Titles

Job No.: GGC16550
Job Title: 190 Goldhurst Terrace
Sub-title:
Calculation Heading:
Initials: KRG
Checker:
Date Saved:
Date Checked:
Notes:
File Name: S2.pdd
File Path: C:\Users\gkite\goldhusrt

History

Date	Time	By	Notes
19-Oct-2015	13:26	Michael Southall	
19-Oct-2015	13:41	Michael Southall	
19-Oct-2015	13:47	Michael Southall	
19-Oct-2015	14:59	Michael Southall	
19-Oct-2015	15:04	Michael Southall	
19-Oct-2015	15:19	Michael Southall	
28-Dec-2015	10:47	m	
28-Dec-2015	10:52	m	
01-Jan-2016	23:55	m	
06-Jan-2016	20:04	m	
24-Apr-2016	14:32	m	
24-Apr-2016	16:25	m	
24-Apr-2016	16:29	m	
09-Sep-2016	17:12	Alex	
12-Sep-2016	10:25	Alex	
12-Sep-2016	14:44	Alex	
25-Oct-2016	17:14	Alex	
26-Oct-2016	11:11	Alex	
26-Oct-2016	14:12	Alex	
16-Nov-2016	12:37	Alex	
16-Nov-2016	17:13	Alex	
03-Dec-2021	14:18	Keith G	
09-Dec-2021	12:54	Keith G	
09-Dec-2021	22:39	Keith G	
10-Dec-2021	10:35	Keith G	
25-May-2022	14:58	gkite	

Analysis Options

General
Global Poisson's ratio: 0.50
Maximum allowable ratio between values of E: 1.5
Horizontal rigid boundary level: 19.00 [m OD]
Displacements at load centroids: Yes
GSA piled raft data : No

Elastic
Elastic : Yes

Consolidation
Consolidation : No

Soil ProfilesSoil Profile 1

Layer ref.	Name	Level at top	Number of intermediate displacement levels	Youngs Modulus : Top	Youngs Modulus : Btm.	Poissons ratio	Non-linear curve
		[mOD]		[kN/m²]	[kN/m²]		
1	Layer 1	37.000	35	40000.	104500.	0.50000	None

Soil Zones

Zone	Name	X min [m]	X max [m]	Y min [m]	Y max [m]	Profile
1	basement footprint	-2.0000	23.000	-3.0000	12.000	Soil Profile 1

Polygonal Load Data

Load ref.	Name	Position : Level [m]	Position : Polygon : Coords. [m]	Position : Polygon : Rect. tolerance [%]	No. of Rectangles	Value : Normal (local z) [kN/m²]
1	1	36.95000	(0,4.45) (0,6.8) (2.4,6.8) (2.4,4.45)	10.000	1	-10.390
2	2	36.95000	(0,6.8) (0,9) (2.4,9) (2.4,6.8)	10.000	1	12.450
3	3	36.95000	(2.4,6.6) (2.4,9) (12.4,9) (12.4,6.6)	10.000	1	-8.9000
4	4	36.95000	(12.4,5.5) (12.4,9) (14.8,9) (14.8,5.5)	10.000	1	-11.820
5	5	36.95000	(14.8,5.5) (14.8,7.9) (16.6,7.9) (16.6,5.5)	10.000	1	-3.7000
6	6	36.95000	(16.6,5.25) (16.6,7.9) (19,7.9) (19,5.25)	10.000	1	42.260
7	7	36.95000	(7.4,0) (7.4,2.4) (18.1,2.4) (18.1,0)	10.000	1	1.1700
8	1a	36.95000	(0.25,4.45) (0.25,6.8) (2.4,6.8) (2.4,4.45)	10.000	1	0.0
9	2a	36.95000	(0.25,6.8) (0.25,8.75) (2.4,8.75) (2.4,6.8)	10.000	1	0.0
10	3a	36.95000	(2.4,6.6) (2.4,8.75) (12.4,8.75) (12.4,6.6)	10.000	1	0.0
11	4a	36.95000	(12.4,5.5) (12.4,8.75) (14.6,8.75) (14.6,7.65) (14.8,7.65) (14.8,5.5)	10.000	2	0.0
12	5a	36.95000	(14.8,5.5) (14.8,7.65) (16.6,7.65) (16.6,5.5)	10.000	1	0.0
13	6a	36.95000	(16.6,5.25) (16.6,7.65) (18.8,7.65) (18.8,5.25)	10.000	1	0.0
14	7a	36.95000	(7.4,0.25) (7.4,2.4) (18.1,2.4) (18.1,0.25)	10.000	1	0.0
15	8	36.95000	(18.1,0.65) (18.1,2.4) (18.2,2.4) (18.2,3.6) (16.7,3.6) (16.7,5.25) (20.4,5.25) (20.4,0.65)	10.000	3	-12.200
16	9	36.95000	(6,0.4) (6,2.45) (6,3.7) (7.95,3.7) (7.4,3.3) (7.4,2.8) (7.95,2.4) (7.4,2.4) (7.4,0.4)	10.000	5	8.9900
17	10	36.95000	(2.3,0.4) (2.3,2.45) (6,2.45) (6,0.4)	10.000	1	-30.310

