0	0.0	-	-	-	*
		-10.30303	53.83838	17.00000	0.0	0.0	0.0	-	-	-	*
		-8.78788	53.83838	17.00000	0.0	0.0	0.0	-	-	-	*
		-7.27273	53.83838	17.00000	0.0	0.0	0.0	-	-	-	*
		-5.75758	53.83838	17.00000	0.0	0.0	0.0	-	-	-	*
		-4.24242	53.83838	17.00000	0.0	0.0	0.0	-	-	-	*
		-2.72727	53.83838	17.00000	0.0	0.0	0.0	-	-	-	*
		-1.21212	53.83838	17.00000	0.0	0.0	0.0	-	-	-	*
		0.30303	53.83838	17.00000	0.0	0.0	0.0	-	-	-	*
		1.81818	53.83838	17.00000	0.0	0.0	0.0	-	-	-	*
		3.33333	53.83838	17.00000	0.0	0.0	0.0	-	-	-	*
		4.84848	53.83838	17.00000	0.0	0.0	0.0	-	-	-	*
		6.36364	53.83838	17.00000	0.0	0.0	0.0	-	-	-	*
		7.87879	53.83838	17.00000	0.0	0.0	0.0	-	-	-	*
		9.39394	53.83838	17.00000	0.0	0.0	0.0	-	-	-	*
		10.90909	53.83838	17.00000	0.0	0.0	0.0	-	-	-	*
		12.42424	53.83838	17.00000	0.0	0.0	0.0	-	-	-	*
		13.93939	53.83838	17.00000	0.0	0.0	0.0	-	-	-	*
		15.45455	53.83838	17.00000	0.0	0.0	0.0	-	-	-	*
		16.96970	53.83838	17.00000	0.0	0.0	0.0	-	-	-	*
		18.48485	53.83838	17.00000	0.0	0.0	0.0	-	-	-	*
		20.00000	53.83838	17.00000	0.0	0.0	0.0	-	-	-	*
		21.51515	53.83838	17.00000	0.0	0.0	0.0	-	-	-	*
		23.03030	53.83838	17.00000	0.0	0.0	0.0	-	-	-	*
		24.54545	53.83838	17.00000	0.0	0.0	0.0	-	-	-	*
		26.06061	53.83838	17.00000	0.0	0.0	0.0	-	-	-	*
		27.57576	53.83838	17.00000	0.0	0.0	0.0	-	-	-	*
		29.09091	53.83838	17.00000	0.0	0.0	0.0	-	-	-	*
		30.60606	53.83838	17.00000	0.0	0.0	0.0	-	-	-	*
		32.12121	53.83838	17.00000	0.0	0.0	0.0	-	-	-	*
		33.63636	53.83838	17.00000	0.0	0.0	0.0	-	-	-	*
		35.15152	53.83838	17.00000	0.0	0.0	0.0	-	-	-	*
		36.66667	53.83838	17.00000	0.0	0.0	0.0	-	-	-	*
		38.18182	53.83838	17.00000	0.0	0.0	0.0	-	-	-	*
		39.69697	53.83838	17.00000	0.0	0.0	0.0	-	-	-	*
		41.21212	53.83838	17.00000	0.0	0.0	0.0	-	-	-	*
		42.72727	53.83838	17.00000	0.0	0.0	0.0	-	-	-	*
		44.24242	53.83838	17.00000	0.0	0.0	0.0	-	-	-	*
		45.75758	53.83838	17.00000	0.0	0.0	0.0	-	-	-	*
		47.27273	53.83838	17.00000	0.0	0.0	0.0	-	-	-	*
		48.78788	53.83838	17.00000	0.0	0.0	0.0	-	-	-	*
		50.30303	53.83838	17.00000	0.0	0.0	0.0	-	-	-	*
		51.81818	53.83838	17.00000	0.0	0.0	0.0	-	-	-	*
		53.33333	53.83838	17.00000	0.0	0.0	0.0	-	-	-	*
		54.84848	53.83838	17.00000	0.0	0.0	0.0	-	-	-	*
		56.36364	53.83838	17.00000	0.0	0.0	0.0	-	-	-	*
		57.87879	53.83838	17.00000	0.0137343	-0.0115690	0.0061688	-	-	-	*
		59.39394	53.83838	17.00000	0.070419	-0.091880	0.088378	-	-	-	*
		60.90909	53.83838	17.00000	0.12322	-0.18756	0.21891	-	-	-	*
		62.42424	53.83838	17.00000	0.16590	-0.30305	0.35930	-	-	-	*
		63.93939	53.83838	17.00000	0.19100	-0.43613	0.50993	-	-	-	*
		65.45455	53.83838	17.00000	0.19082	-0.58095	0.66617	-	-	-	*
		66.96970	53.83838	17.00000	0.15925	-0.72726	0.81818	-	-	-	*
		68.48485	53.83838	17.00000	0.094248	-0.86080	0.95191	-	-	-	*
		70.00000	53.83838	17.00000	0.0	-0.96512	1.0514	-	-	-	*
		71.51515	53.83838	17.00000	0.0	-1.4405	1.1593	-	-	-	*
		73.03030	53.83838	17.00000	0.0	-1.4405	1.1593	-	-	-	*
		74.54545	53.83838	17.00000	0.0	-1.4405	1.1593	-	-	-	*
		76.06061	53.83838	17.00000	0.0	-1.4405	1.1593	-	-	-	*
		77.57576	53.83838	17.00000	0.0	-1.4405	1.1593	-	-	-	*
		79.09091	53.83838	17.00000	0.0	-1.4405	1.1593	-	-	-	*
		80.60606	53.83838	17.00000	0.0	-1.4405	1.1593	-	-	-	*
		82.12121	53.83838	17.00000	-0.0084243	-1.4405	1.1593	-	-	-	*
		83.63636	53.83838	17.00000	-0.96292	-0.96292	1.0505	-	-	-	*
		85.15152	53.83838	17.00000	-0.10787	-0.91224	1.0141	-	-	-	*
		86.66667	53.83838	17.00000	-0.18765	-0.82399	0.93354	-	-	-	*
		88.18182	53.83838	17.00000	-0.23866	-0.70772	0.81664	-	-	-	*
		89.69697	53.83838	17.00000	-0.25633	-0.57382	0.67229	-	-	-	*
					-0.24013	-0.43174	0.50817	-	-	-	*

Type/No. Name	Dist.	Coordinates x	y	z	Displacements x	y	z	Horizontal displacement	Horizontal displacement	Angle of Line to x Axis	
		91.21212	53.83838	17.00000	-0.19236	-0.28897	0.32855	-	-	-	*
		92.72727	53.83838	17.00000	-0.11685	-0.15074	0.13255	-	-	-	*
		94.24242	53.83838	17.00000	-0.017939	-0.020277	0.0080272	-	-	-	*
		95.75758	53.83838	17.00000	0.0	0.0	0.0	-	-	-	*
		97.27273	53.83838	17.00000	0.0	0.0	0.0	-	-	-	*
		98.78788	53.83838	17.00000	0.0	0.0	0.0	-	-	-	*
		100.30303	53.83838	17.00000	0.0	0.0	0.0	-	-	-	*
		101.81818	53.83838	17.00000	0.0	0.0	0.0	-	-	-	*
		103.33333	53.83838	17.00000	0.0	0.0	0.0	-	-	-	*
		104.84848	53.83838	17.00000	0.0	0.0	0.0	-	-	-	*
		106.36364	53.83838	17.00000	0.0	0.0	0.0	-	-	-	*
		107.87879	53.83838	17.00000	0.0	0.0	0.0	-	-	-	*
		109.39394	53.83838	17.00000	0.0	0.0	0.0	-	-	-	*
		110.90909	53.83838	17.00000	0.0	0.0	0.0	-	-	-	*
		112.42424	53.83838	17.00000	0.0	0.0	0.0	-	-	-	*
		113.93939	53.83838	17.00000	0.0	0.0	0.0	-	-	-	*
		115.45455	53.83838	17.00000	0.0	0.0	0.0	-	-	-	*
		116.96970	53.83838	17.00000	0.0	0.0	0.0	-	-	-	*
		118.48485	53.83838	17.00000	0.0	0.0	0.0	-	-	-	*
		120.00000	53.83838	17.00000	0.0	0.0	0.0	-	-	-	*
		-30.00000	54.84848	17.00000	0.0	0.0	0.0	-	-	-	*
		-28.48485	54.84848	17.00000	0.0	0.0	0.0	-	-	-	*
		-26.96970	54.84848	17.00000	0.0	0.0	0.0	-	-	-	*
		-25.45455	54.84848	17.00000	0.0	0.0	0.0	-	-	-	*
		-23.93939	54.84848	17.00000	0.0	0.0	0.0	-	-	-	*
		-22.42424	54.84848	17.00000	0.0	0.0	0.0	-	-	-	*
		-20.90909	54.84848	17.00000	0.0	0.0	0.0	-	-	-	*
		-19.39394	54.84848	17.00000	0.0	0.0	0.0	-	-	-	*
		-17.87879	54.84848	17.00000	0.0	0.0	0.0	-	-	-	*
		-16.36364	54.84848	17.00000	0.0	0.0	0.0	-	-	-	*
		-14.84848	54.84848	17.00000	0.0	0.0	0.0	-	-	-	*
		-13.33333	54.84848	17.00000	0.0	0.0	0.0	-	-	-	*
		-11.81818	54.84848	17.00000	0.0	0.0	0.0	-	-	-	*
		-10.30303	54.84848	17.00000	0.0	0.0	0.0	-	-	-	*
		-8.78788	54.84848	17.00000	0.0	0.0	0.0	-	-	-	*
		-7.27273	54.84848	17.00000	0.0	0.0	0.0	-	-	-	*
		-5.75758	54.84848	17.00000	0.0	0.0	0.0	-	-	-	*
		-4.24242	54.84848	17.00000	0.0	0.0	0.0	-	-	-	*
		-2.72727	54.84848	17.00000	0.0	0.0	0.0	-	-	-	*
		-1.21212	54.84848	17.00000	0.0	0.0	0.0	-	-	-	*
		0.30303	54.84848	17.00000	0.0	0.0	0.0	-	-	-	*
		1.81818	54.84848	17.00000	0.0	0.0	0.0	-	-	-	*
		3.33333	54.84848	17.00000	0.0	0.0	0.0	-	-	-	*
		4.84848	54.84848	17.00000	0.0	0.0	0.0	-	-	-	*
		6.36364	54.84848	17.00000	0.0	0.0	0.0	-	-	-	*
		7.87879	54.84848	17.00000	0.0	0.0	0.0	-	-	-	*
		9.39394	54.84848	17.00000	0.0	0.0	0.0	-	-	-	*
		10.90909	54.84848	17.00000	0.0	0.0	0.0	-	-	-	*
		12.42424	54.84848	17.00000	0.0	0.0	0.0	-	-	-	*
		13.93939	54.84848	17.00000	0.0	0.0	0.0	-	-	-	*
		15.45455	54.84848	17.00000	0.0	0.0	0.0	-	-	-	*
		16.96970	54.84848	17.00000	0.0	0.0	0.0	-	-	-	*
		18.48485	54.84848	17.00000	0.0	0.0	0.0	-	-	-	*
		20.00000	54.84848	17.00000	0.0	0.0	0.0	-	-	-	*
		21.51515	54.84848	17.00000	0.0	0.0	0.0	-	-	-	*
		23.03030	54.84848	17.00000	0.0	0.0	0.0	-	-	-	*
		24.54545	54.84848	17.00000	0.0	0.0	0.0	-	-	-	*
		26.06061	54.84848	17.00000	0.0	0.0	0.0	-	-	-	*
		27.57576	54.84848	17.00000	0.0	0.0	0.0	-	-	-	*
		29.09091	54.84848	17.00000	0.0	0.0	0.0	-	-	-	*
		30.60606	54.84848	17.00000	0.0	0.0	0.0	-	-	-	*
		32.12121	54.84848	17.00000	0.0	0.0	0.0	-	-	-	*
		33.63636	54.84848	17.00000	0.0	0.0	0.0	-	-	-	*
		35.15152	54.84848	17.00000	0.0	0.0	0.0	-	-	-	*
		36.66667	54.84848	17.00000	0.0	0.0	0.0	-	-	-	*
		38.18182	54.84848	17.00000	0.0	0.0	0.0	-	-	-	*
		39.69697	54.84848	17.00000	0.0	0.0	0.0	-	-	-	*
		41.21212	54.84848	17.00000	0.0	0.0	0.0	-	-	-	*
		42.72727	54.84848	17.00000	0.0	0.0	0.0	-	-	-	*
		44.24242	54.84848	17.00000	0.0	0.0	0.0	-	-	-	*
		45.75758	54.84848	17.00000	0.0	0.0	0.0	-	-	-	*
		47.27273	54.84848	17.00000	0.0	0.0	0.0	-	-	-	*
		48.78788	54.84848	17.00000	0.0	0.0	0.0	-	-	-	*
		50.30303	54.84848	17.00000	0.0	0.0	0.0	-	-	-	*
		51.81818	54.84848	17.00000	0.0	0.0	0.0	-	-	-	*
		53.33333	54.84848	17.00000	0.0	0.0	0.0	-	-	-	*
		54.84848	54.84848	17.00000	0.0	0.0	0.0	-	-	-	*
		56.36364	54.84848	17.00000	0.0	0.0	0.0	-	-	-	*
		57.87879	54.84848	17.00000	0.0	0.0	0.0	-	-	-	*
		59.39394	54.84848	17.00000	0.023163	-0.032428	0.010505	-	-	-	*
		60.90909	54.84848	17.00000	0.072464	-0.11836	0.10342	-	-	-	*
		62.42424	54.84848	17.00000	0.11223	-0.21997	0.22755	-	-	-	*
		63.93939	54.84848	17.00000	0.13652	-0.33449	0.35411	-	-	-	*
		65.45455	54.84848	17.00000	0.13966	-0.45621	0.48011	-	-	-	*
		66.96970	54.84848	17.00000	0.11758	-0.57613	0.59847	-	-	-	*
		68.48485	54.84848	17.00000	0.069638	-0.68246	0.69888	-	-	-	*
		70.00000	54.84848	17.00000	0.0	-0.76209	0.76972	-	-	-	*
		71.51515	54.84848	17.00000	0.0	-1.1375	0.83839	-	-	-	*
		73.03030	54.84848	17.00000	0.0	-1.1375	0.83839	-	-	-	*
		74.54545	54.84848	17.00000	0.0	-1.1375	0.83839	-	-	-	*
		76.06061	54.84848	17.00000	0.0	-1.1375	0.83839	-	-	-	*
		77.57576	54.84848	17.00000	0.0	-1.1375	0.83839	-	-	-	*
		79.09091	54.84848	17.00000	0.0	-1.1375	0.83839	-	-	-	*
		80.60606	54.84848	17.00000	0.0	-1.1375	0.83839	-	-	-	*
		82.12121	54.84848	17.00000	-0.0062078	-0.76045	0.76918	-	-	-	*
		83.63636	54.84848	17.00000	-0.079320	-0.71975	0.74107	-	-	-	*
		85.15152	54.84848	17.00000	-0.13706	-0.64575	0.67576	-	-	-	*
		86.66667	54.84848	17.00000	-0.17158	-0.54593	0.57840	-	-	-	*
		88.18182	54.84848	17.00000	-0.17847	-0.42868	0.45468	-	-	-	*
		89.69697	54.84848	17.00000	-0.15649	-0.30190	0.30888	-	-	-	*
		91.21212	54.84848	17.00000	-0.10682	-0.17218	0.14205	-	-	-	*
		92.72727	54.84848	17.00000	-0.032111	-0.044448	0.013896	-	-	-	*
		94.24242	54.84848	17.00000	0.0	0.0	0.0	-	-	-	*
		95.75758	54.84848	17.00000	0.0	0.0	0.0	-	-	-	*
		97.27273	54.84848	17.00000	0.0	0.0	0.0	-	-	-	*
		98.78788	54.84848	17.00000	0.0	0.0	0.0	-	-	-	*
		100.30303	54.84848	17.00000	0.0	0.0	0.0	-	-	-	*
		101.81818	54.84848	17.00000	0.0	0.0	0.0	-	-	-	*
		103.33333	54.84848	17.00000	0.0	0.0	0.0	-	-	-	*
		104.84848	54.84848	17.00000	0.0	0.0	0.0	-	-	-	*
		106.36364	54.84848	17.00000	0.0	0.0	0.0	-	-	-	*
		107.87879	54.84848	17.00000	0.0	0.0	0.0	-	-	-	*
		109.39394	54.84848	17.00000	0.0	0.0	0.0	-	-	-	*
		110.90909	54.84848	17.00000	0.0	0.0	0.0	-	-	-	*
		112.42424	54.84848	17.00000	0.0	0.0	0.0	-	-	-	*
		113.93939	54.84848	17.00000	0.0	0.0	0.0	-	-	-	*
		115.45455	54.84848	17.00000	0.0	0.0	0.0	-	-	-	*
		116.96970	54.84848	17.00000	0.0	0.0	0.0	-	-	-	*
		118.48485	54.84848	17.00000	0.0	0.0	0.0	-	-	-	*
		120.00000	54.84848	17.00000	0.0	0.0	0.0	-	-	-	*
		-30.00000	55.85859	17.00000	0.0	0.0	0.0	-	-	-	*
		-28.48485	55.85859	17.00000	0.0	0.0	0.0	-	-	-	*
		-26.96970	55.85859	17.00000	0.0	0.0	0.0	-	-	-	*
		-25.45455	55.85859	17.00000	0.0	0.0	0.0	-	-	-	*
		-23.93939	55.85859	17.00000	0.0	0.0	0.0	-	-	-	*
		-22.42424	55.85859	17.00000	0.0	0.0	0.0	-	-	-	*
		-20.90909	55.85859	17.00000	0.0	0.0	0.0	-	-	-	*
		-19.39394	55.85859	17.00000	0.0	0.0	0.0	-	-	-	*
		-17.87879	55.85859	17.00000	0.0	0.0	0.0	-	-	-	*
		-16.36364	55.85859	17.00000	0.0	0.0	0.0	-	-	-	*
		-14.84848	55.85859	17.00000	0.0	0.0	0.0	-	-	-	*
		-13.33333	55.85859	17.00000	0.0	0.0	0.0	-	-	-	*
		-11.81818	55.85859	17.00000	0.0	0.0	0.0	-	-	-	*
		-10.30303	55.85859	17.00000	0.0	0.0	0.0	-	-	-	*
		-8.78788	55.85859	17.00000	0.0	0.0	0.0	-	-	-	*
		-7.27273	55.85859	17.00000	0.0	0.0	0.0	-	-	-	*
		-5.75758	55.85859	17.00000	0.0	0.0	0.0	-	-	-	*
		-4.24242	55.85859	17.00000	0.0	0.0	0.0	-	-	-	*
		-2.72727	55.85859	17.00000	0.0	0.0	0.0	-	-	-	*
		-1.21212	55.85859	17.00000	0.0	0.0	0.0	-	-	-	*
		0.30303	55.85859	17.00000	0.0	0.0	0.0	-	-	-	*

Oasys
GEA LIMITED
(GEOTECHNICAL &ENV ASSOC) J15050A
The Great Hall, Lincoln's Inn, Newman's Row, London, WC2A 3TL
Wall Movements Rev 3 Piling and Excavation
Damage Assessment
Job No. | Sheet No. | Rev.
Drg. Ref.
Made by MP | Date 08-Feb-2016 | Checked

Type/No. Name	Dist.	Coordinates x	y	z	Displacements x	y	z	Horizontal displacement	Horizontal displacement	Angle of Line to x Axis	
		1.81818	55.85859	17.00000	0.0	0.0	0.0	-	-	-	*
		3.33333	55.85859	17.00000	0.0	0.0	0.0	-	-	-	*
		4.84848	55.85859	17.00000	0.0	0.0	0.0	-	-	-	*
		6.36364	55.85859	17.00000	0.0	0.0	0.0	-	-	-	*
		7.87879	55.85859	17.00000	0.0	0.0	0.0	-	-	-	*
		9.39394	55.85859	17.00000	0.0	0.0	0.0	-	-	-	*
		10.90909	55.85859	17.00000	0.0	0.0	0.0	-	-	-	*
		12.42424	55.85859	17.00000	0.0	0.0	0.0	-	-	-	*
		13.93939	55.85859	17.00000	0.0	0.0	0.0	-	-	-	*
		15.45455	55.85859	17.00000	0.0	0.0	0.0	-	-	-	*
		16.96970	55.85859	17.00000	0.0	0.0	0.0	-	-	-	*
		18.48485	55.85859	17.00000	0.0	0.0	0.0	-	-	-	*
		20.00000	55.85859	17.00000	0.0	0.0	0.0	-	-	-	*
		21.51515	55.85859	17.00000	0.0	0.0	0.0	-	-	-	*
		23.03030	55.85859	17.00000	0.0	0.0	0.0	-	-	-	*
		24.54545	55.85859	17.00000	0.0	0.0	0.0	-	-	-	*
		26.06061	55.85859	17.00000	0.0	0.0	0.0	-	-	-	*
		27.57576	55.85859	17.00000	0.0	0.0	0.0	-	-	-	*
		29.09091	55.85859	17.00000	0.0	0.0	0.0	-	-	-	*
		30.60606	55.85859	17.00000	0.0	0.0	0.0	-	-	-	*
		32.12121	55.85859	17.00000	0.0	0.0	0.0	-	-	-	*
		33.63636	55.85859	17.00000	0.0	0.0	0.0	-	-	-	*
		35.15152	55.85859	17.00000	0.0	0.0	0.0	-	-	-	*
		36.66667	55.85859	17.00000	0.0	0.0	0.0	-	-	-	*
		38.18182	55.85859	17.00000	0.0	0.0	0.0	-	-	-	*
		39.69697	55.85859	17.00000	0.0	0.0	0.0	-	-	-	*
		41.21212	55.85859	17.00000	0.0	0.0	0.0	-	-	-	*
		42.72727	55.85859	17.00000	0.0	0.0	0.0	-	-	-	*
		44.24242	55.85859	17.00000	0.0	0.0	0.0	-	-	-	*
		45.75758	55.85859	17.00000	0.0	0.0	0.0	-	-	-	*
		47.27273	55.85859	17.00000	0.0	0.0	0.0	-	-	-	*
		48.78788	55.85859	17.00000	0.0	0.0	0.0	-	-	-	*
		50.30303	55.85859	17.00000	0.0	0.0	0.0	-	-	-	*
		51.81818	55.85859	17.00000	0.0	0.0	0.0	-	-	-	*
		53.33333	55.85859	17.00000	0.0	0.0	0.0	-	-	-	*
		54.84848	55.85859	17.00000	0.0	0.0	0.0	-	-	-	*
		56.36364	55.85859	17.00000	0.0	0.0	0.0	-	-	-	*
		57.87879	55.85859	17.00000	0.0	0.0	0.0	-	-	-	*
		59.39394	55.85859	17.00000	0.0	0.0	0.0	-	-	-	*
		60.90909	55.85859	17.00000	0.0231066	-0.036749	0.011395	-	-	-	*
		62.42424	55.85859	17.00000	0.059441	-0.12443	0.088673	-	-	-	*
		63.93939	55.85859	17.00000	0.084550	-0.22124	0.19853	-	-	-	*
		65.45455	55.85859	17.00000	0.092234	-0.32179	0.30227	-	-	-	*
		66.96970	55.85859	17.00000	0.079924	-0.41827	0.39526	-	-	-	*
		68.48485	55.85859	17.00000	0.047854	-0.50087	0.47033	-	-	-	*
		70.00000	55.85859	17.00000	0.0	-0.55906	0.51916	-	-	-	*
		71.51515	55.85859	17.00000	0.0	-0.83442	0.56392	-	-	-	*
		73.03030	55.85859	17.00000	0.0	-0.83442	0.56392	-	-	-	*
		74.54545	55.85859	17.00000	0.0	-0.83442	0.56392	-	-	-	*
		76.06061	55.85859	17.00000	0.0	-0.83442	0.56392	-	-	-	*
		77.57576	55.85859	17.00000	0.0	-0.83442	0.56392	-	-	-	*
		79.09091	55.85859	17.00000	0.0	-0.83442	0.56392	-	-	-	*
		80.60606	55.85859	17.00000	0.0	-0.83442	0.56392	-	-	-	*
		82.12121	55.85859	17.00000	-0.0042643	-0.55791	0.51880	-	-	-	*
		83.63636	55.85859	17.00000	-0.054250	-0.52575	0.49611	-	-	-	*
		85.15152	55.85859	17.00000	-0.092188	-0.46390	0.44109	-	-	-	*
		86.66667	55.85859	17.00000	-0.11132	-0.37829	0.35667	-	-	-	*
		88.18182	55.85859	17.00000	-0.10749	-0.27574	0.24570	-	-	-	*
		89.69697	55.85859	17.00000	-0.079048	-0.16287	0.10942	-	-	-	*
		91.21212	55.85859	17.00000	-0.026396	-0.045440	0.013768	-	-	-	*
		92.72727	55.85859	17.00000	0.0	0.0	0.0	-	-	-	*
		94.24242	55.85859	17.00000	0.0	0.0	0.0	-	-	-	*
		95.75758	55.85859	17.00000	0.0	0.0	0.0	-	-	-	*
		97.27273	55.85859	17.00000	0.0	0.0	0.0	-	-	-	*
		98.78788	55.85859	17.00000	0.0	0.0	0.0	-	-	-	*
		100.30303	55.85859	17.00000	0.0	0.0	0.0	-	-	-	*
		101.81818	55.85859	17.00000	0.0	0.0	0.0	-	-	-	*
		103.33333	55.85859	17.00000	0.0	0.0	0.0	-	-	-	*
		104.84848	55.85859	17.00000	0.0	0.0	0.0	-	-	-	*
		106.36364	55.85859	17.00000	0.0	0.0	0.0	-	-	-	*
		107.87879	55.85859	17.00000	0.0	0.0	0.0	-	-	-	*
		109.39394	55.85859	17.00000	0.0	0.0	0.0	-	-	-	*
		110.90909	55.85859	17.00000	0.0	0.0	0.0	-	-	-	*
		112.42424	55.85859	17.00000	0.0	0.0	0.0	-	-	-	*
		113.93939	55.85859	17.00000	0.0	0.0	0.0	-	-	-	*
		115.45455	55.85859	17.00000	0.0	0.0	0.0	-	-	-	*
		116.96970	55.85859	17.00000	0.0	0.0	0.0	-	-	-	*
		118.48485	55.85859	17.00000	0.0	0.0	0.0	-	-	-	*
		120.00000	55.85859	17.00000	0.0	0.0	0.0	-	-	-	*
		-30.00000	56.86869	17.00000	0.0	0.0	0.0	-	-	-	*
		-28.48485	56.86869	17.00000	0.0	0.0	0.0	-	-	-	*
		-26.96970	56.86869	17.00000	0.0	0.0	0.0	-	-	-	*
		-25.45455	56.86869	17.00000	0.0	0.0	0.0	-	-	-	*
		-23.93939	56.86869	17.00000	0.0	0.0	0.0	-	-	-	*
		-22.42424	56.86869	17.00000	0.0	0.0	0.0	-	-	-	*
		-20.90909	56.86869	17.00000	0.0	0.0	0.0	-	-	-	*
		-19.39394	56.86869	17.00000	0.0	0.0	0.0	-	-	-	*
		-17.87879	56.86869	17.00000	0.0	0.0	0.0	-	-	-	*
		-16.36364	56.86869	17.00000	0.0	0.0	0.0	-	-	-	*
		-14.84848	56.86869	17.00000	0.0	0.0	0.0	-	-	-	*
		-13.33333	56.86869	17.00000	0.0	0.0	0.0	-	-	-	*
		-11.81818	56.86869	17.00000	0.0	0.0	0.0	-	-	-	*
		-10.30303	56.86869	17.00000	0.0	0.0	0.0	-	-	-	*
		-8.78788	56.86869	17.00000	0.0	0.0	0.0	-	-	-	*
		-7.27273	56.86869	17.00000	0.0	0.0	0.0	-	-	-	*
		-5.75758	56.86869	17.00000	0.0	0.0	0.0	-	-	-	*
		-4.24242	56.86869	17.00000	0.0	0.0	0.0	-	-	-	*
		-2.72727	56.86869	17.00000	0.0	0.0	0.0	-	-	-	*
		-1.21212	56.86869	17.00000	0.0	0.0	0.0	-	-	-	*
		0.30303	56.86869	17.00000	0.0	0.0	0.0	-	-	-	*
		1.81818	56.86869	17.00000	0.0	0.0	0.0	-	-	-	*
		3.33333	56.86869	17.00000	0.0	0.0	0.0	-	-	-	*
		4.84848	56.86869	17.00000	0.0	0.0	0.0	-	-	-	*
		6.36364	56.86869	17.00000	0.0	0.0	0.0	-	-	-	*
		7.87879	56.86869	17.00000	0.0	0.0	0.0	-	-	-	*
		9.39394	56.86869	17.00000	0.0	0.0	0.0	-	-	-	*
		10.90909	56.86869	17.00000	0.0	0.0	0.0	-	-	-	*
		12.42424	56.86869	17.00000	0.0	0.0	0.0	-	-	-	*
		13.93939	56.86869	17.00000	0.0	0.0	0.0	-	-	-	*
		15.45455	56.86869	17.00000	0.0	0.0	0.0	-	-	-	*
		16.96970	56.86869	17.00000	0.0	0.0	0.0	-	-	-	*
		18.48485	56.86869	17.00000	0.0	0.0	0.0	-	-	-	*
		20.00000	56.86869	17.00000	0.0	0.0	0.0	-	-	-	*
		21.51515	56.86869	17.00000	0.0	0.0	0.0	-	-	-	*
		23.03030	56.86869	17.00000	0.0	0.0	0.0	-	-	-	*
		24.54545	56.86869	17.00000	0.0	0.0	0.0	-	-	-	*
		26.06061	56.86869	17.00000	0.0	0.0	0.0	-	-	-	*
		27.57576	56.86869	17.00000	0.0	0.0	0.0	-	-	-	*
		29.09091	56.86869	17.00000	0.0	0.0	0.0	-	-	-	*
		30.60606	56.86869	17.00000	0.0	0.0	0.0	-	-	-	*
		32.12121	56.86869	17.00000	0.0	0.0	0.0	-	-	-	*
		33.63636	56.86869	17.00000	0.0	0.0	0.0	-	-	-	*
		35.15152	56.86869	17.00000	0.0	0.0	0.0	-	-	-	*
		36.66667	56.86869	17.00000	0.0	0.0	0.0	-	-	-	*
		38.18182	56.86869	17.00000	0.0	0.0	0.0	-	-	-	*
		39.69697	56.86869	17.00000	0.0	0.0	0.0	-	-	-	*
		41.21212	56.86869	17.00000	0.0	0.0	0.0	-	-	-	*
		42.72727	56.86869	17.00000	0.0	0.0	0.0	-	-	-	*
		44.24242	56.86869	17.00000	0.0	0.0	0.0	-	-	-	*
		45.75758	56.86869	17.00000	0.0	0.0	0.0	-	-	-	*
		47.27273	56.86869	17.00000	0.0	0.0	0.0	-	-	-	*
		48.78788	56.86869	17.00000	0.0	0.0	0.0	-	-	-	*
		50.30303	56.86869	17.00000	0.0	0.0	0.0	-	-	-	*
		51.81818	56.86869	17.00000	0.0	0.0	0.0	-	-	-	*
		53.33333	56.86869	17.00000	0.0	0.0	0.0	-	-	-	*
		54.84848	56.86869	17.00000	0.0	0.0	0.0	-	-	-	*
		56.36364	56.86869	17.00000	0.0	0.0	0.0	-	-	-	*
		57.87879	56.86869	17.00000	0.0	0.0	0.0	-	-	-	*
		59.39394	56.86869	17.00000	0.0	0.0	0.0	-	-	-	*
		60.90909	56.86869	17.00000	0.0	0.0	0.0	-	-	-	*
		62.42424	56.86869	17.00000	0.0080951	-0.018025	0.0066937	-	-	-	*

