CIVIL GEOTECHNICAL SERVICES
ABN 26 474 013 724
PO Box 678 Croydon Vic 3136
Telephone: 9723 0744 Facsimile: 9723 0799

5th June 2023

Our Reference: 22853:NB1576

Winslow Constructors Pty Ltd
50 Barry Road
CAMPBELLFIELD VIC 3061

Dear Sirs/Madams,

RE: LEVEL 1 EARTHWORKS INSPECTION AND TESTING
ALAMORA – STAGE 11 – 13 BEW (TARNEIT)

Please find attached our Report No's 22853/R001 to 22853/R044 which relate to the field density testing that was conducted within the filled allotments at the above subdivision. The level 1 inspections and associated field density commenced in December 2022 and was completed in May 2023.

The inspections and testing of the earthworks was undertaken in general accordance with the Level 1 requirements of AS 3798 - Guidelines on Earthworks for Commercial and Residential Developments.

The site inspection and testing was performed by experienced geotechnicians from this office. Any areas that were deemed unsatisfactory were reworked and retested under their supervision. The testing was performed to the relevant Australian Standards and the accompanying test reports carry NATA endorsement. The attached compaction results, which were located randomly throughout the fill profile, are considered to be representative of the bulk fill materials that were placed across the reported allotments by Winslow Constructors during the aforementioned period. The approximate locations of the field density tests can be seen on the attached plan (Figure 1).

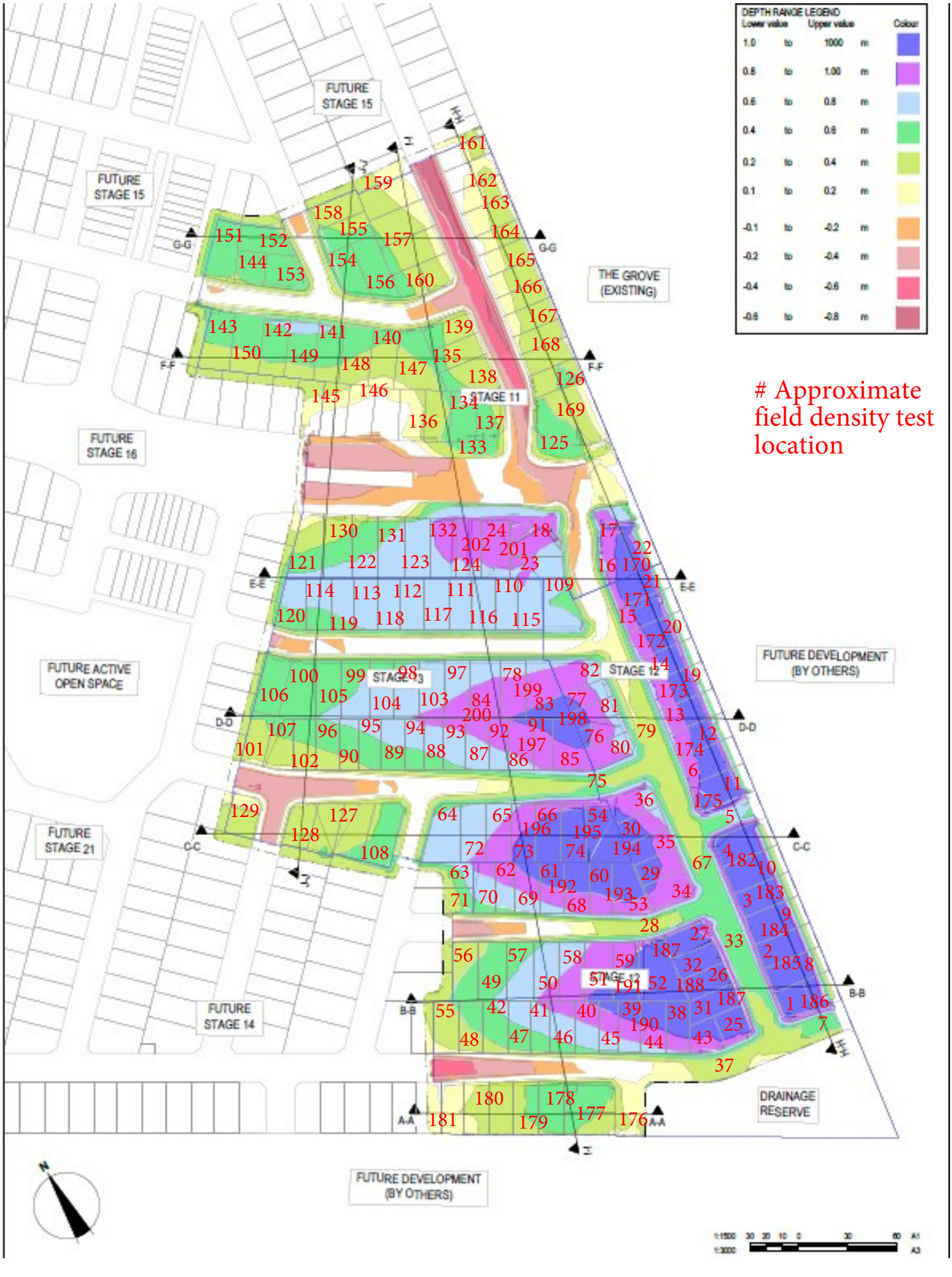
We are of the view that the bulk fill materials that have been placed across the reported allotments by Winslow Constructors during the aforementioned period can be considered as having been placed in a controlled manner to a minimum density ratio of 95% (standard compactive effort).

Please contact the undersigned if you require any additional information.

Civil Geotechnical Services

Nick Brock

FIGURE 1


DEPTH RANGE LEGEND
Lower value
Upper value
Colour
1.0 to 1000 m
0.8 to 1.00 m
0.6 to 0.8 m
0.4 to 0.6 m
0.2 to 0.4 m
0.1 to 0.2 m
-0.1 to -0.2 m
-0.2 to -0.4 m
-0.4 to -0.6 m
-0.6 to -0.8 m
Approximate field density test location
FUTURE STAGE 15
FUTURE STAGE 15
THE GROVE (EXISTING)
STAGE 11
FUTURE STAGE 16
FUTURE ACTIVE OPEN SPACE
STAGE 13
STAGE 12
FUTURE DEVELOPMENT (BY OTHERS)
FUTURE STAGE 21
STAGE 14
FUTURE STAGE 14
DRAINAGE RESERVE
FUTURE DEVELOPMENT (BY OTHERS)
A-A
B-B
C-C
D-D
E-E
F-F
G-G
H-H
J-J

COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

		Job No	22853
		Report No	22853/R001
		Date Issued	13/01/23
Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	*Tested by*	JB
Project	ALAMORA - STAGES 11 - 13 BEW	*Date tested*	15/12/22
Location	TARNEIT	*Checked by*	JHF

Feature **EARTHWORKS** *Layer thickness* 200 mm *Time:* 10:00

Test procedure AS 1289.2.1.1 & 5.8.1

Test No		**1**	**2**	**3**	**4**	**5**	**6**
Location		REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1
Approximate depth below FSL							
Measurement depth	*mm*	175	175	175	175	175	175
Field wet density	*t/m³*	1.87	1.82	1.81	1.80	1.87	1.84
Field moisture content	*%*	20.4	26.9	22.7	20.6	28.5	27.3

Test procedure AS 1289.5.7.1

Test No		1	2	3	4	5	6
Compactive effort		Standard					
Oversize rock retained on sieve	*mm*	19.0	19.0	19.0	19.0	19.0	19.0
Percent of oversize material	*wet*	0	0	0	0	0	0
Peak Converted Wet Density	*t/m³*	1.91	1.83	1.85	1.85	1.89	1.87
Adjusted Peak Converted Wet Density	*t/m³*	-	-	-	-	-	-
Optimum Moisture Content	*%*	23.0	29.5	24.0	22.5	31.0	28.5

Moisture Variation From Optimum Moisture Content		2.5% dry	2.5% dry	1.0% dry	2.0% dry	2.0% dry	1.0% dry
density and moisture ratio results relate only to the soil to the depth of test and not to the full depth of the layer							
Density Ratio (R_{HD})	*%*	**98.0**	**99.0**	**98.0**	**97.0**	**98.5**	**98.0**

Material description

No 1 - 6 Clay Fill

Approved Signatory : Justin Fry

COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

		Job No	22853
		Report No	22853/R002
		Date Issued	13/01/23
Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	*Tested by*	JB
Project	ALAMORA - STAGES 11 - 13 BEW	*Date tested*	16/12/22
Location	TARNEIT	*Checked by*	JHF

Feature **EARTHWORKS** *Layer thickness* 200 mm *Time:* 13:00

Test procedure AS 1289.2.1.1 & 5.8.1

Test No		**7**	**8**	**9**	**10**	**11**	**12**
Location		REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1
Approximate depth below FSL							
Measurement depth	*mm*	175	175	175	175	175	175
Field wet density	*t/m³*	2.03	2.04	2.07	2.02	2.04	2.00
Field moisture content	*%*	25.5	23.9	21.7	23.4	21.5	24.8

Test procedure AS 1289.5.7.1

Test No		7	8	9	10	11	12
Compactive effort		Standard					
Oversize rock retained on sieve	*mm*	19.0	19.0	19.0	19.0	19.0	19.0
Percent of oversize material	*wet*	0	0	0	0	0	0
Peak Converted Wet Density	*t/m³*	2.07	2.07	2.07	2.08	2.08	2.06
Adjusted Peak Converted Wet Density	*t/m³*	-	-	-	-	-	-
Optimum Moisture Content	*%*	26.0	24.5	23.5	24.5	23.5	26.5

Moisture Variation From Optimum Moisture Content		0.5% dry	0.5% dry	2.0% dry	1.0% dry	2.0% dry	1.5% dry

density and moisture ratio results relate only to the soil to the depth of test and not to the full depth of the layer

Density Ratio (R_{HD})	*%*	**98.0**	**98.5**	**100.0**	**97.5**	**98.0**	**97.5**

Material description

No 7 - 12 Clay Fill

NATA Accredited Laboratory No 9909
Accredited for compliance with
ISO/IEC 17025 - Testing

Approved Signatory : Justin Fry

COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

		Job No	22853
		Report No	22853/R003
		Date Issued	13/01/23
Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	*Tested by*	WS
Project	ALAMORA - STAGES 11 - 13 BEW	*Date tested*	17/12/22
Location	TARNEIT	*Checked by*	JHF

Feature **EARTHWORKS** *Layer thickness* 200 mm *Time:* 07:30

Test procedure AS 1289.2.1.1 & 5.8.1

Test No		**13**	**14**	**15**	**16**	**17**	**18**
Location		REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1
Approximate depth below FSL							
Measurement depth	*mm*	175	175	175	175	175	175
Field wet density	*t/m³*	1.81	1.86	1.76	1.73	1.74	1.77
Field moisture content	*%*	27.6	25.8	23.7	26.7	26.8	28.3

