



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

21st March 2023

Our Reference: 22371:NB1491

Winslow Constructors Pty Ltd
50 Barry Road
CAMPBELLFIELD VIC 3061

Dear Sirs/Madams,

**RE: LEVEL 1 EARTHWORKS INSPECTION AND TESTING
MARIGOLD – STAGE 6 (TARNEIT)**

Please find attached our Report No's 22371/R001 to 22371/R012 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 testing commenced in May 2022 and was completed in June 2022.

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).

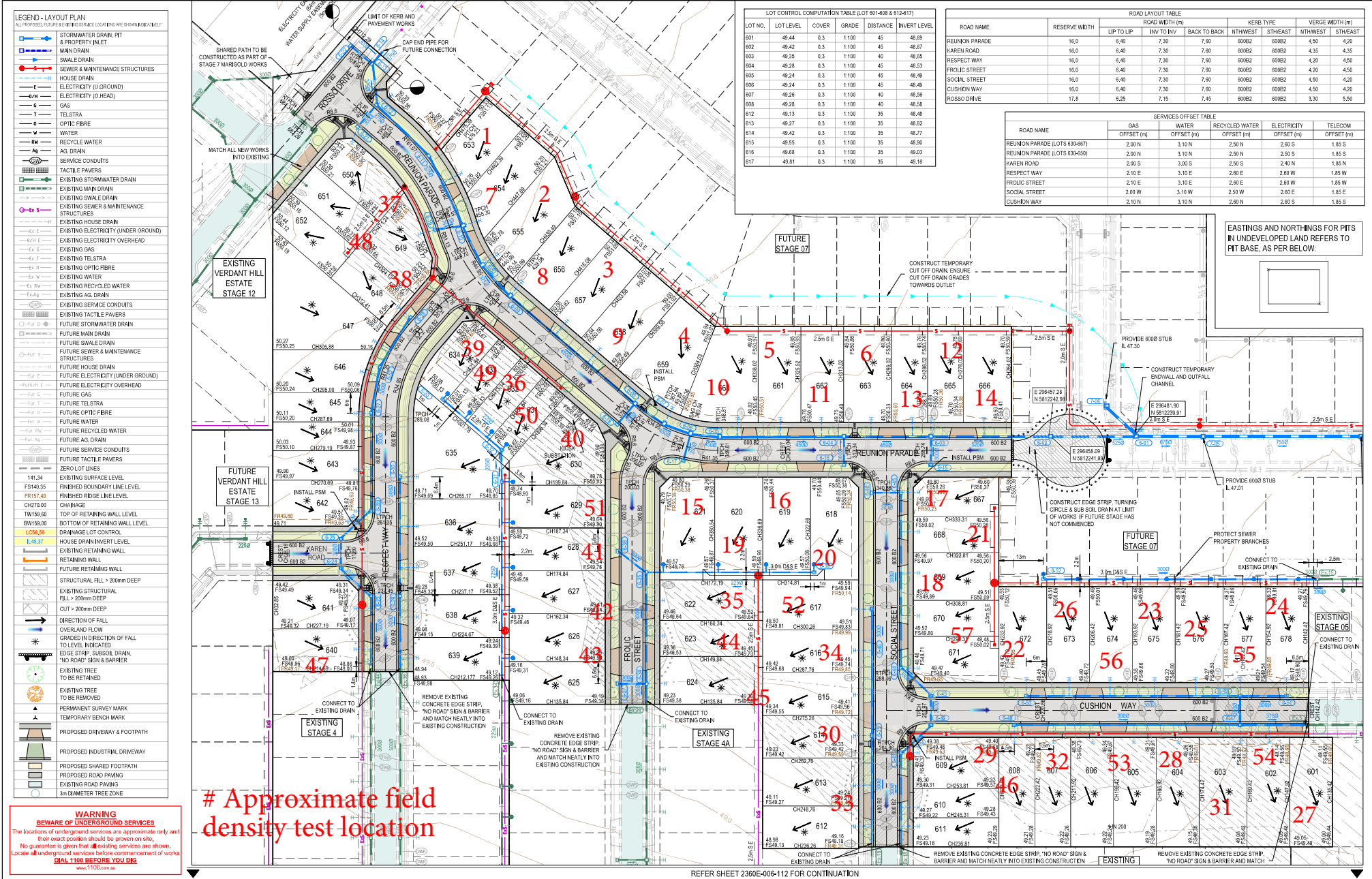
Please contact the undersigned if you require any additional information.