Type/No. Name	Dist.	Coordinates x	y	z	Displacements x	y	z	Horizontal displacement	Horizontal displacement	Angle of Line to x Axis	
		63.93939	56.86869	17.00000	0.035246	-0.098101	0.035428	-	-	-	*
		65.45455	56.86869	17.00000	0.048317	-0.17931	0.12454	-	-	-	*
		66.96970	56.86869	17.00000	0.045785	-0.25487	0.19959	-	-	-	*
		68.48485	56.86869	17.00000	0.028440	-0.31663	0.25588	-	-	-	*
		70.00000	56.86869	17.00000	0.0	-0.35603	0.28754	-	-	-	*
		71.51515	56.86869	17.00000	0.0	-0.53139	0.31772	-	-	-	*
		73.03030	56.86869	17.00000	0.0	-0.53139	0.31772	-	-	-	*
		74.54545	56.86869	17.00000	0.0	-0.53139	0.31772	-	-	-	*
		76.06061	56.86869	17.00000	0.0	-0.53139	0.31772	-	-	-	*
		77.57576	56.86869	17.00000	0.0	-0.53139	0.31772	-	-	-	*
		79.09091	56.86869	17.00000	0.0	-0.53139	0.31772	-	-	-	*
		80.60606	56.86869	17.00000	0.0	-0.53139	0.31772	-	-	-	*
		82.12121	56.86869	17.00000	-0.0025532	-0.35531	0.28728	-	-	-	*
		83.63636	56.86869	17.00000	-0.032065	-0.33055	0.26769	-	-	-	*
		85.15152	56.86869	17.00000	-0.052151	-0.27914	0.21835	-	-	-	*
		86.66667	56.86869	17.00000	-0.056960	-0.20589	0.14037	-	-	-	*
		88.18182	56.86869	17.00000	-0.042639	-0.11635	0.034163	-	-	-	*
		89.69697	56.86869	17.00000	-0.0073431	-0.016093	0.0065071	-	-	-	*
		91.21212	56.86869	17.00000	0.0	0.0	0.0	-	-	-	*
		92.72727	56.86869	17.00000	0.0	0.0	0.0	-	-	-	*
		94.24242	56.86869	17.00000	0.0	0.0	0.0	-	-	-	*
		95.75758	56.86869	17.00000	0.0	0.0	0.0	-	-	-	*
		97.27273	56.86869	17.00000	0.0	0.0	0.0	-	-	-	*
		98.78788	56.86869	17.00000	0.0	0.0	0.0	-	-	-	*
		100.30303	56.86869	17.00000	0.0	0.0	0.0	-	-	-	*
		101.81818	56.86869	17.00000	0.0	0.0	0.0	-	-	-	*
		103.33333	56.86869	17.00000	0.0	0.0	0.0	-	-	-	*
		104.84848	56.86869	17.00000	0.0	0.0	0.0	-	-	-	*
		106.36364	56.86869	17.00000	0.0	0.0	0.0	-	-	-	*
		107.87879	56.86869	17.00000	0.0	0.0	0.0	-	-	-	*
		109.39394	56.86869	17.00000	0.0	0.0	0.0	-	-	-	*
		110.90909	56.86869	17.00000	0.0	0.0	0.0	-	-	-	*
		112.42424	56.86869	17.00000	0.0	0.0	0.0	-	-	-	*
		113.93939	56.86869	17.00000	0.0	0.0	0.0	-	-	-	*
		115.45455	56.86869	17.00000	0.0	0.0	0.0	-	-	-	*
		116.96970	56.86869	17.00000	0.0	0.0	0.0	-	-	-	*
		118.48485	56.86869	17.00000	0.0	0.0	0.0	-	-	-	*
		120.00000	56.86869	17.00000	0.0	0.0	0.0	-	-	-	*
		-30.00000	57.87879	17.00000	0.0	0.0	0.0	-	-	-	*
		-28.48485	57.87879	17.00000	0.0	0.0	0.0	-	-	-	*
		-26.96970	57.87879	17.00000	0.0	0.0	0.0	-	-	-	*
		-25.45455	57.87879	17.00000	0.0	0.0	0.0	-	-	-	*
		-23.93939	57.87879	17.00000	0.0	0.0	0.0	-	-	-	*
		-22.42424	57.87879	17.00000	0.0	0.0	0.0	-	-	-	*
		-20.90909	57.87879	17.00000	0.0	0.0	0.0	-	-	-	*
		-19.39394	57.87879	17.00000	0.0	0.0	0.0	-	-	-	*
		-17.87879	57.87879	17.00000	0.0	0.0	0.0	-	-	-	*
		-16.36364	57.87879	17.00000	0.0	0.0	0.0	-	-	-	*
		-14.84848	57.87879	17.00000	0.0	0.0	0.0	-	-	-	*
		-13.33333	57.87879	17.00000	0.0	0.0	0.0	-	-	-	*
		-11.81818	57.87879	17.00000	0.0	0.0	0.0	-	-	-	*
		-10.30303	57.87879	17.00000	0.0	0.0	0.0	-	-	-	*
		-8.78788	57.87879	17.00000	0.0	0.0	0.0	-	-	-	*
		-7.27273	57.87879	17.00000	0.0	0.0	0.0	-	-	-	*
		-5.75758	57.87879	17.00000	0.0	0.0	0.0	-	-	-	*
		-4.24242	57.87879	17.00000	0.0	0.0	0.0	-	-	-	*
		-2.72727	57.87879	17.00000	0.0	0.0	0.0	-	-	-	*
		-1.21212	57.87879	17.00000	0.0	0.0	0.0	-	-	-	*
		0.30303	57.87879	17.00000	0.0	0.0	0.0	-	-	-	*
		1.81818	57.87879	17.00000	0.0	0.0	0.0	-	-	-	*
		3.33333	57.87879	17.00000	0.0	0.0	0.0	-	-	-	*
		4.84848	57.87879	17.00000	0.0	0.0	0.0	-	-	-	*
		6.36364	57.87879	17.00000	0.0	0.0	0.0	-	-	-	*
		7.87879	57.87879	17.00000	0.0	0.0	0.0	-	-	-	*
		9.39394	57.87879	17.00000	0.0	0.0	0.0	-	-	-	*
		10.90909	57.87879	17.00000	0.0	0.0	0.0	-	-	-	*
		12.42424	57.87879	17.00000	0.0	0.0	0.0	-	-	-	*
		13.93939	57.87879	17.00000	0.0	0.0	0.0	-	-	-	*
		15.45455	57.87879	17.00000	0.0	0.0	0.0	-	-	-	*
		16.96970	57.87879	17.00000	0.0	0.0	0.0	-	-	-	*
		18.48485	57.87879	17.00000	0.0	0.0	0.0	-	-	-	*
		20.00000	57.87879	17.00000	0.0	0.0	0.0	-	-	-	*
		21.51515	57.87879	17.00000	0.0	0.0	0.0	-	-	-	*
		23.03030	57.87879	17.00000	0.0	0.0	0.0	-	-	-	*
		24.54545	57.87879	17.00000	0.0	0.0	0.0	-	-	-	*
		26.06061	57.87879	17.00000	0.0	0.0	0.0	-	-	-	*
		27.57576	57.87879	17.00000	0.0	0.0	0.0	-	-	-	*
		29.09091	57.87879	17.00000	0.0	0.0	0.0	-	-	-	*
		30.60606	57.87879	17.00000	0.0	0.0	0.0	-	-	-	*
		32.12121	57.87879	17.00000	0.0	0.0	0.0	-	-	-	*
		33.63636	57.87879	17.00000	0.0	0.0	0.0	-	-	-	*
		35.15152	57.87879	17.00000	0.0	0.0	0.0	-	-	-	*
		36.66667	57.87879	17.00000	0.0	0.0	0.0	-	-	-	*
		38.18182	57.87879	17.00000	0.0	0.0	0.0	-	-	-	*
		39.69697	57.87879	17.00000	0.0	0.0	0.0	-	-	-	*
		41.21212	57.87879	17.00000	0.0	0.0	0.0	-	-	-	*
		42.72727	57.87879	17.00000	0.0	0.0	0.0	-	-	-	*
		44.24242	57.87879	17.00000	0.0	0.0	0.0	-	-	-	*
		45.75758	57.87879	17.00000	0.0	0.0	0.0	-	-	-	*
		47.27273	57.87879	17.00000	0.0	0.0	0.0	-	-	-	*
		48.78788	57.87879	17.00000	0.0	0.0	0.0	-	-	-	*
		50.30303	57.87879	17.00000	0.0	0.0	0.0	-	-	-	*
		51.81818	57.87879	17.00000	0.0	0.0	0.0	-	-	-	*
		53.33333	57.87879	17.00000	0.0	0.0	0.0	-	-	-	*
		54.84848	57.87879	17.00000	0.0	0.0	0.0	-	-	-	*
		56.36364	57.87879	17.00000	0.0	0.0	0.0	-	-	-	*
		57.87879	57.87879	17.00000	0.0	0.0	0.0	-	-	-	*
		59.39394	57.87879	17.00000	0.0	0.0	0.0	-	-	-	*
		60.90909	57.87879	17.00000	0.0	0.0	0.0	-	-	-	*
		62.42424	57.87879	17.00000	0.0	0.0	0.0	-	-	-	*
		63.93939	57.87879	17.00000	0.0	0.0	0.0	-	-	-	*
		65.45455	57.87879	17.00000	0.0076372	-0.030040	0.0097465	-	-	-	*
		66.96970	57.87879	17.00000	0.014725	-0.086877	0.021844	-	-	-	*
		68.48485	57.87879	17.00000	0.011034	-0.13020	0.040637	-	-	-	*
		70.00000	57.87879	17.00000	0.0	-0.15300	0.0583333	-	-	-	*
		71.51515	57.87879	17.00000	0.0	-0.22836	0.075123	-	-	-	*
		73.03030	57.87879	17.00000	0.0	-0.22836	0.075123	-	-	-	*
		74.54545	57.87879	17.00000	0.0	-0.22836	0.075123	-	-	-	*
		76.06061	57.87879	17.00000	0.0	-0.22836	0.075123	-	-	-	*
		77.57576	57.87879	17.00000	0.0	-0.22836	0.075123	-	-	-	*
		79.09091	57.87879	17.00000	0.0	-0.22836	0.075123	-	-	-	*
		80.60606	57.87879	17.00000	0.0	-0.22836	0.075123	-	-	-	*
		82.12121	57.87879	17.00000	-0.0010350	-0.15266	0.0581155	-	-	-	*
		83.63636	57.87879	17.00000	-0.012296	-0.13435	0.039897	-	-	-	*
		85.15152	57.87879	17.00000	-0.016222	-0.092029	0.022925	-	-	-	*
		86.66667	57.87879	17.00000	-0.0077215	-0.029582	0.0097761	-	-	-	*
		88.18182	57.87879	17.00000	0.0	0.0	0.0	-	-	-	*
		89.69697	57.87879	17.00000	0.0	0.0	0.0	-	-	-	*
		91.21212	57.87879	17.00000	0.0	0.0	0.0	-	-	-	*
		92.72727	57.87879	17.00000	0.0	0.0	0.0	-	-	-	*
		94.24242	57.87879	17.00000	0.0	0.0	0.0	-	-	-	*
		95.75758	57.87879	17.00000	0.0	0.0	0.0	-	-	-	*
		97.27273	57.87879	17.00000	0.0	0.0	0.0	-	-	-	*
		98.78788	57.87879	17.00000	0.0	0.0	0.0	-	-	-	*
		100.30303	57.87879	17.00000	0.0	0.0	0.0	-	-	-	*
		101.81818	57.87879	17.00000	0.0	0.0	0.0	-	-	-	*
		103.33333	57.87879	17.00000	0.0	0.0	0.0	-	-	-	*
		104.84848	57.87879	17.00000	0.0	0.0	0.0	-	-	-	*
		106.36364	57.87879	17.00000	0.0	0.0	0.0	-	-	-	*
		107.87879	57.87879	17.00000	0.0	0.0	0.0	-	-	-	*
		109.39394	57.87879	17.00000	0.0	0.0	0.0	-	-	-	*
		110.90909	57.87879	17.00000	0.0	0.0	0.0	-	-	-	*
		112.42424	57.87879	17.00000	0.0	0.0	0.0	-	-	-	*
		113.93939	57.87879	17.00000	0.0	0.0	0.0	-	-	-	*
		115.45455	57.87879	17.00000	0.0	0.0	0.0	-	-	-	*
		116.96970	57.87879	17.00000	0.0	0.0	0.0	-	-	-	*
		118.48485	57.87879	17.00000	0.0	0.0	0.0	-	-	-	*
		120.00000	57.87879	17.00000	0.0	0.0	0.0	-	-	-	*
		-30.00000	58.88889	17.00000	0.0	0.0	0.0	-	-	-	*
		-28.48485	58.88889	17.00000	0.0	0.0	0.0	-	-	-	*
		-26.96970	58.88889	17.00000	0.0	0.0	0.0	-	-	-	*

Oasys
GEA LIMITED
(GEOTECHNICAL &ENV ASSOC) J15050A
The Great Hall, Lincoln's Inn, Newman's Row, London, WC2A 3TL
Wall Movements Rev 3 Piling and Excavation
Damage Assessment
Job No. | Sheet No. | Rev.
Drg. Ref.
Made by MP | Date 08-Feb-2016 | Checked

Type/No. Name	Dist.	Coordinates x	y	z	Displacements x	y	z	Horizontal displacement	Horizontal displacement	Angle of Line to x Axis	
		-25.45455	58.88889	17.00000	0.0	0.0	0.0	-	-	-	*
		-23.93939	58.88889	17.00000	0.0	0.0	0.0	-	-	-	*
		-22.42424	58.88889	17.00000	0.0	0.0	0.0	-	-	-	*
		-20.90909	58.88889	17.00000	0.0	0.0	0.0	-	-	-	*
		-19.39394	58.88889	17.00000	0.0	0.0	0.0	-	-	-	*
		-17.87879	58.88889	17.00000	0.0	0.0	0.0	-	-	-	*
		-16.36364	58.88889	17.00000	0.0	0.0	0.0	-	-	-	*
		-14.84848	58.88889	17.00000	0.0	0.0	0.0	-	-	-	*
		-13.33333	58.88889	17.00000	0.0	0.0	0.0	-	-	-	*
		-11.81818	58.88889	17.00000	0.0	0.0	0.0	-	-	-	*
		-10.30303	58.88889	17.00000	0.0	0.0	0.0	-	-	-	*
		-8.78788	58.88889	17.00000	0.0	0.0	0.0	-	-	-	*
		-7.27273	58.88889	17.00000	0.0	0.0	0.0	-	-	-	*
		-5.75758	58.88889	17.00000	0.0	0.0	0.0	-	-	-	*
		-4.24242	58.88889	17.00000	0.0	0.0	0.0	-	-	-	*
		-2.72727	58.88889	17.00000	0.0	0.0	0.0	-	-	-	*
		-1.21212	58.88889	17.00000	0.0	0.0	0.0	-	-	-	*
		0.30303	58.88889	17.00000	0.0	0.0	0.0	-	-	-	*
		1.81818	58.88889	17.00000	0.0	0.0	0.0	-	-	-	*
		3.33333	58.88889	17.00000	0.0	0.0	0.0	-	-	-	*
		4.84848	58.88889	17.00000	0.0	0.0	0.0	-	-	-	*
		6.36364	58.88889	17.00000	0.0	0.0	0.0	-	-	-	*
		7.87879	58.88889	17.00000	0.0	0.0	0.0	-	-	-	*
		9.39394	58.88889	17.00000	0.0	0.0	0.0	-	-	-	*
		10.90909	58.88889	17.00000	0.0	0.0	0.0	-	-	-	*
		12.42424	58.88889	17.00000	0.0	0.0	0.0	-	-	-	*
		13.93939	58.88889	17.00000	0.0	0.0	0.0	-	-	-	*
		15.45455	58.88889	17.00000	0.0	0.0	0.0	-	-	-	*
		16.96970	58.88889	17.00000	0.0	0.0	0.0	-	-	-	*
		18.48485	58.88889	17.00000	0.0	0.0	0.0	-	-	-	*
		20.00000	58.88889	17.00000	0.0	0.0	0.0	-	-	-	*
		21.51515	58.88889	17.00000	0.0	0.0	0.0	-	-	-	*
		23.03030	58.88889	17.00000	0.0	0.0	0.0	-	-	-	*
		24.54545	58.88889	17.00000	0.0	0.0	0.0	-	-	-	*
		26.06061	58.88889	17.00000	0.0	0.0	0.0	-	-	-	*
		27.57576	58.88889	17.00000	0.0	0.0	0.0	-	-	-	*
		29.09091	58.88889	17.00000	0.0	0.0	0.0	-	-	-	*
		30.60606	58.88889	17.00000	0.0	0.0	0.0	-	-	-	*
		32.12121	58.88889	17.00000	0.0	0.0	0.0	-	-	-	*
		33.63636	58.88889	17.00000	0.0	0.0	0.0	-	-	-	*
		35.15152	58.88889	17.00000	0.0	0.0	0.0	-	-	-	*
		36.66667	58.88889	17.00000	0.0	0.0	0.0	-	-	-	*
		38.18182	58.88889	17.00000	0.0	0.0	0.0	-	-	-	*
		39.69697	58.88889	17.00000	0.0	0.0	0.0	-	-	-	*
		41.21212	58.88889	17.00000	0.0	0.0	0.0	-	-	-	*
		42.72727	58.88889	17.00000	0.0	0.0	0.0	-	-	-	*
		44.24242	58.88889	17.00000	0.0	0.0	0.0	-	-	-	*
		45.75758	58.88889	17.00000	0.0	0.0	0.0	-	-	-	*
		47.27273	58.88889	17.00000	0.0	0.0	0.0	-	-	-	*
		48.78788	58.88889	17.00000	0.0	0.0	0.0	-	-	-	*
		50.30303	58.88889	17.00000	0.0	0.0	0.0	-	-	-	*
		51.81818	58.88889	17.00000	0.0	0.0	0.0	-	-	-	*
		53.33333	58.88889	17.00000	0.0	0.0	0.0	-	-	-	*
		54.84848	58.88889	17.00000	0.0	0.0	0.0	-	-	-	*
		56.36364	58.88889	17.00000	0.0	0.0	0.0	-	-	-	*
		57.87879	58.88889	17.00000	0.0	0.0	0.0	-	-	-	*
		59.39394	58.88889	17.00000	0.0	0.0	0.0	-	-	-	*
		60.90909	58.88889	17.00000	0.0	0.0	0.0	-	-	-	*
		62.42424	58.88889	17.00000	0.0	0.0	0.0	-	-	-	*
		63.93939	58.88889	17.00000	0.0	0.0	0.0	-	-	-	*
		65.45455	58.88889	17.00000	0.0	0.0	0.0	-	-	-	*
		66.96970	58.88889	17.00000	0.0	0.0	0.0	-	-	-	*
		68.48485	58.88889	17.00000	0.0	0.0	0.0	-	-	-	*
		70.00000	58.88889	17.00000	0.0	0.0	0.0	-	-	-	*
		71.51515	58.88889	17.00000	0.0	0.0	0.0	-	-	-	*
		73.03030	58.88889	17.00000	0.0	0.0	0.0	-	-	-	*
		74.54545	58.88889	17.00000	0.0	0.0	0.0	-	-	-	*
		76.06061	58.88889	17.00000	0.0	0.0	0.0	-	-	-	*
		77.57576	58.88889	17.00000	0.0	0.0	0.0	-	-	-	*
		79.09091	58.88889	17.00000	0.0	0.0	0.0	-	-	-	*
		80.60606	58.88889	17.00000	0.0	0.0	0.0	-	-	-	*
		82.12121	58.88889	17.00000	0.0	0.0	0.0	-	-	-	*
		83.63636	58.88889	17.00000	0.0	0.0	0.0	-	-	-	*
		85.15152	58.88889	17.00000	0.0	0.0	0.0	-	-	-	*
		86.66667	58.88889	17.00000	0.0	0.0	0.0	-	-	-	*
		88.18182	58.88889	17.00000	0.0	0.0	0.0	-	-	-	*
		89.69697	58.88889	17.00000	0.0	0.0	0.0	-	-	-	*
		91.21212	58.88889	17.00000	0.0	0.0	0.0	-	-	-	*
		92.72727	58.88889	17.00000	0.0	0.0	0.0	-	-	-	*
		94.24242	58.88889	17.00000	0.0	0.0	0.0	-	-	-	*
		95.75758	58.88889	17.00000	0.0	0.0	0.0	-	-	-	*
		97.27273	58.88889	17.00000	0.0	0.0	0.0	-	-	-	*
		98.78788	58.88889	17.00000	0.0	0.0	0.0	-	-	-	*
		100.30303	58.88889	17.00000	0.0	0.0	0.0	-	-	-	*
		101.81818	58.88889	17.00000	0.0	0.0	0.0	-	-	-	*
		103.33333	58.88889	17.00000	0.0	0.0	0.0	-	-	-	*
		104.84848	58.88889	17.00000	0.0	0.0	0.0	-	-	-	*
		106.36364	58.88889	17.00000	0.0	0.0	0.0	-	-	-	*
		107.87879	58.88889	17.00000	0.0	0.0	0.0	-	-	-	*
		109.39394	58.88889	17.00000	0.0	0.0	0.0	-	-	-	*
		110.90909	58.88889	17.00000	0.0	0.0	0.0	-	-	-	*
		112.42424	58.88889	17.00000	0.0	0.0	0.0	-	-	-	*
		113.93939	58.88889	17.00000	0.0	0.0	0.0	-	-	-	*
		115.45455	58.88889	17.00000	0.0	0.0	0.0	-	-	-	*
		116.96970	58.88889	17.00000	0.0	0.0	0.0	-	-	-	*
		118.48485	58.88889	17.00000	0.0	0.0	0.0	-	-	-	*
		120.00000	58.88889	17.00000	0.0	0.0	0.0	-	-	-	*
		-30.00000	59.89899	17.00000	0.0	0.0	0.0	-	-	-	*
		-28.48485	59.89899	17.00000	0.0	0.0	0.0	-	-	-	*
		-26.96970	59.89899	17.00000	0.0	0.0	0.0	-	-	-	*
		-25.45455	59.89899	17.00000	0.0	0.0	0.0	-	-	-	*
		-23.93939	59.89899	17.00000	0.0	0.0	0.0	-	-	-	*
		-22.42424	59.89899	17.00000	0.0	0.0	0.0	-	-	-	*
		-20.90909	59.89899	17.00000	0.0	0.0	0.0	-	-	-	*
		-19.39394	59.89899	17.00000	0.0	0.0	0.0	-	-	-	*
		-17.87879	59.89899	17.00000	0.0	0.0	0.0	-	-	-	*
		-16.36364	59.89899	17.00000	0.0	0.0	0.0	-	-	-	*
		-14.84848	59.89899	17.00000	0.0	0.0	0.0	-	-	-	*
		-13.33333	59.89899	17.00000	0.0	0.0	0.0	-	-	-	*
		-11.81818	59.89899	17.00000	0.0	0.0	0.0	-	-	-	*
		-10.30303	59.89899	17.00000	0.0	0.0	0.0	-	-	-	*
		-8.78788	59.89899	17.00000	0.0	0.0	0.0	-	-	-	*
		-7.27273	59.89899	17.00000	0.0	0.0	0.0	-	-	-	*
		-5.75758	59.89899	17.00000	0.0	0.0	0.0	-	-	-	*
		-4.24242	59.89899	17.00000	0.0	0.0	0.0	-	-	-	*
		-2.72727	59.89899	17.00000	0.0	0.0	0.0	-	-	-	*
		-1.21212	59.89899	17.00000	0.0	0.0	0.0	-	-	-	*
		0.30303	59.89899	17.00000	0.0	0.0	0.0	-	-	-	*
		1.81818	59.89899	17.00000	0.0	0.0	0.0	-	-	-	*
		3.33333	59.89899	17.00000	0.0	0.0	0.0	-	-	-	*
		4.84848	59.89899	17.00000	0.0	0.0	0.0	-	-	-	*
		6.36364	59.89899	17.00000	0.0	0.0	0.0	-	-	-	*
		7.87879	59.89899	17.00000	0.0	0.0	0.0	-	-	-	*
		9.39394	59.89899	17.00000	0.0	0.0	0.0	-	-	-	*
		10.90909	59.89899	17.00000	0.0	0.0	0.0	-	-	-	*
		12.42424	59.89899	17.00000	0.0	0.0	0.0	-	-	-	*
		13.93939	59.89899	17.00000	0.0	0.0	0.0	-	-	-	*
		15.45455	59.89899	17.00000	0.0	0.0	0.0	-	-	-	*
		16.96970	59.89899	17.00000	0.0	0.0	0.0	-	-	-	*
		18.48485	59.89899	17.00000	0.0	0.0	0.0	-	-	-	*
		20.00000	59.89899	17.00000	0.0	0.0	0.0	-	-	-	*
		21.51515	59.89899	17.00000	0.0	0.0	0.0	-	-	-	*
		23.03030	59.89899	17.00000	0.0	0.0	0.0	-	-	-	*
		24.54545	59.89899	17.00000	0.0	0.0	0.0	-	-	-	*
		26.06061	59.89899	17.00000	0.0	0.0	0.0	-	-	-	*
		27.57576	59.89899	17.00000	0.0	0.0	0.0	-	-	-	*
		29.09091	59.89899	17.00000	0.0	0.0	0.0	-	-	-	*
		30.60606	59.89899	17.00000	0.0	0.0	0.0	-	-	-	*
		32.12121	59.89899	17.00000	0.0	0.0	0.0	-	-	-	*
		33.63636	59.89899	17.00000	0.0	0.0	0.0	-	-	-	*
		35.15152	59.89899	17.00000	0.0	0.0	0.0	-	-	-	*