Test procedure AS 1289.5.7.1

Test No		13	14	15	16	17	18
Compactive effort		Standard					
Oversize rock retained on sieve	*mm*	19.0	19.0	19.0	19.0	19.0	19.0
Percent of oversize material	*wet*	0	0	0	0	0	0
Peak Converted Wet Density	*t/m³*	1.86	1.92	1.79	1.79	1.80	1.80
Adjusted Peak Converted Wet Density	*t/m³*	-	-	-	-	-	-
Optimum Moisture Content	*%*	30.0	28.0	26.0	27.5	27.5	30.0

Moisture Variation From Optimum Moisture Content		2.0% dry	2.0% dry	2.5% dry	0.5% dry	0.5% dry	2.0% dry

density and moisture ratio results relate only to the soil to the depth of test and not to the full depth of the layer

Density Ratio (R_{HD})	*%*	**97.5**	**97.0**	**98.0**	**97.0**	**97.0**	**98.5**

Material description

No 13 - 18 Clay Fill

NATA Accredited Laboratory No 9909
Accredited for compliance with
ISO/IEC 17025 - Testing

Approved Signatory : Justin Fry

COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES
6 - 8 Rose Avenue, Croydon 3136

		Job No	22853
		Report No	22853/R004
		Date Issued	17/01/23
Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	*Tested by*	JB
Project	ALAMORA - STAGES 11 - 13 BEW	*Date tested*	19/12/22
Location	TARNEIT	*Checked by*	JHF

Feature	**EARTHWORKS**	*Layer thickness*	200 mm	*Time:*	13:00

Test procedure AS 1289.2.1.1 & 5.8.1

Test No		**19**	**20**	**21**	**22**	**23**	**24**
Location		REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1
Approximate depth below FSL							
Measurement depth	*mm*	175	175	175	175	175	175
Field wet density	*t/m³*	1.91	1.91	1.95	1.95	1.94	1.93
Field moisture content	*%*	30.7	29.3	28.1	30.2	34.2	26.5

Test procedure AS 1289.5.7.1

Test No		19	20	21	22	23	24
Compactive effort		Standard					
Oversize rock retained on sieve	*mm*	19.0	19.0	19.0	19.0	19.0	19.0
Percent of oversize material	*wet*	0	0	0	0	0	0
Peak Converted Wet Density	*t/m³*	1.94	1.96	1.97	2.00	1.96	1.98
Adjusted Peak Converted Wet Density	*t/m³*	-	-	-	-	-	-
Optimum Moisture Content	*%*	32.5	31.5	29.0	31.5	36.0	27.5

Moisture Variation From Optimum Moisture Content	1.5% dry	2.0% dry	1.0% dry	1.5% dry	1.5% dry	1.0% dry

density and moisture ratio results relate only to the soil to the depth of test and not to the full depth of the layer

Density Ratio (R_{HD})	*%*	**98.5**	**97.5**	**99.0**	**97.5**	**98.5**	**97.5**

Material description

No 19 - 24 Clay Fill

NATA Accredited Laboratory No 9909
Accredited for compliance with
ISO/IEC 17025 - Testing

Approved Signatory : Justin Fry

COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES
6 - 8 Rose Avenue, Croydon 3136

		Job No	22853
		Report No	22853/R005
		Date Issued	19/01/23
Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	*Tested by*	SB
Project	ALAMORA - STAGES 11 - 13 BEW	*Date tested*	10/01/23
Location	TARNEIT	*Checked by*	JHF

Feature **EARTHWORKS** *Layer thickness* 200 mm *Time:* 13:30

Test procedure AS 1289.2.1.1 & 5.8.1

Test No		**25**	**26**	**27**	**-**	**-**	**-**
Location		REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1			
Approximate depth below FSL							
Measurement depth	*mm*	175	175	175	-	-	-
Field wet density	*t/m³*	1.95	1.94	1.96	-	-	-
Field moisture content	*%*	25.4	20.4	22.8	-	-	-

Test procedure AS 1289.5.7.1

Test No		25	26	27	-	-	-
Compactive effort		Standard					
Oversize rock retained on sieve	*mm*	19.0	19.0	19.0	-	-	-
Percent of oversize material	*wet*	0	0	0	-	-	-
Peak Converted Wet Density	*t/m³*	1.97	1.97	1.99	-	-	-
Adjusted Peak Converted Wet Density	*t/m³*	-	-	-	-	-	-
Optimum Moisture Content	*%*	26.0	22.0	24.0	-	-	-

Moisture Variation From Optimum Moisture Content		1.0% dry	1.5% dry	1.0% dry	-	-	-

density and moisture ratio results relate only to the soil to the depth of test and not to the full depth of the layer

Density Ratio (R_{HD})	*%*	**99.0**	**98.0**	**98.5**	**-**	**-**	**-**

Material description

No 25 - 27 Clay Fill

Approved Signatory : Justin Fry

COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES
6 - 8 Rose Avenue, Croydon 3136

		Job No	22853
		Report No	22853/R006
		Date Issued	18/01/23
Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	*Tested by*	JB
Project	ALAMORA - STAGES 11 - 13 BEW	*Date tested*	11/01/23
Location	TARNEIT	*Checked by*	JHF

Feature	**EARTHWORKS**	*Layer thickness*	200 mm	*Time:*	14:00

Test procedure AS 1289.2.1.1 & 5.8.1

Test No		**28**	**29**	**30**	**31**	**32**	**33**
Location		REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1
Approximate depth below FSL							
Measurement depth	*mm*	175	175	175	175	175	175
Field wet density	*t/m³*	2.04	2.04	2.01	2.03	1.91	1.90
Field moisture content	*%*	23.0	23.6	21.0	24.5	22.1	21.2

Test procedure AS 1289.5.7.1

Test No		28	29	30	31	32	33
Compactive effort		Standard					
Oversize rock retained on sieve	*mm*	19.0	19.0	19.0	19.0	19.0	19.0
Percent of oversize material	*wet*	0	0	0	0	0	0
Peak Converted Wet Density	*t/m³*	2.03	2.07	2.02	2.06	1.96	1.89
Adjusted Peak Converted Wet Density	*t/m³*	-	-	-	-	-	-
Optimum Moisture Content	*%*	25.5	23.5	22.0	26.5	23.0	22.0

Moisture Variation From Optimum Moisture Content	2.5% dry	0.0%	1.0% dry	2.0% dry	1.0% dry	1.0% dry

density and moisture ratio results relate only to the soil to the depth of test and not to the full depth of the layer

Density Ratio (R_{HD})	*%*	**101.0**	**98.5**	**99.5**	**98.5**	**97.5**	**100.5**

Material description

No 28 - 33 Clay Fill

Approved Signatory : Justin Fry

COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

		Job No	22853
		Report No	22853/R007
		Date Issued	18/01/23
Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	*Tested by*	JB
Project	ALAMORA - STAGES 11 - 13 BEW	*Date tested*	12/01/23
Location	TARNEIT	*Checked by*	JHF

Feature	**EARTHWORKS**	*Layer thickness*	200 mm	*Time:*	14:00

Test procedure AS 1289.2.1.1 & 5.8.1

Test No		**34**	**35**	**36**	**37**	**38**	**39**
Location		REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1
Approximate depth below FSL							
Measurement depth	*mm*	175	175	175	175	175	175
Field wet density	*t/m³*	2.02	2.05	2.03	2.03	1.95	1.97
Field moisture content	*%*	19.2	20.7	21.7	18.7	18.9	22.3

Test procedure AS 1289.5.7.1

Test No		34	35	36	37	38	39
Compactive effort		Standard					
Oversize rock retained on sieve	*mm*	19.0	19.0	19.0	19.0	19.0	19.0
Percent of oversize material	*wet*	0	0	0	0	0	0
Peak Converted Wet Density	*t/m³*	2.03	2.09	2.07	2.06	1.99	1.99
Adjusted Peak Converted Wet Density	*t/m³*	-	-	-	-	-	-
Optimum Moisture Content	*%*	21.5	22.5	22.5	21.0	21.0	24.0

Moisture Variation From Optimum Moisture Content		2.0% dry	2.0% dry	1.0% dry	2.5% dry	2.5% dry	2.0% dry

density and moisture ratio results relate only to the soil to the depth of test and not to the full depth of the layer

Density Ratio (R_{HD})	*%*	**99.5**	**98.5**	**98.0**	**99.0**	**98.0**	**99.0**

Material description

No 34 - 39 Clay Fill

COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES
6 - 8 Rose Avenue, Croydon 3136

		Job No	22853
		Report No	22853/R008
		Date Issued	05/06/23
Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	JB
Project	ALAMORA - STAGES 11 - 13 BEW	Date tested	13/01/23
Location	TARNEIT	Checked by	JHF

Feature	**EARTHWORKS**	*Layer thickness*	200 mm	*Time:*	14:00

Test procedure AS 1289.2.1.1 & 5.8.1

Test No		**40**	**41**	**42**	**43**	**44**	**45**
Location		REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1
Approximate depth below FSL							
Measurement depth	*mm*	175	175	175	175	175	175
Field wet density	*t/m³*	1.93	1.96	1.96	1.92	1.93	1.96
Field moisture content	*%*	25.8	22.2	20.8	19.3	21.5	21.7

Test procedure AS 1289.5.7.1

Test No		40	41	42	43	44	45
Compactive effort		Standard					
Oversize rock retained on sieve	*mm*	19.0	19.0	19.0	19.0	19.0	19.0
Percent of oversize material	*wet*	0	0	0	0	0	0
Peak Converted Wet Density	*t/m³*	2.00	2.02	2.00	1.95	2.01	1.99
Adjusted Peak Converted Wet Density	*t/m³*	-	-	-	-	-	-
Optimum Moisture Content	*%*	27.0	23.5	22.0	22.0	22.0	23.0

Moisture Variation From Optimum Moisture Content		1.0% dry	1.5% dry	1.0% dry	2.5% dry	1.5% dry	1.5% dry
density and moisture ratio results relate only to the soil to the depth of test and not to the full depth of the layer							
Density Ratio (R_{HD})	*%*	**96.5**	**97.0**	**98.0**	**98.0**	**96.0**	**98.5**

Material description

No 40 - 45 Clay Fill

Approved Signatory : Justin Fry

COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES
6 - 8 Rose Avenue, Croydon 3136

Job No	22853		
Report No	22853/R009		
Date Issued	19/01/23		
Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	*Tested by*	WS
Project	ALAMORA - STAGES 11 - 13 BEW	*Date tested*	14/01/23
Location	TARNEIT	*Checked by*	JHF