Load ref.	Name	Position : Level	Position : Polygon : Coords.	Position : Polygon : Rect. tolerance	No. of Rectangles	Value : Normal (local z)
18	11	36.95000	(0.25,0.4) (0.25,2.25) (2.3,2.25) (2.3,0.4)	10.000	1	-28.600
19	12	36.95000	(0.25,2.25) (0.25,4.45) (2.3,4.45) (2.3,2.25)	10.000	1	-47.210
20	13	36.95000	(2.4,3.85) (2.4,5.35) (5.3,5.35) (5.3,3.85)	10.000	1	-57.450
21	13A	36.95000	(2.3,3.85) (2.3,4.45) (2.4,4.45) (2.4,3.85)	10.000	1	-57.450
22	14	36.95000	(6,3.7) (6,3.85) (5.3,3.85) (5.3,5.35) (5.8,5.85) (8.35,5.85) (8.35,3.7)	10.000	3	-13.140
23	15	36.60000	(8.65,4.35) (8.65,5.85) (10.2,5.85) (10.2,4.35)	10.000	1	59.990
24	16	36.85000	(12,4.8) (12,5.5) (13.5,5.5) (13.5,4.8)	10.000	1	140.46
25	17	36.85000	(14.2,4.8) (14.2,5.5) (15.7,5.5) (15.7,4.8)	10.000	1	106.17
26	18	36.95000	(5.5,0.1) (5.5,0.4) (7.4,0.4) (7.4,0.1)	10.000	1	90.880
27	19	36.95000	(7.95,2.4) (7.4,2.4) (7.4,3.3) (7.95,3.7) (8.35,3.7) (8.35,5.85) (5.8,5.85) (5.3,5.35) (2.4,5.35) (2.4,6.6) (12.4,6.6) (12.4,5.5) (16.7,5.5) (16.7,3.6) (18.2,3.6) (18.2,2.4)	10.000	8	-70.780
28	20	36.95000	(2.3,2.45) (2.3,3.85) (6,3.85) (6,2.45)	10.000	1	-70.780
29	21	36.95000	(12.9,5.25) (12.9,8.4) (14.3,8.4) (14.3,7.3) (18.4,7.3) (18.4,5.25)	10.000	2	34.200