Type/No. Name	Dist.	Coordinates x	y	z	Displacements x	y	z	Horizontal displacement	Horizontal displacement	Angle of Line to x Axis	
		36.66667	59.89899	17.00000	0.0	0.0	0.0	-	-	-	*
		38.18182	59.89899	17.00000	0.0	0.0	0.0	-	-	-	*
		39.69697	59.89899	17.00000	0.0	0.0	0.0	-	-	-	*
		41.21212	59.89899	17.00000	0.0	0.0	0.0	-	-	-	*
		42.72727	59.89899	17.00000	0.0	0.0	0.0	-	-	-	*
		44.24242	59.89899	17.00000	0.0	0.0	0.0	-	-	-	*
		45.75758	59.89899	17.00000	0.0	0.0	0.0	-	-	-	*
		47.27273	59.89899	17.00000	0.0	0.0	0.0	-	-	-	*
		48.78788	59.89899	17.00000	0.0	0.0	0.0	-	-	-	*
		50.30303	59.89899	17.00000	0.0	0.0	0.0	-	-	-	*
		51.81818	59.89899	17.00000	0.0	0.0	0.0	-	-	-	*
		53.33333	59.89899	17.00000	0.0	0.0	0.0	-	-	-	*
		54.84848	59.89899	17.00000	0.0	0.0	0.0	-	-	-	*
		56.36364	59.89899	17.00000	0.0	0.0	0.0	-	-	-	*
		57.87879	59.89899	17.00000	0.0	0.0	0.0	-	-	-	*
		59.39394	59.89899	17.00000	0.0	0.0	0.0	-	-	-	*
		60.90909	59.89899	17.00000	0.0	0.0	0.0	-	-	-	*
		62.42424	59.89899	17.00000	0.0	0.0	0.0	-	-	-	*
		63.93939	59.89899	17.00000	0.0	0.0	0.0	-	-	-	*
		65.45455	59.89899	17.00000	0.0	0.0	0.0	-	-	-	*
		66.96970	59.89899	17.00000	0.0	0.0	0.0	-	-	-	*
		68.48485	59.89899	17.00000	0.0	0.0	0.0	-	-	-	*
		70.00000	59.89899	17.00000	0.0	0.0	0.0	-	-	-	*
		71.51515	59.89899	17.00000	0.0	0.0	0.0	-	-	-	*
		73.03030	59.89899	17.00000	0.0	0.0	0.0	-	-	-	*
		74.54545	59.89899	17.00000	0.0	0.0	0.0	-	-	-	*
		76.06061	59.89899	17.00000	0.0	0.0	0.0	-	-	-	*
		77.57576	59.89899	17.00000	0.0	0.0	0.0	-	-	-	*
		79.09091	59.89899	17.00000	0.0	0.0	0.0	-	-	-	*
		80.60606	59.89899	17.00000	0.0	0.0	0.0	-	-	-	*
		82.12121	59.89899	17.00000	0.0	0.0	0.0	-	-	-	*
		83.63636	59.89899	17.00000	0.0	0.0	0.0	-	-	-	*
		85.15152	59.89899	17.00000	0.0	0.0	0.0	-	-	-	*
		86.66667	59.89899	17.00000	0.0	0.0	0.0	-	-	-	*
		88.18182	59.89899	17.00000	0.0	0.0	0.0	-	-	-	*
		89.69697	59.89899	17.00000	0.0	0.0	0.0	-	-	-	*
		91.21212	59.89899	17.00000	0.0	0.0	0.0	-	-	-	*
		92.72727	59.89899	17.00000	0.0	0.0	0.0	-	-	-	*
		94.24242	59.89899	17.00000	0.0	0.0	0.0	-	-	-	*
		95.75758	59.89899	17.00000	0.0	0.0	0.0	-	-	-	*
		97.27273	59.89899	17.00000	0.0	0.0	0.0	-	-	-	*
		98.78788	59.89899	17.00000	0.0	0.0	0.0	-	-	-	*
		100.30303	59.89899	17.00000	0.0	0.0	0.0	-	-	-	*
		101.81818	59.89899	17.00000	0.0	0.0	0.0	-	-	-	*
		103.33333	59.89899	17.00000	0.0	0.0	0.0	-	-	-	*
		104.84848	59.89899	17.00000	0.0	0.0	0.0	-	-	-	*
		106.36364	59.89899	17.00000	0.0	0.0	0.0	-	-	-	*
		107.87879	59.89899	17.00000	0.0	0.0	0.0	-	-	-	*
		109.39394	59.89899	17.00000	0.0	0.0	0.0	-	-	-	*
		110.90909	59.89899	17.00000	0.0	0.0	0.0	-	-	-	*
		112.42424	59.89899	17.00000	0.0	0.0	0.0	-	-	-	*
		113.93939	59.89899	17.00000	0.0	0.0	0.0	-	-	-	*
		115.45455	59.89899	17.00000	0.0	0.0	0.0	-	-	-	*
		116.96970	59.89899	17.00000	0.0	0.0	0.0	-	-	-	*
		118.48485	59.89899	17.00000	0.0	0.0	0.0	-	-	-	*
		120.00000	59.89899	17.00000	0.0	0.0	0.0	-	-	-	*
		-30.00000	60.90909	17.00000	0.0	0.0	0.0	-	-	-	*
		-28.48485	60.90909	17.00000	0.0	0.0	0.0	-	-	-	*
		-26.96970	60.90909	17.00000	0.0	0.0	0.0	-	-	-	*
		-25.45455	60.90909	17.00000	0.0	0.0	0.0	-	-	-	*
		-23.93939	60.90909	17.00000	0.0	0.0	0.0	-	-	-	*
		-22.42424	60.90909	17.00000	0.0	0.0	0.0	-	-	-	*
		-20.90909	60.90909	17.00000	0.0	0.0	0.0	-	-	-	*
		-19.39394	60.90909	17.00000	0.0	0.0	0.0	-	-	-	*
		-17.87879	60.90909	17.00000	0.0	0.0	0.0	-	-	-	*
		-16.36364	60.90909	17.00000	0.0	0.0	0.0	-	-	-	*
		-14.84848	60.90909	17.00000	0.0	0.0	0.0	-	-	-	*
		-13.33333	60.90909	17.00000	0.0	0.0	0.0	-	-	-	*
		-11.81818	60.90909	17.00000	0.0	0.0	0.0	-	-	-	*
		-10.30303	60.90909	17.00000	0.0	0.0	0.0	-	-	-	*
		-8.78788	60.90909	17.00000	0.0	0.0	0.0	-	-	-	*
		-7.27273	60.90909	17.00000	0.0	0.0	0.0	-	-	-	*
		-5.75758	60.90909	17.00000	0.0	0.0	0.0	-	-	-	*
		-4.24242	60.90909	17.00000	0.0	0.0	0.0	-	-	-	*
		-2.72727	60.90909	17.00000	0.0	0.0	0.0	-	-	-	*
		-1.21212	60.90909	17.00000	0.0	0.0	0.0	-	-	-	*
		0.30303	60.90909	17.00000	0.0	0.0	0.0	-	-	-	*
		1.81818	60.90909	17.00000	0.0	0.0	0.0	-	-	-	*
		3.33333	60.90909	17.00000	0.0	0.0	0.0	-	-	-	*
		4.84848	60.90909	17.00000	0.0	0.0	0.0	-	-	-	*
		6.36364	60.90909	17.00000	0.0	0.0	0.0	-	-	-	*
		7.87879	60.90909	17.00000	0.0	0.0	0.0	-	-	-	*
		9.39394	60.90909	17.00000	0.0	0.0	0.0	-	-	-	*
		10.90909	60.90909	17.00000	0.0	0.0	0.0	-	-	-	*
		12.42424	60.90909	17.00000	0.0	0.0	0.0	-	-	-	*
		13.93939	60.90909	17.00000	0.0	0.0	0.0	-	-	-	*
		15.45455	60.90909	17.00000	0.0	0.0	0.0	-	-	-	*
		16.96970	60.90909	17.00000	0.0	0.0	0.0	-	-	-	*
		18.48485	60.90909	17.00000	0.0	0.0	0.0	-	-	-	*
		20.00000	60.90909	17.00000	0.0	0.0	0.0	-	-	-	*
		21.51515	60.90909	17.00000	0.0	0.0	0.0	-	-	-	*
		23.03030	60.90909	17.00000	0.0	0.0	0.0	-	-	-	*
		24.54545	60.90909	17.00000	0.0	0.0	0.0	-	-	-	*
		26.06061	60.90909	17.00000	0.0	0.0	0.0	-	-	-	*
		27.57576	60.90909	17.00000	0.0	0.0	0.0	-	-	-	*
		29.09091	60.90909	17.00000	0.0	0.0	0.0	-	-	-	*
		30.60606	60.90909	17.00000	0.0	0.0	0.0	-	-	-	*
		32.12121	60.90909	17.00000	0.0	0.0	0.0	-	-	-	*
		33.63636	60.90909	17.00000	0.0	0.0	0.0	-	-	-	*
		35.15152	60.90909	17.00000	0.0	0.0	0.0	-	-	-	*
		36.66667	60.90909	17.00000	0.0	0.0	0.0	-	-	-	*
		38.18182	60.90909	17.00000	0.0	0.0	0.0	-	-	-	*
		39.69697	60.90909	17.00000	0.0	0.0	0.0	-	-	-	*
		41.21212	60.90909	17.00000	0.0	0.0	0.0	-	-	-	*
		42.72727	60.90909	17.00000	0.0	0.0	0.0	-	-	-	*
		44.24242	60.90909	17.00000	0.0	0.0	0.0	-	-	-	*
		45.75758	60.90909	17.00000	0.0	0.0	0.0	-	-	-	*
		47.27273	60.90909	17.00000	0.0	0.0	0.0	-	-	-	*
		48.78788	60.90909	17.00000	0.0	0.0	0.0	-	-	-	*
		50.30303	60.90909	17.00000	0.0	0.0	0.0	-	-	-	*
		51.81818	60.90909	17.00000	0.0	0.0	0.0	-	-	-	*
		53.33333	60.90909	17.00000	0.0	0.0	0.0	-	-	-	*
		54.84848	60.90909	17.00000	0.0	0.0	0.0	-	-	-	*
		56.36364	60.90909	17.00000	0.0	0.0	0.0	-	-	-	*
		57.87879	60.90909	17.00000	0.0	0.0	0.0	-	-	-	*
		59.39394	60.90909	17.00000	0.0	0.0	0.0	-	-	-	*
		60.90909	60.90909	17.00000	0.0	0.0	0.0	-	-	-	*
		62.42424	60.90909	17.00000	0.0	0.0	0.0	-	-	-	*
		63.93939	60.90909	17.00000	0.0	0.0	0.0	-	-	-	*
		65.45455	60.90909	17.00000	0.0	0.0	0.0	-	-	-	*
		66.96970	60.90909	17.00000	0.0	0.0	0.0	-	-	-	*
		68.48485	60.90909	17.00000	0.0	0.0	0.0	-	-	-	*
		70.00000	60.90909	17.00000	0.0	0.0	0.0	-	-	-	*
		71.51515	60.90909	17.00000	0.0	0.0	0.0	-	-	-	*
		73.03030	60.90909	17.00000	0.0	0.0	0.0	-	-	-	*
		74.54545	60.90909	17.00000	0.0	0.0	0.0	-	-	-	*
		76.06061	60.90909	17.00000	0.0	0.0	0.0	-	-	-	*
		77.57576	60.90909	17.00000	0.0	0.0	0.0	-	-	-	*
		79.09091	60.90909	17.00000	0.0	0.0	0.0	-	-	-	*
		80.60606	60.90909	17.00000	0.0	0.0	0.0	-	-	-	*
		82.12121	60.90909	17.00000	0.0	0.0	0.0	-	-	-	*
		83.63636	60.90909	17.00000	0.0	0.0	0.0	-	-	-	*
		85.15152	60.90909	17.00000	0.0	0.0	0.0	-	-	-	*
		86.66667	60.90909	17.00000	0.0	0.0	0.0	-	-	-	*
		88.18182	60.90909	17.00000	0.0	0.0	0.0	-	-	-	*
		89.69697	60.90909	17.00000	0.0	0.0	0.0	-	-	-	*
		91.21212	60.90909	17.00000	0.0	0.0	0.0	-	-	-	*
		92.72727	60.90909	17.00000	0.0	0.0	0.0	-	-	-	*
		94.24242	60.90909	17.00000	0.0	0.0	0.0	-	-	-	*
		95.75758	60.90909	17.00000	0.0	0.0	0.0	-	-	-	*
		97.27273	60.90909	17.00000	0.0	0.0	0.0	-	-	-	*

Oasys
GEA LIMITED
(GEOTECHNICAL &ENV ASSOC) J15050A
The Great Hall, Lincoln's Inn, Newman's Row, London, WC2A 3TL
Wall Movements Rev 3 Piling and Excavation
Damage Assessment
Job No. | Sheet No. | Rev.
Drg. Ref.
Made by MP | Date 08-Feb-2016 | Checked

Type/No. Name	Dist.	Coordinates x	y	z	Displacements x	y	z	Horizontal displacement	Horizontal displacement	Angle of Line to x Axis	
		98.78788	60.90909	17.00000	0.0	0.0	0.0	-	-	-	*
		100.30303	60.90909	17.00000	0.0	0.0	0.0	-	-	-	*
		101.81818	60.90909	17.00000	0.0	0.0	0.0	-	-	-	*
		103.33333	60.90909	17.00000	0.0	0.0	0.0	-	-	-	*
		104.84848	60.90909	17.00000	0.0	0.0	0.0	-	-	-	*
		106.36364	60.90909	17.00000	0.0	0.0	0.0	-	-	-	*
		107.87879	60.90909	17.00000	0.0	0.0	0.0	-	-	-	*
		109.39394	60.90909	17.00000	0.0	0.0	0.0	-	-	-	*
		110.90909	60.90909	17.00000	0.0	0.0	0.0	-	-	-	*
		112.42424	60.90909	17.00000	0.0	0.0	0.0	-	-	-	*
		113.93939	60.90909	17.00000	0.0	0.0	0.0	-	-	-	*
		115.45455	60.90909	17.00000	0.0	0.0	0.0	-	-	-	*
		116.96970	60.90909	17.00000	0.0	0.0	0.0	-	-	-	*
		118.48485	60.90909	17.00000	0.0	0.0	0.0	-	-	-	*
		120.00000	60.90909	17.00000	0.0	0.0	0.0	-	-	-	*
		-30.00000	61.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		-28.48485	61.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		-26.96970	61.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		-25.45455	61.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		-23.93939	61.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		-22.42424	61.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		-20.90909	61.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		-19.39394	61.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		-17.87879	61.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		-16.36364	61.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		-14.84848	61.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		-13.33333	61.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		-11.81818	61.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		-10.30303	61.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		-8.78788	61.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		-7.27273	61.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		-5.75758	61.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		-4.24242	61.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		-2.72727	61.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		-1.21212	61.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		0.30303	61.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		1.81818	61.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		3.33333	61.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		4.84848	61.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		6.36364	61.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		7.87879	61.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		9.39394	61.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		10.90909	61.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		12.42424	61.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		13.93939	61.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		15.45455	61.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		16.96970	61.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		18.48485	61.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		20.00000	61.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		21.51515	61.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		23.03030	61.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		24.54545	61.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		26.06061	61.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		27.57576	61.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		29.09091	61.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		30.60606	61.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		32.12121	61.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		33.63636	61.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		35.15152	61.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		36.66667	61.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		38.18182	61.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		39.69697	61.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		41.21212	61.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		42.72727	61.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		44.24242	61.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		45.75758	61.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		47.27273	61.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		48.78788	61.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		50.30303	61.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		51.81818	61.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		53.33333	61.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		54.84848	61.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		56.36364	61.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		57.87879	61.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		59.39394	61.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		60.90909	61.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		62.42424	61.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		63.93939	61.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		65.45455	61.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		66.96970	61.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		68.48485	61.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		70.00000	61.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		71.51515	61.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		73.03030	61.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		74.54545	61.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		76.06061	61.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		77.57576	61.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		79.09091	61.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		80.60606	61.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		82.12121	61.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		83.63636	61.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		85.15152	61.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		86.66667	61.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		88.18182	61.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		89.69697	61.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		91.21212	61.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		92.72727	61.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		94.24242	61.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		95.75758	61.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		97.27273	61.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		98.78788	61.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		100.30303	61.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		101.81818	61.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		103.33333	61.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		104.84848	61.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		106.36364	61.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		107.87879	61.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		109.39394	61.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		110.90909	61.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		112.42424	61.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		113.93939	61.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		115.45455	61.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		116.96970	61.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		118.48485	61.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		120.00000	61.91919	17.00000	0.0	0.0	0.0	-	-	-	*
		-30.00000	62.92929	17.00000	0.0	0.0	0.0	-	-	-	*
		-28.48485	62.92929	17.00000	0.0	0.0	0.0	-	-	-	*
		-26.96970	62.92929	17.00000	0.0	0.0	0.0	-	-	-	*
		-25.45455	62.92929	17.00000	0.0	0.0	0.0	-	-	-	*
		-23.93939	62.92929	17.00000	0.0	0.0	0.0	-	-	-	*
		-22.42424	62.92929	17.00000	0.0	0.0	0.0	-	-	-	*
		-20.90909	62.92929	17.00000	0.0	0.0	0.0	-	-	-	*
		-19.39394	62.92929	17.00000	0.0	0.0	0.0	-	-	-	*
		-17.87879	62.92929	17.00000	0.0	0.0	0.0	-	-	-	*
		-16.36364	62.92929	17.00000	0.0	0.0	0.0	-	-	-	*
		-14.84848	62.92929	17.00000	0.0	0.0	0.0	-	-	-	*
		-13.33333	62.92929	17.00000	0.0	0.0	0.0	-	-	-	*
		-11.81818	62.92929	17.00000	0.0	0.0	0.0	-	-	-	*
		-10.30303	62.92929	17.00000	0.0	0.0	0.0	-	-	-	*
		-8.78788	62.92929	17.00000	0.0	0.0	0.0	-	-	-	*
		-7.27273	62.92929	17.00000	0.0	0.0	0.0	-	-	-	*
		-5.75758	62.92929	17.00000	0.0	0.0	0.0	-	-	-	*
		-4.24242	62.92929	17.00000	0.0	0.0	0.0	-	-	-	*
		-2.72727	62.92929	17.00000	0.0	0.0	0.0	-	-	-	*
		-1.21212	62.92929	17.00000	0.0	0.0	0.0	-	-	-	*
		0.30303	62.92929	17.00000	0.0	0.0	0.0	-	-	-	*
		1.81818	62.92929	17.00000	0.0	0.0	0.0	-	-	-	*
		3.33333	62.92929	17.00000	0.0	0.0	0.0	-	-	-	*
		4.84848	62.92929	17.00000	0.0	0.0	0.0	-	-	-	*
		6.36364	62.92929	17.00000	0.0	0.0	0.0	-	-	-	*
		7.87879	62.92929	17.00000	0.0	0.0	0.0	-	-	-	*

Type/No. Name	Dist.	Coordinates x	y	z	Displacements x	y	z	Horizontal displacement	Horizontal displacement	Angle of Line to x Axis	
	9.39394	62.92929	17.00000	0.0	0.0	0.0	-	-	-	*
	10.90909	62.92929	17.00000	0.0	0.0	0.0	-	-	-	*
	12.42424	62.92929	17.00000	0.0	0.0	0.0	-	-	-	*
	13.93939	62.92929	17.00000	0.0	0.0	0.0	-	-	-	*
	15.45455	62.92929	17.00000	0.0	0.0	0.0	-	-	-	*
	16.96970	62.92929	17.00000	0.0	0.0	0.0	-	-	-	*
	18.48485	62.92929	17.00000	0.0	0.0	0.0	-	-	-	*
	20.00000	62.92929	17.00000	0.0	0.0	0.0	-	-	-	*
	21.51515	62.92929	17.00000	0.0	0.0	0.0	-	-	-	*
	23.03030	62.92929	17.00000	0.0	0.0	0.0	-	-	-	*
	24.54545	62.92929	17.00000	0.0	0.0	0.0	-	-	-	*
	26.06061	62.92929	17.00000	0.0	0.0	0.0	-	-	-	*
	27.57576	62.92929	17.00000	0.0	0.0	0.0	-	-	-	*
	29.09091	62.92929	17.00000	0.0	0.0	0.0	-	-	-	*
	30.60606	62.92929	17.00000	0.0	0.0	0.0	-	-	-	*
	32.12121	62.92929	17.00000	0.0	0.0	0.0	-	-	-	*
	33.63636	62.92929	17.00000	0.0	0.0	0.0	-	-	-	*
	35.15152	62.92929	17.00000	0.0	0.0	0.0	-	-	-	*
	36.66667	62.92929	17.00000	0.0	0.0	0.0	-	-	-	*
	38.18182	62.92929	17.00000	0.0	0.0	0.0	-	-	-	*
	39.69697	62.92929	17.00000	0.0	0.0	0.0	-	-	-	*
	41.21212	62.92929	17.00000	0.0	0.0	0.0	-	-	-	*
	42.72727	62.92929	17.00000	0.0	0.0	0.0	-	-	-	*
	44.24242	62.92929	17.00000	0.0	0.0	0.0	-	-	-	*
	45.75758	62.92929	17.00000	0.0	0.0	0.0	-	-	-	*
	47.27273	62.92929	17.00000	0.0	0.0	0.0	-	-	-	*
	48.78788	62.92929	17.00000	0.0	0.0	0.0	-	-	-	*
	50.30303	62.92929	17.00000	0.0	0.0	0.0	-	-	-	*
	51.81818	62.92929	17.00000	0.0	0.0	0.0	-	-	-	*
	53.33333	62.92929	17.00000	0.0	0.0	0.0	-	-	-	*
	54.84848	62.92929	17.00000	0.0	0.0	0.0	-	-	-	*
	56.36364	62.92929	17.00000	0.0	0.0	0.0	-	-	-	*
	57.87879	62.92929	17.00000	0.0	0.0	0.0	-	-	-	*
	59.39394	62.92929	17.00000	0.0	0.0	0.0	-	-	-	*
	60.90909	62.92929	17.00000	0.0	0.0	0.0	-	-	-	*
	62.42424	62.92929	17.00000	0.0	0.0	0.0	-	-	-	*
	63.93939	62.92929	17.00000	0.0	0.0	0.0	-	-	-	*
	65.45455	62.92929	17.00000	0.0	0.0	0.0	-	-	-	*
	66.96970	62.92929	17.00000	0.0	0.0	0.0	-	-	-	*
	68.48485	62.92929	17.00000	0.0	0.0	0.0	-	-	-	*
	70.00000	62.92929	17.00000	0.0	0.0	0.0	-	-	-	*
	71.51515	62.92929	17.00000	0.0	0.0	0.0	-	-	-	*
	73.03030	62.92929	17.00000	0.0	0.0	0.0	-	-	-	*
	74.54545	62.92929	17.00000	0.0	0.0	0.0	-	-	-	*
	76.06061	62.92929	17.00000	0.0	0.0	0.0	-	-	-	*
	77.57576	62.92929	17.00000	0.0	0.0	0.0	-	-	-	*
	79.09091	62.92929	17.00000	0.0	0.0	0.0	-	-	-	*
	80.60606	62.92929	17.00000	0.0	0.0	0.0	-	-	-	*
	82.12121	62.92929	17.00000	0.0	0.0	0.0	-	-	-	*
	83.63636	62.92929	17.00000	0.0	0.0	0.0	-	-	-	*
	85.15152	62.92929	17.00000	0.0	0.0	0.0	-	-	-	*
	86.66667	62.92929	17.00000	0.0	0.0	0.0	-	-	-	*
	88.18182	62.92929	17.00000	0.0	0.0	0.0	-	-	-	*
	89.69697	62.92929	17.00000	0.0	0.0	0.0	-	-	-	*
	91.21212	62.92929	17.00000	0.0	0.0	0.0	-	-	-	*
	92.72727	62.92929	17.00000	0.0	0.0	0.0	-	-	-	*
	94.24242	62.92929	17.00000	0.0	0.0	0.0	-	-	-	*
	95.75758	62.92929	17.00000	0.0	0.0	0.0	-	-	-	*
	97.27273	62.92929	17.00000	0.0	0.0	0.0	-	-	-	*
	98.78788	62.92929	17.00000	0.0	0.0	0.0	-	-	-	*
	100.30303	62.92929	17.00000	0.0	0.0	0.0	-	-	-	*
	101.81818	62.92929	17.00000	0.0	0.0	0.0	-	-	-	*
	103.33333	62.92929	17.00000	0.0	0.0	0.0	-	-	-	*
	104.84848	62.92929	17.00000	0.0	0.0	0.0	-	-	-	*
	106.36364	62.92929	17.00000	0.0	0.0	0.0	-	-	-	*
	107.87879	62.92929	17.00000	0.0	0.0	0.0	-	-	-	*
	109.39394	62.92929	17.00000	0.0	0.0	0.0	-	-	-	*
	110.90909	62.92929	17.00000	0.0	0.0	0.0	-	-	-	*
	112.42424	62.92929	17.00000	0.0	0.0	0.0	-	-	-	*
	113.93939	62.92929	17.00000	0.0	0.0	0.0	-	-	-	*
	115.45455	62.92929	17.00000	0.0	0.0	0.0	-	-	-	*
	116.96970	62.92929	17.00000	0.0	0.0	0.0	-	-	-	*
	118.48485	62.92929	17.00000	0.0	0.0	0.0	-	-	-	*
	120.00000	62.92929	17.00000	0.0	0.0	0.0	-	-	-	*
	-30.00000	63.93939	17.00000	0.0	0.0	0.0	-	-	-	*
	-28.48485	63.93939	17.00000	0.0	0.0	0.0	-	-	-	*
	-26.96970	63.93939	17.00000	0.0	0.0	0.0	-	-	-	*
	-25.45455	63.93939	17.00000	0.0	0.0	0.0	-	-	-	*
	-23.93939	63.93939	17.00000	0.0	0.0	0.0	-	-	-	*
	-22.42424	63.93939	17.00000	0.0	0.0	0.0	-	-	-	*
	-20.90909	63.93939	17.00000	0.0	0.0	0.0	-	-	-	*
	-19.39394	63.93939	17.00000	0.0	0.0	0.0	-	-	-	*
	-17.87879	63.93939	17.00000	0.0	0.0	0.0	-	-	-	*
	-16.36364	63.93939	17.00000	0.0	0.0	0.0	-	-	-	*
	-14.84848	63.93939	17.00000	0.0	0.0	0.0	-	-	-	*
	-13.33333	63.93939	17.00000	0.0	0.0	0.0	-	-	-	*
	-11.81818	63.93939	17.00000	0.0	0.0	0.0	-	-	-	*
	-10.30303	63.93939	17.00000	0.0	0.0	0.0	-	-	-	*
	-8.78788	63.93939	17.00000	0.0	0.0	0.0	-	-	-	*
	-7.27273	63.93939	17.00000	0.0	0.0	0.0	-	-	-	*
	-5.75758	63.93939	17.00000	0.0	0.0	0.0	-	-	-	*
	-4.24242	63.93939	17.00000	0.0	0.0	0.0	-	-	-	*
	-2.72727	63.93939	17.00000	0.0	0.0	0.0	-	-	-	*
	-1.21212	63.93939	17.00000	0.0	0.0	0.0	-	-	-	*
	0.30303	63.93939	17.00000	0.0	0.0	0.0	-	-	-	*
	1.81818	63.93939	17.00000	0.0	0.0	0.0	-	-	-	*
	3.33333	63.93939	17.00000	0.0	0.0	0.0	-	-	-	*
	4.84848	63.93939	17.00000	0.0	0.0	0.0	-	-	-	*
	6.36364	63.93939	17.00000	0.0	0.0	0.0	-	-	-	*
	7.87879	63.93939	17.00000	0.0	0.0	0.0	-	-	-	*
	9.39394	63.93939	17.00000	0.0	0.0	0.0	-	-	-	*
	10.90909	63.93939	17.00000	0.0	0.0	0.0	-	-	-	*
	12.42424	63.93939	17.00000	0.0	0.0	0.0	-	-	-	*
	13.93939	63.93939	17.00000	0.0	0.0	0.0	-	-	-	*
	15.45455	63.93939	17.00000	0.0	0.0	0.0	-	-	-	*
	16.96970	63.93939	17.00000	0.0	0.0	0.0	-	-	-	*
	18.48485	63.93939	17.00000	0.0	0.0	0.0	-	-	-	*
	20.00000	63.93939	17.00000	0.0	0.0	0.0	-	-	-	*
	21.51515	63.93939	17.00000	0.0	0.0	0.0	-	-	-	*
	23.03030	63.93939	17.00000	0.0	0.0	0.0	-	-	-	*
	24.54545	63.93939	17.00000	0.0	0.0	0.0	-	-	-	*
	26.06061	63.93939	17.00000	0.0	0.0	0.0	-	-	-	*
	27.57576	63.93939	17.00000	0.0	0.0	0.0	-	-	-	*
	29.09091	63.93939	17.00000	0.0	0.0	0.0	-	-	-	*
	30.60606	63.93939	17.00000	0.0	0.0	0.0	-	-	-	*
	32.12121	63.93939	17.00000	0.0	0.0	0.0	-	-	-	*
	33.63636	63.93939	17.00000	0.0	0.0	0.0	-	-	-	*
	35.15152	63.93939	17.00000	0.0	0.0	0.0	-	-	-	*
	36.66667	63.93939	17.00000	0.0	0.0	0.0	-	-	-	*
	38.18182	63.93939	17.00000	0.0	0.0	0.0	-	-	-	*
	39.69697	63.93939	17.00000	0.0	0.0	0.0	-	-	-	*
	41.21212	63.93939	17.00000	0.0	0.0	0.0	-	-	-	*
	42.72727	63.93939	17.00000	0.0	0.0	0.0	-	-	-	*
	44.24242	63.93939	17.00000	0.0	0.0	0.0	-	-	-	*
	45.75758	63.93939	17.00000	0.0	0.0	0.0	-	-	-	*
	47.27273	63.93939	17.00000	0.0	0.0	0.0	-	-	-	*
	48.78788	63.93939	17.00000	0.0	0.0	0.0	-	-	-	*
	50.30303	63.93939	17.00000	0.0	0.0	0.0	-	-	-	*
	51.81818	63.93939	17.00000	0.0	0.0	0.0	-	-	-	*
	53.33333	63.93939	17.00000	0.0	0.0	0.0	-	-	-	*
	54.84848	63.93939	17.00000	0.0	0.0	0.0	-	-	-	*
	56.36364	63.93939	17.00000	0.0	0.0	0.0	-	-	-	*
	57.87879	63.93939	17.00000	0.0	0.0	0.0	-	-	-	*
	59.39394	63.93939	17.00000	0.0	0.0	0.0	-	-	-	*
	60.90909	63.93939	17.00000	0.0	0.0	0.0	-	-	-	*
	62.42424	63.93939	17.00000	0.0	0.0	0.0	-	-	-	*
	63.93939	63.93939	17.00000	0.0	0.0	0.0	-	-	-	*
	65.45455	63.93939	17.00000	0.0	0.0	0.0	-	-	-	*
	66.96970	63.93939	17.00000	0.0	0.0	0.0	-	-	-	*
	68.48485	63.93939	17.00000	0.0	0.0	0.0	-	-	-	*
	70.00000	63.93939	17.00000	0.0	0.0	0.0	-	-	-	*

Oasys
GEA LIMITED
(GEOTECHNICAL &ENV ASSOC)
Job No. J15050A
Sheet No.
Rev.
The Great Hall, Lincoln's Inn, Newman's Row, London, WC2A 3TL
Wall Movements Rev 3 Piling and Excavation
Damage Assessment
Drg. Ref.
Made by MP
Date 08-Feb-2016
Checked