Feature	**EARTHWORKS**	*Layer thickness*	200 mm	*Time:*	09:28

Test procedure AS 1289.2.1.1 & 5.8.1

Test No		**46**	**47**	**48**	**49**	**50**	**51**
Location		REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1
Approximate depth below FSL							
Measurement depth	*mm*	175	175	175	175	175	175
Field wet density	*t/m³*	1.91	1.86	1.81	1.90	1.86	1.86
Field moisture content	*%*	24.4	26.0	28.2	23.2	22.3	21.2

Test procedure AS 1289.5.7.1

Test No		46	47	48	49	50	51
Compactive effort		Standard					
Oversize rock retained on sieve	*mm*	19.0	19.0	19.0	19.0	19.0	19.0
Percent of oversize material	*wet*	0	0	0	0	0	0
Peak Converted Wet Density	*t/m³*	1.94	1.89	1.83	1.93	1.88	1.89
Adjusted Peak Converted Wet Density	*t/m³*	-	-	-	-	-	-
Optimum Moisture Content	*%*	25.5	28.5	31.0	26.0	23.5	23.5

Moisture Variation From Optimum Moisture Content	1.0% dry	2.5% dry	2.5% dry	2.5% dry	1.0% dry	2.5% dry

density and moisture ratio results relate only to the soil to the depth of test and not to the full depth of the layer

Density Ratio (R_{HD})	*%*	**99.0**	**98.5**	**99.0**	**98.0**	**99.0**	**98.5**

Material description

No 46 - 51 Clay Fill

NATA Accredited Laboratory No 9909
Accredited for compliance with
ISO/IEC 17025 - Testing

Approved Signatory : Justin Fry

COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES
6 - 8 Rose Avenue, Croydon 3136

Job No	22853		
Report No	22853/R010		
Date Issued	28/02/23		
Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	*Tested by*	JB
Project	ALAMORA - STAGES 11 - 13 BEW	*Date tested*	16/01/23
Location	TARNEIT	*Checked by*	JHF

Feature	**EARTHWORKS**	*Layer thickness*	200 mm	*Time:*	14:00

Test procedure AS 1289.2.1.1 & 5.8.1

Test No		**52**	**53**	**54**	**55**	**56**	**57**
Location		REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1
Approximate depth below FSL							
Measurement depth	*mm*	175	175	175	175	175	175
Field wet density	*t/m³*	1.83	1.83	1.73	1.81	1.82	1.83
Field moisture content	*%*	27.3	28.4	21.6	23.7	25.9	28.9

Test procedure AS 1289.5.7.1

Test No		52	53	54	55	56	57
Compactive effort		Standard					
Oversize rock retained on sieve	*mm*	19.0	19.0	19.0	19.0	19.0	19.0
Percent of oversize material	*wet*	0	0	0	0	0	0
Peak Converted Wet Density	*t/m³*	1.87	1.88	1.77	1.83	1.85	1.87
Adjusted Peak Converted Wet Density	*t/m³*	-	-	-	-	-	-
Optimum Moisture Content	*%*	28.5	28.5	23.5	24.0	26.5	29.0

Moisture Variation From Optimum Moisture Content	1.0% dry	0.5% dry	2.0% dry	0.5% dry	0.5% dry	0.0%

density and moisture ratio results relate only to the soil to the depth of test and not to the full depth of the layer

Density Ratio (R_{HD})	*%*	**98.0**	**97.0**	**98.5**	**99.0**	**98.5**	**98.0**

Material description

No 52 - 57 Clay Fill

NATA Accredited Laboratory No 9909
Accredited for compliance with
ISO/IEC 17025 - Testing

Approved Signatory : Justin Fry

COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES
6 - 8 Rose Avenue, Croydon 3136

		Job No	22853
		Report No	22853/R011
		Date Issued	01/02/23
Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	JB
Project	ALAMORA - STAGES 11 - 13 BEW	Date tested	17/01/23
Location	TARNEIT	Checked by	JHF

Feature	**EARTHWORKS**	*Layer thickness*	200 mm	*Time:*	12:00

Test procedure AS 1289.2.1.1 & 5.8.1

Test No		**58**	**59**	**60**	**-**	**-**	**-**
Location		REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1			
Approximate depth below FSL							
Measurement depth	*mm*	175	175	175	-	-	-
Field wet density	*t/m³*	1.97	1.94	1.94	-	-	-
Field moisture content	*%*	21.4	20.2	19.7	-	-	-

Test procedure AS 1289.5.7.1

Test No		58	59	60	-	-	-
Compactive effort		Standard					
Oversize rock retained on sieve	*mm*	19.0	19.0	19.0	-	-	-
Percent of oversize material	*wet*	0	0	0	-	-	-
Peak Converted Wet Density	*t/m³*	2.01	1.96	1.97	-	-	-
Adjusted Peak Converted Wet Density	*t/m³*	-	-	-	-	-	-
Optimum Moisture Content	*%*	23.5	22.0	20.5	-	-	-

Moisture Variation From Optimum Moisture Content	2.0% dry	1.5% dry	1.0% dry	-	-	-

density and moisture ratio results relate only to the soil to the depth of test and not to the full depth of the layer

Density Ratio (R_{HD})	*%*	**98.0**	**99.0**	**98.5**	**-**	**-**	**-**

Material description

No 58 - 60 Clay Fill

Approved Signatory : Justin Fry

COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

		Job No	22853
		Report No	22853/R012
		Date Issued	25/01/23
Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	*Tested by*	JB
Project	ALAMORA - STAGES 11 - 13 BEW	*Date tested*	18/01/23
Location	TARNEIT	*Checked by*	JHF

Feature	**EARTHWORKS**	*Layer thickness*	200 mm	*Time:*	11:00

Test procedure AS 1289.2.1.1 & 5.8.1

Test No		**61**	**62**	**63**	**64**	**65**	**66**
Location		REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1
Approximate depth below FSL							
Measurement depth	*mm*	175	175	175	175	175	175
Field wet density	*t/m³*	1.91	1.89	1.92	1.97	1.97	1.93
Field moisture content	*%*	22.3	23.7	27.0	21.8	24.0	23.7

Test procedure AS 1289.5.7.1

Test No		61	62	63	64	65	66
Compactive effort		Standard					
Oversize rock retained on sieve	*mm*	19.0	19.0	19.0	19.0	19.0	19.0
Percent of oversize material	*wet*	0	0	0	0	0	0
Peak Converted Wet Density	*t/m³*	1.96	1.96	1.96	2.00	1.99	1.98
Adjusted Peak Converted Wet Density	*t/m³*	-	-	-	-	-	-
Optimum Moisture Content	*%*	21.5	25.5	29.5	22.5	26.5	25.5

Moisture Variation From Optimum Moisture Content	0.5% wet	1.5% dry	2.0% dry	0.5% dry	2.5% dry	1.5% dry

density and moisture ratio results relate only to the soil to the depth of test and not to the full depth of the layer

Density Ratio (R_{HD})	*%*	**97.5**	**96.5**	**98.0**	**98.5**	**99.0**	**97.5**

Material description

No 61 - 66 Clay Fill

NATA Accredited Laboratory No 9909
Accredited for compliance with
ISO/IEC 17025 - Testing

Approved Signatory : Justin Fry

COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES
6 - 8 Rose Avenue, Croydon 3136

		Job No	22853
		Report No	22853/R013
		Date Issued	30/01/23
Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	JB
Project	ALAMORA - STAGES 11 - 13 BEW	Date tested	19/01/23
Location	TARNEIT	Checked by	JHF

Feature	**EARTHWORKS**	*Layer thickness*	200 mm	*Time:*	13:30

Test procedure AS 1289.2.1.1 & 5.8.1

Test No		**67**	**68**	**69**	**70**	**71**	**72**
Location		REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1
Approximate depth below FSL							
Measurement depth	*mm*	175	175	175	175	175	175
Field wet density	*t/m³*	1.97	1.98	1.97	1.95	1.97	1.99
Field moisture content	*%*	25.0	25.0	22.1	22.6	21.6	22.5

Test procedure AS 1289.5.7.1

Test No		67	68	69	70	71	72
Compactive effort		Standard					
Oversize rock retained on sieve	*mm*	19.0	19.0	19.0	19.0	19.0	19.0
Percent of oversize material	*wet*	0	0	0	0	0	0
Peak Converted Wet Density	*t/m³*	1.97	2.02	1.99	1.97	1.98	2.00
Adjusted Peak Converted Wet Density	*t/m³*	-	-	-	-	-	-
Optimum Moisture Content	*%*	27.0	27.5	24.5	24.0	21.5	23.5

Moisture Variation From Optimum Moisture Content	2.0% dry	2.5% dry	2.5% dry	1.5% dry	0.0%	1.0% dry

density and moisture ratio results relate only to the soil to the depth of test and not to the full depth of the layer

Density Ratio (R_{HD})	*%*	**100.0**	**98.0**	**99.0**	**99.0**	**99.5**	**99.5**

Material description

No 67 - 72 Clay Fill

NATA Accredited Laboratory No 9909
Accredited for compliance with
ISO/IEC 17025 - Testing

Approved Signatory : Justin Fry

COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

		Job No	22853
		Report No	22853/R014
		Date Issued	01/02/23
Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	*Tested by*	JB
Project	ALAMORA - STAGES 11 - 13 BEW	*Date tested*	20/01/23
Location	TARNEIT	*Checked by*	JHF

Feature	**EARTHWORKS**	*Layer thickness*	200 mm	*Time:*	13:00

Test procedure AS 1289.2.1.1 & 5.8.1

Test No		**73**	**74**	**75**	**76**	**77**	**78**
Location		REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1
Approximate depth below FSL							
Measurement depth	*mm*	175	175	175	175	175	175
Field wet density	*t/m³*	1.95	1.91	1.94	1.99	1.98	1.95
Field moisture content	*%*	20.6	17.7	19.8	22.3	17.6	20.8

Test procedure AS 1289.5.7.1

Test No		73	74	75	76	77	78
Compactive effort		Standard					
Oversize rock retained on sieve	*mm*	19.0	19.0	19.0	19.0	19.0	19.0
Percent of oversize material	*wet*	0	0	0	0	0	0
Peak Converted Wet Density	*t/m³*	1.95	1.94	1.97	2.01	2.02	1.97
Adjusted Peak Converted Wet Density	*t/m³*	-	-	-	-	-	-
Optimum Moisture Content	*%*	23.0	20.0	22.0	24.5	20.0	23.0

Moisture Variation From Optimum Moisture Content		2.5% dry	2.5% dry	2.0% dry	2.0% dry	2.5% dry	2.0% dry

density and moisture ratio results relate only to the soil to the depth of test and not to the full depth of the layer

Density Ratio (R_{HD})	*%*	**99.5**	**98.5**	**98.5**	**98.5**	**98.0**	**99.0**

Material description

No 73 - 78 Clay Fill

Approved Signatory : Justin Fry

COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

		Job No	22853
		Report No	22853/R015
		Date Issued	01/02/23
Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	*Tested by*	JB
Project	ALAMORA - STAGES 11 - 13 BEW	*Date tested*	23/01/23
Location	TARNEIT	*Checked by*	JHF