Civil Geotechnical Services

A handwritten signature in blue ink, appearing to read 'Nick Brock', is written over a light blue circular stamp.

Nick Brock

FIGURE 1



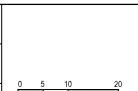
WARNING
BEWARE OF UNDERGROUND SERVICES
 The locations of underground services are approximate only and their exact position should be proven on site.
 No guarantee is given that all existing services are shown.
 Locate all underground services before commencement of works
DIAL 1100 BEFORE YOU DIG
 www.1100.com.au

Approximate field density test location

REV	DATE	AMENDMENT / REVISION DESCRIPTION	DRAFTER	DESIGNER	CHECKER	APPROVER
A	16.09.21	PRELIMINARY ISSUE	S.SATHARAVAN	R.CALLOS	C.SEXTON	B.SANDERSON
B	23.12.21	ISSUED FOR PERMIT APPROVAL	S.SATHARAVAN	R.CALLOS	C.SEXTON	B.SANDERSON
C	18.02.22	UPDATED DRAINAGE AND SOCIAL STREET AMENDMENTS	D.MARAGAM	HEHNSAN	C.SEXTON	M.BOUWMEESTER
D	03.05.22	ISSUED FOR CONSTRUCTION	K.JANG	HEHNSAN	C.SEXTON	M.BOUWMEESTER

PLAN OF SUB. NO. PS90882T
 PERMIT REF. NO. WYP1035517.01

ISSUED FOR CONSTRUCTION



SMC
 Member of the Surlana Jurong Group
 Collins Square, Tower 4, Level 20, 727 Collins St
 Melbourne, VIC 3008
 Ph 03 9514 1500

GROWLAND

Marigold - Stage 6
 Wyndham City Council
 Road and Drainage
 Layout Plan - 1

REVISION NO: 359 F9
 PROJECT DRAWING NO: 2360E-006-111
 SHEET NO: 02 of 25
 REVISION: 0



COMPACTION ASSESSMENT

Job No 22371
 Report No 22371/R001
 Date Issued 07/06/2022

CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	JB
Project	MARIGOLD - STAGE 6	Date tested	24/05/22
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	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	
Field wet density	t/m ³	1.96	1.94	1.95	1.98	2.00	2.01
Field moisture content	%	27.9	26.0	26.1	28.9	25.2	27.2

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/m ³	2.01	1.95	1.98	2.02	2.04	2.04
Adjusted Peak Converted Wet Density	t/m ³	-	-	-	-	-	-
Optimum Moisture Content	%	30.5	28.5	28.5	32.0	27.5	29.5

Moisture Variation From Optimum Moisture Content	2.0% dry	2.5% dry	2.5% dry	2.5% 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	99.5	98.5	98.5	97.5	98.5
-----------------------------------	---	------	------	------	------	------	------

Material description

No 1 - 6 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

Job No 22371
 Report No 22371/R002
 Date Issued 06/06/2022

CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	JB
Project	MARIGOLD - STAGE 6	Date tested	25/05/22
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	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
Field wet density	t/m ³	1.95	1.94	1.98	1.95	1.95
Field moisture content	%	24.7	23.8	26.0	22.4	23.5

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
Percent of oversize material	wet	0	0	0	0	0
Peak Converted Wet Density	t/m ³	1.97	1.98	2.03	2.00	1.98
Adjusted Peak Converted Wet Density	t/m ³	-	-	-	-	-
Optimum Moisture Content	%	27.5	26.5	28.5	24.5	27.5