Type/No. Name	Dist.	Coordinates x	y	z	Displacements x	y	z	Horizontal displacement	Horizontal displacement	Angle of Line to x Axis	
	71.51515	63.93939	17.00000	0.0	0.0	0.0	-	-	-	*
	73.03030	63.93939	17.00000	0.0	0.0	0.0	-	-	-	*
	74.54545	63.93939	17.00000	0.0	0.0	0.0	-	-	-	*
	76.06061	63.93939	17.00000	0.0	0.0	0.0	-	-	-	*
	77.57576	63.93939	17.00000	0.0	0.0	0.0	-	-	-	*
	79.09091	63.93939	17.00000	0.0	0.0	0.0	-	-	-	*
	80.60606	63.93939	17.00000	0.0	0.0	0.0	-	-	-	*
	82.12121	63.93939	17.00000	0.0	0.0	0.0	-	-	-	*
	83.63636	63.93939	17.00000	0.0	0.0	0.0	-	-	-	*
	85.15152	63.93939	17.00000	0.0	0.0	0.0	-	-	-	*
	86.66667	63.93939	17.00000	0.0	0.0	0.0	-	-	-	*
	88.18182	63.93939	17.00000	0.0	0.0	0.0	-	-	-	*
	89.69697	63.93939	17.00000	0.0	0.0	0.0	-	-	-	*
	91.21212	63.93939	17.00000	0.0	0.0	0.0	-	-	-	*
	92.72727	63.93939	17.00000	0.0	0.0	0.0	-	-	-	*
	94.24242	63.93939	17.00000	0.0	0.0	0.0	-	-	-	*
	95.75758	63.93939	17.00000	0.0	0.0	0.0	-	-	-	*
	97.27273	63.93939	17.00000	0.0	0.0	0.0	-	-	-	*
	98.78788	63.93939	17.00000	0.0	0.0	0.0	-	-	-	*
	100.30303	63.93939	17.00000	0.0	0.0	0.0	-	-	-	*
	101.81818	63.93939	17.00000	0.0	0.0	0.0	-	-	-	*
	103.33333	63.93939	17.00000	0.0	0.0	0.0	-	-	-	*
	104.84848	63.93939	17.00000	0.0	0.0	0.0	-	-	-	*
	106.36364	63.93939	17.00000	0.0	0.0	0.0	-	-	-	*
	107.87879	63.93939	17.00000	0.0	0.0	0.0	-	-	-	*
	109.39394	63.93939	17.00000	0.0	0.0	0.0	-	-	-	*
	110.90909	63.93939	17.00000	0.0	0.0	0.0	-	-	-	*
	112.42424	63.93939	17.00000	0.0	0.0	0.0	-	-	-	*
	113.93939	63.93939	17.00000	0.0	0.0	0.0	-	-	-	*
	115.45455	63.93939	17.00000	0.0	0.0	0.0	-	-	-	*
	116.96970	63.93939	17.00000	0.0	0.0	0.0	-	-	-	*
	118.48485	63.93939	17.00000	0.0	0.0	0.0	-	-	-	*
	120.00000	63.93939	17.00000	0.0	0.0	0.0	-	-	-	*
	-30.00000	64.94949	17.00000	0.0	0.0	0.0	-	-	-	*
	-28.48485	64.94949	17.00000	0.0	0.0	0.0	-	-	-	*
	-26.96970	64.94949	17.00000	0.0	0.0	0.0	-	-	-	*
	-25.45455	64.94949	17.00000	0.0	0.0	0.0	-	-	-	*
	-23.93939	64.94949	17.00000	0.0	0.0	0.0	-	-	-	*
	-22.42424	64.94949	17.00000	0.0	0.0	0.0	-	-	-	*
	-20.90909	64.94949	17.00000	0.0	0.0	0.0	-	-	-	*
	-19.39394	64.94949	17.00000	0.0	0.0	0.0	-	-	-	*
	-17.87879	64.94949	17.00000	0.0	0.0	0.0	-	-	-	*
	-16.36364	64.94949	17.00000	0.0	0.0	0.0	-	-	-	*
	-14.84848	64.94949	17.00000	0.0	0.0	0.0	-	-	-	*
	-13.33333	64.94949	17.00000	0.0	0.0	0.0	-	-	-	*
	-11.81818	64.94949	17.00000	0.0	0.0	0.0	-	-	-	*
	-10.30303	64.94949	17.00000	0.0	0.0	0.0	-	-	-	*
	-8.78788	64.94949	17.00000	0.0	0.0	0.0	-	-	-	*
	-7.27273	64.94949	17.00000	0.0	0.0	0.0	-	-	-	*
	-5.75758	64.94949	17.00000	0.0	0.0	0.0	-	-	-	*
	-4.24242	64.94949	17.00000	0.0	0.0	0.0	-	-	-	*
	-2.72727	64.94949	17.00000	0.0	0.0	0.0	-	-	-	*
	-1.21212	64.94949	17.00000	0.0	0.0	0.0	-	-	-	*
	0.30303	64.94949	17.00000	0.0	0.0	0.0	-	-	-	*
	1.81818	64.94949	17.00000	0.0	0.0	0.0	-	-	-	*
	3.33333	64.94949	17.00000	0.0	0.0	0.0	-	-	-	*
	4.84848	64.94949	17.00000	0.0	0.0	0.0	-	-	-	*
	6.36364	64.94949	17.00000	0.0	0.0	0.0	-	-	-	*
	7.87879	64.94949	17.00000	0.0	0.0	0.0	-	-	-	*
	9.39394	64.94949	17.00000	0.0	0.0	0.0	-	-	-	*
	10.90909	64.94949	17.00000	0.0	0.0	0.0	-	-	-	*
	12.42424	64.94949	17.00000	0.0	0.0	0.0	-	-	-	*
	13.93939	64.94949	17.00000	0.0	0.0	0.0	-	-	-	*
	15.45455	64.94949	17.00000	0.0	0.0	0.0	-	-	-	*
	16.96970	64.94949	17.00000	0.0	0.0	0.0	-	-	-	*
	18.48485	64.94949	17.00000	0.0	0.0	0.0	-	-	-	*
	20.00000	64.94949	17.00000	0.0	0.0	0.0	-	-	-	*
	21.51515	64.94949	17.00000	0.0	0.0	0.0	-	-	-	*
	23.03030	64.94949	17.00000	0.0	0.0	0.0	-	-	-	*
	24.54545	64.94949	17.00000	0.0	0.0	0.0	-	-	-	*
	26.06061	64.94949	17.00000	0.0	0.0	0.0	-	-	-	*
	27.57576	64.94949	17.00000	0.0	0.0	0.0	-	-	-	*
	29.09091	64.94949	17.00000	0.0	0.0	0.0	-	-	-	*
	30.60606	64.94949	17.00000	0.0	0.0	0.0	-	-	-	*
	32.12121	64.94949	17.00000	0.0	0.0	0.0	-	-	-	*
	33.63636	64.94949	17.00000	0.0	0.0	0.0	-	-	-	*
	35.15152	64.94949	17.00000	0.0	0.0	0.0	-	-	-	*
	36.66667	64.94949	17.00000	0.0	0.0	0.0	-	-	-	*
	38.18182	64.94949	17.00000	0.0	0.0	0.0	-	-	-	*
	39.69697	64.94949	17.00000	0.0	0.0	0.0	-	-	-	*
	41.21212	64.94949	17.00000	0.0	0.0	0.0	-	-	-	*
	42.72727	64.94949	17.00000	0.0	0.0	0.0	-	-	-	*
	44.24242	64.94949	17.00000	0.0	0.0	0.0	-	-	-	*
	45.75758	64.94949	17.00000	0.0	0.0	0.0	-	-	-	*
	47.27273	64.94949	17.00000	0.0	0.0	0.0	-	-	-	*
	48.78788	64.94949	17.00000	0.0	0.0	0.0	-	-	-	*
	50.30303	64.94949	17.00000	0.0	0.0	0.0	-	-	-	*
	51.81818	64.94949	17.00000	0.0	0.0	0.0	-	-	-	*
	53.33333	64.94949	17.00000	0.0	0.0	0.0	-	-	-	*
	54.84848	64.94949	17.00000	0.0	0.0	0.0	-	-	-	*
	56.36364	64.94949	17.00000	0.0	0.0	0.0	-	-	-	*
	57.87879	64.94949	17.00000	0.0	0.0	0.0	-	-	-	*
	59.39394	64.94949	17.00000	0.0	0.0	0.0	-	-	-	*
	60.90909	64.94949	17.00000	0.0	0.0	0.0	-	-	-	*
	62.42424	64.94949	17.00000	0.0	0.0	0.0	-	-	-	*
	63.93939	64.94949	17.00000	0.0	0.0	0.0	-	-	-	*
	65.45455	64.94949	17.00000	0.0	0.0	0.0	-	-	-	*
	66.96970	64.94949	17.00000	0.0	0.0	0.0	-	-	-	*
	68.48485	64.94949	17.00000	0.0	0.0	0.0	-	-	-	*
	70.00000	64.94949	17.00000	0.0	0.0	0.0	-	-	-	*
	71.51515	64.94949	17.00000	0.0	0.0	0.0	-	-	-	*
	73.03030	64.94949	17.00000	0.0	0.0	0.0	-	-	-	*
	74.54545	64.94949	17.00000	0.0	0.0	0.0	-	-	-	*
	76.06061	64.94949	17.00000	0.0	0.0	0.0	-	-	-	*
	77.57576	64.94949	17.00000	0.0	0.0	0.0	-	-	-	*
	79.09091	64.94949	17.00000	0.0	0.0	0.0	-	-	-	*
	80.60606	64.94949	17.00000	0.0	0.0	0.0	-	-	-	*
	82.12121	64.94949	17.00000	0.0	0.0	0.0	-	-	-	*
	83.63636	64.94949	17.00000	0.0	0.0	0.0	-	-	-	*
	85.15152	64.94949	17.00000	0.0	0.0	0.0	-	-	-	*
	86.66667	64.94949	17.00000	0.0	0.0	0.0	-	-	-	*
	88.18182	64.94949	17.00000	0.0	0.0	0.0	-	-	-	*
	89.69697	64.94949	17.00000	0.0	0.0	0.0	-	-	-	*
	91.21212	64.94949	17.00000	0.0	0.0	0.0	-	-	-	*
	92.72727	64.94949	17.00000	0.0	0.0	0.0	-	-	-	*
	94.24242	64.94949	17.00000	0.0	0.0	0.0	-	-	-	*
	95.75758	64.94949	17.00000	0.0	0.0	0.0	-	-	-	*
	97.27273	64.94949	17.00000	0.0	0.0	0.0	-	-	-	*
	98.78788	64.94949	17.00000	0.0	0.0	0.0	-	-	-	*
	100.30303	64.94949	17.00000	0.0	0.0	0.0	-	-	-	*
	101.81818	64.94949	17.00000	0.0	0.0	0.0	-	-	-	*
	103.33333	64.94949	17.00000	0.0	0.0	0.0	-	-	-	*
	104.84848	64.94949	17.00000	0.0	0.0	0.0	-	-	-	*
	106.36364	64.94949	17.00000	0.0	0.0	0.0	-	-	-	*
	107.87879	64.94949	17.00000	0.0	0.0	0.0	-	-	-	*
	109.39394	64.94949	17.00000	0.0	0.0	0.0	-	-	-	*
	110.90909	64.94949	17.00000	0.0	0.0	0.0	-	-	-	*
	112.42424	64.94949	17.00000	0.0	0.0	0.0	-	-	-	*
	113.93939	64.94949	17.00000	0.0	0.0	0.0	-	-	-	*
	115.45455	64.94949	17.00000	0.0	0.0	0.0	-	-	-	*
	116.96970	64.94949	17.00000	0.0	0.0	0.0	-	-	-	*
	118.48485	64.94949	17.00000	0.0	0.0	0.0	-	-	-	*
	120.00000	64.94949	17.00000	0.0	0.0	0.0	-	-	-	*
	-30.00000	65.95960	17.00000	0.0	0.0	0.0	-	-	-	*
	-28.48485	65.95960	17.00000	0.0	0.0	0.0	-	-	-	*
	-26.96970	65.95960	17.00000	0.0	0.0	0.0	-	-	-	*
	-25.45455	65.95960	17.00000	0.0	0.0	0.0	-	-	-	*
	-23.93939	65.95960	17.00000	0.0	0.0	0.0	-	-	-	*
	-22.42424	65.95960	17.00000	0.0	0.0	0.0	-	-	-	*
	-20.90909	65.95960	17.00000	0.0	0.0	0.0	-	-	-	*
	-19.39394	65.95960	17.00000	0.0	0.0	0.0	-	-	-	*

Type/No. Name	Dist.	Coordinates x	y	z	Displacements x	y	z	Horizontal displacement	Horizontal displacement	Angle of Line to x Axis	
		-17.87879	65.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		-16.36364	65.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		-14.84848	65.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		-13.33333	65.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		-11.81818	65.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		-10.30303	65.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		-8.78788	65.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		-7.27273	65.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		-5.75758	65.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		-4.24242	65.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		-2.72727	65.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		-1.21212	65.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		0.30303	65.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		1.81818	65.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		3.33333	65.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		4.84848	65.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		6.36364	65.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		7.87879	65.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		9.39394	65.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		10.90909	65.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		12.42424	65.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		13.93939	65.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		15.45455	65.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		16.96970	65.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		18.48485	65.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		20.00000	65.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		21.51515	65.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		23.03030	65.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		24.54545	65.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		26.06061	65.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		27.57576	65.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		29.09091	65.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		30.60606	65.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		32.12121	65.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		33.63636	65.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		35.15152	65.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		36.66667	65.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		38.18182	65.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		39.69697	65.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		41.21212	65.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		42.72727	65.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		44.24242	65.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		45.75758	65.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		47.27273	65.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		48.78788	65.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		50.30303	65.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		51.81818	65.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		53.33333	65.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		54.84848	65.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		56.36364	65.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		57.87879	65.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		59.39394	65.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		60.90909	65.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		62.42424	65.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		63.93939	65.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		65.45455	65.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		66.96970	65.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		68.48485	65.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		70.00000	65.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		71.51515	65.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		73.03030	65.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		74.54545	65.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		76.06061	65.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		77.57576	65.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		79.09091	65.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		80.60606	65.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		82.12121	65.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		83.63636	65.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		85.15152	65.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		86.66667	65.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		88.18182	65.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		89.69697	65.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		91.21212	65.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		92.72727	65.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		94.24242	65.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		95.75758	65.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		97.27273	65.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		98.78788	65.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		100.30303	65.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		101.81818	65.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		103.33333	65.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		104.84848	65.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		106.36364	65.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		107.87879	65.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		109.39394	65.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		110.90909	65.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		112.42424	65.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		113.93939	65.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		115.45455	65.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		116.96970	65.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		118.48485	65.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		120.00000	65.95960	17.00000	0.0	0.0	0.0	-	-	-	*
		-30.00000	66.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		-28.48485	66.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		-26.96970	66.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		-25.45455	66.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		-23.93939	66.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		-22.42424	66.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		-20.90909	66.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		-19.39394	66.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		-17.87879	66.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		-16.36364	66.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		-14.84848	66.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		-13.33333	66.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		-11.81818	66.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		-10.30303	66.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		-8.78788	66.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		-7.27273	66.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		-5.75758	66.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		-4.24242	66.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		-2.72727	66.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		-1.21212	66.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		0.30303	66.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		1.81818	66.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		3.33333	66.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		4.84848	66.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		6.36364	66.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		7.87879	66.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		9.39394	66.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		10.90909	66.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		12.42424	66.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		13.93939	66.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		15.45455	66.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		16.96970	66.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		18.48485	66.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		20.00000	66.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		21.51515	66.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		23.03030	66.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		24.54545	66.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		26.06061	66.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		27.57576	66.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		29.09091	66.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		30.60606	66.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		32.12121	66.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		33.63636	66.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		35.15152	66.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		36.66667	66.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		38.18182	66.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		39.69697	66.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		41.21212	66.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		42.72727	66.96970	17.00000	0.0	0.0	0.0	-	-	-	*

Oasys
GEA LIMITED
(GEOTECHNICAL &ENV ASSOC) J15050A
The Great Hall, Lincoln's Inn, Newman's Row, London, WC2A 3TL
Wall Movements Rev 3 Piling and Excavation
Damage Assessment
Job No. | Sheet No. | Rev.
Drg. Ref.
Made by MP | Date 08-Feb-2016 | Checked

Type/No. Name	Dist.	Coordinates x	y	z	Displacements x	y	z	Horizontal displacement	Horizontal displacement	Angle of Line to x Axis	
		44.24242	66.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		45.75758	66.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		47.27273	66.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		48.78788	66.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		50.30303	66.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		51.81818	66.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		53.33333	66.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		54.84848	66.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		56.36364	66.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		57.87879	66.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		59.39394	66.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		60.90909	66.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		62.42424	66.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		63.93939	66.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		65.45455	66.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		66.96970	66.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		68.48485	66.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		70.00000	66.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		71.51515	66.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		73.03030	66.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		74.54545	66.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		76.06061	66.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		77.57576	66.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		79.09091	66.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		80.60606	66.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		82.12121	66.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		83.63636	66.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		85.15152	66.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		86.66667	66.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		88.18182	66.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		89.69697	66.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		91.21212	66.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		92.72727	66.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		94.24242	66.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		95.75758	66.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		97.27273	66.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		98.78788	66.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		100.30303	66.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		101.81818	66.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		103.33333	66.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		104.84848	66.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		106.36364	66.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		107.87879	66.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		109.39394	66.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		110.90909	66.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		112.42424	66.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		113.93939	66.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		115.45455	66.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		116.96970	66.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		118.48485	66.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		120.00000	66.96970	17.00000	0.0	0.0	0.0	-	-	-	*
		-30.00000	67.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		-28.48485	67.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		-26.96970	67.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		-25.45455	67.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		-23.93939	67.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		-22.42424	67.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		-20.90909	67.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		-19.39394	67.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		-17.87879	67.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		-16.36364	67.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		-14.84848	67.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		-13.33333	67.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		-11.81818	67.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		-10.30303	67.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		-8.78788	67.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		-7.27273	67.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		-5.75758	67.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		-4.24242	67.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		-2.72727	67.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		-1.21212	67.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		0.30303	67.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		1.81818	67.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		3.33333	67.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		4.84848	67.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		6.36364	67.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		7.87879	67.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		9.39394	67.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		10.90909	67.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		12.42424	67.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		13.93939	67.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		15.45455	67.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		16.96970	67.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		18.48485	67.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		20.00000	67.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		21.51515	67.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		23.03030	67.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		24.54545	67.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		26.06061	67.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		27.57576	67.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		29.09091	67.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		30.60606	67.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		32.12121	67.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		33.63636	67.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		35.15152	67.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		36.66667	67.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		38.18182	67.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		39.69697	67.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		41.21212	67.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		42.72727	67.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		44.24242	67.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		45.75758	67.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		47.27273	67.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		48.78788	67.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		50.30303	67.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		51.81818	67.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		53.33333	67.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		54.84848	67.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		56.36364	67.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		57.87879	67.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		59.39394	67.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		60.90909	67.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		62.42424	67.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		63.93939	67.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		65.45455	67.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		66.96970	67.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		68.48485	67.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		70.00000	67.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		71.51515	67.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		73.03030	67.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		74.54545	67.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		76.06061	67.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		77.57576	67.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		79.09091	67.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		80.60606	67.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		82.12121	67.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		83.63636	67.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		85.15152	67.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		86.66667	67.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		88.18182	67.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		89.69697	67.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		91.21212	67.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		92.72727	67.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		94.24242	67.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		95.75758	67.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		97.27273	67.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		98.78788	67.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		100.30303	67.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		101.81818	67.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		103.33333	67.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		104.84848	67.97980	17.00000	0.0	0.0	0.0	-	-	-	*

Type/No. Name	Dist.	Coordinates x	y	z	Displacements x	y	z	Horizontal dispalcement	Horizontal displacement	Angle of Line to x Axis	
		106.36364	67.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		107.87879	67.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		109.39394	67.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		110.90909	67.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		112.42424	67.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		113.93939	67.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		115.45455	67.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		116.96970	67.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		118.48485	67.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		120.00000	67.97980	17.00000	0.0	0.0	0.0	-	-	-	*
		-30.00000	68.98990	17.00000	0.0	0.0	0.0	-	-	-	*
		-28.48485	68.98990	17.00000	0.0	0.0	0.0	-	-	-	*
		-26.96970	68.98990	17.00000	0.0	0.0	0.0	-	-	-	*
		-25.45455	68.98990	17.00000	0.0	0.0	0.0	-	-	-	*
		-23.93939	68.98990	17.00000	0.0	0.0	0.0	-	-	-	*
		-22.42424	68.98990	17.00000	0.0	0.0	0.0	-	-	-	*
		-20.90909	68.98990	17.00000	0.0	0.0	0.0	-	-	-	*
		-19.39394	68.98990	17.00000	0.0	0.0	0.0	-	-	-	*
		-17.87879	68.98990	17.00000	0.0	0.0	0.0	-	-	-	*
		-16.36364	68.98990	17.00000	0.0	0.0	0.0	-	-	-	*
		-14.84848	68.98990	17.00000	0.0	0.0	0.0	-	-	-	*
		-13.33333	68.98990	17.00000	0.0	0.0	0.0	-	-	-	*
		-11.81818	68.98990	17.00000	0.0	0.0	0.0	-	-	-	*
		-10.30303	68.98990	17.00000	0.0	0.0	0.0	-	-	-	*
		-8.78788	68.98990	17.00000	0.0	0.0	0.0	-	-	-	*
		-7.27273	68.98990	17.00000	0.0	0.0	0.0	-	-	-	*
		-5.75758	68.98990	17.00000	0.0	0.0	0.0	-	-	-	*
		-4.24242	68.98990	17.00000	0.0	0.0	0.0	-	-	-	*
		-2.72727	68.98990	17.00000	0.0	0.0	0.0	-	-	-	*
		-1.21212	68.98990	17.00000	0.0	0.0	0.0	-	-	-	*
		0.30303	68.98990	17.00000	0.0	0.0	0.0	-	-	-	*
		1.81818	68.98990	17.00000	0.0	0.0	0.0	-	-	-	*
		3.33333	68.98990	17.00000	0.0	0.0	0.0	-	-	-	*
		4.84848	68.98990	17.00000	0.0	0.0	0.0	-	-	-	*
		6.36364	68.98990	17.00000	0.0	0.0	0.0	-	-	-	*
		7.87879	68.98990	17.00000	0.0	0.0	0.0	-	-	-	*
		9.39394	68.98990	17.00000	0.0	0.0	0.0	-	-	-	*
		10.90909	68.98990	17.00000	0.0	0.0	0.0	-	-	-	*
		12.42424	68.98990	17.00000	0.0	0.0	0.0	-	-	-	*
		13.93939	68.98990	17.00000	0.0	0.0	0.0	-	-	-	*
		15.45455	68.98990	17.00000	0.0	0.0	0.0	-	-	-	*
		16.96970	68.98990	17.00000	0.0	0.0	0.0	-	-	-	*
		18.48485	68.98990	17.00000	0.0	0.0	0.0	-	-	-	*
		20.00000	68.98990	17.00000	0.0	0.0	0.0	-	-	-	*
		21.51515	68.98990	17.00000	0.0	0.0	0.0	-	-	-	*
		23.03030	68.98990	17.00000	0.0	0.0	0.0	-	-	-	*
		24.54545	68.98990	17.00000	0.0	0.0	0.0	-	-	-	*
		26.06061	68.98990	17.00000	0.0	0.0	0.0	-	-	-	*
		27.57576	68.98990	17.00000	0.0	0.0	0.0	-	-	-	*
		29.09091	68.98990	17.00000	0.0	0.0	0.0	-	-	-	*
		30.60606	68.98990	17.00000	0.0	0.0	0.0	-	-	-	*
		32.12121	68.98990	17.00000	0.0	0.0	0.0	-	-	-	*
		33.63636	68.98990	17.00000	0.0	0.0	0.0	-	-	-	*
		35.15152	68.98990	17.00000	0.0	0.0	0.0	-	-	-	*
		36.66667	68.98990	17.00000	0.0	0.0	0.0	-	-	-	*
		38.18182	68.98990	17.00000	0.0	0.0	0.0	-	-	-	*
		39.69697	68.98990	17.00000	0.0	0.0	0.0	-	-	-	*
		41.21212	68.98990	17.00000	0.0	0.0	0.0	-	-	-	*
		42.72727	68.98990	17.00000	0.0	0.0	0.0	-	-	-	*
		44.24242	68.98990	17.00000	0.0	0.0	0.0	-	-	-	*
		45.75758	68.98990	17.00000	0.0	0.0	0.0	-	-	-	*
		47.27273	68.98990	17.00000	0.0	0.0	0.0	-	-	-	*
		48.78788	68.98990	17.00000	0.0	0.0	0.0	-	-	-	*
		50.30303	68.98990	17.00000	0.0	0.0	0.0	-	-	-	*
		51.81818	68.98990	17.00000	0.0	0.0	0.0	-	-	-	*
		53.33333	68.98990	17.00000	0.0	0.0	0.0	-	-	-	*
		54.84848	68.98990	17.00000	0.0	0.0	0.0	-	-	-	*
		56.36364	68.98990	17.00000	0.0	0.0	0.0	-	-	-	*
		57.87879	68.98990	17.00000	0.0	0.0	0.0	-	-	-	*
		59.39394	68.98990	17.00000	0.0	0.0	0.0	-	-	-	*
		60.90909	68.98990	17.00000	0.0	0.0	0.0	-	-	-	*
		62.42424	68.98990	17.00000	0.0	0.0	0.0	-	-	-	*
		63.93939	68.98990	17.00000	0.0	0.0	0.0	-	-	-	*
		65.45455	68.98990	17.00000	0.0	0.0	0.0	-	-	-	*
		66.96970	68.98990	17.00000	0.0	0.0	0.0	-	-	-	*
		68.48485	68.98990	17.00000	0.0	0.0	0.0	-	-	-	*
		70.00000	68.98990	17.00000	0.0	0.0	0.0	-	-	-	*
		71.51515	68.98990	17.00000	0.0	0.0	0.0	-	-	-	*
		73.03030	68.98990	17.00000	0.0	0.0	0.0	-	-	-	*
		74.54545	68.98990	17.00000	0.0	0.0	0.0	-	-	-	*
		76.06061	68.98990	17.00000	0.0	0.0	0.0	-	-	-	*
		77.57576	68.98990	17.00000	0.0	0.0	0.0	-	-	-	*
		79.09091	68.98990	17.00000	0.0	0.0	0.0	-	-	-	*
		80.60606	68.98990	17.00000	0.0	0.0	0.0	-	-	-	*
		82.12121	68.98990	17.00000	0.0	0.0	0.0	-	-	-	*
		83.63636	68.98990	17.00000	0.0	0.0	0.0	-	-	-	*
		85.15152	68.98990	17.00000	0.0	0.0	0.0	-	-	-	*
		86.66667	68.98990	17.00000	0.0	0.0	0.0	-	-	-	*
		88.18182	68.98990	17.00000	0.0	0.0	0.0	-	-	-	*
		89.69697	68.98990	17.00000	0.0	0.0	0.0	-	-	-	*
		91.21212	68.98990	17.00000	0.0	0.0	0.0	-	-	-	*
		92.72727	68.98990	17.00000	0.0	0.0	0.0	-	-	-	*
		94.24242	68.98990	17.00000	0.0	0.0	0.0	-	-	-	*
		95.75758	68.98990	17.00000	0.0	0.0	0.0	-	-	-	*
		97.27273	68.98990	17.00000	0.0	0.0	0.0	-	-	-	*
		98.78788	68.98990	17.00000	0.0	0.0	0.0	-	-	-	*
		100.30303	68.98990	17.00000	0.0	0.0	0.0	-	-	-	*
		101.81818	68.98990	17.00000	0.0	0.0	0.0	-	-	-	*
		103.33333	68.98990	17.00000	0.0	0.0	0.0	-	-	-	*
		104.84848	68.98990	17.00000	0.0	0.0	0.0	-	-	-	*
		106.36364	68.98990	17.00000	0.0	0.0	0.0	-	-	-	*
		107.87879	68.98990	17.00000	0.0	0.0	0.0	-	-	-	*
		109.39394	68.98990	17.00000	0.0	0.0	0.0	-	-	-	*
		110.90909	68.98990	17.00000	0.0	0.0	0.0	-	-	-	*
		112.42424	68.98990	17.00000	0.0	0.0	0.0	-	-	-	*
		113.93939	68.98990	17.00000	0.0	0.0	0.0	-	-	-	*
		115.45455	68.98990	17.00000	0.0	0.0	0.0	-	-	-	*
		116.96970	68.98990	17.00000	0.0	0.0	0.0	-	-	-	*
		118.48485	68.98990	17.00000	0.0	0.0	0.0	-	-	-	*
		120.00000	68.98990	17.00000	0.0	0.0	0.0	-	-	-	*
		-30.00000	70.00000	17.00000	0.0	0.0	0.0	-	-	-	*
		-28.48485	70.00000	17.00000	0.0	0.0	0.0	-	-	-	*
		-26.96970	70.00000	17.00000	0.0	0.0	0.0	-	-	-	*
		-25.45455	70.00000	17.00000	0.0	0.0	0.0	-	-	-	*
		-23.93939	70.00000	17.00000	0.0	0.0	0.0	-	-	-	*
		-22.42424	70.00000	17.00000	0.0	0.0	0.0	-	-	-	*
		-20.90909	70.00000	17.00000	0.0	0.0	0.0	-	-	-	*
		-19.39394	70.00000	17.00000	0.0	0.0	0.0	-	-	-	*
		-17.87879	70.00000	17.00000	0.0	0.0	0.0	-	-	-	*
		-16.36364	70.00000	17.00000	0.0	0.0	0.0	-	-	-	*
		-14.84848	70.00000	17.00000	0.0	0.0	0.0	-	-	-	*
		-13.33333	70.00000	17.00000	0.0	0.0	0.0	-	-	-	*
		-11.81818	70.00000	17.00000	0.0	0.0	0.0	-	-	-	*
		-10.30303	70.00000	17.00000	0.0	0.0	0.0	-	-	-	*
		-8.78788	70.00000	17.00000	0.0	0.0	0.0	-	-	-	*
		-7.27273	70.00000	17.00000	0.0	0.0	0.0	-	-	-	*
		-5.75758	70.00000	17.00000	0.0	0.0	0.0	-	-	-	*
		-4.24242	70.00000	17.00000	0.0	0.0	0.0	-	-	-	*
		-2.72727	70.00000	17.00000	0.0	0.0	0.0	-	-	-	*
		-1.21212	70.00000	17.00000	0.0	0.0	0.0	-	-	-	*
		0.30303	70.00000	17.00000	0.0	0.0	0.0	-	-	-	*
		1.81818	70.00000	17.00000	0.0	0.0	0.0	-	-	-	*
		3.33333	70.00000	17.00000	0.0	0.0	0.0	-	-	-	*
		4.84848	70.00000	17.00000	0.0	0.0	0.0	-	-	-	*
		6.36364	70.00000	17.00000	0.0	0.0	0.0	-	-	-	*
		7.87879	70.00000	17.00000	0.0	0.0	0.0	-	-	-	*
		9.39394	70.00000	17.00000	0.0	0.0	0.0	-	-	-	*
		10.90909	70.00000	17.00000	0.0	0.0	0.0	-	-	-	*
		12.42424	70.00000	17.00000	0.0	0.0	0.0	-	-	-	*
		13.93939	70.00000	17.00000	0.0	0.0	0.0	-	-	-	*
		15.45455	70.00000	17.00000	0.0	0.0	0.0	-	-	-	*