Feature	**EARTHWORKS**	*Layer thickness*	200 mm	*Time:*	14:00

Test procedure AS 1289.2.1.1 & 5.8.1

Test No		**79**	**80**	**81**	**82**	**83**	**84**
Location		REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1
Approximate depth below FSL							
Measurement depth	*mm*	175	175	175	175	175	175
Field wet density	*t/m³*	1.86	1.87	1.91	1.90	1.91	1.90
Field moisture content	*%*	17.6	17.5	22.0	22.1	20.6	21.4

Test procedure AS 1289.5.7.1

Test No		79	80	81	82	83	84
Compactive effort		Standard					
Oversize rock retained on sieve	*mm*	19.0	19.0	19.0	19.0	19.0	19.0
Percent of oversize material	*wet*	0	0	0	0	0	0
Peak Converted Wet Density	*t/m³*	1.90	1.89	1.94	1.95	1.92	1.93
Adjusted Peak Converted Wet Density	*t/m³*	-	-	-	-	-	-
Optimum Moisture Content	*%*	20.0	20.0	24.0	23.0	22.5	23.5

Moisture Variation From Optimum Moisture Content		2.5% dry	2.5% dry	2.0% dry	1.0% dry	2.0% dry	2.0% dry

density and moisture ratio results relate only to the soil to the depth of test and not to the full depth of the layer

Density Ratio (R_{HD})	*%*	**98.0**	**99.0**	**99.0**	**97.5**	**99.5**	**98.5**

Material description

No 79 - 84 Clay Fill

Approved Signatory : Justin Fry

COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

		Job No	22853
		Report No	22853/R016
		Date Issued	30/01/23
Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	*Tested by*	JB
Project	ALAMORA - STAGES 11 - 13 BEW	*Date tested*	24/01/23
Location	TARNEIT	*Checked by*	JHF

Feature **EARTHWORKS** *Layer thickness* 200 mm *Time:* 08:00

Test procedure AS 1289.2.1.1 & 5.8.1

Test No		**85**	**86**	**87**	**88**	**89**	**90**
Location		REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1
Approximate depth below FSL							
Measurement depth	*mm*	175	175	175	175	175	175
Field wet density	*t/m³*	1.92	2.03	1.95	1.94	1.92	1.93
Field moisture content	*%*	23.5	24.4	24.3	22.3	20.4	22.9

Test procedure AS 1289.5.7.1

Test No		85	86	87	88	89	90
Compactive effort		Standard					
Oversize rock retained on sieve	*mm*	19.0	19.0	19.0	19.0	19.0	19.0
Percent of oversize material	*wet*	0	0	0	0	0	0
Peak Converted Wet Density	*t/m³*	1.94	2.07	1.98	1.98	1.95	1.95
Adjusted Peak Converted Wet Density	*t/m³*	-	-	-	-	-	-
Optimum Moisture Content	*%*	25.5	25.5	25.0	24.5	22.5	25.5

Moisture Variation From Optimum Moisture Content		2.0% dry	1.0% dry	0.5% dry	2.5% dry	2.0% dry	2.5% dry
density and moisture ratio results relate only to the soil to the depth of test and not to the full depth of the layer							
Density Ratio (R_{HD})	*%*	**99.0**	**98.5**	**98.5**	**97.5**	**99.0**	**99.5**

Material description

No 85 - 90 Clay Fill

NATA Accredited Laboratory No 9909
Accredited for compliance with
ISO/IEC 17025 - Testing

Approved Signatory : Justin Fry

COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

		Job No	22853
		Report No	22853/R017
		Date Issued	01/02/23
Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	*Tested by*	JB
Project	ALAMORA - STAGES 11 - 13 BEW	*Date tested*	25/01/23
Location	TARNEIT	*Checked by*	JHF

Feature **EARTHWORKS** *Layer thickness* 200 mm *Time:* 11:00

Test procedure AS 1289.2.1.1 & 5.8.1

Test No		**91**	**92**	**93**	**94**	**95**	**96**
Location		REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1
Approximate depth below FSL							
Measurement depth	*mm*	175	175	175	175	175	175
Field wet density	*t/m³*	2.00	1.95	1.94	2.00	1.98	2.00
Field moisture content	*%*	21.2	21.3	17.6	21.6	19.5	20.9

Test procedure AS 1289.5.7.1

Test No		91	92	93	94	95	96
Compactive effort		Standard					
Oversize rock retained on sieve	*mm*	19.0	19.0	19.0	19.0	19.0	19.0
Percent of oversize material	*wet*	0	0	0	0	0	0
Peak Converted Wet Density	*t/m³*	2.06	1.99	1.97	2.01	2.01	2.03
Adjusted Peak Converted Wet Density	*t/m³*	-	-	-	-	-	-
Optimum Moisture Content	*%*	23.5	24.0	20.0	24.0	21.5	23.5

Moisture Variation From Optimum Moisture Content		2.5% dry	2.5% dry	2.5% dry	2.5% dry	2.0% dry	2.5% dry

density and moisture ratio results relate only to the soil to the depth of test and not to the full depth of the layer

Density Ratio (R_{HD})	*%*	**97.0**	**98.5**	**98.5**	**99.5**	**98.5**	**98.0**

Material description

No 91 - 96 Clay Fill

NATA Accredited Laboratory No 9909
Accredited for compliance with
ISO/IEC 17025 - Testing

Approved Signatory : Justin Fry

COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES
6 - 8 Rose Avenue, Croydon 3136

		Job No	22853
		Report No	22853/R018
		Date Issued	13/02/23
Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	JB
Project	ALAMORA - STAGES 11 - 13 BEW	Date tested	30/01/23
Location	TARNEIT	Checked by	JHF

Feature	**EARTHWORKS**	*Layer thickness*	200 mm	*Time:*	12:00

Test procedure AS 1289.2.1.1 & 5.8.1

Test No		**97**	**98**	**99**	**100**	**101**	**102**
Location		REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1
Approximate depth below FSL							
Measurement depth	*mm*	175	175	175	175	175	175
Field wet density	*t/m³*	1.95	1.94	1.95	1.99	1.98	1.95
Field moisture content	*%*	21.1	21.6	19.3	23.4	24.1	20.2

Test procedure AS 1289.5.7.1

Test No		97	98	99	100	101	102
Compactive effort		Standard					
Oversize rock retained on sieve	*mm*	19.0	19.0	19.0	19.0	19.0	19.0
Percent of oversize material	*wet*	0	0	0	0	0	0
Peak Converted Wet Density	*t/m³*	1.99	1.95	1.99	2.01	2.01	1.98
Adjusted Peak Converted Wet Density	*t/m³*	-	-	-	-	-	-
Optimum Moisture Content	*%*	23.5	24.0	21.0	23.5	24.0	21.0

Moisture Variation From Optimum Moisture Content	2.5% dry	2.5% dry	1.5% dry	0.0%	0.0%	1.0% dry

density and moisture ratio results relate only to the soil to the depth of test and not to the full depth of the layer

Density Ratio (R_{HD})	*%*	**98.0**	**99.5**	**98.0**	**99.0**	**98.5**	**98.5**

Material description

No 97 - 102 Clay Fill

NATA Accredited Laboratory No 9909
Accredited for compliance with
ISO/IEC 17025 - Testing

Approved Signatory : Justin Fry

COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

		Job No	22853
		Report No	22853/R019
		Date Issued	23/02/23
Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	*Tested by*	JB
Project	ALAMORA - STAGES 11 - 13 BEW	*Date tested*	31/01/23
Location	TARNEIT	*Checked by*	JHF

Feature **EARTHWORKS** *Layer thickness* 200 mm *Time:* 12:00

Test procedure AS 1289.2.1.1 & 5.8.1

Test No		**103**	**104**	**105**	**106**	**107**	**108**
Location		REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1
Approximate depth below FSL							
Measurement depth	*mm*	175	175	175	175	175	175
Field wet density	*t/m³*	1.83	1.85	1.86	1.83	1.85	1.82
Field moisture content	*%*	23.9	23.5	25.6	23.7	23.3	20.3

Test procedure AS 1289.5.7.1

Test No		103	104	105	106	107	108
Compactive effort		Standard					
Oversize rock retained on sieve	*mm*	19.0	19.0	19.0	19.0	19.0	19.0
Percent of oversize material	*wet*	0	0	0	0	0	0
Peak Converted Wet Density	*t/m³*	1.84	1.88	1.88	1.84	1.87	1.87
Adjusted Peak Converted Wet Density	*t/m³*	-	-	-	-	-	-
Optimum Moisture Content	*%*	26.5	25.0	28.0	26.0	24.0	21.0

Moisture Variation From Optimum Moisture Content		2.5% dry	1.5% dry	2.5% dry	2.5% dry	0.5% dry	0.5% dry

density and moisture ratio results relate only to the soil to the depth of test and not to the full depth of the layer

Density Ratio (R_{HD})	*%*	**99.5**	**98.5**	**99.0**	**100.0**	**99.0**	**97.5**

Material description

No 103 - 108 Clay Fill

NATA Accredited Laboratory No 9909
Accredited for compliance with
ISO/IEC 17025 - Testing

Approved Signatory : Justin Fry

COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES
6 - 8 Rose Avenue, Croydon 3136

		Job No	22853
		Report No	22853/R020
		Date Issued	22/02/23
Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	JB
Project	ALAMORA - STAGES 11 - 13 BEW	Date tested	01/02/23
Location	TARNEIT	Checked by	JHF

Feature	**EARTHWORKS**	*Layer thickness*	200 mm	*Time:*	12:00

Test procedure AS 1289.2.1.1 & 5.8.1

Test No		**109**	**110**	**111**	**112**	**113**	**114**
Location		REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1
Approximate depth below FSL							
Measurement depth	mm	175	175	175	175	175	175
Field wet density	t/m³	1.96	2.00	1.99	1.97	2.04	2.05
Field moisture content	%	20.9	20.0	20.3	20.3	20.4	19.6

Test procedure AS 1289.5.7.1

Test No		109	110	111	112	113	114
Compactive effort		Standard					
Oversize rock retained on sieve	mm	19.0	19.0	19.0	19.0	19.0	19.0
Percent of oversize material	wet	0	0	0	0	0	0
Peak Converted Wet Density	t/m³	1.97	2.02	2.00	1.99	2.04	2.06
Adjusted Peak Converted Wet Density	t/m³	-	-	-	-	-	-
Optimum Moisture Content	%	23.0	22.0	22.5	22.5	20.5	20.5

Moisture Variation From Optimum Moisture Content	2.0% dry	2.0% dry	2.5% dry	2.0% dry	0.0%	1.0% dry

density and moisture ratio results relate only to the soil to the depth of test and not to the full depth of the layer