Moisture Variation From Optimum Moisture Content	2.5% dry	2.5% dry	2.5% dry	1.5% 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})	%	99.5	98.5	97.5	97.5	98.5	98.5
-----------------------------------	---	------	------	------	------	------	------

Material description

No 7 - 12 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

Job No 22371
 Report No 22371/R003
 Date Issued 01/06/2022

CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	JB
Project	MARIGOLD - STAGE 6	Date tested	26/05/22
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	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
Field wet density	t/m ³	1.87	1.91	1.79	1.90	1.88
Field moisture content	%	24.4	28.6	26.6	26.1	25.6

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
Percent of oversize material	wet	0	0	0	0	0
Peak Converted Wet Density	t/m ³	1.91	1.94	1.83	1.94	1.93
Adjusted Peak Converted Wet Density	t/m ³	-	-	-	-	-
Optimum Moisture Content	%	27.0	31.5	29.0	28.0	29.5

Moisture Variation From Optimum Moisture Content	2.5% dry	2.5% dry	2.0% dry	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})	%	98.5	98.5	98.0	98.0	97.5	98.0
-----------------------------------	---	------	------	------	------	------	------

Material description

No 13 - 18 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 22371
Report No 22371/R004
Date Issued 01/06/2022

Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	JB
Project	MARIGOLD - STAGE 6	Date tested	27/05/22
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	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
Field wet density	t/m ³	2.06	2.09	2.03	1.99	1.93
Field moisture content	%	21.9	23.5	18.2	24.3	24.7

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
Percent of oversize material	wet	0	0	0	0	0
Peak Converted Wet Density	t/m ³	2.09	2.10	2.08	2.02	1.95
Adjusted Peak Converted Wet Density	t/m ³	-	-	-	-	-
Optimum Moisture Content	%	23.5	26.0	18.0	27.0	27.5

Moisture Variation From Optimum Moisture Content	1.5% dry	2.5% dry	0.0%	2.5% 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})	%	98.5	99.5	98.0	98.5	98.0	99.0
-----------------------------------	---	------	------	------	------	------	------

Material description

No 19 - 24 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

Job No 22371
 Report No 22371/R005
 Date Issued 02/06/2022

CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	JB
Project	MARIGOLD - STAGE 6	Date tested	28/05/22
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	25	26	27	28	29	30
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
Field wet density	t/m ³	1.86	1.86	1.83	1.76	1.86
Field moisture content	%	24.5	25.5	25.4	25.8	24.6

Test procedure AS 1289.5.7.1

Test No	25	26	27	28	29	30
Compactive effort	Standard					
Oversize rock retained on sieve	mm	19.0	19.0	19.0	19.0	19.0
Percent of oversize material	wet	0	0	0	0	0
Peak Converted Wet Density	t/m ³	1.91	1.87	1.88	1.81	1.90
Adjusted Peak Converted Wet Density	t/m ³	-	-	-	-	-
Optimum Moisture Content	%	27.0	26.5	25.5	27.5	27.0

Moisture Variation From Optimum Moisture Content	2.5% dry	1.0% dry	0.0%	1.5% 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})	%	97.5	99.5	97.5	97.5	97.5	98.5
-----------------------------------	---	------	------	------	------	------	------

Material description

No 25 - 30 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

Job No 22371
 Report No 22371/R006
 Date Issued 16/06/2022

CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	JB
Project	MARIGOLD - STAGE 6	Date tested	31/05/22
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	31	32	33	34	35	36	
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	
Field wet density	t/m ³	2.05	2.01	1.96	1.97	1.95	1.99
Field moisture content	%	22.3	23.3	20.7	20.5	26.2	24.9

Test procedure AS 1289.5.7.1

Test No	31	32	33	34	35	36	
Compactive effort	Standard						
Oversize rock retained on sieve	mm	19.0	19.0	19.0	19.0	19.0	
Percent of oversize material	wet	0	0	0	0	0	
Peak Converted Wet Density	t/m ³	2.10	2.03	1.98	2.00	1.98	2.03
Adjusted Peak Converted Wet Density	t/m ³	-	-	-	-	-	-
Optimum Moisture Content	%	21.5	23.0	23.0	21.0	28.0	24.5

