Titles

Job No.: 134910
Job Title: 8a Fawley Road
Sub-title: Ground Movement Assessment
Calculation Heading:
Initials: RT
Checker:
Date Saved: 03 Jan 2020
Date Checked:
Notes:
File Name: 03 ST loading (drained) - TJ.pdd
File Path: \\Lonsrvr05.london.fairhurst.local\users\a_PROJECTS\134910_Fawley Road\Geotech\09 Ground Movement Assessment\Data\PDisp

History

Date	Time	By	Notes
25-Oct-2019	14:05	rturner	New
25-Oct-2019	17:01	rturner	
03-Jan-2020	10:27	rturner	
03-Jan-2020	11:08	rturner	
03-Jan-2020	11:16	rturner	
13-Jan-2020	10:36	tjanusz	
13-Jan-2020	11:35	tjanusz	
13-Jan-2020	11:41	tjanusz	
13-Jan-2020	12:10	tjanusz	
13-Jan-2020	12:18	tjanusz	
13-Jan-2020	14:24	tjanusz	
14-Jan-2020	12:13	tjanusz	
14-Jan-2020	12:16	tjanusz	
06-Aug-2020	20:01	tjanusz	Open

Analysis Options

General
Global Poisson's ratio: 0.20
Maximum allowable ratio between values of E: 1.5
Horizontal rigid boundary level: -25.00 [m OD]
Displacements at load centroids: Yes
GSA piled raft data : No

Elastic
Elastic : Yes
Analysis: Boussinesq
Stiffness for horizontal displacement calculations: Weighted average
Using legacy heave correction factor: No

Consolidation
Consolidation : No

Soil ProfilesBH1 & BH2

Layer ref.	Name	Level at top [mOD]	Number of intermediate displacement levels	Youngs Modulus : Top [kN/m²]	Youngs Modulus : Btm. [kN/m²]	Poissons ratio	Non-linear curve
1	London Clay weathered	0.0	44	23500.	42000.	0.25000	None
2	London Clay	-11.000	28	42000.	42000.	0.25000	None

Soil Zones

Zone	Name	X min [m]	X max [m]	Y min [m]	Y max [m]	Profile
1	1	-10.000	50.000	-10.000	40.000	BH1 & BH2

Rectangular Load Data

Load ref.	Name	Orientation of Plane	Centre (Global) : x [m]	Centre (Global) : y [m]	Centre (Global) : z [m]	Position : Angle of local x from [Degrees]	Position : Width x or Radius [m]	Position : Length y [m]	Value : Normal (local z) [kN/m²]	Value : Tangential (local x) [kN/m²]	Value : Tangential (local y) [kN/m²]
1	Slab + Pedestrian	Horizontal	19.73333	16.42006	0.00000	0.0	7.7310	9.6755	13.750	0.0	0.0
2	Lightwell #1	Horizontal	24.46608	18.80826	0.00000	0.0	1.5693	2.9027	8.7500	0.0	0.0
3	Lightwell #2	Horizontal	24.51209	13.64956	0.00000	0.0	1.7133	2.7375	8.7500	0.0	0.0
4	Internal Wall #1	Horizontal	18.46844	19.32271	0.00000	0.0	1.3499	3.7758	35.400	0.0	0.0
5	Internal Wall #2	Horizontal	18.47256	14.55398	0.00000	0.0	1.4336	5.7664	56.660	0.0	0.0
6	Spreader Beam #1	Horizontal	17.12537	18.75811	0.00000	0.0	1.4956	3.9764	61.880	0.0	0.0
7	Spreader Beam #2	Horizontal	20.72256	16.78540	0.00000	0.0	4.5053	1.3991	37.130	0.0	0.0
8	Internal Pad	Horizontal	19.41416	13.45398	0.00000	0.0	1.1788	1.1947	65.970	0.0	0.0
9	No.6 Party Wall	Horizontal	19.27552	20.94631	0.00000	0.0	7.8348	0.92507	135.98	0.0	0.0
10	Rear Wall	Horizontal	16.14513	16.66549	0.00000	0.0	0.84248	9.5575	99.260	0.0	0.0
11	No.10 Side Ext Wall	Horizontal	19.82655	11.97876	0.00000	0.0	8.1982	1.0619	115.00	0.0	0.0
12	Front Ext Wall	Horizontal	22.63599	16.09439	0.00000	0.0	0.99115	2.8507	115.00	0.0	0.0

Displacement Grids

Name	Extrusion: Direction	X1 [m]	Y1 [m]	Z1 [m]	X2 [m]	Y2 [m]	Z2 [m]	Intervals Along Line [No.]	Extrusion: Distance [m]	Extrusion: Intervals Along [No.]	Calculate	Detailed Results
Grid 1	Global Y	-13.30614	-11.48477	0.00000	51.45379	-	0.00000	100	53.17398	100	Yes	Yes

Warnings

(1)The displacement location of Grid 1 at (-13.306, -11.485, 0.000)m lies wide of all soil zones. The first soil profile will be used.There are more displacement locations for which this warning applies. Only one is detailed here.

(2)The load at (19.733, 16.420, 0.000)m lies wide of all soil zones. Displacements at its centre have been requested. The first soil profile will be used.