Density Ratio (R_{HD})	%	**100.0**	**99.0**	**99.5**	**99.0**	**100.0**	**99.5**

Material description

No 109 - 114 Clay Fill

NATA Accredited Laboratory No 9909
Accredited for compliance with
ISO/IEC 17025 - Testing

Approved Signatory : Justin Fry

COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES
6 - 8 Rose Avenue, Croydon 3136

		Job No	22853
		Report No	22853/R021
		Date Issued	13/02/23
Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	JB
Project	ALAMORA - STAGES 11 - 13 BEW	Date tested	02/02/23
Location	TARNEIT	Checked by	JHF

Feature	**EARTHWORKS**	*Layer thickness*	200 mm	*Time:*	12:00

Test procedure AS 1289.2.1.1 & 5.8.1

Test No		**115**	**116**	**117**	**118**	**119**	**120**
Location		REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1
Approximate depth below FSL							
Measurement depth	mm	175	175	175	175	175	175
Field wet density	t/m³	1.95	1.94	1.94	1.96	1.94	1.94
Field moisture content	%	20.8	18.1	20.4	17.4	17.4	20.9

Test procedure AS 1289.5.7.1

Test No		115	116	117	118	119	120
Compactive effort		Standard					
Oversize rock retained on sieve	mm	19.0	19.0	19.0	19.0	19.0	19.0
Percent of oversize material	wet	0	0	0	0	0	0
Peak Converted Wet Density	t/m³	1.98	1.97	1.97	2.01	1.97	1.98
Adjusted Peak Converted Wet Density	t/m³	-	-	-	-	-	-
Optimum Moisture Content	%	23.0	20.5	22.5	20.0	19.5	21.5

Moisture Variation From Optimum Moisture Content		2.5% dry	2.0% dry	2.0% dry	2.5% dry	2.0% dry	0.5% dry

density and moisture ratio results relate only to the soil to the depth of test and not to the full depth of the layer

Density Ratio (R_{HD})	%	**99.0**	**98.5**	**98.5**	**97.5**	**98.5**	**98.0**

Material description

No 115 - 120 Clay Fill

Approved Signatory : Justin Fry

COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES
6 - 8 Rose Avenue, Croydon 3136

		Job No	22853
		Report No	22853/R022
		Date Issued	20/02/23
Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	JB
Project	ALAMORA - STAGES 11 - 13 BEW	Date tested	06/02/23
Location	TARNEIT	Checked by	JHF

Feature	**EARTHWORKS**	*Layer thickness*	200 mm	*Time:*	12:00

Test procedure AS 1289.2.1.1 & 5.8.1

Test No		**121**	**122**	**123**	**124**	**125**	**126**
Location		REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1
Approximate depth below FSL							
Measurement depth	*mm*	175	175	175	175	175	175
Field wet density	*t/m³*	1.89	1.91	1.90	1.81	1.87	1.90
Field moisture content	*%*	16.3	17.7	16.5	20.4	24.5	16.0

Test procedure AS 1289.5.7.1

Test No		121	122	123	124	125	126
Compactive effort		Standard					
Oversize rock retained on sieve	*mm*	19.0	19.0	19.0	19.0	19.0	19.0
Percent of oversize material	*wet*	0	0	0	0	0	0
Peak Converted Wet Density	*t/m³*	1.94	1.91	1.96	1.88	1.94	1.95
Adjusted Peak Converted Wet Density	*t/m³*	-	-	-	-	-	-
Optimum Moisture Content	*%*	18.5	20.0	17.5	21.5	24.5	17.0

Moisture Variation From Optimum Moisture Content		2.5% dry	2.0% dry	1.0% dry	1.0% dry	0.0%	1.0% dry

density and moisture ratio results relate only to the soil to the depth of test and not to the full depth of the layer

Density Ratio (R_{HD})	*%*	**98.0**	**100.0**	**97.0**	**96.5**	**96.0**	**97.5**

Material description

No 121 - 126 Clay Fill

Approved Signatory : Justin Fry

COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES
6 - 8 Rose Avenue, Croydon 3136

		Job No	22853
		Report No	22853/R023
		Date Issued	14/02/23
Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	JB
Project	ALAMORA - STAGES 11 - 13 BEW	Date tested	07/02/23
Location	TARNEIT	Checked by	JHF

Feature	**EARTHWORKS**	*Layer thickness*	200 mm	*Time:*	14:00

Test procedure AS 1289.2.1.1 & 5.8.1

Test No		**127**	**128**	**129**	**-**	**-**	**-**
Location		REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1			
Approximate depth below FSL							
Measurement depth	*mm*	175	175	175	-	-	-
Field wet density	*t/m³*	1.98	1.93	1.92	-	-	-
Field moisture content	*%*	18.3	17.8	19.3	-	-	-

Test procedure AS 1289.5.7.1

Test No		127	128	129	-	-	-
Compactive effort		Standard					
Oversize rock retained on sieve	*mm*	19.0	19.0	19.0	-	-	-
Percent of oversize material	*wet*	0	0	0	-	-	-
Peak Converted Wet Density	*t/m³*	2.04	1.97	1.99	-	-	-
Adjusted Peak Converted Wet Density	*t/m³*	-	-	-	-	-	-
Optimum Moisture Content	*%*	19.5	19.0	19.5	-	-	-

Moisture Variation From Optimum Moisture Content	1.0% dry	1.0% dry	0.0%	-	-	-

density and moisture ratio results relate only to the soil to the depth of test and not to the full depth of the layer

Density Ratio (R_{HD})	*%*	**97.0**	**97.5**	**97.0**	**-**	**-**	**-**

Material description

No 127 - 129 Clay Fill

Approved Signatory : Justin Fry

COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

		Job No	22853
		Report No	22853/R024
		Date Issued	20/02/23
Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	*Tested by*	JB
Project	ALAMORA - STAGES 11 - 13 BEW	*Date tested*	08/02/23
Location	TARNEIT	*Checked by*	JHF

Feature	**EARTHWORKS**	*Layer thickness*	200 mm	*Time:*	08:00

Test procedure AS 1289.2.1.1 & 5.8.1

Test No		**130**	**131**	**132**	**133**	**134**	**135**
Location		REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1
Approximate depth below FSL							
Measurement depth	*mm*	175	175	175	175	175	175
Field wet density	*t/m³*	1.98	1.93	1.99	1.98	1.96	1.90
Field moisture content	*%*	18.6	15.4	16.6	16.9	14.0	16.4

Test procedure AS 1289.5.7.1

Test No		130	131	132	133	134	135
Compactive effort		Standard					
Oversize rock retained on sieve	*mm*	19.0	19.0	19.0	19.0	19.0	19.0
Percent of oversize material	*wet*	0	0	0	0	0	0
Peak Converted Wet Density	*t/m³*	2.00	1.97	1.95	2.00	1.97	1.94
Adjusted Peak Converted Wet Density	*t/m³*	-	-	-	-	-	-
Optimum Moisture Content	*%*	19.0	17.0	19.5	19.5	16.0	19.0

Moisture Variation From Optimum Moisture Content	0.5% dry	2.0% dry	2.5% dry	2.5% dry	2.0% dry	2.5% dry

density and moisture ratio results relate only to the soil to the depth of test and not to the full depth of the layer

Density Ratio (R_{HD})	*%*	**99.0**	**98.0**	**101.5**	**99.0**	**99.5**	**98.5**

Material description

No 130 - 135 Clay Fill

Approved Signatory : Justin Fry

COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES
6 - 8 Rose Avenue, Croydon 3136

		Job No	22853
		Report No	22853/R025
		Date Issued	28/02/23
Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	JB
Project	ALAMORA - STAGES 11 - 13 BEW	Date tested	13/02/23
Location	TARNEIT	Checked by	JHF

Feature	**EARTHWORKS**	*Layer thickness*	200 mm	*Time:*	13:00

Test procedure AS 1289.2.1.1 & 5.8.1

Test No		**136**	**137**	**138**	**-**	**-**	**-**
Location		REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1			
Approximate depth below FSL							
Measurement depth	*mm*	175	175	175	-	-	-
Field wet density	*t/m³*	1.99	1.94	1.94	-	-	-
Field moisture content	*%*	21.0	20.9	18.1	-	-	-

Test procedure AS 1289.5.7.1

Test No		136	137	138	-	-	-
Compactive effort		Standard					
Oversize rock retained on sieve	*mm*	19.0	19.0	19.0	-	-	-
Percent of oversize material	*wet*	0	0	0	-	-	-
Peak Converted Wet Density	*t/m³*	2.03	1.97	1.94	-	-	-
Adjusted Peak Converted Wet Density	*t/m³*	-	-	-	-	-	-
Optimum Moisture Content	*%*	21.0	21.0	20.5	-	-	-

Moisture Variation From Optimum Moisture Content	0.0%	0.5% dry	2.5% dry	-	-	-

density and moisture ratio results relate only to the soil to the depth of test and not to the full depth of the layer

Density Ratio (R_{HD})	*%*	**98.0**	**98.5**	**100.5**	**-**	**-**	**-**

Material description

No 136 - 138 Clay Fill

NATA Accredited Laboratory No 9909
Accredited for compliance with
ISO/IEC 17025 - Testing

Approved Signatory : Justin Fry

COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

		Job No	22853
		Report No	22853/R026
		Date Issued	28/02/23
Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	*Tested by*	JB
Project	ALAMORA - STAGES 11 - 13 BEW	*Date tested*	14/02/23
Location	TARNEIT	*Checked by*	JHF

Feature **EARTHWORKS** *Layer thickness* 200 mm *Time:* 07:30

Test procedure AS 1289.2.1.1 & 5.8.1

Test No		**139**	**140**	**141**	**142**	**143**	**144**
Location		REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1
Approximate depth below FSL							
Measurement depth	*mm*	175	175	175	175	175	175
Field wet density	*t/m³*	1.82	1.80	1.87	1.85	1.84	1.92
Field moisture content	*%*	18.5	22.2	19.4	21.2	18.1	17.7

Test procedure AS 1289.5.7.1

Test No		139	140	141	142	143	144
Compactive effort		Standard					
Oversize rock retained on sieve	*mm*	19.0	19.0	19.0	19.0	19.0	19.0
Percent of oversize material	*wet*	0	0	0	0	0	0
Peak Converted Wet Density	*t/m³*	1.91	1.85	1.87	1.88	1.88	1.97
Adjusted Peak Converted Wet Density	*t/m³*	-	-	-	-	-	-
Optimum Moisture Content	*%*	21.0	22.5	20.0	22.5	20.0	19.0

Moisture Variation From Optimum Moisture Content	2.5% dry	0.0%	0.5% dry	1.5% dry	2.0% dry	1.0% dry

density and moisture ratio results relate only to the soil to the depth of test and not to the full depth of the layer