Type/No. Name	Dist.	Coordinates x	y	z	Displacements x	y	z	Horizontal dispalcement	Horizontal displacement	Angle of Line to x Axis	
		16.96970	70.00000	17.00000	0.0	0.0	0.0	-	-	-	*
		18.48485	70.00000	17.00000	0.0	0.0	0.0	-	-	-	*
		20.00000	70.00000	17.00000	0.0	0.0	0.0	-	-	-	*
		21.51515	70.00000	17.00000	0.0	0.0	0.0	-	-	-	*
		23.03030	70.00000	17.00000	0.0	0.0	0.0	-	-	-	*
		24.54545	70.00000	17.00000	0.0	0.0	0.0	-	-	-	*
		26.06061	70.00000	17.00000	0.0	0.0	0.0	-	-	-	*
		27.57576	70.00000	17.00000	0.0	0.0	0.0	-	-	-	*
		29.09091	70.00000	17.00000	0.0	0.0	0.0	-	-	-	*
		30.60606	70.00000	17.00000	0.0	0.0	0.0	-	-	-	*
		32.12121	70.00000	17.00000	0.0	0.0	0.0	-	-	-	*
		33.63636	70.00000	17.00000	0.0	0.0	0.0	-	-	-	*
		35.15152	70.00000	17.00000	0.0	0.0	0.0	-	-	-	*
		36.66667	70.00000	17.00000	0.0	0.0	0.0	-	-	-	*
		38.18182	70.00000	17.00000	0.0	0.0	0.0	-	-	-	*
		39.69697	70.00000	17.00000	0.0	0.0	0.0	-	-	-	*
		41.21212	70.00000	17.00000	0.0	0.0	0.0	-	-	-	*
		42.72727	70.00000	17.00000	0.0	0.0	0.0	-	-	-	*
		44.24242	70.00000	17.00000	0.0	0.0	0.0	-	-	-	*
		45.75758	70.00000	17.00000	0.0	0.0	0.0	-	-	-	*
		47.27273	70.00000	17.00000	0.0	0.0	0.0	-	-	-	*
		48.78788	70.00000	17.00000	0.0	0.0	0.0	-	-	-	*
		50.30303	70.00000	17.00000	0.0	0.0	0.0	-	-	-	*
		51.81818	70.00000	17.00000	0.0	0.0	0.0	-	-	-	*
		53.33333	70.00000	17.00000	0.0	0.0	0.0	-	-	-	*
		54.84848	70.00000	17.00000	0.0	0.0	0.0	-	-	-	*
		56.36364	70.00000	17.00000	0.0	0.0	0.0	-	-	-	*
		57.87879	70.00000	17.00000	0.0	0.0	0.0	-	-	-	*
		59.39394	70.00000	17.00000	0.0	0.0	0.0	-	-	-	*
		60.90909	70.00000	17.00000	0.0	0.0	0.0	-	-	-	*
		62.42424	70.00000	17.00000	0.0	0.0	0.0	-	-	-	*
		63.93939	70.00000	17.00000	0.0	0.0	0.0	-	-	-	*
		65.45455	70.00000	17.00000	0.0	0.0	0.0	-	-	-	*
		66.96970	70.00000	17.00000	0.0	0.0	0.0	-	-	-	*
		68.48485	70.00000	17.00000	0.0	0.0	0.0	-	-	-	*
		70.00000	70.00000	17.00000	0.0	0.0	0.0	-	-	-	*
		71.51515	70.00000	17.00000	0.0	0.0	0.0	-	-	-	*
		73.03030	70.00000	17.00000	0.0	0.0	0.0	-	-	-	*
		74.54545	70.00000	17.00000	0.0	0.0	0.0	-	-	-	*
		76.06061	70.00000	17.00000	0.0	0.0	0.0	-	-	-	*
		77.57576	70.00000	17.00000	0.0	0.0	0.0	-	-	-	*
		79.09091	70.00000	17.00000	0.0	0.0	0.0	-	-	-	*
		80.60606	70.00000	17.00000	0.0	0.0	0.0	-	-	-	*
		82.12121	70.00000	17.00000	0.0	0.0	0.0	-	-	-	*
		83.63636	70.00000	17.00000	0.0	0.0	0.0	-	-	-	*
		85.15152	70.00000	17.00000	0.0	0.0	0.0	-	-	-	*
		86.66667	70.00000	17.00000	0.0	0.0	0.0	-	-	-	*
		88.18182	70.00000	17.00000	0.0	0.0	0.0	-	-	-	*
		89.69697	70.00000	17.00000	0.0	0.0	0.0	-	-	-	*
		91.21212	70.00000	17.00000	0.0	0.0	0.0	-	-	-	*
		92.72727	70.00000	17.00000	0.0	0.0	0.0	-	-	-	*
		94.24242	70.00000	17.00000	0.0	0.0	0.0	-	-	-	*
		95.75758	70.00000	17.00000	0.0	0.0	0.0	-	-	-	*
		97.27273	70.00000	17.00000	0.0	0.0	0.0	-	-	-	*
		98.78788	70.00000	17.00000	0.0	0.0	0.0	-	-	-	*
		100.30303	70.00000	17.00000	0.0	0.0	0.0	-	-	-	*
		101.81818	70.00000	17.00000	0.0	0.0	0.0	-	-	-	*
		103.33333	70.00000	17.00000	0.0	0.0	0.0	-	-	-	*
		104.84848	70.00000	17.00000	0.0	0.0	0.0	-	-	-	*
		106.36364	70.00000	17.00000	0.0	0.0	0.0	-	-	-	*
		107.87879	70.00000	17.00000	0.0	0.0	0.0	-	-	-	*
		109.39394	70.00000	17.00000	0.0	0.0	0.0	-	-	-	*
		110.90909	70.00000	17.00000	0.0	0.0	0.0	-	-	-	*
		112.42424	70.00000	17.00000	0.0	0.0	0.0	-	-	-	*
		113.93939	70.00000	17.00000	0.0	0.0	0.0	-	-	-	*
		115.45455	70.00000	17.00000	0.0	0.0	0.0	-	-	-	*
		116.96970	70.00000	17.00000	0.0	0.0	0.0	-	-	-	*
		118.48485	70.00000	17.00000	0.0	0.0	0.0	-	-	-	*
		120.00000	70.00000	17.00000	0.0	0.0	0.0	-	-	-	*
Line 1	Line 1	-7.95000	-1.00000	17.00000	3.6467	0.45871	4.0730	3.6467	0.45871	0.0	*
	0.98750	-6.96250	-1.00000	17.00000	4.0649	0.58383	4.5156	4.0649	0.58383	0.0	*
	1.9750	-5.97500	-1.00000	17.00000	4.4865	0.75088	4.9335	4.4865	0.75088	0.0	*
	2.9625	-4.98750	-1.00000	17.00000	4.9017	0.98280	5.3007	4.9017	0.98280	0.0	*
	3.9500	-4.00000	-1.00000	17.00000	5.2877	1.3219	5.5869	5.2877	1.3219	0.0	*
	4.9375	-3.01250	-1.00000	17.00000	5.5846	1.8538	5.7562	5.5846	1.8538	0.0	*
	5.9250	-2.02500	-1.00000	17.00000	5.6041	2.7675	5.7664	5.6041	2.7675	0.0	*
	6.9125	-1.03750	-1.00000	17.00000	4.5958	4.4296	5.5624	4.5958	4.4296	0.0	*
	7.9000	-0.05000	-1.00000	17.00000	0.37132	7.4263	5.9297	0.37132	7.4263	0.0	*
Line 2	Line 2	0.00000	-1.00000	17.00000	0.0	7.4922	5.9578	7.4922	0.0	90.000	*
	1.0000	0.00000	0.00000	17.00000	0.0	8.1384	5.5886	8.1384	0.0	90.000	*
	2.0000	0.00000	1.00000	17.00000	9.9402	0.0	6.1741	0.0	-9.9402	90.000	*
	3.0000	0.00000	2.00000	17.00000	9.9402	0.0	6.1741	0.0	-9.9402	90.000	*
	4.0000	0.00000	3.00000	17.00000	9.9402	0.0	6.1741	0.0	-9.9402	90.000	*
	5.0000	0.00000	4.00000	17.00000	9.9402	0.0	6.1741	0.0	-9.9402	90.000	*
	6.0000	0.00000	5.00000	17.00000	9.9402	0.0	6.1741	0.0	-9.9402	90.000	*
	7.0000	0.00000	6.00000	17.00000	9.9402	0.0	6.1741	0.0	-9.9402	90.000	*
	8.0000	0.00000	7.00000	17.00000	9.9402	0.0	6.1741	0.0	-9.9402	90.000	*
	9.0000	0.00000	8.00000	17.00000	9.9402	0.0	6.1741	0.0	-9.9402	90.000	*
	10.000	0.00000	9.00000	17.00000	9.9402	0.0	6.1741	0.0	-9.9402	90.000	*
	11.000	0.00000	10.00000	17.00000	9.9402	0.0	6.1741	0.0	-9.9402	90.000	*
	12.000	0.00000	11.00000	17.00000	9.9402	0.0	6.1741	0.0	-9.9402	90.000	*
	13.000	0.00000	12.00000	17.00000	8.1384	0.0	5.5886	0.0	-8.1384	90.000	*
Line 3	Line 3	0.05000	12.00000	17.00000	0.0	-9.9402	6.1741	0.0	-9.9402	0.0	*
	0.99792	1.04792	12.00000	17.00000	0.0	-9.9402	6.1741	0.0	-9.9402	0.0	*
	1.9958	2.04583	12.00000	17.00000	0.0	-9.9402	6.1741	0.0	-9.9402	0.0	*
	2.9938	3.04375	12.00000	17.00000	0.0	-9.9402	6.1741	0.0	-9.9402	0.0	*
	3.9917	4.04167	12.00000	17.00000	0.0	-9.9402	6.1741	0.0	-9.9402	0.0	*
	4.9896	5.03958	12.00000	17.00000	0.0	-9.9402	6.1741	0.0	-9.9402	0.0	*
	5.9875	6.03750	12.00000	17.00000	0.0	-9.9402	6.1741	0.0	-9.9402	0.0	*
	6.9854	7.03542	12.00000	17.00000	0.0	-9.9402	6.1741	0.0	-9.9402	0.0	*
	7.9833	8.03333	12.00000	17.00000	0.0	-9.9402	6.1741	0.0	-9.9402	0.0	*
	8.9813	9.03125	12.00000	17.00000	0.0	-9.9402	6.1741	0.0	-9.9402	0.0	*
	9.9792	10.02917	12.00000	17.00000	0.0	-9.9402	6.1741	0.0	-9.9402	0.0	*
	10.977	11.02708	12.00000	17.00000	0.0	-9.9402	6.1741	0.0	-9.9402	0.0	*
	11.975	12.02500	12.00000	17.00000	0.0	-9.9402	6.1741	0.0	-9.9402	0.0	*
	12.973	13.02292	12.00000	17.00000	0.0	-9.9402	6.1741	0.0	-9.9402	0.0	*
	13.971	14.02083	12.00000	17.00000	0.0	-9.9402	6.1741	0.0	-9.9402	0.0	*
	14.969	15.01875	12.00000	17.00000	0.0	-9.9402	6.1741	0.0	-9.9402	0.0	*
	15.967	16.01667	12.00000	17.00000	0.0	-9.9402	6.1741	0.0	-9.9402	0.0	*
	16.965	17.01458	12.00000	17.00000	0.0	-9.9402	6.1741	0.0	-9.9402	0.0	*
	17.963	18.01250	12.00000	17.00000	0.0	-9.9402	6.1741	0.0	-9.9402	0.0	*
	18.960	19.01042	12.00000	17.00000	0.0	-9.9402	6.1741	0.0	-9.9402	0.0	*
	19.958	20.00833	12.00000	17.00000	0.0	-9.9402	6.1741	0.0	-9.9402	0.0	*
	20.956	21.00625	12.00000	17.00000	0.0	-9.9402	6.1741	0.0	-9.9402	0.0	*
	21.954	22.00417	12.00000	17.00000	0.0	-9.9402	6.1741	0.0	-9.9402	0.0	*
	22.952	23.00208	12.00000	17.00000	0.0	-9.9402	6.1741	0.0	-9.9402	0.0	*
	23.950	24.00000	12.00000	17.00000	0.0	-9.9402	6.1741	0.0	-9.9402	0.0	*
	24.948	24.99792	12.00000	17.00000	0.0	-9.9402	6.1741	0.0	-9.9402	0.0	*
	25.946	25.99583	12.00000	17.00000	0.0	-9.9402	6.1741	0.0	-9.9402	0.0	*
	26.944	26.99375	12.00000	17.00000	0.0	-9.9402	6.1741	0.0	-9.9402	0.0	*
	27.942	27.99167	12.00000	17.00000	0.0	-9.9402	6.1741	0.0	-9.9402	0.0	*
	28.940	28.98958	12.00000	17.00000	0.0	-9.9402	6.1741	0.0	-9.9402	0.0	*
	29.938	29.98750	12.00000	17.00000	0.0	-9.9402	6.1741	0.0	-9.9402	0.0	*
	30.935	30.98542	12.00000	17.00000	0.0	-9.9402	6.1741	0.0	-9.9402	0.0	*
	31.933	31.98333	12.00000	17.00000	0.0	-9.9402	6.1741	0.0	-9.9402	0.0	*
	32.931	32.98125	12.00000	17.00000	0.0	-9.9402	6.1741	0.0	-9.9402	0.0	*
	33.929	33.97917	12.00000	17.00000	0.0	-9.9402	6.1741	0.0	-9.9402	0.0	*
	34.927	34.97708	12.00000	17.00000	0.0	-9.9402	6.1741	0.0	-9.9402	0.0	*
	35.925	35.97500	12.00000	17.00000	0.0	-9.9402	6.1741	0.0	-9.9402	0.0	*
	36.923	36.97292	12.00000	17.00000	0.0	-9.9402	6.1741	0.0	-9.9402	0.0	*
	37.921	37.97083	12.00000	17.00000	0.0	-9.9402	6.1741	0.0	-9.9402	0.0	*
	38.919	38.96875	12.00000	17.00000	0.0	-9.9402	6.1741	0.0	-9.9402	0.0	*
	39.917	39.96667	12.00000	17.00000	0.0	-9.9402	6.1741	0.0	-9.9402	0.0	*
	40.915	40.96458	12.00000	17.00000	0.0	-9.9402	6.1741	0.0	-9.9402	0.0	*
	41.913	41.96250	12.00000	17.00000	0.0	-9.9402	6.1741	0.0	-9.9402	0.0	*
	42.910	42.96042	12.00000	17.00000	0.0	-9.9402	6.1741	0.0	-9.9402	0.0	*
	43.908	43.95833	12.00000	17.00000	0.0	-9.9402	6.1741	0.0	-9.9402	0.0	*
	44.906	44.95625	12.00000	17.00000	0.0	-9.9402	6.1741	0.0	-9.9402	0.0	*
	45.904	45.95417	12.00000	17.00000	0.0	-9.9402	6.1741	0.0	-9.9402	0.0	*
	46.902	46.95208	12.00000	17.00000	0.0	-9.9402	6.1741	0.0	-9.9402	0.0	*
	47.900	47.95000	12.00000	17.00000	0.0	-9.9402	6.1741	0.0	-9.9402	0.0	*

Type/No. Name	Dist.	Coordinates x	y	z	Displacements x	y	z	Horizontal dispalcement	Horizontal displacement	Angle of Line to x Axis
Line 4	Line 4	48.00000	12.00000	17.00000	0.0	-8.1384	5.5886	8.1384	0.0	270.00 *
	1.0000	48.00000	11.00000	17.00000	-9.9402	0.0	6.1741	0.0	-9.9402	270.00 *
	2.0000	48.00000	10.00000	17.00000	-9.9402	0.0	6.1741	0.0	-9.9402	270.00 *
	3.0000	48.00000	9.00000	17.00000	-9.9402	0.0	6.1741	0.0	-9.9402	270.00 *
	4.0000	48.00000	8.00000	17.00000	-9.9402	0.0	6.1741	0.0	-9.9402	270.00 *
	5.0000	48.00000	7.00000	17.00000	-9.9402	0.0	6.1741	0.0	-9.9402	270.00 *
	6.0000	48.00000	6.00000	17.00000	-9.9402	0.0	6.1741	0.0	-9.9402	270.00 *
	7.0000	48.00000	5.00000	17.00000	-9.9402	0.0	6.1741	0.0	-9.9402	270.00 *
	8.0000	48.00000	4.00000	17.00000	-9.9402	0.0	6.1741	0.0	-9.9402	270.00 *
	9.0000	48.00000	3.00000	17.00000	-9.9402	0.0	6.1741	0.0	-9.9402	270.00 *
	10.000	48.00000	2.00000	17.00000	-9.9402	0.0	6.1741	0.0	-9.9402	270.00 *
	11.000	48.00000	1.00000	17.00000	-9.9402	0.0	6.1741	0.0	-9.9402	270.00 *
Line 5	Line 5	48.05000	1.00000	17.00000	-9.9021	0.0	6.2163	-9.9021	0.0	0.0 *
	0.96250	49.01250	1.00000	17.00000	-9.1859	0.0	6.8292	-9.1859	0.0	0.0 *
	1.9250	49.97500	1.00000	17.00000	-8.4998	0.0	7.1066	-8.4998	0.0	0.0 *
	2.8875	50.93750	1.00000	17.00000	-7.8421	0.0	7.1132	-7.8421	0.0	0.0 *
	3.8500	51.90000	1.00000	17.00000	-7.2108	0.0	6.9078	-7.2108	0.0	0.0 *
Line 6	Line 6	52.00000	1.00000	17.00000	-7.1466	0.0	6.8765	0.0	-7.1466	270.00 *
	1.0000	52.00000	0.00000	17.00000	-5.7408	0.0	5.7952	0.0	-5.7408	270.00 *
	2.0000	52.00000	-1.00000	17.00000	-5.2877	1.3219	5.5869	-1.3219	-5.2877	270.00 *
	3.0000	52.00000	-2.00000	17.00000	-4.5391	2.2696	5.3294	-2.2696	-4.5391	270.00 *
	4.0000	52.00000	-3.00000	17.00000	-3.7287	2.7965	5.0353	-2.7965	-3.7287	270.00 *
	5.0000	52.00000	-4.00000	17.00000	-2.9974	2.9974	4.7128	-2.9974	-2.9974	270.00 *
	6.0000	52.00000	-5.00000	17.00000	-2.4953	3.1191	4.4955	-3.1191	-2.4953	270.00 *
Line 7	Line 7	52.00000	-5.00000	18.00000	-2.4953	3.1191	4.4955	-2.4953	3.1191	0.0 *
	1.0000	53.00000	-5.00000	18.00000	-2.5633	2.5633	4.1694	-2.5633	2.5633	0.0 *
	2.0000	54.00000	-5.00000	18.00000	-2.5977	2.1648	3.9120	-2.5977	2.1648	0.0 *
	3.0000	55.00000	-5.00000	18.00000	-2.5289	1.8064	3.6138	-2.5289	1.8064	0.0 *
	4.0000	56.00000	-5.00000	18.00000	-2.3862	1.4914	3.2916	-2.3862	1.4914	0.0 *
	5.0000	57.00000	-5.00000	18.00000	-2.1914	1.2174	2.9608	-2.1914	1.2174	0.0 *
	6.0000	58.00000	-5.00000	18.00000	-1.9600	0.98002	2.6348	-1.9600	0.98002	0.0 *
	7.0000	59.00000	-5.00000	18.00000	-1.7028	0.77399	2.3238	-1.7028	0.77399	0.0 *
	8.0000	60.00000	-5.00000	18.00000	-1.4268	0.59451	2.0346	-1.4268	0.59451	0.0 *
	9.0000	61.00000	-5.00000	18.00000	-1.1369	0.43727	1.7701	-1.1369	0.43727	0.0 *
	10.000	62.00000	-5.00000	18.00000	-0.83600	0.29857	1.5294	-0.83600	0.29857	0.0 *
	11.000	63.00000	-5.00000	18.00000	-0.52576	0.17525	1.3074	-0.52576	0.17525	0.0 *
	12.000	64.00000	-5.00000	18.00000	-0.24870	0.077720	1.0948	-0.24870	0.077720	0.0 *
	13.000	65.00000	-5.00000	18.00000	-0.083998	0.024705	0.87785	-0.083998	0.024705	0.0 *
	14.000	66.00000	-5.00000	18.00000	0.0	0.0	0.66369	0.0	0.0	0.0 *
	15.000	67.00000	-5.00000	18.00000	0.0	0.0	0.47062	0.0	0.0	0.0 *
	16.000	68.00000	-5.00000	18.00000	0.0	0.0	0.27689	0.0	0.0	0.0 *
	17.000	69.00000	-5.00000	18.00000	0.0	0.0	0.082593	0.0	0.0	0.0 *
	18.000	70.00000	-5.00000	18.00000	0.0	0.0	0.0	0.0	0.0	0.0 *
Line 8	Line 8	70.00000	-5.00000	18.00000	0.0	0.0	0.0	0.0	0.0	90.000 *
	1.0000	70.00000	-4.00000	18.00000	0.0	0.0	0.0	0.0	0.0	90.000 *
	2.0000	70.00000	-3.00000	18.00000	0.0	0.0	0.0	0.0	0.0	90.000 *
	3.0000	70.00000	-2.00000	18.00000	0.0	0.0	0.0	0.0	0.0	90.000 *
	4.0000	70.00000	-1.00000	18.00000	0.0	0.0	0.0	0.0	0.0	90.000 *
	5.0000	70.00000	0.00000	18.00000	0.0	0.12864	0.030043	0.12864	0.0	90.000 *
	6.0000	70.00000	1.00000	18.00000	0.0	0.32964	0.25801	0.32964	0.0	90.000 *
	7.0000	70.00000	2.00000	18.00000	0.0	0.53064	0.48592	0.53064	0.0	90.000 *
	8.0000	70.00000	3.00000	18.00000	0.0	0.73164	0.73040	0.73164	0.0	90.000 *
	9.0000	70.00000	4.00000	18.00000	0.0	0.93264	1.0038	0.93264	0.0	90.000 *
	10.000	70.00000	5.00000	18.00000	0.0	1.2239	1.3145	1.2239	0.0	90.000 *
	11.000	70.00000	6.00000	18.00000	0.0	1.6027	1.6663	1.6027	0.0	90.000 *
	12.000	70.00000	7.00000	18.00000	0.0	1.9861	2.0590	1.9861	0.0	90.000 *
	13.000	70.00000	8.00000	18.00000	0.0	2.3774	2.4883	2.3774	0.0	90.000 *
	14.000	70.00000	9.00000	18.00000	0.0	2.7796	2.9456	2.7796	0.0	90.000 *
	15.000	70.00000	10.00000	18.00000	0.0	3.1959	3.4180	3.1959	0.0	90.000 *
	16.000	70.00000	11.00000	18.00000	0.0	3.6295	3.8886	3.6295	0.0	90.000 *
	17.000	70.00000	12.00000	18.00000	0.0	4.0835	4.3360	4.0835	0.0	90.000 *
	18.000	70.00000	13.00000	18.00000	0.0	4.5611	4.7349	4.5611	0.0	90.000 *
	19.000	70.00000	14.00000	18.00000	0.0	5.0653	5.0557	5.0653	0.0	90.000 *
	20.000	70.00000	15.00000	18.00000	0.0	5.5994	5.2644	5.5994	0.0	90.000 *
	21.000	70.00000	16.00000	18.00000	0.0	6.1665	5.3231	6.1665	0.0	90.000 *
	22.000	70.00000	17.00000	18.00000	0.0	6.7697	5.1896	6.7697	0.0	90.000 *
	23.000	70.00000	18.00000	18.00000	0.0	7.4122	4.8174	7.4122	0.0	90.000 *
	24.000	70.00000	19.00000	18.00000	0.0	0.0	0.0	0.0	0.0	90.000 *
	25.000	70.00000	20.00000	18.00000	0.0	0.0	0.0	0.0	0.0	90.000 *
	26.000	70.00000	21.00000	18.00000	0.0	0.0	0.0	0.0	0.0	90.000 *
	27.000	70.00000	22.00000	18.00000	0.0	0.0	0.0	0.0	0.0	90.000 *
	28.000	70.00000	23.00000	18.00000	0.0	0.0	0.0	0.0	0.0	90.000 *
	29.000	70.00000	24.00000	18.00000	0.0	0.0	0.0	0.0	0.0	90.000 *
	30.000	70.00000	25.00000	18.00000	0.0	0.0	0.0	0.0	0.0	90.000 *
	31.000	70.00000	26.00000	18.00000	0.0	0.0	0.0	0.0	0.0	90.000 *
	32.000	70.00000	27.00000	18.00000	0.0	0.0	0.0	0.0	0.0	90.000 *
	33.000	70.00000	28.00000	18.00000	0.0	0.0	0.0	0.0	0.0	90.000 *
	34.000	70.00000	29.00000	18.00000	0.0	0.0	0.0	0.0	0.0	90.000 *
	35.000	70.00000	30.00000	18.00000	0.0	0.0	0.0	0.0	0.0	90.000 *
	36.000	70.00000	31.00000	18.00000	0.0	0.0	0.0	0.0	0.0	90.000 *
	37.000	70.00000	32.00000	18.00000	0.0	0.0	0.0	0.0	0.0	90.000 *
	38.000	70.00000	33.00000	18.00000	0.0	0.0	0.0	0.0	0.0	90.000 *
	39.000	70.00000	34.00000	18.00000	0.0	0.0	0.0	0.0	0.0	90.000 *
	40.000	70.00000	35.00000	18.00000	0.0	0.0	0.0	0.0	0.0	90.000 *
	41.000	70.00000	36.00000	18.00000	0.0	0.0	0.0	0.0	0.0	90.000 *
	42.000	70.00000	37.00000	18.00000	0.0	0.0	0.0	0.0	0.0	90.000 *
	43.000	70.00000	38.00000	18.00000	0.0	0.0	0.0	0.0	0.0	90.000 *
	44.000	70.00000	39.00000	18.00000	0.0	0.0	0.0	0.0	0.0	90.000 *
	45.000	70.00000	40.00000	18.00000	0.0	0.0	0.0	0.0	0.0	90.000 *
Line 9	Line 9	70.00000	40.00000	18.00000	0.0	0.0	0.0	0.0	0.0	180.00 *
	1.0000	69.00000	40.00000	18.00000	0.0	0.0	0.0	0.0	0.0	180.00 *
	2.0000	68.00000	40.00000	18.00000	0.0	0.0	0.0	0.0	0.0	180.00 *
	3.0000	67.00000	40.00000	18.00000	0.0	0.0	0.0	0.0	0.0	180.00 *
	4.0000	66.00000	40.00000	18.00000	0.0	0.0	0.0	0.0	0.0	180.00 *
	5.0000	65.00000	40.00000	18.00000	0.0	0.0	0.0	0.0	0.0	180.00 *
	6.0000	64.00000	40.00000	18.00000	0.0	0.0	0.0	0.0	0.0	180.00 *
	7.0000	63.00000	40.00000	18.00000	0.0	0.0	0.0	0.0	0.0	180.00 *
	8.0000	62.00000	40.00000	18.00000	0.0	0.0	0.0	0.0	0.0	180.00 *
	9.0000	61.00000	40.00000	18.00000	0.0	0.0	0.0	0.0	0.0	180.00 *
	10.000	60.00000	40.00000	18.00000	0.0	0.0	0.0	0.0	0.0	180.00 *
	11.000	59.00000	40.00000	18.00000	0.0	0.0	0.0	0.0	0.0	180.00 *
	12.000	58.00000	40.00000	18.00000	0.0	0.0	0.0	0.0	0.0	180.00 *
	13.000	57.00000	40.00000	18.00000	0.0	0.0	0.0	0.0	0.0	180.00 *
	14.000	56.00000	40.00000	18.00000	0.0	0.0	0.0	0.0	0.0	180.00 *
	15.000	55.00000	40.00000	18.00000	0.0	0.0	0.0	0.0	0.0	180.00 *
	16.000	54.00000	40.00000	18.00000	0.0	0.0	0.0	0.0	0.0	180.00 *
	17.000	53.00000	40.00000	18.00000	0.0	0.0	0.0	0.0	0.0	180.00 *
	18.000	52.00000	40.00000	18.00000	0.0	0.0	0.0	0.0	0.0	180.00 *
Line 10	Line 10	52.00000	40.00000	17.00000	0.0	0.0	0.0	0.0	0.0	270.00 *
	1.0000	52.00000	39.00000	17.00000	0.0	0.0	0.0	0.0	0.0	270.00 *
	2.0000	52.00000	38.00000	17.00000	0.0	0.0	0.0	0.0	0.0	270.00 *
Line 11	Line 11	52.00000	38.00000	17.00000	0.0	0.0	0.0	0.0	0.0	180.00 *
	1.0000	51.00000	38.00000	17.00000	0.0	0.0	0.0	0.0	0.0	180.00 *
	2.0000	50.00000	38.00000	17.00000	0.0	0.0	0.0	0.0	0.0	180.00 *
	3.0000	49.00000	38.00000	17.00000	0.0	0.0	0.0	0.0	0.0	180.00 *
	4.0000	48.00000	38.00000	17.00000	0.0	0.0	0.0	0.0	0.0	180.00 *
	5.0000	47.00000	38.00000	17.00000	0.0	0.0	0.0	0.0	0.0	180.00 *
	6.0000	46.00000	38.00000	17.00000	0.0	0.0	0.0	0.0	0.0	180.00 *
	7.0000	45.00000	38.00000	17.00000	0.0	0.0	0.0	0.0	0.0	180.00 *
	8.0000	44.00000	38.00000	17.00000	0.0	0.0	0.0	0.0	0.0	180.00 *
	9.0000	43.00000	38.00000	17.00000	0.0	0.0	0.0	0.0	0.0	180.00 *
	10.000	42.00000	38.00000	17.00000	0.0	0.0	0.0	0.0	0.0	180.00 *
	11.000	41.00000	38.00000	17.00000	0.0	0.0	0.0	0.0	0.0	180.00 *
	12.000	40.00000	38.00000	17.00000	0.0	0.0	0.0	0.0	0.0	180.00 *
	13.000	39.00000	38.00000	17.00000	0.0	0.0	0.0	0.0	0.0	180.00 *
	14.000	38.00000	38.00000	17.00000	0.0	0.0	0.0	0.0	0.0	180.00 *
	15.000	37.00000	38.00000	17.00000	0.0	0.0	0.0	0.0	0.0	180.00 *
	16.000	36.00000	38.00000	17.00000	0.0	0.0	0.0	0.0	0.0	180.00 *
	17.000	35.00000	38.00000	17.00000	0.0	0.0	0.0	0.0	0.0	180.00 *
	18.000	34.00000	38.00000	17.00000	0.0	0.0	0.0	0.0	0.0	180.00 *
	19.000	33.00000	38.00000	17.00000	0.0	0.0	0.0	0.0	0.0	180.00 *
	20.000	32.00000	38.00000	17.00000	0.0	0.0	0.0	0.0	0.0	180.00 *
	21.000	31.00000	38.00000	17.00000	0.0	0.0	0.0	0.0	0.0	180.00 *
	22.000	30.00000	38.00000	17.00000	0.0	0.0	0.0	0.0	0.0	180.00 *
	23.000	29.00000	38.00000	17.00000	0.0	0.0	0.0	0.0	0.0	180.00 *
	24.000	28.00000	38.00000	17.00000	0.0	0.0	0.0	0.0	0.0	180.00 *
	25.000	27.00000	38.00000	17.00000	0.0	0.0	0.0	0.0	0.0	180.00 *
	26.000	26.00000	38.00000	17.00000	0.0	0.0	0.0	0.0	0.0	180.00 *
	27.000	25.00000	38.00000	17.00000	0.0	0.0	0.0	0.0	0.0	180.00 *
	28.000	24.00000	38.00000	17.00000	0.0	0.0	0.0	0.0	0.0	180.00 *
	29.000	23.00000	38.00000	17.00000	0.0	0.0	0.0	0.0	0.0	180.00 *