Polygonal Loads' Rectangles

No.	Centre x [m]	Centre y [m]	Angle of local x from global X [Degrees]	Width x [m]	Depth y [m]
Load 1 : 1					
(Edge 2 optimal)					
1	1.20000	5.62500	90.000	2.3500	2.4000
Load 2 : 2					
(Edge 2 optimal)					
1	1.20000	7.90000	90.000	2.2000	2.4000
Load 3 : 3					
(Edge 2 optimal)					
1	7.42500	7.80000	90.000	2.4000	10.050
Load 4 : 4					
(Edge 2 optimal)					
1	13.65000	7.25000	90.000	3.5000	2.4000
Load 5 : 5					
(Edge 2 optimal)					
1	15.72500	6.70000	90.000	2.4000	1.7500
Load 6 : 6					
(Edge 2 optimal)					
1	17.80000	6.57500	90.000	2.6500	2.4000
Load 7 : 7					
(Edge 2 optimal)					
1	12.72500	1.20000	90.000	2.4000	10.650
Load 8 : 1a					
(Edge 2 optimal)					
1	1.32500	5.62500	90.000	2.3500	2.1500
Load 9 : 2a					
(Edge 2 optimal)					
1	1.32500	7.77500	90.000	1.9500	2.1500
Load 10 : 3a					
(Edge 2 optimal)					
1	7.42500	7.67500	90.000	2.1500	10.050
Load 11 : 4a					
(Edge 2 optimal)					
1	13.65000	6.57500	90.000	2.1500	2.4000
2	13.52500	8.20000	90.000	1.1000	2.1500
Load 12 : 5a					
(Edge 2 optimal)					
1	15.72500	6.57500	90.000	2.1500	1.7500
Load 13 : 6a					
(Edge 2 optimal)					
1	17.67500	6.45000	90.000	2.4000	2.1500
Load 14 : 7a					
(Edge 2 optimal)					
1	12.72500	1.32500	90.000	2.1500	10.650
Load 15 : 8					
(Edge 2 optimal)					
1	19.20000	1.52500	90.000	1.7500	2.3000
2	19.27500	3.00000	90.000	1.2000	2.1500
3	18.52500	4.42500	90.000	1.6500	3.6500
Load 16 : 9					
(Edge 2 optimal)					
1	6.70000	1.40000	90.000	2.0000	1.4000
2	6.95781	2.42500	90.000	0.050000	1.9156
3	6.82031	2.62500	90.000	0.35000	1.6406
4	6.70000	3.05000	90.000	0.50000	1.4000
5	6.83750	3.50000	90.000	0.40000	1.6750
Load 17 : 10					
(Edge 2 optimal)					
1	4.15000	1.42500	90.000	2.0500	3.7000
Load 18 : 11					
(Edge 2 optimal)					
1	1.27500	1.32500	90.000	1.8500	2.0500
Load 19 : 12					
(Edge 2 optimal)					
1	1.27500	3.35000	90.000	2.2000	2.0500
Load 20 : 13					
(Edge 2 optimal)					
1	3.85000	4.60000	90.000	1.5000	2.9000
Load 21 : 13A					
(Edge 2 optimal)					
1	2.35000	4.15000	90.000	0.60000	0.10000
Load 22 : 14					
(Edge 2 optimal)					
1	7.17500	3.77500	90.000	0.15000	2.3500
2	6.82500	4.60000	90.000	1.5000	3.0500
3	6.95000	5.60000	90.000	0.50000	2.8000
Load 23 : 15					
(Edge 2 optimal)					
1	9.40000	5.10000	90.000	1.5000	1.5000
Load 24 : 16					
(Edge 2 optimal)					
1	12.75000	5.15000	90.000	0.70000	1.5000
Load 25 : 17					
(Edge 2 optimal)					
1	14.95000	5.15000	90.000	0.70000	1.5000
Load 26 : 18					
(Edge 2 optimal)					
1	6.45000	0.25000	90.000	0.30000	1.9000
Load 27 : 19					

No.	Centre : x	Centre : y	Angle of local x from global X	Width x	Depth y
(Edge 2 optimal)					
1	12.93750	2.60000	90.000	0.40000	10.525
2	12.80000	3.05000	90.000	0.50000	10.800
3	12.90312	3.45000	90.000	0.30000	10.594
4	12.29063	3.65000	90.000	0.10000	8.8188
5	12.52500	4.60000	90.000	1.8000	8.3500
6	10.40000	5.67500	90.000	0.35000	4.1000
7	7.42500	6.22500	90.000	0.75000	10.050
8	3.97500	5.60000	90.000	0.50000	3.1500
Load 28 : 20					
(Edge 2 optimal)					
1	4.15000	3.15000	90.000	1.4000	3.7000
Load 29 : 21					
(Edge 2 optimal)					
1	15.67500	6.27500	90.000	2.0500	5.4500
2	13.60000	7.85000	90.000	1.1000	1.3000

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	-2.00000	-3.00000	36.95000	23.00000	-	36.95000	125	15.00000	75	Yes	Yes