Density Ratio (R_{HD})	*%*	**95.5**	**97.5**	**100.0**	**98.5**	**98.0**	**97.5**

Material description

No 139 - 144 Clay Fill

NATA Accredited Laboratory No 9909
Accredited for compliance with
ISO/IEC 17025 - Testing

Approved Signatory : Justin Fry

COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES
6 - 8 Rose Avenue, Croydon 3136

Job No	22853		
Report No	22853/R027		
Date Issued	22/02/23		
Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	*Tested by*	JB
Project	ALAMORA - STAGES 11 - 13 BEW	*Date tested*	14/02/23
Location	TARNEIT	*Checked by*	JHF

Feature **EARTHWORKS** *Layer thickness* 200 mm *Time:* 08:30

Test procedure AS 1289.2.1.1 & 5.8.1

Test No		**145**	**146**	**147**	**148**	**149**	**150**
Location		REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1
Approximate depth below FSL							
Measurement depth	*mm*	175	175	175	175	175	175
Field wet density	*t/m³*	1.90	1.91	1.85	1.85	1.84	1.87
Field moisture content	*%*	21.9	20.7	21.3	21.1	23.0	23.7

Test procedure AS 1289.5.7.1

Test No		145	146	147	148	149	150
Compactive effort		Standard					
Oversize rock retained on sieve	*mm*	19.0	19.0	19.0	19.0	19.0	19.0
Percent of oversize material	*wet*	0	0	0	0	0	0
Peak Converted Wet Density	*t/m³*	1.93	1.93	1.86	1.87	1.89	1.90
Adjusted Peak Converted Wet Density	*t/m³*	-	-	-	-	-	-
Optimum Moisture Content	*%*	22.0	23.0	23.5	22.0	25.5	24.0

Moisture Variation From Optimum Moisture Content	0.0%	2.5% dry	2.5% dry	1.0% dry	2.5% dry	0.5% dry

density and moisture ratio results relate only to the soil to the depth of test and not to the full depth of the layer

Density Ratio (R_{HD})	*%*	**98.5**	**99.0**	**99.0**	**99.0**	**97.5**	**98.5**

Material description

No 145 - 150 Clay Fill

Approved Signatory : Justin Fry

COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

		Job No	22853
		Report No	22853/R028
		Date Issued	02/03/23
Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	*Tested by*	JB
Project	ALAMORA - STAGES 11 - 13 BEW	*Date tested*	15/02/23
Location	TARNEIT	*Checked by*	JHF

Feature **EARTHWORKS** *Layer thickness* 200 mm *Time:* 13:00

Test procedure AS 1289.2.1.1 & 5.8.1

Test No		**151**	**152**	**153**	**154**	**-**	**-**
Location		REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1		
Approximate depth below FSL							
Measurement depth	*mm*	175	175	175	175	-	-
Field wet density	*t/m³*	1.86	1.90	1.85	1.84	-	-
Field moisture content	*%*	20.7	22.2	24.7	21.3	-	-

Test procedure AS 1289.5.7.1

Test No		151	152	153	154	-	-
Compactive effort		Standard					
Oversize rock retained on sieve	*mm*	19.0	19.0	19.0	19.0	-	-
Percent of oversize material	*wet*	0	0	0	0	-	-
Peak Converted Wet Density	*t/m³*	1.89	1.93	1.87	1.88	-	-
Adjusted Peak Converted Wet Density	*t/m³*	-	-	-	-	-	-
Optimum Moisture Content	*%*	23.0	24.5	26.5	23.0	-	-

Moisture Variation From Optimum Moisture Content	2.5% dry	2.0% dry	1.5% dry	2.0% dry	-	-

density and moisture ratio results relate only to the soil to the depth of test and not to the full depth of the layer

Density Ratio (R_{HD})	*%*	**98.5**	**99.0**	**98.5**	**98.0**	**-**	**-**

Material description

No 151 - 154 Clay Fill

Approved Signatory : Justin Fry

COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES
6 - 8 Rose Avenue, Croydon 3136

		Job No	22853
		Report No	22853/R029
		Date Issued	06/03/23
Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	*Tested by*	JB
Project	ALAMORA - STAGES 11 - 13 BEW	*Date tested*	16/02/23
Location	TARNEIT	*Checked by*	JHF

Feature	**EARTHWORKS**	*Layer thickness*	200 mm	*Time:*	11:00

Test procedure AS 1289.2.1.1 & 5.8.1

Test No		**155**	**156**	**157**	**-**	**-**	**-**
Location		REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1			
Approximate depth below FSL							
Measurement depth	*mm*	175	175	175	-	-	-
Field wet density	*t/m³*	1.83	1.85	1.86	-	-	-
Field moisture content	*%*	22.6	21.7	21.3	-	-	-

Test procedure AS 1289.5.7.1

Test No		155	156	157	-	-	-
Compactive effort		Standard					
Oversize rock retained on sieve	*mm*	19.0	19.0	19.0	-	-	-
Percent of oversize material	*wet*	0	0	0	-	-	-
Peak Converted Wet Density	*t/m³*	1.87	1.88	1.89	-	-	-
Adjusted Peak Converted Wet Density	*t/m³*	-	-	-	-	-	-
Optimum Moisture Content	*%*	23.0	23.0	23.5	-	-	-

Moisture Variation From Optimum Moisture Content	0.5% dry	1.5% dry	2.0% dry	-	-	-

density and moisture ratio results relate only to the soil to the depth of test and not to the full depth of the layer

Density Ratio (R_{HD})	*%*	**98.0**	**98.5**	**98.5**	**-**	**-**	**-**

Material description

No 155 - 157 Clay Fill

Approved Signatory : Justin Fry

COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

		Job No	22853
		Report No	22853/R030
		Date Issued	01/03/23
Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	*Tested by*	JB
Project	ALAMORA - STAGES 11 - 13 BEW	*Date tested*	20/02/23
Location	TARNEIT	*Checked by*	JHF

Feature **EARTHWORKS** *Layer thickness* 200 mm *Time:* 08:00

Test procedure AS 1289.2.1.1 & 5.8.1

Test No		**158**	**159**	**160**	**-**	**-**	**-**
Location		REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1			
Approximate depth below FSL							
Measurement depth	*mm*	175	175	175	-	-	-
Field wet density	*t/m³*	1.83	1.81	1.78	-	-	-
Field moisture content	*%*	21.9	21.3	21.8	-	-	-

Test procedure AS 1289.5.7.1

Test No		158	159	160	-	-	-
Compactive effort		Standard					
Oversize rock retained on sieve	*mm*	19.0	19.0	19.0	-	-	-
Percent of oversize material	*wet*	0	0	0	-	-	-
Peak Converted Wet Density	*t/m³*	1.88	1.84	1.78	-	-	-
Adjusted Peak Converted Wet Density	*t/m³*	-	-	-	-	-	-
Optimum Moisture Content	*%*	23.5	23.5	23.5	-	-	-

Moisture Variation From Optimum Moisture Content		1.5% dry	2.0% dry	2.0% dry	-	-	-

density and moisture ratio results relate only to the soil to the depth of test and not to the full depth of the layer

Density Ratio (R_{HD})	*%*	**97.5**	**98.0**	**99.5**	**-**	**-**	**-**

Material description

No 158 - 160 Clay Fill

Approved Signatory : Justin Fry

COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES
6 - 8 Rose Avenue, Croydon 3136

		Job No	22853
		Report No	22853/R031
		Date Issued	24/02/23
Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	JB
Project	ALAMORA - STAGES 11 - 13 BEW	Date tested	21/02/23
Location	TARNEIT	Checked by	JHF

Feature	**EARTHWORKS**	*Layer thickness*	200 mm	*Time:*	13:00

Test procedure AS 1289.2.1.1 & 5.8.1

Test No		**161**	**162**	**163**	**-**	**-**	**-**
Location		REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1			
Approximate depth below FSL							
Measurement depth	*mm*	175	175	175	-	-	-
Field wet density	*t/m³*	1.84	1.85	1.83	-	-	-
Field moisture content	*%*	21.1	21.8	22.6	-	-	-

Test procedure AS 1289.5.7.1

Test No		161	162	163	-	-	-
Compactive effort		Standard					
Oversize rock retained on sieve	*mm*	19.0	19.0	19.0	-	-	-
Percent of oversize material	*wet*	0	0	0	-	-	-
Peak Converted Wet Density	*t/m³*	1.91	1.90	1.87	-	-	-
Adjusted Peak Converted Wet Density	*t/m³*	-	-	-	-	-	-
Optimum Moisture Content	*%*	23.0	23.0	25.0	-	-	-

Moisture Variation From Optimum Moisture Content	2.0% dry	1.0% dry	2.5% dry	-	-	-

density and moisture ratio results relate only to the soil to the depth of test and not to the full depth of the layer

Density Ratio (R_{HD})	*%*	**96.5**	**97.5**	**97.5**	**-**	**-**	**-**

Material description

No 161 - 163 Clay Fill

Approved Signatory : Justin Fry

COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

		Job No	22853
		Report No	22853/R032
		Date Issued	28/02/23
Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	*Tested by*	JB
Project	ALAMORA - STAGES 11 - 13 BEW	*Date tested*	22/02/23
Location	TARNEIT	*Checked by*	JHF

Feature **EARTHWORKS** *Layer thickness* 200 mm *Time:* 13:00

Test procedure AS 1289.2.1.1 & 5.8.1

Test No		**164**	**165**	**166**	**-**	**-**	**-**
Location		REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1			
Approximate depth below FSL							
Measurement depth	*mm*	175	175	175	-	-	-
Field wet density	*t/m³*	1.81	1.84	1.97	-	-	-
Field moisture content	*%*	17.2	17.6	18.6	-	-	-

Test procedure AS 1289.5.7.1

Test No		164	165	166	-	-	-
Compactive effort		Standard					
Oversize rock retained on sieve	*mm*	19.0	19.0	19.0	-	-	-
Percent of oversize material	*wet*	0	0	0	-	-	-
Peak Converted Wet Density	*t/m³*	1.83	1.87	2.01	-	-	-
Adjusted Peak Converted Wet Density	*t/m³*	-	-	-	-	-	-
Optimum Moisture Content	*%*	19.5	18.5	19.0	-	-	-

Moisture Variation From Optimum Moisture Content	2.5% dry	1.0% dry	0.5% dry	-	-	-

density and moisture ratio results relate only to the soil to the depth of test and not to the full depth of the layer

Density Ratio (R_{HD})	*%*	**99.0**	**98.0**	**98.0**	**-**	**-**	**-**

Material description

No 164 - 166 Clay Fill

AVRLOT HILF V1.10 MAR 13

NATA Accredited Laboratory No 9909
Accredited for compliance with
ISO/IEC 17025 - Testing

Approved Signatory : Justin Fry

COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES
6 - 8 Rose Avenue, Croydon 3136