Type/No. Name	Dist.	Coordinates x	y	z	Displacements x	y	z	Horizontal dispalcement	Horizontal displacement	Angle of Line to x Axis
	30.000	22.00000	38.00000	17.00000	0.0	0.0	0.0	0.0	0.0	180.00 *
	31.000	21.00000	38.00000	17.00000	0.0	0.0	0.0	0.0	0.0	180.00 *
	32.000	20.00000	38.00000	17.00000	0.0	0.0	0.0	0.0	0.0	180.00 *
	33.000	19.00000	38.00000	17.00000	0.0	0.0	0.0	0.0	0.0	180.00 *
	34.000	18.00000	38.00000	17.00000	0.0	0.0	0.0	0.0	0.0	180.00 *
	35.000	17.00000	38.00000	17.00000	0.0	0.0	0.0	0.0	0.0	180.00 *
	36.000	16.00000	38.00000	17.00000	0.0	0.0	0.0	0.0	0.0	180.00 *
	37.000	15.00000	38.00000	17.00000	0.0	0.0	0.0	0.0	0.0	180.00 *
	38.000	14.00000	38.00000	17.00000	0.0	0.0	0.0	0.0	0.0	180.00 *
	39.000	13.00000	38.00000	17.00000	0.0	0.0	0.0	0.0	0.0	180.00 *
	40.000	12.00000	38.00000	17.00000	0.0	0.0	0.0	0.0	0.0	180.00 *
	41.000	11.00000	38.00000	17.00000	0.0	0.0	0.0	0.0	0.0	180.00 *
	42.000	10.00000	38.00000	17.00000	0.0	0.0	0.0	0.0	0.0	180.00 *
	43.000	9.00000	38.00000	17.00000	0.0	0.0	0.0	0.0	0.0	180.00 *
	44.000	8.00000	38.00000	17.00000	0.0	0.0	0.0	0.0	0.0	180.00 *
	45.000	7.00000	38.00000	17.00000	0.0	0.0	0.0	0.0	0.0	180.00 *
	46.000	6.00000	38.00000	17.00000	0.0	0.0	0.0	0.0	0.0	180.00 *
Line 12	Line 12	6.00000	38.00000	17.00000	0.0	0.0	0.0	0.0	0.0	90.000 *
	1.0000	6.00000	39.00000	17.00000	0.0	0.0	0.0	0.0	0.0	90.000 *
	2.0000	6.00000	40.00000	17.00000	0.0	0.0	0.0	0.0	0.0	90.000 *
Line 13	Line 13	6.00000	40.00000	17.00000	0.0	0.0	0.0	0.0	0.0	180.00 *
	1.0000	5.00000	40.00000	17.00000	0.0	0.0	0.0	0.0	0.0	180.00 *
	2.0000	4.00000	40.00000	17.00000	0.0	0.0	0.0	0.0	0.0	180.00 *
	3.0000	3.00000	40.00000	17.00000	0.0	0.0	0.0	0.0	0.0	180.00 *
	4.0000	2.00000	40.00000	17.00000	0.0	0.0	0.0	0.0	0.0	180.00 *
	5.0000	1.00000	40.00000	17.00000	0.0	0.0	0.0	0.0	0.0	180.00 *
	6.0000	0.00000	40.00000	17.00000	0.0	0.0	0.0	0.0	0.0	180.00 *
	7.0000	-1.00000	40.00000	17.00000	0.0	0.0	0.0	0.0	0.0	180.00 *
	8.0000	-2.00000	40.00000	17.00000	0.0	0.0	0.0	0.0	0.0	180.00 *
	9.0000	-3.00000	40.00000	17.00000	0.0	0.0	0.0	0.0	0.0	180.00 *
	10.000	-4.00000	40.00000	17.00000	0.0	0.0	0.0	0.0	0.0	180.00 *
	11.000	-5.00000	40.00000	17.00000	0.0	0.0	0.0	0.0	0.0	180.00 *
	12.000	-6.00000	40.00000	17.00000	0.0	0.0	0.0	0.0	0.0	180.00 *
	13.000	-7.00000	40.00000	17.00000	0.0	0.0	0.0	0.0	0.0	180.00 *
	14.000	-8.00000	40.00000	17.00000	0.0	0.0	0.0	0.0	0.0	180.00 *
Line 14	Line 14	-8.00000	40.00000	17.00000	0.0	0.0	0.0	0.0	0.0	270.00 *
	1.0000	-8.00000	39.00000	17.00000	0.0	0.0	0.0	0.0	0.0	270.00 *
	2.0000	-8.00000	38.00000	17.00000	0.0	0.0	0.0	0.0	0.0	270.00 *
	3.0000	-8.00000	37.00000	17.00000	0.0	0.0	0.0	0.0	0.0	270.00 *
	4.0000	-8.00000	36.00000	17.00000	0.0	0.0	0.0	0.0	0.0	270.00 *
	5.0000	-8.00000	35.00000	17.00000	0.0	0.0	0.0	0.0	0.0	270.00 *
	6.0000	-8.00000	34.00000	17.00000	0.0	0.0	0.0	0.0	0.0	270.00 *
	7.0000	-8.00000	33.00000	17.00000	0.0	0.0	0.0	0.0	0.0	270.00 *
	8.0000	-8.00000	32.00000	17.00000	0.0	0.0	0.091868	0.0	0.0	270.00 *
	9.0000	-8.00000	31.00000	17.00000	0.0	0.0	0.27689	0.0	0.0	270.00 *
	10.000	-8.00000	30.00000	17.00000	0.0	0.0	0.46046	0.0	0.0	270.00 *
	11.000	-8.00000	29.00000	17.00000	0.0	0.0	0.64234	0.0	0.0	270.00 *
	12.000	-8.00000	28.00000	17.00000	0.023803	-0.047606	0.83703	0.047606	0.023803	270.00 *
	13.000	-8.00000	27.00000	17.00000	0.095539	-0.17914	1.0391	0.17914	0.095539	270.00 *
	14.000	-8.00000	26.00000	17.00000	0.20638	-0.36116	1.2323	0.36116	0.20638	270.00 *
	15.000	-8.00000	25.00000	17.00000	0.36990	-0.60108	1.4270	0.60108	0.36990	270.00 *
	16.000	-8.00000	24.00000	17.00000	0.54733	-0.82099	1.6297	0.82099	0.54733	270.00 *
	17.000	-8.00000	23.00000	17.00000	0.73993	-1.0174	1.8433	1.0174	0.73993	270.00 *
	18.000	-8.00000	22.00000	17.00000	0.94853	-1.1857	2.0675	1.1857	0.94853	270.00 *
	19.000	-8.00000	21.00000	17.00000	1.1731	-1.3198	2.2989	1.3198	1.1731	270.00 *
	20.000	-8.00000	20.00000	17.00000	1.4124	-1.4124	2.5315	1.4124	1.4124	270.00 *
	21.000	-8.00000	19.00000	17.00000	1.7120	-1.4980	2.7861	1.4980	1.7120	270.00 *
	22.000	-8.00000	18.00000	17.00000	2.0388	-1.5291	3.0419	1.5291	2.0388	270.00 *
	23.000	-8.00000	17.00000	17.00000	2.3862	-1.4914	3.2916	1.4914	2.3862	270.00 *
	24.000	-8.00000	16.00000	17.00000	2.7417	-1.3709	3.5267	1.3709	2.7417	270.00 *
	25.000	-8.00000	15.00000	17.00000	3.0854	-1.1570	3.7381	1.1570	3.0854	270.00 *
	26.000	-8.00000	14.00000	17.00000	3.3903	-0.84757	3.9158	0.84757	3.3903	270.00 *
	27.000	-8.00000	13.00000	17.00000	3.6257	-0.45321	4.0503	0.45321	3.6257	270.00 *
	28.000	-8.00000	12.00000	17.00000	3.7639	0.0	4.1327	0.0	3.7639	270.00 *
	29.000	-8.00000	11.00000	17.00000	4.7737	0.0	4.7891	0.0	4.7737	270.00 *
	30.000	-8.00000	10.00000	17.00000	4.7737	0.0	4.7891	0.0	4.7737	270.00 *
	31.000	-8.00000	9.00000	17.00000	4.7737	0.0	4.7891	0.0	4.7737	270.00 *
	32.000	-8.00000	8.00000	17.00000	4.7737	0.0	4.7891	0.0	4.7737	270.00 *
	33.000	-8.00000	7.00000	17.00000	4.7737	0.0	4.7891	0.0	4.7737	270.00 *
	34.000	-8.00000	6.00000	17.00000	4.7737	0.0	4.7891	0.0	4.7737	270.00 *
	35.000	-8.00000	5.00000	17.00000	4.7737	0.0	4.7891	0.0	4.7737	270.00 *
	36.000	-8.00000	4.00000	17.00000	4.7737	0.0	4.7891	0.0	4.7737	270.00 *
	37.000	-8.00000	3.00000	17.00000	4.7737	0.0	4.7891	0.0	4.7737	270.00 *
	38.000	-8.00000	2.00000	17.00000	4.7737	0.0	4.7891	0.0	4.7737	270.00 *
	39.000	-8.00000	1.00000	17.00000	4.7737	0.0	4.7891	0.0	4.7737	270.00 *
	40.000	-8.00000	0.00000	17.00000	3.7639	0.0	4.1327	0.0	3.7639	270.00 *
	41.000	-8.00000	-1.00000	17.00000	3.6257	0.45321	4.0503	-0.45321	3.6257	270.00 *
Line 15	Line 15	60.00000	41.00000	18.00000	0.12119	-0.012119	0.14238	0.12119	-0.012119	0.0 *
	1.0000	61.00000	41.00000	18.00000	0.15881	-0.017645	0.18547	0.15881	-0.017645	0.0 *
	2.0000	62.00000	41.00000	18.00000	0.20661	-0.025826	0.24011	0.20661	-0.025826	0.0 *
	3.0000	63.00000	41.00000	18.00000	0.26900	-0.038428	0.31002	0.26900	-0.038428	0.0 *
	4.0000	64.00000	41.00000	18.00000	0.35309	-0.058848	0.40100	0.35309	-0.058848	0.0 *
	5.0000	65.00000	41.00000	18.00000	0.47097	-0.094195	0.52289	0.47097	-0.094195	0.0 *
	6.0000	66.00000	41.00000	18.00000	0.64475	-0.16119	0.69426	0.64475	-0.16119	0.0 *
	7.0000	67.00000	41.00000	18.00000	0.91743	-0.30581	0.95517	0.91743	-0.30581	0.0 *
	8.0000	68.00000	41.00000	18.00000	1.3709	-0.68547	1.4091	1.3709	-0.68547	0.0 *
	9.0000	69.00000	41.00000	18.00000	1.9929	-1.9929	2.3877	1.9929	-1.9929	0.0 *
	10.000	70.00000	41.00000	18.00000	0.0	-6.7697	5.1896	0.0	-6.7697	0.0 *
	11.000	71.00000	41.00000	18.00000	0.0	-8.5161	6.0710	0.0	-8.5161	0.0 *
	12.000	72.00000	41.00000	18.00000	0.0	-8.5161	6.0710	0.0	-8.5161	0.0 *
	13.000	73.00000	41.00000	18.00000	0.0	-8.5161	6.0710	0.0	-8.5161	0.0 *
	14.000	74.00000	41.00000	18.00000	0.0	-8.5161	6.0710	0.0	-8.5161	0.0 *
	15.000	75.00000	41.00000	18.00000	0.0	-8.5161	6.0710	0.0	-8.5161	0.0 *
	16.000	76.00000	41.00000	18.00000	0.0	-8.5161	6.0710	0.0	-8.5161	0.0 *
	17.000	77.00000	41.00000	18.00000	0.0	-8.5161	6.0710	0.0	-8.5161	0.0 *
	18.000	78.00000	41.00000	18.00000	0.0	-8.5161	6.0710	0.0	-8.5161	0.0 *
	19.000	79.00000	41.00000	18.00000	0.0	-8.5161	6.0710	0.0	-8.5161	0.0 *
	20.000	80.00000	41.00000	18.00000	0.0	-8.5161	6.0710	0.0	-8.5161	0.0 *
	21.000	81.00000	41.00000	18.00000	0.0	-8.5161	6.0710	0.0	-8.5161	0.0 *
	22.000	82.00000	41.00000	18.00000	0.0	-6.7697	5.1896	0.0	-6.7697	0.0 *
	23.000	83.00000	41.00000	18.00000	-4.1380	-4.1380	4.7243	-4.1380	-4.1380	0.0 *
	24.000	84.00000	41.00000	18.00000	-5.2608	-2.6304	4.9038	-5.2608	-2.6304	0.0 *
	25.000	85.00000	41.00000	18.00000	-5.2866	-1.7622	4.8853	-5.2866	-1.7622	0.0 *
	26.000	86.00000	41.00000	18.00000	-5.0079	-1.2520	4.7172	-5.0079	-1.2520	0.0 *
	27.000	87.00000	41.00000	18.00000	-4.6295	-0.92591	4.4384	-4.6295	-0.92591	0.0 *
	28.000	88.00000	41.00000	18.00000	-4.2175	-0.70291	4.0817	-4.2175	-0.70291	0.0 *
	29.000	89.00000	41.00000	18.00000	-3.7966	-0.54237	3.6754	-3.7966	-0.54237	0.0 *
	30.000	90.00000	41.00000	18.00000	-3.3770	-0.42213	3.2439	-3.3770	-0.42213	0.0 *

* Result includes imported displacement(s).

Specific Building Damage Results - Horizontal Displacements

Structure: East Terrace | Sub-structure: Sub 1

Dist. [m]	Coordinates x [m]	y [m]	z [m]	Displacements x [mm]	y [mm]	Horizontal displacement along the Line [mm]	Horizontal displacement perpendicular to Line [mm]
0.0	-7.95000	-1.00000	17.00000	3.6467	0.45871	3.6467	0.45871 d
0.98750	-6.96250	-1.00000	17.00000	4.0649	0.58383	4.0649	0.58383 d
1.9750	-5.97500	-1.00000	17.00000	4.4865	0.75088	4.4865	0.75088 d
2.9625	-4.98750	-1.00000	17.00000	4.9017	0.98280	4.9017	0.98280 d
3.9500	-4.00000	-1.00000	17.00000	5.2877	1.3219	5.2877	1.3219 d
4.9375	-3.01250	-1.00000	17.00000	5.5846	1.8538	5.5846	1.8538 d
5.9250	-2.02500	-1.00000	17.00000	5.6041	2.7675	5.6041	2.7675 d
6.9125	-1.03750	-1.00000	17.00000	4.5958	4.4296	4.5958	4.4296 d
7.9000	-0.05000	-1.00000	17.00000	0.37132	7.4263	0.37132	7.4263 d

d - Displacements include imported displacements.

Structure: East Terrace | Sub-structure: Sub 2

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

				Line	to Line
[m]	[m]	[m]	[m]	[mm]	[mm]
0.0	0.00000	-1.00000	17.00000	7.4922	0.0 d
1.0000	0.00000	0.00000	17.00000	8.1384	0.0 d
2.0000	0.00000	1.00000	17.00000	9.9402	-9.9402 d
3.0000	0.00000	2.00000	17.00000	9.9402	-9.9402 d
4.0000	0.00000	3.00000	17.00000	9.9402	-9.9402 d
5.0000	0.00000	4.00000	17.00000	9.9402	-9.9402 d
6.0000	0.00000	5.00000	17.00000	9.9402	-9.9402 d
7.0000	0.00000	6.00000	17.00000	9.9402	-9.9402 d
8.0000	0.00000	7.00000	17.00000	9.9402	-9.9402 d
9.0000	0.00000	8.00000	17.00000	9.9402	-9.9402 d
10.000	0.00000	9.00000	17.00000	9.9402	-9.9402 d
11.000	0.00000	10.00000	17.00000	9.9402	-9.9402 d
12.000	0.00000	11.00000	17.00000	9.9402	-9.9402 d
13.000	0.00000	12.00000	17.00000	8.1384	-8.1384 d

d - Displacements include imported displacements.

Structure: Great Hall (East Terrace Frontage) | Sub-structure: Sub 3

Dist.	Coordinates x	y	z	Displacements x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	0.05000	12.00000	17.00000	0.0	-9.9402	0.0	-9.9402 d
0.99792	1.04792	12.00000	17.00000	0.0	-9.9402	0.0	-9.9402 d
1.9958	2.04583	12.00000	17.00000	0.0	-9.9402	0.0	-9.9402 d
2.9938	3.04375	12.00000	17.00000	0.0	-9.9402	0.0	-9.9402 d
3.9917	4.04167	12.00000	17.00000	0.0	-9.9402	0.0	-9.9402 d
4.9896	5.03958	12.00000	17.00000	0.0	-9.9402	0.0	-9.9402 d
5.9875	6.03750	12.00000	17.00000	0.0	-9.9402	0.0	-9.9402 d
6.9854	7.03542	12.00000	17.00000	0.0	-9.9402	0.0	-9.9402 d
7.9833	8.03333	12.00000	17.00000	0.0	-9.9402	0.0	-9.9402 d
8.9813	9.03125	12.00000	17.00000	0.0	-9.9402	0.0	-9.9402 d
9.9792	10.02917	12.00000	17.00000	0.0	-9.9402	0.0	-9.9402 d
10.977	11.02708	12.00000	17.00000	0.0	-9.9402	0.0	-9.9402 d
11.975	12.02500	12.00000	17.00000	0.0	-9.9402	0.0	-9.9402 d
12.973	13.02292	12.00000	17.00000	0.0	-9.9402	0.0	-9.9402 d
13.971	14.02083	12.00000	17.00000	0.0	-9.9402	0.0	-9.9402 d
14.969	15.01875	12.00000	17.00000	0.0	-9.9402	0.0	-9.9402 d
15.967	16.01667	12.00000	17.00000	0.0	-9.9402	0.0	-9.9402 d
16.965	17.01458	12.00000	17.00000	0.0	-9.9402	0.0	-9.9402 d
17.963	18.01250	12.00000	17.00000	0.0	-9.9402	0.0	-9.9402 d
18.960	19.01042	12.00000	17.00000	0.0	-9.9402	0.0	-9.9402 d
19.958	20.00833	12.00000	17.00000	0.0	-9.9402	0.0	-9.9402 d
20.956	21.00625	12.00000	17.00000	0.0	-9.9402	0.0	-9.9402 d
21.954	22.00417	12.00000	17.00000	0.0	-9.9402	0.0	-9.9402 d
22.952	23.00208	12.00000	17.00000	0.0	-9.9402	0.0	-9.9402 d
23.950	24.00000	12.00000	17.00000	0.0	-9.9402	0.0	-9.9402 d
24.948	24.99792	12.00000	17.00000	0.0	-9.9402	0.0	-9.9402 d
25.946	25.99583	12.00000	17.00000	0.0	-9.9402	0.0	-9.9402 d
26.944	26.99375	12.00000	17.00000	0.0	-9.9402	0.0	-9.9402 d
27.942	27.99167	12.00000	17.00000	0.0	-9.9402	0.0	-9.9402 d
28.940	28.98958	12.00000	17.00000	0.0	-9.9402	0.0	-9.9402 d
29.938	29.98750	12.00000	17.00000	0.0	-9.9402	0.0	-9.9402 d
30.935	30.98542	12.00000	17.00000	0.0	-9.9402	0.0	-9.9402 d
31.933	31.98333	12.00000	17.00000	0.0	-9.9402	0.0	-9.9402 d
32.931	32.98125	12.00000	17.00000	0.0	-9.9402	0.0	-9.9402 d
33.929	33.97917	12.00000	17.00000	0.0	-9.9402	0.0	-9.9402 d
34.927	34.97708	12.00000	17.00000	0.0	-9.9402	0.0	-9.9402 d
35.925	35.97500	12.00000	17.00000	0.0	-9.9402	0.0	-9.9402 d
36.923	36.97292	12.00000	17.00000	0.0	-9.9402	0.0	-9.9402 d
37.921	37.97083	12.00000	17.00000	0.0	-9.9402	0.0	-9.9402 d
38.919	38.96875	12.00000	17.00000	0.0	-9.9402	0.0	-9.9402 d
39.917	39.96667	12.00000	17.00000	0.0	-9.9402	0.0	-9.9402 d
40.915	40.96458	12.00000	17.00000	0.0	-9.9402	0.0	-9.9402 d
41.913	41.96250	12.00000	17.00000	0.0	-9.9402	0.0	-9.9402 d
42.910	42.96042	12.00000	17.00000	0.0	-9.9402	0.0	-9.9402 d
43.908	43.95833	12.00000	17.00000	0.0	-9.9402	0.0	-9.9402 d
44.906	44.95625	12.00000	17.00000	0.0	-9.9402	0.0	-9.9402 d
45.904	45.95417	12.00000	17.00000	0.0	-9.9402	0.0	-9.9402 d
46.902	46.95208	12.00000	17.00000	0.0	-9.9402	0.0	-9.9402 d
47.900	47.95000	12.00000	17.00000	0.0	-9.9402	0.0	-9.9402 d

d - Displacements include imported displacements.

Structure: Library (East Terrace Frontage) | Sub-structure: Sub 4

Dist.	Coordinates x	y	z	Displacements x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	48.00000	12.00000	17.00000	0.0	-8.1384	8.1384	0.0 d
1.0000	48.00000	11.00000	17.00000	-9.9402	0.0	0.0	-9.9402 d
2.0000	48.00000	10.00000	17.00000	-9.9402	0.0	0.0	-9.9402 d
3.0000	48.00000	9.00000	17.00000	-9.9402	0.0	0.0	-9.9402 d
4.0000	48.00000	8.00000	17.00000	-9.9402	0.0	0.0	-9.9402 d
5.0000	48.00000	7.00000	17.00000	-9.9402	0.0	0.0	-9.9402 d
6.0000	48.00000	6.00000	17.00000	-9.9402	0.0	0.0	-9.9402 d
7.0000	48.00000	5.00000	17.00000	-9.9402	0.0	0.0	-9.9402 d
8.0000	48.00000	4.00000	17.00000	-9.9402	0.0	0.0	-9.9402 d
9.0000	48.00000	3.00000	17.00000	-9.9402	0.0	0.0	-9.9402 d
10.000	48.00000	2.00000	17.00000	-9.9402	0.0	0.0	-9.9402 d
11.000	48.00000	1.00000	17.00000	-9.9402	0.0	0.0	-9.9402 d

d - Displacements include imported displacements.

Structure: Library (Eastern Elevation) | Sub-structure: Sub 5

Dist.	Coordinates x	y	z	Displacements x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	48.05000	1.00000	17.00000	-9.9021	0.0	-9.9021	0.0 d
0.96250	49.01250	1.00000	17.00000	-9.1859	0.0	-9.1859	0.0 d
1.9250	49.97500	1.00000	17.00000	-8.4998	0.0	-8.4998	0.0 d
2.8875	50.93750	1.00000	17.00000	-7.8421	0.0	-7.8421	0.0 d
3.8500	51.90000	1.00000	17.00000	-7.2108	0.0	-7.2108	0.0 d

d - Displacements include imported displacements.

Structure: Library (Eastern Elevation) | Sub-structure: Sub 6

Dist.	Coordinates x	y	z	Displacements x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	52.00000	1.00000	17.00000	-7.1466	0.0	0.0	-7.1466 d
1.0000	52.00000	0.00000	17.00000	-5.7408	0.0	0.0	-5.7408 d
2.0000	52.00000	-1.00000	17.00000	-5.2877	1.3219	-1.3219	-5.2877 d
3.0000	52.00000	-2.00000	17.00000	-4.5391	2.2696	-2.2696	-4.5391 d
4.0000	52.00000	-3.00000	17.00000	-3.7287	2.7965	-2.7965	-3.7287 d
5.0000	52.00000	-4.00000	17.00000	-2.9974	2.9974	-2.9974	-2.9974 d
6.0000	52.00000	-5.00000	17.00000	-2.4953	3.1191	-3.1191	-2.4953 d

d - Displacements include imported displacements.

Structure: Library (Eastern Elevation) | Sub-structure: Sub 7

Dist.	Coordinates x	y	z	Displacements x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	52.00000	-5.00000	18.00000	-2.4953	3.1191	-2.4953	3.1191 d
1.0000	53.00000	-5.00000	18.00000	-2.5633	2.5633	-2.5633	2.5633 d
2.0000	54.00000	-5.00000	18.00000	-2.5977	2.1648	-2.5977	2.1648 d
3.0000	55.00000	-5.00000	18.00000	-2.5289	1.8064	-2.5289	1.8064 d
4.0000	56.00000	-5.00000	18.00000	-2.3862	1.4914	-2.3862	1.4914 d
5.0000	57.00000	-5.00000	18.00000	-2.1914	1.2174	-2.1914	1.2174 d
6.0000	58.00000	-5.00000	18.00000	-1.9600	0.98002	-1.9600	0.98002 d
7.0000	59.00000	-5.00000	18.00000	-1.7028	0.77399	-1.7028	0.77399 d
8.0000	60.00000	-5.00000	18.00000	-1.4268	0.59451	-1.4268	0.59451 d
9.0000	61.00000	-5.00000	18.00000	-1.1369	0.43727	-1.1369	0.43727 d
10.000	62.00000	-5.00000	18.00000	-0.83600	0.29857	-0.83600	0.29857 d
11.000	63.00000	-5.00000	18.00000	-0.52576	0.17525	-0.52576	0.17525 d
12.000	64.00000	-5.00000	18.00000	-0.24870	0.077720	-0.24870	0.077720 d
13.000	65.00000	-5.00000	18.00000	-0.083998	0.024705	-0.083998	0.024705 d
14.000	66.00000	-5.00000	18.00000	0.0	0.0	0.0	0.0 d
15.000	67.00000	-5.00000	18.00000	0.0	0.0	0.0	0.0 d
16.000	68.00000	-5.00000	18.00000	0.0	0.0	0.0	0.0 d
17.000	69.00000	-5.00000	18.00000	0.0	0.0	0.0	0.0 d
18.000	70.00000	-5.00000	18.00000	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: Library (Northern Elevation) | Sub-structure: Sub 8

Dist.	Coordinates x	y	z	Displacements x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	70.00000	-5.00000	18.00000	0.0	0.0	0.0	0.0 d
1.0000	70.00000	-4.00000	18.00000	0.0	0.0	0.0	0.0 d
2.0000	70.00000	-3.00000	18.00000	0.0	0.0	0.0	0.0 d
3.0000	70.00000	-2.00000	18.00000	0.0	0.0	0.0	0.0 d
4.0000	70.00000	-1.00000	18.00000	0.0	0.0	0.0	0.0 d
5.0000	70.00000	0.00000	18.00000	0.0	0.12864	0.12864	0.0 d
6.0000	70.00000	1.00000	18.00000	0.0	0.32964	0.32964	0.0 d
7.0000	70.00000	2.00000	18.00000	0.0	0.53064	0.53064	0.0 d
8.0000	70.00000	3.00000	18.00000	0.0	0.73164	0.73164	0.0 d
9.0000	70.00000	4.00000	18.00000	0.0	0.93264	0.93264	0.0 d
10.000	70.00000	5.00000	18.00000	0.0	1.2239	1.2239	0.0 d
11.000	70.00000	6.00000	18.00000	0.0	1.6027	1.6027	0.0 d
12.000	70.00000	7.00000	18.00000	0.0	1.9861	1.9861	0.0 d
13.000	70.00000	8.00000	18.00000	0.0	2.3774	2.3774	0.0 d
14.000	70.00000	9.00000	18.00000	0.0	2.7796	2.7796	0.0 d
15.000	70.00000	10.00000	18.00000	0.0	3.1959	3.1959	0.0 d
16.000	70.00000	11.00000	18.00000	0.0	3.6295	3.6295	0.0 d
17.000	70.00000	12.00000	18.00000	0.0	4.0835	4.0835	0.0 d
18.000	70.00000	13.00000	18.00000	0.0	4.5611	4.5611	0.0 d
19.000	70.00000	14.00000	18.00000	0.0	5.0653	5.0653	0.0 d
20.000	70.00000	15.00000	18.00000	0.0	5.5994	5.5994	0.0 d
21.000	70.00000	16.00000	18.00000	0.0	6.1665	6.1665	0.0 d
22.000	70.00000	17.00000	18.00000	0.0	6.7697	6.7697	0.0 d
23.000	70.00000	18.00000	18.00000	0.0	7.4122	7.4122	0.0 d
24.000	70.00000	19.00000	18.00000	0.0	0.0	0.0	0.0 d
25.000	70.00000	20.00000	18.00000	0.0	0.0	0.0	0.0 d
26.000	70.00000	21.00000	18.00000	0.0	0.0	0.0	0.0 d
27.000	70.00000	22.00000	18.00000	0.0	0.0	0.0	0.0 d
28.000	70.00000	23.00000	18.00000	0.0	0.0	0.0	0.0 d
29.000	70.00000	24.00000	18.00000	0.0	0.0	0.0	0.0 d
30.000	70.00000	25.00000	18.00000	0.0	0.0	0.0	0.0 d
31.000	70.00000	26.00000	18.00000	0.0	0.0	0.0	0.0 d
32.000	70.00000	27.00000	18.00000	0.0	0.0	0.0	0.0 d
33.000	70.00000	28.00000	18.00000	0.0	0.0	0.0	0.0 d
34.000	70.00000	29.00000	18.00000	0.0	0.0	0.0	0.0 d
35.000	70.00000	30.00000	18.00000	0.0	0.0	0.0	0.0 d
36.000	70.00000	31.00000	18.00000	0.0	0.0	0.0	0.0 d
37.000	70.00000	32.00000	18.00000	0.0	0.0	0.0	0.0 d
38.000	70.00000	33.00000	18.00000	0.0	0.0	0.0	0.0 d
39.000	70.00000	34.00000	18.00000	0.0	0.0	0.0	0.0 d
40.000	70.00000	35.00000	18.00000	0.0	0.0	0.0	0.0 d
41.000	70.00000	36.00000	18.00000	0.0	0.0	0.0	0.0 d
42.000	70.00000	37.00000	18.00000	0.0	0.0	0.0	0.0 d
43.000	70.00000	38.00000	18.00000	0.0	0.0	0.0	0.0 d
44.000	70.00000	39.00000	18.00000	0.0	0.0	0.0	0.0 d
45.000	70.00000	40.00000	18.00000	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: Library (Western Elevation) | Sub-structure: Sub 9

Dist.	Coordinates x	y	z	Displacements x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	70.00000	40.00000	18.00000	0.0	0.0	0.0	0.0 d
1.0000	69.00000	40.00000	18.00000	0.0	0.0	0.0	0.0 d
2.0000	68.00000	40.00000	18.00000	0.0	0.0	0.0	0.0 d
3.0000	67.00000	40.00000	18.00000	0.0	0.0	0.0	0.0 d
4.0000	66.00000	40.00000	18.00000	0.0	0.0	0.0	0.0 d
5.0000	65.00000	40.00000	18.00000	0.0	0.0	0.0	0.0 d
6.0000	64.00000	40.00000	18.00000	0.0	0.0	0.0	0.0 d
7.0000	63.00000	40.00000	18.00000	0.0	0.0	0.0	0.0 d
8.0000	62.00000	40.00000	18.00000	0.0	0.0	0.0	0.0 d
9.0000	61.00000	40.00000	18.00000	0.0	0.0	0.0	0.0 d
10.000	60.00000	40.00000	18.00000	0.0	0.0	0.0	0.0 d
11.000	59.00000	40.00000	18.00000	0.0	0.0	0.0	0.0 d
12.000	58.00000	40.00000	18.00000	0.0	0.0	0.0	0.0 d
13.000	57.00000	40.00000	18.00000	0.0	0.0	0.0	0.0 d
14.000	56.00000	40.00000	18.00000	0.0	0.0	0.0	0.0 d
15.000	55.00000	40.00000	18.00000	0.0	0.0	0.0	0.0 d
16.000	54.00000	40.00000	18.00000	0.0	0.0	0.0	0.0 d
17.000	53.00000	40.00000	18.00000	0.0	0.0	0.0	0.0 d
18.000	52.00000	40.00000	18.00000	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: Library / Great Hall (Western Elevation) | Sub-structure: Sub 10

Dist.	Coordinates x	y	z	Displacements x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	52.00000	40.00000	17.00000	0.0	0.0	0.0	0.0 d
1.0000	52.00000	39.00000	17.00000	0.0	0.0	0.0	0.0 d
2.0000	52.00000	38.00000	17.00000	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: Great Hall (Western Elevation) | Sub-structure: Sub 11

Dist.	Coordinates x	y	z	Displacements x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	52.00000	38.00000	17.00000	0.0	0.0	0.0	0.0 d
1.0000	51.00000	38.00000	17.00000	0.0	0.0	0.0	0.0 d
2.0000	50.00000	38.00000	17.00000	0.0	0.0	0.0	0.0 d

Oasys
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(GEOTECHNICAL &ENV ASSOC)
The Great Hall, Lincoln's Inn, Newman's Row, London, WC2A 3TL
Wall Movements Rev 3 Piling and Excavation
Damage Assessment
Job No. J15050A | Sheet No. | Rev.
Drg. Ref.
Made by MP | Date 08-Feb-2016 | Checked

Dist.	Coordinates x	y	z	x	y	Displacements Horizontal displacement along the	Horizontal displacement perpendicular	
3.0000	49.00000	38.00000	17.00000	0.0	0.0	0.0	0.0	d
4.0000	48.00000	38.00000	17.00000	0.0	0.0	0.0	0.0	d
5.0000	47.00000	38.00000	17.00000	0.0	0.0	0.0	0.0	d
6.0000	46.00000	38.00000	17.00000	0.0	0.0	0.0	0.0	d
7.0000	45.00000	38.00000	17.00000	0.0	0.0	0.0	0.0	d
8.0000	44.00000	38.00000	17.00000	0.0	0.0	0.0	0.0	d
9.0000	43.00000	38.00000	17.00000	0.0	0.0	0.0	0.0	d
10.000	42.00000	38.00000	17.00000	0.0	0.0	0.0	0.0	d
11.000	41.00000	38.00000	17.00000	0.0	0.0	0.0	0.0	d
12.000	40.00000	38.00000	17.00000	0.0	0.0	0.0	0.0	d
13.000	39.00000	38.00000	17.00000	0.0	0.0	0.0	0.0	d
14.000	38.00000	38.00000	17.00000	0.0	0.0	0.0	0.0	d
15.000	37.00000	38.00000	17.00000	0.0	0.0	0.0	0.0	d
16.000	36.00000	38.00000	17.00000	0.0	0.0	0.0	0.0	d
17.000	35.00000	38.00000	17.00000	0.0	0.0	0.0	0.0	d
18.000	34.00000	38.00000	17.00000	0.0	0.0	0.0	0.0	d
19.000	33.00000	38.00000	17.00000	0.0	0.0	0.0	0.0	d
20.000	32.00000	38.00000	17.00000	0.0	0.0	0.0	0.0	d
21.000	31.00000	38.00000	17.00000	0.0	0.0	0.0	0.0	d
22.000	30.00000	38.00000	17.00000	0.0	0.0	0.0	0.0	d
23.000	29.00000	38.00000	17.00000	0.0	0.0	0.0	0.0	d
24.000	28.00000	38.00000	17.00000	0.0	0.0	0.0	0.0	d
25.000	27.00000	38.00000	17.00000	0.0	0.0	0.0	0.0	d
26.000	26.00000	38.00000	17.00000	0.0	0.0	0.0	0.0	d
27.000	25.00000	38.00000	17.00000	0.0	0.0	0.0	0.0	d
28.000	24.00000	38.00000	17.00000	0.0	0.0	0.0	0.0	d
29.000	23.00000	38.00000	17.00000	0.0	0.0	0.0	0.0	d
30.000	22.00000	38.00000	17.00000	0.0	0.0	0.0	0.0	d
31.000	21.00000	38.00000	17.00000	0.0	0.0	0.0	0.0	d
32.000	20.00000	38.00000	17.00000	0.0	0.0	0.0	0.0	d
33.000	19.00000	38.00000	17.00000	0.0	0.0	0.0	0.0	d
34.000	18.00000	38.00000	17.00000	0.0	0.0	0.0	0.0	d
35.000	17.00000	38.00000	17.00000	0.0	0.0	0.0	0.0	d
36.000	16.00000	38.00000	17.00000	0.0	0.0	0.0	0.0	d
37.000	15.00000	38.00000	17.00000	0.0	0.0	0.0	0.0	d
38.000	14.00000	38.00000	17.00000	0.0	0.0	0.0	0.0	d
39.000	13.00000	38.00000	17.00000	0.0	0.0	0.0	0.0	d
40.000	12.00000	38.00000	17.00000	0.0	0.0	0.0	0.0	d
41.000	11.00000	38.00000	17.00000	0.0	0.0	0.0	0.0	d
42.000	10.00000	38.00000	17.00000	0.0	0.0	0.0	0.0	d
43.000	9.00000	38.00000	17.00000	0.0	0.0	0.0	0.0	d
44.000	8.00000	38.00000	17.00000	0.0	0.0	0.0	0.0	d
45.000	7.00000	38.00000	17.00000	0.0	0.0	0.0	0.0	d
46.000	6.00000	38.00000	17.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: Great Hall (Western Elevation) | Sub-structure: Sub 12

Dist.	Coordinates x	y	z	x	y	Displacements Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	6.00000	38.00000	17.00000	0.0	0.0	0.0	0.0	d
1.0000	6.00000	39.00000	17.00000	0.0	0.0	0.0	0.0	d
2.0000	6.00000	40.00000	17.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: Great Hall (Western Elevation) | Sub-structure: Sub 13

Dist.	Coordinates x	y	z	x	y	Displacements Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	6.00000	40.00000	17.00000	0.0	0.0	0.0	0.0	d
1.0000	5.00000	40.00000	17.00000	0.0	0.0	0.0	0.0	d
2.0000	4.00000	40.00000	17.00000	0.0	0.0	0.0	0.0	d
3.0000	3.00000	40.00000	17.00000	0.0	0.0	0.0	0.0	d
4.0000	2.00000	40.00000	17.00000	0.0	0.0	0.0	0.0	d
5.0000	1.00000	40.00000	17.00000	0.0	0.0	0.0	0.0	d
6.0000	0.00000	40.00000	17.00000	0.0	0.0	0.0	0.0	d
7.0000	-1.00000	40.00000	17.00000	0.0	0.0	0.0	0.0	d
8.0000	-2.00000	40.00000	17.00000	0.0	0.0	0.0	0.0	d
9.0000	-3.00000	40.00000	17.00000	0.0	0.0	0.0	0.0	d
10.000	-4.00000	40.00000	17.00000	0.0	0.0	0.0	0.0	d
11.000	-5.00000	40.00000	17.00000	0.0	0.0	0.0	0.0	d
12.000	-6.00000	40.00000	17.00000	0.0	0.0	0.0	0.0	d
13.000	-7.00000	40.00000	17.00000	0.0	0.0	0.0	0.0	d
14.000	-8.00000	40.00000	17.00000	0.0	0.0	0.0	0.0	d

d - Displacements include imported displacements.