		Job No	22853
		Report No	22853/R033
		Date Issued	01/03/23
Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	JB
Project	ALAMORA - STAGES 11 - 13 BEW	Date tested	24/02/23
Location	TARNEIT	Checked by	JHF

Feature	**EARTHWORKS**	*Layer thickness*	200 mm	*Time:*	09:00

Test procedure AS 1289.2.1.1 & 5.8.1

Test No		**167**	**168**	**169**	**-**	**-**	**-**
Location		REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1			
Approximate depth below FSL							
Measurement depth	*mm*	175	175	175	-	-	-
Field wet density	*t/m³*	1.82	1.83	1.84	-	-	-
Field moisture content	*%*	18.1	18.7	18.4	-	-	-

Test procedure AS 1289.5.7.1

Test No		167	168	169	-	-	-
Compactive effort		Standard					
Oversize rock retained on sieve	*mm*	19.0	19.0	19.0	-	-	-
Percent of oversize material	*wet*	0	0	0	-	-	-
Peak Converted Wet Density	*t/m³*	1.88	1.86	1.86	-	-	-
Adjusted Peak Converted Wet Density	*t/m³*	-	-	-	-	-	-
Optimum Moisture Content	*%*	19.5	21.0	19.5	-	-	-

Moisture Variation From Optimum Moisture Content	1.5% dry	2.5% dry	1.5% dry	-	-	-

density and moisture ratio results relate only to the soil to the depth of test and not to the full depth of the layer

Density Ratio (R_{HD})	*%*	**97.0**	**98.0**	**99.5**	**-**	**-**	**-**

Material description

No 167 - 169 Clay Fill

NATA Accredited Laboratory No 9909
Accredited for compliance with
ISO/IEC 17025 - Testing

Approved Signatory : Justin Fry

COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES
6 - 8 Rose Avenue, Croydon 3136

		Job No	22853
		Report No	22853/R034
		Date Issued	01/03/23
Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	JB
Project	ALAMORA - STAGES 11 - 13 BEW	Date tested	27/02/23
Location	TARNEIT	Checked by	JHF

Feature	**EARTHWORKS**	*Layer thickness*	200 mm	*Time:*	12:00

Test procedure AS 1289.2.1.1 & 5.8.1

Test No		**170**	**171**	**172**	**-**	**-**	**-**
Location		REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1			
Approximate depth below FSL							
Measurement depth	*mm*	175	175	175	-	-	-
Field wet density	*t/m³*	2.00	1.97	1.97	-	-	-
Field moisture content	*%*	21.1	22.2	21.7	-	-	-

Test procedure AS 1289.5.7.1

Test No		170	171	172	-	-	-
Compactive effort		Standard					
Oversize rock retained on sieve	*mm*	19.0	19.0	19.0	-	-	-
Percent of oversize material	*wet*	0	0	0	-	-	-
Peak Converted Wet Density	*t/m³*	2.04	1.99	2.03	-	-	-
Adjusted Peak Converted Wet Density	*t/m³*	-	-	-	-	-	-
Optimum Moisture Content	*%*	23.0	25.0	24.0	-	-	-

Moisture Variation From Optimum Moisture Content	1.5% dry	2.5% dry	2.0% dry	-	-	-

density and moisture ratio results relate only to the soil to the depth of test and not to the full depth of the layer

Density Ratio (R_{HD})	*%*	**98.0**	**99.0**	**97.5**	**-**	**-**	**-**

Material description

No 170 - 172 Clay Fill

NATA Accredited Laboratory No 9909
Accredited for compliance with
ISO/IEC 17025 - Testing

Approved Signatory : Justin Fry

COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES
6 - 8 Rose Avenue, Croydon 3136

		Job No	22853
		Report No	22853/R035
		Date Issued	07/03/23
Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	JB
Project	ALAMORA - STAGES 11 - 13 BEW	Date tested	28/02/23
Location	TARNEIT	Checked by	JHF

Feature	**EARTHWORKS**	*Layer thickness*	200 mm	*Time:*	13:00

Test procedure AS 1289.2.1.1 & 5.8.1

Test No		**173**	**174**	**175**	**-**	**-**	**-**
Location		REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1			
Approximate depth below FSL							
Measurement depth	*mm*	175	175	175	-	-	-
Field wet density	*t/m³*	1.95	1.94	1.97	-	-	-
Field moisture content	*%*	28.0	26.9	26.0	-	-	-

Test procedure AS 1289.5.7.1

Test No		173	174	175	-	-	-
Compactive effort		Standard					
Oversize rock retained on sieve	*mm*	19.0	19.0	19.0	-	-	-
Percent of oversize material	*wet*	0	0	0	-	-	-
Peak Converted Wet Density	*t/m³*	1.98	1.98	2.02	-	-	-
Adjusted Peak Converted Wet Density	*t/m³*	-	-	-	-	-	-
Optimum Moisture Content	*%*	29.0	28.5	27.0	-	-	-

Moisture Variation From Optimum Moisture Content	1.0% dry	1.5% dry	0.5% dry	-	-	-

density and moisture ratio results relate only to the soil to the depth of test and not to the full depth of the layer

Density Ratio (R_{HD})	*%*	**98.5**	**98.0**	**97.5**	**-**	**-**	**-**

Material description

No 173 - 175 Clay Fill

NATA Accredited Laboratory No 9909
Accredited for compliance with
ISO/IEC 17025 - Testing

Approved Signatory : Justin Fry

COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES
6 - 8 Rose Avenue, Croydon 3136

		Job No	22853
		Report No	22853/R036
		Date Issued	10/03/23
Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	JB
Project	ALAMORA - STAGES 11 - 13 BEW	Date tested	01/03/23
Location	TARNEIT	Checked by	JHF

Feature	**EARTHWORKS**	*Layer thickness*	200 mm	*Time:*	09:00

Test procedure AS 1289.2.1.1 & 5.8.1

Test No		**176**	**177**	**178**	**-**	**-**	**-**
Location		REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1			
Approximate depth below FSL							
Measurement depth	*mm*	175	175	175	-	-	-
Field wet density	*t/m³*	1.97	2.01	1.95	-	-	-
Field moisture content	*%*	19.9	22.5	20.5	-	-	-

Test procedure AS 1289.5.7.1

Test No		176	177	178	-	-	-
Compactive effort		Standard					
Oversize rock retained on sieve	*mm*	19.0	19.0	19.0	-	-	-
Percent of oversize material	*wet*	0	0	0	-	-	-
Peak Converted Wet Density	*t/m³*	2.00	2.05	1.97	-	-	-
Adjusted Peak Converted Wet Density	*t/m³*	-	-	-	-	-	-
Optimum Moisture Content	*%*	22.0	23.0	21.5	-	-	-

Moisture Variation From Optimum Moisture Content	2.0% dry	0.5% dry	1.0% dry	-	-	-

density and moisture ratio results relate only to the soil to the depth of test and not to the full depth of the layer

Density Ratio (R_{HD})	*%*	**98.5**	**98.5**	**99.0**	**-**	**-**	**-**

Material description

No 176 - 178 Clay Fill

NATA Accredited Laboratory No 9909
Accredited for compliance with
ISO/IEC 17025 - Testing

Approved Signatory : Justin Fry

COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES
6 - 8 Rose Avenue, Croydon 3136

		Job No	22853
		Report No	22853/R037
		Date Issued	10/03/23
Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	*Tested by*	JB
Project	ALAMORA - STAGES 11 - 13 BEW	*Date tested*	02/03/23
Location	TARNEIT	*Checked by*	JHF

Feature	**EARTHWORKS**	*Layer thickness*	200 mm	*Time:*	09:00

Test procedure AS 1289.2.1.1 & 5.8.1

Test No		**179**	**180**	**181**	**-**	**-**	**-**
Location		REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1			
Approximate depth below FSL							
Measurement depth	*mm*	175	175	175	-	-	-
Field wet density	*t/m³*	1.98	2.00	1.98	-	-	-
Field moisture content	*%*	23.6	18.1	17.1	-	-	-

Test procedure AS 1289.5.7.1

Test No		179	180	181	-	-	-
Compactive effort		Standard					
Oversize rock retained on sieve	*mm*	19.0	19.0	19.0	-	-	-
Percent of oversize material	*wet*	0	0	0	-	-	-
Peak Converted Wet Density	*t/m³*	2.03	2.03	1.99	-	-	-
Adjusted Peak Converted Wet Density	*t/m³*	-	-	-	-	-	-
Optimum Moisture Content	*%*	23.5	20.5	19.5	-	-	-

Moisture Variation From Optimum Moisture Content	0.0%	2.5% dry	2.5% dry	-	-	-

density and moisture ratio results relate only to the soil to the depth of test and not to the full depth of the layer

Density Ratio (R_{HD})	*%*	**98.0**	**98.5**	**99.5**	**-**	**-**	**-**

Material description

No 179 - 181 Clay Fill

Approved Signatory : Justin Fry

COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

		Job No	22853
		Report No	22853/R038
		Date Issued	31/05/23
Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	*Tested by*	JB
Project	ALAMORA - STAGES 11 - 13 BEW	*Date tested*	03/05/23
Location	TARNEIT	*Checked by*	JHF

Feature **EARTHWORKS** *Layer thickness* 200 mm *Time:* 09:30

Test procedure AS 1289.2.1.1 & 5.8.1

Test No		**182**	**183**	**184**	**-**	**-**	**-**
Location		REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1			
Approximate depth below FSL							
Measurement depth	*mm*	175	175	175	-	-	-
Field wet density	*t/m³*	2.08	2.11	2.14	-	-	-
Field moisture content	*%*	31.7	28.2	27.0	-	-	-

Test procedure AS 1289.5.7.1

Test No		182	183	184	-	-	-
Compactive effort		Standard					
Oversize rock retained on sieve	*mm*	19.0	19.0	19.0	-	-	-
Percent of oversize material	*wet*	0	0	0	-	-	-
Peak Converted Wet Density	*t/m³*	2.12	2.12	2.17	-	-	-
Adjusted Peak Converted Wet Density	*t/m³*	-	-	-	-	-	-
Optimum Moisture Content	*%*	34.0	30.5	29.0	-	-	-

Moisture Variation From Optimum Moisture Content		2.0% dry	2.0% dry	2.0% dry	-	-	-

density and moisture ratio results relate only to the soil to the depth of test and not to the full depth of the layer

Density Ratio (R_{HD})	*%*	**98.5**	**99.5**	**99.0**	**-**	**-**	**-**

Material description

No 182 - 184 Clay Fill

Approved Signatory : Justin Fry

COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES
6 - 8 Rose Avenue, Croydon 3136

		Job No	22853
		Report No	22853/R039
		Date Issued	10/05/23
Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	*Tested by*	JB
Project	ALAMORA - STAGES 11 - 13 BEW	*Date tested*	04/05/23
Location	TARNEIT	*Checked by*	JHF