Structure: Great Hall (Southern Elevation) | Sub-structure: Sub 14

Dist.	Coordinates x	y	z	x	y	Displacements Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	-8.00000	40.00000	17.00000		0.0	0.0	0.0	d
1.0000	-8.00000	39.00000	17.00000		0.0	0.0	0.0	d
2.0000	-8.00000	38.00000	17.00000		0.0	0.0	0.0	d
3.0000	-8.00000	37.00000	17.00000		0.0	0.0	0.0	d
4.0000	-8.00000	36.00000	17.00000		0.0	0.0	0.0	d
5.0000	-8.00000	35.00000	17.00000		0.0	0.0	0.0	d
6.0000	-8.00000	34.00000	17.00000		0.0	0.0	0.0	d
7.0000	-8.00000	33.00000	17.00000		0.0	0.0	0.0	d
8.0000	-8.00000	32.00000	17.00000		0.0	0.0	0.0	d
9.0000	-8.00000	31.00000	17.00000		0.0	0.0	0.0	d
10.000	-8.00000	30.00000	17.00000		0.0	0.0	0.0	d
11.000	-8.00000	29.00000	17.00000		0.0	0.0	0.0	d
12.000	-8.00000	28.00000	17.00000	0.023803	-0.047606	0.047606	0.023803	d
13.000	-8.00000	27.00000	17.00000	0.095539	-0.17914	0.17914	0.095539	d
14.000	-8.00000	26.00000	17.00000	0.20638	-0.36116	0.36116	0.20638	d
15.000	-8.00000	25.00000	17.00000	0.36990	-0.60108	0.60108	0.36990	d
16.000	-8.00000	24.00000	17.00000	0.54733	-0.82099	0.82099	0.54733	d
17.000	-8.00000	23.00000	17.00000	0.73993	-1.0174	1.0174	0.73993	d
18.000	-8.00000	22.00000	17.00000	0.94853	-1.1857	1.1857	0.94853	d
19.000	-8.00000	21.00000	17.00000	1.1731	-1.3198	1.3198	1.1731	d
20.000	-8.00000	20.00000	17.00000	1.4124	-1.4124	1.4124	1.4124	d
21.000	-8.00000	19.00000	17.00000	1.7120	-1.4980	1.4980	1.7120	d
22.000	-8.00000	18.00000	17.00000	2.0388	-1.5291	1.5291	2.0388	d
23.000	-8.00000	17.00000	17.00000	2.3862	-1.4914	1.4914	2.3862	d
24.000	-8.00000	16.00000	17.00000	2.7417	-1.3709	1.3709	2.7417	d
25.000	-8.00000	15.00000	17.00000	3.0854	-1.1570	1.1570	3.0854	d
26.000	-8.00000	14.00000	17.00000	3.3903	-0.84757	0.84757	3.3903	d
27.000	-8.00000	13.00000	17.00000	3.6257	-0.45321	0.45321	3.6257	d
28.000	-8.00000	12.00000	17.00000	3.7639	0.0	0.0	3.7639	d
29.000	-8.00000	11.00000	17.00000	4.7737	0.0	0.0	4.7737	d
30.000	-8.00000	10.00000	17.00000	4.7737	0.0	0.0	4.7737	d
31.000	-8.00000	9.00000	17.00000	4.7737	0.0	0.0	4.7737	d
32.000	-8.00000	8.00000	17.00000	4.7737	0.0	0.0	4.7737	d
33.000	-8.00000	7.00000	17.00000	4.7737	0.0	0.0	4.7737	d
34.000	-8.00000	6.00000	17.00000	4.7737	0.0	0.0	4.7737	d
35.000	-8.00000	5.00000	17.00000	4.7737	0.0	0.0	4.7737	d
36.000	-8.00000	4.00000	17.00000	4.7737	0.0	0.0	4.7737	d
37.000	-8.00000	3.00000	17.00000	4.7737	0.0	0.0	4.7737	d
38.000	-8.00000	2.00000	17.00000	4.7737	0.0	0.0	4.7737	d
39.000	-8.00000	1.00000	17.00000	4.7737	0.0	0.0	4.7737	d
40.000	-8.00000	0.00000	17.00000	3.7639	0.0	0.0	3.7639	d
41.000	-8.00000	-1.00000	17.00000	3.6257	0.45321	-0.45321	3.6257	d

d - Displacements include imported displacements.

Oasys
GEA LIMITED
(GEOTECHNICAL &ENV ASSOC)
The Great Hall, Lincoln's Inn, Newman's Row, London, WC2A 3TL
Wall Movements Rev 3 Piling and Excavation
Damage Assessment
Job No. J15050A | Sheet No. | Rev.
Drg. Ref.
Made by MP | Date 08-Feb-2016 | Checked

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

Structure: Boundary Wall (adjacent to single level basement) | Sub-structure: Sub 15

Dist.	Coordinates x	y	z	x	y	Displacements Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	60.00000	41.00000	18.00000	0.12119	-0.012119	0.12119	-0.012119	d
1.0000	61.00000	41.00000	18.00000	0.15881	-0.017645	0.15881	-0.017645	d
2.0000	62.00000	41.00000	18.00000	0.20661	-0.025826	0.20661	-0.025826	d
3.0000	63.00000	41.00000	18.00000	0.26900	-0.038428	0.26900	-0.038428	d
4.0000	64.00000	41.00000	18.00000	0.35309	-0.058848	0.35309	-0.058848	d
5.0000	65.00000	41.00000	18.00000	0.47097	-0.094195	0.47097	-0.094195	d
6.0000	66.00000	41.00000	18.00000	0.64475	-0.16119	0.64475	-0.16119	d
7.0000	67.00000	41.00000	18.00000	0.91743	-0.30581	0.91743	-0.30581	d
8.0000	68.00000	41.00000	18.00000	1.3709	-0.68547	1.3709	-0.68547	d
9.0000	69.00000	41.00000	18.00000	1.9929	-1.9929	1.9929	-1.9929	d
10.000	70.00000	41.00000	18.00000	0.0	-6.7697	0.0	-6.7697	d
11.000	71.00000	41.00000	18.00000	0.0	-8.5161	0.0	-8.5161	d
12.000	72.00000	41.00000	18.00000	0.0	-8.5161	0.0	-8.5161	d
13.000	73.00000	41.00000	18.00000	0.0	-8.5161	0.0	-8.5161	d
14.000	74.00000	41.00000	18.00000	0.0	-8.5161	0.0	-8.5161	d
15.000	75.00000	41.00000	18.00000	0.0	-8.5161	0.0	-8.5161	d
16.000	76.00000	41.00000	18.00000	0.0	-8.5161	0.0	-8.5161	d
17.000	77.00000	41.00000	18.00000	0.0	-8.5161	0.0	-8.5161	d
18.000	78.00000	41.00000	18.00000	0.0	-8.5161	0.0	-8.5161	d
19.000	79.00000	41.00000	18.00000	0.0	-8.5161	0.0	-8.5161	d
20.000	80.00000	41.00000	18.00000	0.0	-8.5161	0.0	-8.5161	d
21.000	81.00000	41.00000	18.00000	0.0	-8.5161	0.0	-8.5161	d
22.000	82.00000	41.00000	18.00000	0.0	-6.7697	0.0	-6.7697	d
23.000	83.00000	41.00000	18.00000	-4.1380	-4.1380	-4.1380	-4.1380	d
24.000	84.00000	41.00000	18.00000	-5.2608	-2.6304	-5.2608	-2.6304	d
25.000	85.00000	41.00000	18.00000	-5.2866	-1.7622	-5.2866	-1.7622	d
26.000	86.00000	41.00000	18.00000	-5.0079	-1.2520	-5.0079	-1.2520	d
27.000	87.00000	41.00000	18.00000	-4.6295	-0.92591	-4.6295	-0.92591	d
28.000	88.00000	41.00000	18.00000	-4.2175	-0.70291	-4.2175	-0.70291	d
29.000	89.00000	41.00000	18.00000	-3.7966	-0.54237	-3.7966	-0.54237	d
30.000	90.00000	41.00000	18.00000	-3.3770	-0.42213	-3.3770	-0.42213	d

d - Displacements include imported displacements.

Specific Building Damage Results - Vertical Displacements

Structure: East Terrace | Sub-structure: Sub 1

Dist.	Coordinates x	y	z	Displacements z	
[m]	[m]	[m]	[m]	[mm]	
Vertical Offset 1					
0.0	-7.95000	-1.00000	17.00000	4.0730	d
0.98750	-6.96250	-1.00000	17.00000	4.5156	d
1.9750	-5.97500	-1.00000	17.00000	4.9335	d
2.9625	-4.98750	-1.00000	17.00000	5.3007	d
3.9500	-4.00000	-1.00000	17.00000	5.5869	d
4.9375	-3.01250	-1.00000	17.00000	5.7562	d
5.9250	-2.02500	-1.00000	17.00000	5.7664	d
6.9125	-1.03750	-1.00000	17.00000	5.5624	d
7.9000	-0.05000	-1.00000	17.00000	5.9297	d

d - Displacements include imported displacements.

Structure: East Terrace | Sub-structure: Sub 2

Dist.	Coordinates x	y	z	Displacements z	
[m]	[m]	[m]	[m]	[mm]	
Vertical Offset 1					
0.0	0.00000	-1.00000	17.00000	5.9578	d
1.0000	0.00000	0.00000	17.00000	5.5886	d
2.0000	0.00000	1.00000	17.00000	6.1741	d
3.0000	0.00000	2.00000	17.00000	6.1741	d
4.0000	0.00000	3.00000	17.00000	6.1741	d
5.0000	0.00000	4.00000	17.00000	6.1741	d
6.0000	0.00000	5.00000	17.00000	6.1741	d
7.0000	0.00000	6.00000	17.00000	6.1741	d
8.0000	0.00000	7.00000	17.00000	6.1741	d
9.0000	0.00000	8.00000	17.00000	6.1741	d
10.000	0.00000	9.00000	17.00000	6.1741	d
11.000	0.00000	10.0000	17.00000	6.1741	d
12.000	0.00000	11.0000	17.00000	6.1741	d
13.000	0.00000	12.0000	17.00000	5.5886	d

d - Displacements include imported displacements.

Structure: Great Hall (East Terrace Frontage) | Sub-structure: Sub 3

Dist.	Coordinates x	y	z	Displacements z	
[m]	[m]	[m]	[m]	[mm]	
Vertical Offset 1					
0.0	0.05000	12.00000	17.00000	6.1741	d
0.99792	1.04792	12.00000	17.00000	6.1741	d
1.9958	2.04583	12.00000	17.00000	6.1741	d
2.9938	3.04375	12.00000	17.00000	6.1741	d
3.9917	4.04167	12.00000	17.00000	6.1741	d
4.9896	5.03958	12.00000	17.00000	6.1741	d
5.9875	6.03750	12.00000	17.00000	6.1741	d
6.9854	7.03542	12.00000	17.00000	6.1741	d
7.9833	8.03333	12.00000	17.00000	6.1741	d
8.9813	9.03125	12.00000	17.00000	6.1741	d
9.9792	10.0291	12.00000	17.00000	6.1741	d
10.977	11.0270	12.00000	17.00000	6.1741	d
11.975	12.0250	12.00000	17.00000	6.1741	d
12.973	13.0229	12.00000	17.00000	6.1741	d
13.971	14.0208	12.00000	17.00000	6.1741	d
14.969	15.0187	12.00000	17.00000	6.1741	d
15.967	16.0167	12.00000	17.00000	6.1741	d
16.965	17.0145	12.00000	17.00000	6.1741	d
17.963	18.0125	12.00000	17.00000	6.1741	d
18.960	19.0104	12.00000	17.00000	6.1741	d
19.958	20.0083	12.00000	17.00000	6.1741	d
20.956	21.0062	12.00000	17.00000	6.1741	d
21.954	22.0041	12.00000	17.00000	6.1741	d
22.952	23.0020	12.00000	17.00000	6.1741	d
23.950	24.0000	12.00000	17.00000	6.1741	d
24.948	24.9979	12.00000	17.00000	6.1741	d
25.946	25.9958	12.00000	17.00000	6.1741	d
26.944	26.9937	12.00000	17.00000	6.1741	d
27.942	27.9916	12.00000	17.00000	6.1741	d
28.940	28.9895	12.00000	17.00000	6.1741	d
29.938	29.9875	12.00000	17.00000	6.1741	d
30.935	30.9854	12.00000	17.00000	6.1741	d
31.933	31.9833	12.00000	17.00000	6.1741	d
32.931	32.9812	12.00000	17.00000	6.1741	d
33.929	33.9791	12.00000	17.00000	6.1741	d
34.927	34.9770	12.00000	17.00000	6.1741	d
35.925	35.9750	12.00000	17.00000	6.1741	d
36.923	36.9729	12.00000	17.00000	6.1741	d
37.921	37.9708	12.00000	17.00000	6.1741	d
38.919	38.9687	12.00000	17.00000	6.1741	d
39.917	39.9667	12.00000	17.00000	6.1741	d
40.915	40.9645	12.00000	17.00000	6.1741	d
41.913	41.9625	12.00000	17.00000	6.1741	d
42.910	42.9604	12.00000	17.00000	6.1741	d
43.908	43.9583	12.00000	17.00000	6.1741	d

Dist.	Coordinates x [m]	y [m]	z [m]	Displacements z [mm]	
44.906	44.95625	12.00000	17.00000	6.1741	d
45.904	45.95417	12.00000	17.00000	6.1741	d
46.902	46.95208	12.00000	17.00000	6.1741	d
47.900	47.95000	12.00000	17.00000	6.1741	d

d - Displacements include imported displacements.

Structure: Library (East Terrace Frontage) | Sub-structure: Sub 4

Dist.	Coordinates x [m]	y [m]	z [m]	Displacements z [mm]	
Vertical Offset 1					
0.0	48.00000	12.00000	17.00000	5.5886	d
1.0000	48.00000	11.00000	17.00000	6.1741	d
2.0000	48.00000	10.00000	17.00000	6.1741	d
3.0000	48.00000	9.00000	17.00000	6.1741	d
4.0000	48.00000	8.00000	17.00000	6.1741	d
5.0000	48.00000	7.00000	17.00000	6.1741	d
6.0000	48.00000	6.00000	17.00000	6.1741	d
7.0000	48.00000	5.00000	17.00000	6.1741	d
8.0000	48.00000	4.00000	17.00000	6.1741	d
9.0000	48.00000	3.00000	17.00000	6.1741	d
10.000	48.00000	2.00000	17.00000	6.1741	d
11.000	48.00000	1.00000	17.00000	6.1741	d

d - Displacements include imported displacements.

Structure: Library (Eastern Elevation) | Sub-structure: Sub 5

Dist.	Coordinates x [m]	y [m]	z [m]	Displacements z [mm]	
Vertical Offset 1					
0.0	48.05000	1.00000	17.00000	6.2163	d
0.96250	49.01250	1.00000	17.00000	6.8292	d
1.9250	49.97500	1.00000	17.00000	7.1066	d
2.8875	50.93750	1.00000	17.00000	7.1132	d
3.8500	51.90000	1.00000	17.00000	6.9078	d

d - Displacements include imported displacements.

Structure: Library (Eastern Elevation) | Sub-structure: Sub 6

Dist.	Coordinates x [m]	y [m]	z [m]	Displacements z [mm]	
Vertical Offset 1					
0.0	52.00000	1.00000	17.00000	6.8765	d
1.0000	52.00000	0.00000	17.00000	5.7952	d
2.0000	52.00000	-1.00000	17.00000	5.5869	d
3.0000	52.00000	-2.00000	17.00000	5.3294	d
4.0000	52.00000	-3.00000	17.00000	5.0353	d
5.0000	52.00000	-4.00000	17.00000	4.7128	d
6.0000	52.00000	-5.00000	17.00000	4.4955	d

d - Displacements include imported displacements.

Structure: Library (Eastern Elevation) | Sub-structure: Sub 7

Dist.	Coordinates x [m]	y [m]	z [m]	Displacements z [mm]	
Vertical Offset 1					
0.0	52.00000	-5.00000	18.00000	4.4955	d
1.0000	53.00000	-5.00000	18.00000	4.1694	d
2.0000	54.00000	-5.00000	18.00000	3.9120	d
3.0000	55.00000	-5.00000	18.00000	3.6138	d
4.0000	56.00000	-5.00000	18.00000	3.2916	d
5.0000	57.00000	-5.00000	18.00000	2.9608	d
6.0000	58.00000	-5.00000	18.00000	2.6348	d
7.0000	59.00000	-5.00000	18.00000	2.3238	d
8.0000	60.00000	-5.00000	18.00000	2.0346	d
9.0000	61.00000	-5.00000	18.00000	1.7701	d
10.000	62.00000	-5.00000	18.00000	1.5294	d
11.000	63.00000	-5.00000	18.00000	1.3074	d
12.000	64.00000	-5.00000	18.00000	1.0948	d
13.000	65.00000	-5.00000	18.00000	0.87785	d
14.000	66.00000	-5.00000	18.00000	0.66369	d
15.000	67.00000	-5.00000	18.00000	0.47062	d
16.000	68.00000	-5.00000	18.00000	0.27689	d
17.000	69.00000	-5.00000	18.00000	0.082593	d
18.000	70.00000	-5.00000	18.00000	0.0	d

d - Displacements include imported displacements.

Structure: Library (Northern Elevation) | Sub-structure: Sub 8

Dist.	Coordinates x [m]	y [m]	z [m]	Displacements z [mm]	
Vertical Offset 1					
0.0	70.00000	-5.00000	18.00000	0.0	d
1.0000	70.00000	-4.00000	18.00000	0.0	d
2.0000	70.00000	-3.00000	18.00000	0.0	d
3.0000	70.00000	-2.00000	18.00000	0.0	d
4.0000	70.00000	-1.00000	18.00000	0.0	d
5.0000	70.00000	0.00000	18.00000	0.030043	d
6.0000	70.00000	1.00000	18.00000	0.25801	d
7.0000	70.00000	2.00000	18.00000	0.48592	d
8.0000	70.00000	3.00000	18.00000	0.73040	d
9.0000	70.00000	4.00000	18.00000	1.0038	d
10.000	70.00000	5.00000	18.00000	1.3145	d
11.000	70.00000	6.00000	18.00000	1.6663	d
12.000	70.00000	7.00000	18.00000	2.0590	d
13.000	70.00000	8.00000	18.00000	2.4883	d
14.000	70.00000	9.00000	18.00000	2.9456	d
15.000	70.00000	10.00000	18.00000	3.4180	d
16.000	70.00000	11.00000	18.00000	3.8886	d
17.000	70.00000	12.00000	18.00000	4.3360	d
18.000	70.00000	13.00000	18.00000	4.7349	d
19.000	70.00000	14.00000	18.00000	5.0557	d
20.000	70.00000	15.00000	18.00000	5.2644	d
21.000	70.00000	16.00000	18.00000	5.3231	d
22.000	70.00000	17.00000	18.00000	5.1896	d
23.000	70.00000	18.00000	18.00000	4.8174	d
24.000	70.00000	19.00000	18.00000	0.0	d
25.000	70.00000	20.00000	18.00000	0.0	d
26.000	70.00000	21.00000	18.00000	0.0	d
27.000	70.00000	22.00000	18.00000	0.0	d
28.000	70.00000	23.00000	18.00000	0.0	d
29.000	70.00000	24.00000	18.00000	0.0	d
30.000	70.00000	25.00000	18.00000	0.0	d
31.000	70.00000	26.00000	18.00000	0.0	d
32.000	70.00000	27.00000	18.00000	0.0	d
33.000	70.00000	28.00000	18.00000	0.0	d
34.000	70.00000	29.00000	18.00000	0.0	d
35.000	70.00000	30.00000	18.00000	0.0	d
36.000	70.00000	31.00000	18.00000	0.0	d
37.000	70.00000	32.00000	18.00000	0.0	d
38.000	70.00000	33.00000	18.00000	0.0	d
39.000	70.00000	34.00000	18.00000	0.0	d
40.000	70.00000	35.00000	18.00000	0.0	d
41.000	70.00000	36.00000	18.00000	0.0	d
42.000	70.00000	37.00000	18.00000	0.0	d

Oasys
GEA LIMITED
(GEOTECHNICAL &ENV ASSOC) J15050A
The Great Hall, Lincoln's Inn, Newman's Row, London, WC2A 3TL
Wall Movements Rev 3 Piling and Excavation
Damage Assessment
Job No. | Sheet No. | Rev.
Drg. Ref.
Made by MP | Date 08-Feb-2016 | Checked

Dist.	Coordinates x [m]	y [m]	z [m]	Displacements z [mm]	
43.000	70.00000	38.00000	18.00000	0.0	d
44.000	70.00000	39.00000	18.00000	0.0	d
45.000	70.00000	40.00000	18.00000	0.0	d

d - Displacements include imported displacements.

Structure: Library (Western Elevation) | Sub-structure: Sub 9

Dist.	Coordinates x [m]	y [m]	z [m]	Displacements z [mm]	
Vertical Offset 1					
0.0	70.00000	40.00000	18.00000	0.0	d
1.0000	69.00000	40.00000	18.00000	0.0	d
2.0000	68.00000	40.00000	18.00000	0.0	d
3.0000	67.00000	40.00000	18.00000	0.0	d
4.0000	66.00000	40.00000	18.00000	0.0	d
5.0000	65.00000	40.00000	18.00000	0.0	d
6.0000	64.00000	40.00000	18.00000	0.0	d
7.0000	63.00000	40.00000	18.00000	0.0	d
8.0000	62.00000	40.00000	18.00000	0.0	d
9.0000	61.00000	40.00000	18.00000	0.0	d
10.000	60.00000	40.00000	18.00000	0.0	d
11.000	59.00000	40.00000	18.00000	0.0	d
12.000	58.00000	40.00000	18.00000	0.0	d
13.000	57.00000	40.00000	18.00000	0.0	d
14.000	56.00000	40.00000	18.00000	0.0	d
15.000	55.00000	40.00000	18.00000	0.0	d
16.000	54.00000	40.00000	18.00000	0.0	d
17.000	53.00000	40.00000	18.00000	0.0	d
18.000	52.00000	40.00000	18.00000	0.0	d

d - Displacements include imported displacements.

Structure: Library / Great Hall (Western Elevation | Sub-structure: Sub 10

Dist.	Coordinates x [m]	y [m]	z [m]	Displacements z [mm]	
Vertical Offset 1					
0.0	52.00000	40.00000	17.00000	0.0	d
1.0000	52.00000	39.00000	17.00000	0.0	d
2.0000	52.00000	38.00000	17.00000	0.0	d

d - Displacements include imported displacements.

Structure: Great Hall (Western Elevation) | Sub-structure: Sub 11

Dist.	Coordinates x [m]	y [m]	z [m]	Displacements z [mm]	
Vertical Offset 1					
0.0	52.00000	38.00000	17.00000	0.0	d
1.0000	51.00000	38.00000	17.00000	0.0	d
2.0000	50.00000	38.00000	17.00000	0.0	d
3.0000	49.00000	38.00000	17.00000	0.0	d
4.0000	48.00000	38.00000	17.00000	0.0	d
5.0000	47.00000	38.00000	17.00000	0.0	d
6.0000	46.00000	38.00000	17.00000	0.0	d
7.0000	45.00000	38.00000	17.00000	0.0	d
8.0000	44.00000	38.00000	17.00000	0.0	d
9.0000	43.00000	38.00000	17.00000	0.0	d
10.000	42.00000	38.00000	17.00000	0.0	d
11.000	41.00000	38.00000	17.00000	0.0	d
12.000	40.00000	38.00000	17.00000	0.0	d
13.000	39.00000	38.00000	17.00000	0.0	d
14.000	38.00000	38.00000	17.00000	0.0	d
15.000	37.00000	38.00000	17.00000	0.0	d
16.000	36.00000	38.00000	17.00000	0.0	d
17.000	35.00000	38.00000	17.00000	0.0	d
18.000	34.00000	38.00000	17.00000	0.0	d
19.000	33.00000	38.00000	17.00000	0.0	d
20.000	32.00000	38.00000	17.00000	0.0	d
21.000	31.00000	38.00000	17.00000	0.0	d
22.000	30.00000	38.00000	17.00000	0.0	d
23.000	29.00000	38.00000	17.00000	0.0	d
24.000	28.00000	38.00000	17.00000	0.0	d
25.000	27.00000	38.00000	17.00000	0.0	d
26.000	26.00000	38.00000	17.00000	0.0	d
27.000	25.00000	38.00000	17.00000	0.0	d
28.000	24.00000	38.00000	17.00000	0.0	d
29.000	23.00000	38.00000	17.00000	0.0	d
30.000	22.00000	38.00000	17.00000	0.0	d
31.000	21.00000	38.00000	17.00000	0.0	d
32.000	20.00000	38.00000	17.00000	0.0	d
33.000	19.00000	38.00000	17.00000	0.0	d
34.000	18.00000	38.00000	17.00000	0.0	d
35.000	17.00000	38.00000	17.00000	0.0	d
36.000	16.00000	38.00000	17.00000	0.0	d
37.000	15.00000	38.00000	17.00000	0.0	d
38.000	14.00000	38.00000	17.00000	0.0	d
39.000	13.00000	38.00000	17.00000	0.0	d
40.000	12.00000	38.00000	17.00000	0.0	d
41.000	11.00000	38.00000	17.00000	0.0	d
42.000	10.00000	38.00000	17.00000	0.0	d
43.000	9.00000	38.00000	17.00000	0.0	d
44.000	8.00000	38.00000	17.00000	0.0	d
45.000	7.00000	38.00000	17.00000	0.0	d
46.000	6.00000	38.00000	17.00000	0.0	d

d - Displacements include imported displacements.

Structure: Great Hall (Western Elevation) | Sub-structure: Sub 12

Dist.	Coordinates x [m]	y [m]	z [m]	Displacements z [mm]	
Vertical Offset 1					
0.0	6.00000	38.00000	17.00000	0.0	d
1.0000	6.00000	39.00000	17.00000	0.0	d
2.0000	6.00000	40.00000	17.00000	0.0	d

d - Displacements include imported displacements.

Structure: Great Hall (Western Elevation) | Sub-structure: Sub 13

Dist.	Coordinates x [m]	y [m]	z [m]	Displacements z [mm]	
Vertical Offset 1					
0.0	6.00000	40.00000	17.00000	0.0	d
1.0000	5.00000	40.00000	17.00000	0.0	d
2.0000	4.00000	40.00000	17.00000	0.0	d
3.0000	3.00000	40.00000	17.00000	0.0	d
4.0000	2.00000	40.00000	17.00000	0.0	d
5.0000	1.00000	40.00000	17.00000	0.0	d
6.0000	0.00000	40.00000	17.00000	0.0	d
7.0000	-1.00000	40.00000	17.00000	0.0	d
8.0000	-2.00000	40.00000	17.00000	0.0	d
9.0000	-3.00000	40.00000	17.00000	0.0	d
10.000	-4.00000	40.00000	17.00000	0.0	d
11.000	-5.00000	40.00000	17.00000	0.0	d
12.000	-6.00000	40.00000	17.00000	0.0	d
13.000	-7.00000	40.00000	17.00000	0.0	d
14.000	-8.00000	40.00000	17.00000	0.0	d

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

d - Displacements include imported displacements.

Structure: Great Hall (Southern Elevation) | Sub-structure: Sub 14

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

Vertical Offset 1
0.0 -8.00000 40.00000 17.00000 0.0 d
1.0000 -8.00000 39.00000 17.00000 0.0 d
2.0000 -8.00000 38.00000 17.00000 0.0 d
3.0000 -8.00000 37.00000 17.00000 0.0 d
4.0000 -8.00000 36.00000 17.00000 0.0 d
5.0000 -8.00000 35.00000 17.00000 0.0 d
6.0000 -8.00000 34.00000 17.00000 0.0 d
7.0000 -8.00000 33.00000 17.00000 0.0 d
8.0000 -8.00000 32.00000 17.00000 0.091868 d
9.0000 -8.00000 31.00000 17.00000 0.27689 d
10.000 -8.00000 30.00000 17.00000 0.46046 d
11.000 -8.00000 29.00000 17.00000 0.64234 d
12.000 -8.00000 28.00000 17.00000 0.83703 d
13.000 -8.00000 27.00000 17.00000 1.0391 d
14.000 -8.00000 26.00000 17.00000 1.2323 d
15.000 -8.00000 25.00000 17.00000 1.4270 d
16.000 -8.00000 24.00000 17.00000 1.6297 d
17.000 -8.00000 23.00000 17.00000 1.8433 d
18.000 -8.00000 22.00000 17.00000 2.0675 d
19.000 -8.00000 21.00000 17.00000 2.2989 d
20.000 -8.00000 20.00000 17.00000 2.5315 d
21.000 -8.00000 19.00000 17.00000 2.7861 d
22.000 -8.00000 18.00000 17.00000 3.0419 d
23.000 -8.00000 17.00000 17.00000 3.2916 d
24.000 -8.00000 16.00000 17.00000 3.5267 d
25.000 -8.00000 15.00000 17.00000 3.7381 d
26.000 -8.00000 14.00000 17.00000 3.9158 d
27.000 -8.00000 13.00000 17.00000 4.0503 d
28.000 -8.00000 12.00000 17.00000 4.1327 d
29.000 -8.00000 11.00000 17.00000 4.7891 d
30.000 -8.00000 10.00000 17.00000 4.7891 d
31.000 -8.00000 9.00000 17.00000 4.7891 d
32.000 -8.00000 8.00000 17.00000 4.7891 d
33.000 -8.00000 7.00000 17.00000 4.7891 d
34.000 -8.00000 6.00000 17.00000 4.7891 d
35.000 -8.00000 5.00000 17.00000 4.7891 d
36.000 -8.00000 4.00000 17.00000 4.7891 d
37.000 -8.00000 3.00000 17.00000 4.7891 d
38.000 -8.00000 2.00000 17.00000 4.7891 d
39.000 -8.00000 1.00000 17.00000 4.7891 d
40.000 -8.00000 0.00000 17.00000 4.1327 d
41.000 -8.00000 -1.00000 17.00000 4.0503 d
d - Displacements include imported displacements.

Structure: Boundary Wall (adjacent to single level basement) | Sub-structure: Sub 15

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

Vertical Offset 1
0.0 60.00000 41.00000 18.00000 0.14238 d
1.0000 61.00000 41.00000 18.00000 0.18547 d
2.0000 62.00000 41.00000 18.00000 0.24011 d
3.0000 63.00000 41.00000 18.00000 0.31002 d
4.0000 64.00000 41.00000 18.00000 0.40100 d
5.0000 65.00000 41.00000 18.00000 0.52289 d
6.0000 66.00000 41.00000 18.00000 0.69426 d
7.0000 67.00000 41.00000 18.00000 0.95517 d
8.0000 68.00000 41.00000 18.00000 1.4091 d
9.0000 69.00000 41.00000 18.00000 2.3877 d
10.000 70.00000 41.00000 18.00000 5.1896 d
11.000 71.00000 41.00000 18.00000 6.0710 d
12.000 72.00000 41.00000 18.00000 6.0710 d
13.000 73.00000 41.00000 18.00000 6.0710 d
14.000 74.00000 41.00000 18.00000 6.0710 d
15.000 75.00000 41.00000 18.00000 6.0710 d
16.000 76.00000 41.00000 18.00000 6.0710 d
17.000 77.00000 41.00000 18.00000 6.0710 d
18.000 78.00000 41.00000 18.00000 6.0710 d
19.000 79.00000 41.00000 18.00000 6.0710 d
20.000 80.00000 41.00000 18.00000 6.0710 d
21.000 81.00000 41.00000 18.00000 6.0710 d
22.000 82.00000 41.00000 18.00000 5.1896 d
23.000 83.00000 41.00000 18.00000 4.7243 d
24.000 84.00000 41.00000 18.00000 4.9038 d
25.000 85.00000 41.00000 18.00000 4.8853 d
26.000 86.00000 41.00000 18.00000 4.7172 d
27.000 87.00000 41.00000 18.00000 4.4384 d
28.000 88.00000 41.00000 18.00000 4.0817 d
29.000 89.00000 41.00000 18.00000 3.6754 d
30.000 90.00000 41.00000 18.00000 3.2439 d
d - Displacements include imported displacements.

Specific Building Damage Results - All Segments

Structure: East Terrace | Sub-structure: Sub 1

Vertical Offset from Line for Vertical Movement Calculations	Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max. Tensile Strain	Maximum Gradient of Horizontal Displacement Curve	Maximum Gradient of Vertical Displacement Curve	Min. Radius of Curvature	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]			[m]	
0.0	1	0.0	5.9222	Sagging	0.0064878	0.033051	0.042512	-426.69E-6	-448.04E-6	6060.7	0 (Negligible)
	2	5.9222	1.9278	Hogging	0.014459	-0.26034	0.052717	0.0042963	-373.51E-6	1242.5	1 (Very Slight)

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

Structure: East Terrace | Sub-structure: Sub 2

Vertical Offset from Line for Vertical Movement Calculations	Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max. Tensile Strain	Maximum Gradient of Horizontal Displacement Curve	Maximum Gradient of Vertical Displacement Curve	Min. Radius of Curvature	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]			[m]	
0.0	1	0.0	1.9128	Hogging	0.023906	-0.35459	0.072219	0.0082051	-590.24E-6	738.90	1 (Very Slight)
	2	1.9128	2.0872	Sagging	0.0023226	-0.033992	0.0069137	0.0082051	-590.24E-6	6799.2	0 (Negligible)
	3	4.0000	6.0000	None	0.0	0.0	0.0	0.0	0.0 -		0 (Negligible)
	4	10.000	3.0000	Sagging	0.013010	0.0	0.013119	0.0	585.44E-6	1366.5	0 (Negligible)

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

Structure: Great Hall (East Terrace Frontage) | Sub-structure: Sub 3

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

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The Great Hall, Lincoln's Inn, Newman's Row, London, WC2A 3TL
Wall Movements Rev 3 Piling and Excavation
Damage Assessment
Job No. J15050A | Sheet No. | Rev.
Drg. Ref.
Made by MP | Date 08-Feb-2016 | Checked

Vertical Offset from Line for Vertical Movement Calculations	Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max. Tensile Strain	Maximum Gradient of Horizontal Displacement Curve	Maximum Gradient of Vertical Displacement Curve	Min. Radius of Curvature	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]			[m]	
0.0	1	0.0	47.850	None		0.0	0.0	0.0	0.0	0.0 -	0 (Negligible)

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

Structure: Library (East Terrace Frontage) | Sub-structure: Sub 4

Vertical Offset from Line for Vertical Movement Calculations	Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max. Tensile Strain	Maximum Gradient of Horizontal Displacement Curve	Maximum Gradient of Vertical Displacement Curve	Min. Radius of Curvature	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]			[m]	
0.0	1	0.0	3.0000	Sagging	0.013045	-0.27128	0.054774	0.0082051	-590.24E-6	1351.0	1 (Very Slight)
	2	3.0000	8.0000	None		0.0	0.0	0.0	0.0	0.0 -	0 (Negligible)

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

Structure: Library (Eastern Elevation) | Sub-structure: Sub 5

Vertical Offset from Line for Vertical Movement Calculations	Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max. Tensile Strain	Maximum Gradient of Horizontal Displacement Curve	Maximum Gradient of Vertical Displacement Curve	Min. Radius of Curvature	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]			[m]	
0.0	1	0.0	3.8500	Sagging	0.014079	0.069905	0.073220	-743.59E-6	-636.28E-6	2638.4	1 (Very Slight)

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

Structure: Library (Eastern Elevation) | Sub-structure: Sub 6

Vertical Offset from Line for Vertical Movement Calculations	Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max. Tensile Strain	Maximum Gradient of Horizontal Displacement Curve	Maximum Gradient of Vertical Displacement Curve	Min. Radius of Curvature	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]			[m]	
0.0	1	0.0	2.8306	Hogging	0.019434	-0.074509	0.018937	0.0013237	0.0010812	905.85	0 (Negligible)
	2	2.8306	1.0954	Sagging	472.56E-6	-0.059199	0.011843	948.53E-6	294.23E-6	26792.	0 (Negligible)
	3	3.9261	2.0739	Hogging	0.0025655	-0.017435	0.0037967	527.23E-6	322.58E-6	7211.1	0 (Negligible)

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

Structure: Library (Eastern Elevation) | Sub-structure: Sub 7

Vertical Offset from Line for Vertical Movement Calculations	Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max. Tensile Strain	Maximum Gradient of Horizontal Displacement Curve	Maximum Gradient of Vertical Displacement Curve	Min. Radius of Curvature	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]			[m]	
0.0	1	0.0	1.8181	Hogging	0.0016863	-0.0052885	0.0014777	67.981E-6	326.13E-6	10410.	0 (Negligible)
	2	1.8181	2.8762	Sagging	813.71E-6	0.011839	0.011983	-194.75E-6	330.66E-6	41379.	0 (Negligible)
	3	4.6943	11.306	Hogging	0.0020421	0.019910	0.020611	-310.14E-6	330.66E-6	36396.	0 (Negligible)

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

Structure: Library (Northern Elevation) | Sub-structure: Sub 8

Vertical Offset from Line for Vertical Movement Calculations	Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max. Tensile Strain	Maximum Gradient of Horizontal Displacement Curve	Maximum Gradient of Vertical Displacement Curve	Min. Radius of Curvature	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]			[m]	
0.0	1	6.0000	8.8273	Hogging	0.0038317	0.031656	0.032689	-416.16E-6	-472.22E-6	18665.	0 (Negligible)
	2	14.827	8.1727	Sagging	0.012097	0.052470	0.058392	0.0074676	0.0048533	775.57	1 (Very Slight)

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

Structure: Library (Western Elevation) | Sub-structure: Sub 9

Vertical Offset from Line for Vertical Movement Calculations	Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max. Tensile Strain	Maximum Gradient of Horizontal Displacement Curve	Maximum Gradient of Vertical Displacement Curve	Min. Radius of Curvature	Damage Category
[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: Library / Great Hall (Western Elevation | Sub-structure: Sub 10

Vertical Offset from Line for Vertical Movement Calculations	Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max. Tensile Strain	Maximum Gradient of Horizontal Displacement Curve	Maximum Gradient of Vertical Displacement Curve	Min. Radius of Curvature	Damage Category
[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: Great Hall (Western Elevation) | Sub-structure: Sub 11

Vertical Offset from Line for Vertical Movement Calculations	Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max. Tensile Strain	Maximum Gradient of Horizontal Displacement Curve	Maximum Gradient of Vertical Displacement Curve	Min. Radius of Curvature	Damage Category
[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: Great Hall (Western Elevation) | Sub-structure: Sub 12

Vertical Offset from Line for Vertical Movement Calculations	Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max. Tensile Strain	Maximum Gradient of Horizontal Displacement Curve	Maximum Gradient of Vertical Displacement Curve	Min. Radius of Curvature	Damage Category
[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: Great Hall (Western Elevation) | Sub-structure: Sub 13

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

Movement Calculations						Displacement Curve	Displacement 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: Great Hall (Southern Elevation) | Sub-structure: Sub 14

Vertical Offset from Line for Vertical Movement Calculations	Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max. Tensile Strain	Maximum Gradient of Horizontal Displacement Curve	Maximum Gradient of Vertical Displacement Curve	Min. Radius of Curvature	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]			[m]	
0.0	1	9.0000	3.6763	Hogging	369.85E-6	0.0037146	0.0037564	-131.51E-6	-202.07E-6	45171.	0 (Negligible)
	2	12.676	1.1404	Sagging	180.05E-6	0.016769	0.016782	-181.99E-6	-202.07E-6	448900.	0 (Negligible)
	3	13.817	7.5998	Hogging	840.61E-6	0.015569	0.015764	-239.86E-6	-255.75E-6	87255.	0 (Negligible)
	4	21.416	4.8712	Sagging	0.0014515	-0.015948	0.0032969	394.52E-6	-255.75E-6	23256.	0 (Negligible)
	5	26.288	2.0855	Hogging	0.0080829	-0.035201	0.0085328	453.42E-6	-656.40E-6	9096.4	0 (Negligible)
	6	28.373	2.6268	Sagging	0.011866	0.0	0.011832	0.0	-656.40E-6	5420.9	0 (Negligible)
	7	31.000	6.0000	None	0.0	0.0	0.0	0.0	0.0	-	0 (Negligible)
	8	37.000	2.4093	Sagging	0.0092360	0.0	0.0092140	0.0	656.40E-6	5417.6	0 (Negligible)
	9	39.409	1.5907	Hogging	0.013352	-0.028491	0.010293	453.42E-6	656.40E-6	1134.2	0 (Negligible)

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

Structure: Boundary Wall (adjacent to single level basement) | Sub-structure: Sub 15

Vertical Offset from Line for Vertical Movement Calculations	Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max. Tensile Strain	Maximum Gradient of Horizontal Displacement Curve	Maximum Gradient of Vertical Displacement Curve	Min. Radius of Curvature	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]			[m]	
0.0	1	0.0	9.4370	Hogging	0.018612	0.010604	0.032602	0.0019969	-0.0028075	1304.7	0 (Negligible)
	2	9.4370	3.5630	Sagging	0.038683	-0.031489	0.026499	0.0019969	-0.0028075	1087.2	0 (Negligible)
	3	13.000	6.0000	None	0.0	0.0	0.0	0.0	0.0	-	0 (Negligible)
	4	19.000	2.6918	Sagging	0.016704	0.0	0.015548	0.0	881.44E-6	2983.4	0 (Negligible)
	5	21.692	2.4530	Hogging	0.017811	-0.21462	0.044113	0.0041552	881.44E-6	2656.0	0 (Negligible)
	6	24.145	5.8552	Sagging	0.0058945	0.032236	0.040093	-420.70E-6	431.37E-6	6634.9	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: East Terrace | Sub-structure: Sub 1

Vertical Offset from Line for Vertical Movement Calculations	Deflection Ratio	Average Horizontal Strain	Maximum Slope	Maximum Settlement	Max. Tensile Strain	Maximum Gradient of Horizontal Displacement Curve	Maximum Gradient of Vertical Displacement Curve	Min. Radius of Curvature (Hogging)	Min. Radius of Curvature (Sagging)	Damage Category
[m]		[%]		[mm]	[%]			[m]	[m]	
0.0	0.014459	-0.26034	-448.04E-6	5.9111	0.052717	0.0042963	-448.04E-6	1242.5	6060.7	1 (Very Slight)

Structure: East Terrace | Sub-structure: Sub 2

Vertical Offset from Line for Vertical Movement Calculations	Deflection Ratio	Average Horizontal Strain	Maximum Slope	Maximum Settlement	Max. Tensile Strain	Maximum Gradient of Horizontal Displacement Curve	Maximum Gradient of Vertical Displacement Curve	Min. Radius of Curvature (Hogging)	Min. Radius of Curvature (Sagging)	Damage Category
[m]		[%]		[mm]	[%]			[m]	[m]	
0.0	0.023906	-0.35459	-590.24E-6	6.1741	0.072219	0.0082051	-590.24E-6	738.90	1366.5	1 (Very Slight)

Structure: Great Hall (East Terrace Frontage) | Sub-structure: Sub 3

Vertical Offset from Line for Vertical Movement Calculations	Deflection Ratio	Average Horizontal Strain	Maximum Slope	Maximum Settlement	Max. Tensile Strain	Maximum Gradient of Horizontal Displacement Curve	Maximum Gradient of Vertical Displacement Curve	Min. Radius of Curvature (Hogging)	Min. Radius of Curvature (Sagging)	Damage Category
[m]		[%]		[mm]	[%]			[m]	[m]	
0.0	0.0	0.0	0.0	6.1741	0.0	0.0	0.0	-	-	0 (Negligible)

Structure: Library (East Terrace Frontage) | Sub-structure: Sub 4

Vertical Offset from Line for Vertical Movement Calculations	Deflection Ratio	Average Horizontal Strain	Maximum Slope	Maximum Settlement	Max. Tensile Strain	Maximum Gradient of Horizontal Displacement Curve	Maximum Gradient of Vertical Displacement Curve	Min. Radius of Curvature (Hogging)	Min. Radius of Curvature (Sagging)	Damage Category
[m]		[%]		[mm]	[%]			[m]	[m]	
0.0	0.013045	-0.27128	-590.24E-6	6.1741	0.054774	0.0082051	-590.24E-6	-	1351.0	1 (Very Slight)

Structure: Library (Eastern Elevation) | Sub-structure: Sub 5

Vertical Offset from Line for Vertical Movement Calculations	Deflection Ratio	Average Horizontal Strain	Maximum Slope	Maximum Settlement	Max. Tensile Strain	Maximum Gradient of Horizontal Displacement Curve	Maximum Gradient of Vertical Displacement Curve	Min. Radius of Curvature (Hogging)	Min. Radius of Curvature (Sagging)	Damage Category
[m]		[%]		[mm]	[%]			[m]	[m]	
0.0	0.014079	0.069905	-636.28E-6	7.1131	0.073220	-743.59E-6	-636.28E-6	-	2638.4	1 (Very Slight)

Structure: Library (Eastern Elevation) | Sub-structure: Sub 6

Vertical Offset from Line for Vertical Movement Calculations	Deflection Ratio	Average Horizontal Strain	Maximum Slope	Maximum Settlement	Max. Tensile Strain	Maximum Gradient of Horizontal Displacement Curve	Maximum Gradient of Vertical Displacement Curve	Min. Radius of Curvature (Hogging)	Min. Radius of Curvature (Sagging)	Damage Category
[m]		[%]		[mm]	[%]			[m]	[m]	
0.0	0.019434	-0.074509	0.0010812	6.8765	0.018937	0.0013237	0.0010812	905.85	26792.	0 (Negligible)

Structure: Library (Eastern Elevation) | Sub-structure: Sub 7

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GEA LIMITED
(GEOTECHNICAL &ENV ASSOC)
The Great Hall, Lincoln's Inn, Newman's Row, London, WC2A 3TL
Wall Movements Rev 3 Piling and Excavation
Damage Assessment
Job No. J15050A | Sheet No. | Rev.
Drg. Ref.
Made by MP | Date 08-Feb-2016 | Checked

Vertical Offset from Line for Vertical Movement Calculations	Deflection Ratio	Average Horizontal Strain	Maximum Slope	Maximum Settlement	Max. Tensile Strain	Maximum Gradient of Horizontal Displacement Curve	Maximum Gradient of Vertical Displacement Curve	Min. Radius of Curvature (Hogging)	Min. Radius of Curvature (Sagging)	Damage Category
[m]		[%]		[mm]	[%]			[m]	[m]	
0.0	0.0020421	0.019910	330.66E-6	4.4955	0.020611	-310.14E-6	330.66E-6	10410.	41379.	0 (Negligible)

Structure: Library (Northern Elevation) | Sub-structure: Sub 8

Vertical Offset from Line for Vertical Movement Calculations	Deflection Ratio	Average Horizontal Strain	Maximum Slope	Maximum Settlement	Max. Tensile Strain	Maximum Gradient of Horizontal Displacement Curve	Maximum Gradient of Vertical Displacement Curve	Min. Radius of Curvature (Hogging)	Min. Radius of Curvature (Sagging)	Damage Category
[m]		[%]		[mm]	[%]			[m]	[m]	
0.0	0.012097	0.052470	0.0048533	5.3206	0.058392	0.0074676	0.0048533	18665.	775.57	1 (Very Slight)

Structure: Library (Western Elevation) | Sub-structure: Sub 9

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

Structure: Library / Great Hall (Western Elevation | Sub-structure: Sub 10

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

Structure: Great Hall (Western Elevation) | Sub-structure: Sub 11

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

Structure: Great Hall (Western Elevation) | Sub-structure: Sub 12

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

Structure: Great Hall (Western Elevation) | Sub-structure: Sub 13

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

Structure: Great Hall (Southern Elevation) | Sub-structure: Sub 14

Vertical Offset from Line for Vertical Movement Calculations	Deflection Ratio	Average Horizontal Strain	Maximum Slope	Maximum Settlement	Max. Tensile Strain	Maximum Gradient of Horizontal Displacement Curve	Maximum Gradient of Vertical Displacement Curve	Min. Radius of Curvature (Hogging)	Min. Radius of Curvature (Sagging)	Damage Category
[m]		[%]		[mm]	[%]			[m]	[m]	
0.0	0.013352	-0.035201	656.40E-6	4.7891	0.016782	453.42E-6	656.40E-6	1134.2	5417.6	0 (Negligible)

Structure: Boundary Wall (adjacent to single level basement) | Sub-structure: Sub 15

Vertical Offset from Line for Vertical Movement Calculations	Deflection Ratio	Average Horizontal Strain	Maximum Slope	Maximum Settlement	Max. Tensile Strain	Maximum Gradient of Horizontal Displacement Curve	Maximum Gradient of Vertical Displacement Curve	Min. Radius of Curvature (Hogging)	Min. Radius of Curvature (Sagging)	Damage Category
[m]		[%]		[mm]	[%]			[m]	[m]	
0.0	0.038683	-0.21462	-0.0028075	6.0710	0.044113	0.0041552	-0.0028075	1304.7	1087.2	0 (Negligible)

Specific Building Damage Results - Critical Segments within Each Structure

Structure Name	Parameter	Critical Sub-Structure	Critical Segment	Start	End	Curvature	Maximum Slope	Maximum Settlement	Max. Tensile Strain	Min. Radius of Curvature (Hogging)	Min. Radius of Curvature (Sagging)	Damage Category
				[m]	[m]			[mm]	[%]	[m]	[m]	
East Terrace	Maximum Slope	Sub 2	1	0.0	1.9128	Hogging	**590.24E-6**	6.1230	0.072219	738.90	-	1 (Very Slight)
	Maximum Settlement	Sub 2	2	1.9128	4.0000	Sagging	590.24E-6	**6.1741**	0.0069137	-	6799.2	0 (Negligible)
	Max. Tensile Strain	Sub 2	1	0.0	1.9128	Hogging	590.24E-6	6.1230	**0.072219**	738.90	-	1 (Very Slight)
	Min. Radius of Curvature (Hogging)	Sub 2	1	0.0	1.9128	Hogging	590.24E-6	6.1230	0.072219	**738.90**	-	1 (Very Slight)
	Min. Radius of Curvature (Sagging)	Sub 2	4	10.000	13.000	Sagging	585.44E-6	6.1741	0.013119	-	**1366.5**	0 (Negligible)
Great Hall (East Terrace Frontage)	Maximum Slope	-	-	-	-	-	-	-	-	-	-	-
	Maximum Settlement	Sub 3	1	0.0	47.850	Sagging	0.0	**6.1741**	0.0	-	-	0 (Negligible)
	Max. Tensile Strain	Sub 3	1	0.0	47.850	Sagging	0.0	6.1741	**0.0**	-	-	0 (Negligible)
	Min. Radius of Curvature (Hogging)	-	-	-	-	-	-	-	-	-	-	-
	Min. Radius of Curvature (Sagging)	-	-	-	-	-	-	-	-	-	-	-
Library (East Terrace Frontage)	Maximum Slope	Sub 4	1	0.0	3.0000	Sagging	**590.24E-6**	6.1741	0.054774	-	1351.0	1 (Very Slight)
	Maximum	Sub 4	1	0.0	3.0000	Sagging	590.24E-6	**6.1741**	0.054774	-	1351.0	1 (Very Slight)

Structure Name	Parameter	Critical Sub-Structure	Critical Segment	Start	End	Curvature	Maximum Slope	Maximum Settlement	Max. Tensile Strain	Min. Radius of Curvature (Hogging)	Min. Radius of Curvature (Sagging)	Damage Category
	Settlement											
	Max. Tensile Strain	Sub 4	1	0.0	3.0000	Sagging	590.24E-6	6.1741	**0.054774**	-	1351.0	1 (Very Slight)
	Min. Radius of Curvature (Hogging)	-	-	-	-	-	-	-	-	-	-	-
	Min. Radius of Curvature (Sagging)	Sub 4	1	0.0	3.0000	Sagging	590.24E-6	6.1741	0.054774	-	**1351.0**	1 (Very Slight)
Library (Eastern Elevation)	Maximum Slope	Sub 6	1	0.0	2.8306	Hogging	**0.0010812**	6.8765	0.018937	905.85	-	0 (Negligible)
	Maximum Settlement	Sub 5	1	0.0	3.8500	Sagging	636.28E-6	**7.1131**	0.073220	-	2638.4	1 (Very Slight)
	Max. Tensile Strain	Sub 5	1	0.0	3.8500	Sagging	636.28E-6	7.1131	**0.073220**	-	2638.4	1 (Very Slight)
	Min. Radius of Curvature (Hogging)	Sub 6	1	0.0	2.8306	Hogging	0.0010812	6.8765	0.018937	**905.85**	-	0 (Negligible)
	Min. Radius of Curvature (Sagging)	Sub 5	1	0.0	3.8500	Sagging	636.28E-6	7.1131	0.073220	-	**2638.4**	1 (Very Slight)
Library (Northern Elevation)	Maximum Slope	Sub 8	2	14.827	23.000	Sagging	**0.0048533**	5.3206	0.058392	-	775.57	1 (Very Slight)
	Maximum Settlement	Sub 8	2	14.827	23.000	Sagging	0.0048533	**5.3206**	0.058392	-	775.57	1 (Very Slight)
	Max. Tensile Strain	Sub 8	2	14.827	23.000	Sagging	0.0048533	5.3206	**0.058392**	-	775.57	1 (Very Slight)
	Min. Radius of Curvature (Hogging)	Sub 8	1	6.0000	14.827	Hogging	472.22E-6	3.3365	0.032689	**18665.**	-	0 (Negligible)
	Min. Radius of Curvature (Sagging)	Sub 8	2	14.827	23.000	Sagging	0.0048533	5.3206	0.058392	-	**775.57**	1 (Very Slight)
Library (Western Elevation)	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.											
Library # Great Hall (Western Elevation	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.											
Great Hall (Western Elevation)	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.											
Great Hall (Southern Elevation)	Maximum Slope	Sub 14	5	26.288	28.373	Hogging	**656.40E-6**	4.3777	0.0085328	9096.4	-	0 (Negligible)
	Maximum Settlement	Sub 14	6	28.373	31.000	Sagging	656.40E-6	**4.7891**	0.011832	-	5420.9	0 (Negligible)
	Max. Tensile Strain	Sub 14	2	12.676	13.817	Sagging	202.07E-6	1.1969	**0.016782**	-	448900.	0 (Negligible)
	Min. Radius of Curvature (Hogging)	Sub 14	9	39.409	41.000	Hogging	656.40E-6	4.5204	0.010293	**1134.2**	-	0 (Negligible)
	Min. Radius of Curvature (Sagging)	Sub 14	8	37.000	39.409	Sagging	656.40E-6	4.7891	0.0092140	-	**5417.6**	0 (Negligible)
Boundary Wall (adjacent to single level basement)	Maximum Slope	Sub 15	1	0.0	9.4370	Hogging	**0.0028075**	3.6122	0.032602	1304.7	-	0 (Negligible)
	Maximum Settlement	Sub 15	2	9.4370	13.000	Sagging	0.0028075	**6.0710**	0.026499	-	1087.2	0 (Negligible)
	Max. Tensile Strain	Sub 15	5	21.692	24.145	Hogging	881.44E-6	5.4613	**0.044113**	2656.0	-	0 (Negligible)
	Min. Radius of Curvature (Hogging)	Sub 15	1	0.0	9.4370	Hogging	0.0028075	3.6122	0.032602	**1304.7**	-	0 (Negligible)
	Min. Radius of Curvature (Sagging)	Sub 15	2	9.4370	13.000	Sagging	0.0028075	6.0710	0.026499	-	**1087.2**	0 (Negligible)

Specific Building Damage Results - All Combined Segments

Structure: East Terrace | Sub-structure: Sub 1

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

No structures have segments combined.

Structure: East Terrace | Sub-structure: Sub 2

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

No structures have segments combined.

Structure: Great Hall (East Terrace Frontage) | Sub-structure: Sub 3

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

No structures have segments combined.

Structure: Library (East Terrace Frontage) | Sub-structure: Sub 4

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

No structures have segments combined.

Structure: Library (Eastern Elevation) | Sub-structure: Sub 5

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Job No. J15050A | Sheet No. | Rev.
Drg. Ref.
Made by MP | Date 08-Feb-2016 | Checked

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

No structures have segments combined.

Structure: Library (Eastern Elevation) | Sub-structure: Sub 6

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

No structures have segments combined.

Structure: Library (Eastern Elevation) | Sub-structure: Sub 7

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

No structures have segments combined.

Structure: Library (Northern Elevation) | Sub-structure: Sub 8

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

No structures have segments combined.

Structure: Library (Western Elevation) | Sub-structure: Sub 9

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

No structures have segments combined.

Structure: Library / Great Hall (Western Elevation | Sub-structure: Sub 10

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

No structures have segments combined.

Structure: Great Hall (Western Elevation) | Sub-structure: Sub 11

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

No structures have segments combined.

Structure: Great Hall (Western Elevation) | Sub-structure: Sub 12

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

No structures have segments combined.

Structure: Great Hall (Western Elevation) | Sub-structure: Sub 13

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

No structures have segments combined.

Structure: Great Hall (Southern Elevation) | Sub-structure: Sub 14

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

No structures have segments combined.

Structure: Boundary Wall (adjacent to single level basement) | Sub-structure: Sub 15

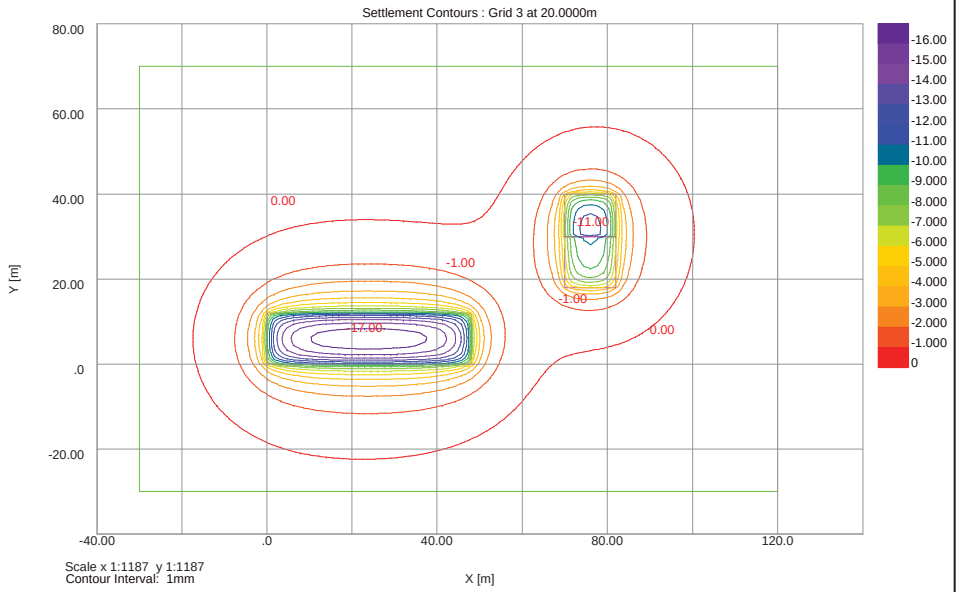
Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max. Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Oasys

Job No.	Sheet No.	Rev.
J15050		
Drg. Ref.		
Made by MP	Date	Checked

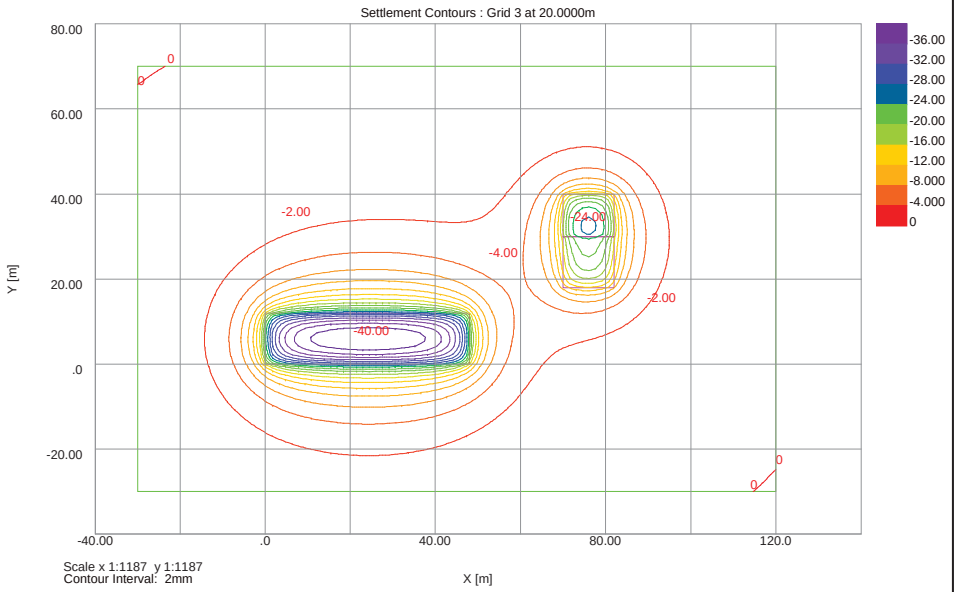
The Great Hall, Lincoln's Inn, London, WC2A 3TL
Heave Analysis
Short-Term Heave



Oasys

Job No.	Sheet No.	Rev.
J15050		
Drg. Ref.		
Made by MP	Date	Checked

The Great Hall, Lincoln's Inn, London, WC2A 3TL
Heave Analysis
Total Heave



Geotechnical & Environmental Associates
Widbury Barn
Widbury Hill
Ware
Herts SG12 7QE

Damage Category Plan

Site	The Great Hall, Lincoln's Inn, Newman's Row, London WC2A 3TL
Client	The Honourable Society of Lincoln's Inn
Engineer	Eckersley O'Callaghan

Job Number J15050

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