Feature	**EARTHWORKS**	*Layer thickness*	200 mm	*Time:*	11:00

Test procedure AS 1289.2.1.1 & 5.8.1

Test No		**185**	**186**	**187**	**-**	**-**	**-**
Location		REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1			
Approximate depth below FSL							
Measurement depth	*mm*	175	175	175	-	-	-
Field wet density	*t/m³*	2.02	1.94	2.04	-	-	-
Field moisture content	*%*	27.3	26.9	26.3	-	-	-

Test procedure AS 1289.5.7.1

Test No		185	186	187	-	-	-
Compactive effort		Standard					
Oversize rock retained on sieve	*mm*	19.0	19.0	19.0	-	-	-
Percent of oversize material	*wet*	0	0	0	-	-	-
Peak Converted Wet Density	*t/m³*	2.06	1.98	2.07	-	-	-
Adjusted Peak Converted Wet Density	*t/m³*	-	-	-	-	-	-
Optimum Moisture Content	*%*	30.0	29.5	28.5	-	-	-

Moisture Variation From Optimum Moisture Content		2.0% dry	2.0% dry	2.0% dry	-	-	-

density and moisture ratio results relate only to the soil to the depth of test and not to the full depth of the layer

Density Ratio (R_{HD})	*%*	**98.0**	**98.0**	**98.5**	**-**	**-**	**-**

Material description

No 186 - 187 Clay Fill

NATA Accredited Laboratory No 9909
Accredited for compliance with
ISO/IEC 17025 - Testing

Approved Signatory : Justin Fry

COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES
6 - 8 Rose Avenue, Croydon 3136

		Job No	22853
		Report No	22853/R040
		Date Issued	10/05/23
Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	JB
Project	ALAMORA - STAGES 11 - 13 BEW	Date tested	05/05/23
Location	TARNEIT	Checked by	JHF

Feature	**EARTHWORKS**	*Layer thickness*	200 mm	*Time:*	08:00

Test procedure AS 1289.2.1.1 & 5.8.1

Test No		**188**	**189**	**190**	**-**	**-**	**-**
Location		REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1			
Approximate depth below FSL							
Measurement depth	*mm*	175	175	175	-	-	-
Field wet density	*t/m³*	1.85	1.88	1.84	-	-	-
Field moisture content	*%*	28.7	28.6	29.9	-	-	-

Test procedure AS 1289.5.7.1

Test No		188	189	190	-	-	-
Compactive effort		Standard					
Oversize rock retained on sieve	*mm*	19.0	19.0	19.0	-	-	-
Percent of oversize material	*wet*	0	0	0	-	-	-
Peak Converted Wet Density	*t/m³*	1.89	1.91	1.86	-	-	-
Adjusted Peak Converted Wet Density	*t/m³*	-	-	-	-	-	-
Optimum Moisture Content	*%*	31.0	31.5	32.0	-	-	-

Moisture Variation From Optimum Moisture Content	2.5% dry	2.5% dry	2.0% dry	-	-	-

density and moisture ratio results relate only to the soil to the depth of test and not to the full depth of the layer

Density Ratio (R_{HD})	*%*	**98.0**	**98.5**	**98.5**	**-**	**-**	**-**

Material description

No 189 - 190 Clay Fill

NATA Accredited Laboratory No 9909
Accredited for compliance with
ISO/IEC 17025 - Testing

Approved Signatory : Justin Fry

COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

		Job No	22853
		Report No	22853/R041
		Date Issued	01/06/23
Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	*Tested by*	JB
Project	ALAMORA - STAGES 11 - 13 BEW	*Date tested*	10/05/23
Location	TARNEIT	*Checked by*	JHF

Feature **EARTHWORKS** *Layer thickness* 200 mm *Time:* 13:00

Test procedure AS 1289.2.1.1 & 5.8.1

Test No		**191**	**192**	**193**	**-**	**-**	**-**
Location		REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1			
Approximate depth below FSL							
Measurement depth	*mm*	175	175	175	-	-	-
Field wet density	*t/m³*	1.83	1.90	1.92	-	-	-
Field moisture content	*%*	18.4	19.8	20.2	-	-	-

Test procedure AS 1289.5.7.1

Test No		191	192	193	-	-	-
Compactive effort		Standard					
Oversize rock retained on sieve	*mm*	19.0	19.0	19.0	-	-	-
Percent of oversize material	*wet*	0	0	0	-	-	-
Peak Converted Wet Density	*t/m³*	1.85	1.92	1.96	-	-	-
Adjusted Peak Converted Wet Density	*t/m³*	-	-	-	-	-	-
Optimum Moisture Content	*%*	21.0	22.5	22.0	-	-	-

Moisture Variation From Optimum Moisture Content		2.5% dry	2.5% dry	2.0% dry	-	-	-

density and moisture ratio results relate only to the soil to the depth of test and not to the full depth of the layer

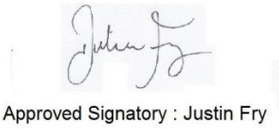
Density Ratio (R_{HD})	*%*	**99.0**	**99.0**	**98.0**	**-**	**-**	**-**

Material description

No 191 - 193 Clay Fill

AVRLOT HILF V1.10 MAR 13

NATA Accredited Laboratory No 9909
Accredited for compliance with
ISO/IEC 17025 - Testing



Approved Signatory : Justin Fry

COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES
6 - 8 Rose Avenue, Croydon 3136

		Job No	22853
		Report No	22853/R042
		Date Issued	25/05/23
Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	*Tested by*	JB
Project	ALAMORA - STAGES 11 - 13 BEW	*Date tested*	11/05/23
Location	TARNEIT	*Checked by*	JHF

Feature	**EARTHWORKS**	*Layer thickness*	200 mm	*Time:*	08:30

Test procedure AS 1289.2.1.1 & 5.8.1

Test No		**194**	**195**	**196**	**-**	**-**	**-**
Location		REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1			
Approximate depth below FSL							
Measurement depth	*mm*	175	175	175	-	-	-
Field wet density	*t/m³*	1.88	1.92	1.90	-	-	-
Field moisture content	*%*	28.9	32.3	32.9	-	-	-

Test procedure AS 1289.5.7.1

Test No		194	195	196	-	-	-
Compactive effort		Standard					
Oversize rock retained on sieve	*mm*	19.0	19.0	19.0	-	-	-
Percent of oversize material	*wet*	0	0	0	-	-	-
Peak Converted Wet Density	*t/m³*	1.91	1.96	1.91	-	-	-
Adjusted Peak Converted Wet Density	*t/m³*	-	-	-	-	-	-
Optimum Moisture Content	*%*	31.0	35.0	35.5	-	-	-

Moisture Variation From Optimum Moisture Content	2.0% dry	2.5% dry	2.5% dry	-	-	-

density and moisture ratio results relate only to the soil to the depth of test and not to the full depth of the layer

Density Ratio (R_{HD})	*%*	**99.0**	**98.0**	**99.5**	**-**	**-**	**-**

Material description

No 194 - 196 Clay Fill

NATA Accredited Laboratory No 9909
Accredited for compliance with
ISO/IEC 17025 - Testing

Approved Signatory : Justin Fry

COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES
6 - 8 Rose Avenue, Croydon 3136

		Job No	22853
		Report No	22853/R043
		Date Issued	31/05/23
Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	JB
Project	ALAMORA - STAGES 11 - 13 BEW	Date tested	12/05/23
Location	TARNEIT	Checked by	JHF

Feature	**EARTHWORKS**	*Layer thickness*	200 mm	*Time:*	10:30

Test procedure AS 1289.2.1.1 & 5.8.1

Test No		**197**	**198**	**199**	**-**	**-**	**-**
Location		REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1			
Approximate depth below FSL							
Measurement depth	*mm*	175	175	175	-	-	-
Field wet density	*t/m³*	1.91	1.98	1.98	-	-	-
Field moisture content	*%*	24.2	25.6	25.7	-	-	-

Test procedure AS 1289.5.7.1

Test No		197	198	199	-	-	-
Compactive effort		Standard					
Oversize rock retained on sieve	*mm*	19.0	19.0	19.0	-	-	-
Percent of oversize material	*wet*	0	0	0	-	-	-
Peak Converted Wet Density	*t/m³*	1.93	2.01	1.99	-	-	-
Adjusted Peak Converted Wet Density	*t/m³*	-	-	-	-	-	-
Optimum Moisture Content	*%*	26.5	28.0	28.0	-	-	-

Moisture Variation From Optimum Moisture Content	2.0% dry	2.0% dry	2.5% dry	-	-	-

density and moisture ratio results relate only to the soil to the depth of test and not to the full depth of the layer

Density Ratio (R_{HD})	*%*	**98.5**	**98.5**	**99.0**	**-**	**-**	**-**

Material description

No 197 - 199 Clay Fill

NATA Accredited Laboratory No 9909
Accredited for compliance with
ISO/IEC 17025 - Testing

Approved Signatory : Justin Fry

COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES
6 - 8 Rose Avenue, Croydon 3136

		Job No	22853
		Report No	22853/R044
		Date Issued	25/05/23
Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	JB
Project	ALAMORA - STAGES 11 - 13 BEW	Date tested	15/05/23
Location	TARNEIT	Checked by	JHF

Feature	**EARTHWORKS**	*Layer thickness*	200 mm	*Time:*	10:30

Test procedure AS 1289.2.1.1 & 5.8.1

Test No		**200**	**201**	**202**	**-**	**-**	**-**
Location		REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1			
Approximate depth below FSL							
Measurement depth	*mm*	175	175	175	-	-	-
Field wet density	*t/m³*	2.01	1.96	2.02	-	-	-
Field moisture content	*%*	27.4	29.1	26.9	-	-	-

Test procedure AS 1289.5.7.1

Test No		200	201	202	-	-	-
Compactive effort		Standard					
Oversize rock retained on sieve	*mm*	19.0	19.0	19.0	-	-	-
Percent of oversize material	*wet*	0	0	0	-	-	-
Peak Converted Wet Density	*t/m³*	2.04	2.01	2.04	-	-	-
Adjusted Peak Converted Wet Density	*t/m³*	-	-	-	-	-	-
Optimum Moisture Content	*%*	29.5	31.0	29.5	-	-	-

Moisture Variation From Optimum Moisture Content	1.5% dry	1.5% dry	2.0% dry	-	-	-

density and moisture ratio results relate only to the soil to the depth of test and not to the full depth of the layer

Density Ratio (R_{HD})	*%*	**98.5**	**97.5**	**99.0**	**-**	**-**	**-**

Material description

No 200 - 202 Clay Fill

NATA Accredited Laboratory No 9909
Accredited for compliance with
ISO/IEC 17025 - Testing

Approved Signatory : Justin Fry