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

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	99.0	99.0	98.5	98.5	98.5
-----------------------------------	---	------	------	------	------	------	------

Material description

No 31 - 36 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

Job No 22371
 Report No 22371/R007
 Date Issued 07/07/2022

CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	JB
Project	MARIGOLD - STAGE 6	Date tested	02/06/22
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	37	38	39	40	41	42
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
Field wet density	t/m ³	1.83	1.81	1.78	1.84	1.80
Field moisture content	%	26.3	26.7	28.3	26.6	27.9

Test procedure AS 1289.5.7.1

Test No	37	38	39	40	41	42
Compactive effort	Standard					
Oversize rock retained on sieve	mm	19.0	19.0	19.0	19.0	19.0
Percent of oversize material	wet	0	0	0	0	0
Peak Converted Wet Density	t/m ³	1.84	1.85	1.80	1.86	1.81
Adjusted Peak Converted Wet Density	t/m ³	-	-	-	-	-
Optimum Moisture Content	%	28.5	29.0	30.5	29.0	30.0

Moisture Variation From Optimum Moisture Content	2.0% dry	2.5% dry	2.0% dry	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})	%	100.0	98.0	99.0	99.0	100.0	98.5
-----------------------------------	---	-------	------	------	------	-------	------

Material description

No 37 - 42 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

Job No 22371
 Report No 22371/R008
 Date Issued 16/06/2022

CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	JB
Project	MARIGOLD - STAGE 6	Date tested	03/06/22
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	43	44	45	-	-	-
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/m ³	1.88	1.94	1.95	-	-
Field moisture content	%	27.3	27.4	25.4	-	-

Test procedure AS 1289.5.7.1

Test No	43	44	45	-	-	-
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/m ³	1.87	1.96	1.98	-	-
Adjusted Peak Converted Wet Density	t/m ³	-	-	-	-	-
Optimum Moisture Content	%	27.5	30.0	28.0	-	-

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})	%	100.0	99.0	99.0	-	-
-----------------------------------	---	-------	------	------	---	---

Material description

No 43 - 45 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

Job No 22371
 Report No 22371/R009
 Date Issued 08/06/2022

CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	WS
Project	MARIGOLD - STAGE 6	Date tested	04/06/22
Location	TARNEIT	Checked by	JHF

Feature	EARTHWORKS	Layer thickness	200 mm	Time: 07:00
---------	------------	-----------------	--------	-------------

Test procedure AS 1289.2.1.1 & 5.8.1

Test No	46	47	48	-	-	-
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/m ³	1.98	1.95	1.98	-	-
Field moisture content	%	22.0	23.8	21.4	-	-

Test procedure AS 1289.5.7.1

Test No	46	47	48	-	-	-
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/m ³	2.03	2.03	2.02	-	-
Adjusted Peak Converted Wet Density	t/m ³	-	-	-	-	-
Optimum Moisture Content	%	25.0	26.0	24.0	-	-

Moisture Variation From Optimum Moisture Content	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})	%	98.0	96.5	98.0	-	-
----------------------------------	---	------	------	------	---	---

Material description

No 46 - 48 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

Job No 22371
 Report No 22371/R010
 Date Issued 16/06/2022

CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	JB
Project	MARIGOLD - STAGE 6	Date tested	06/06/22
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	49	50	51	-	-	-
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/m ³	1.80	1.86	1.92	-	-
Field moisture content	%	21.2	22.4	23.1	-	-

Test procedure AS 1289.5.7.1

Test No	49	50	51	-	-	-
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/m ³	1.85	1.90	1.97	-	-
Adjusted Peak Converted Wet Density	t/m ³	-	-	-	-	-
Optimum Moisture Content	%	22.5	23.0	23.5	-	-

Moisture Variation From Optimum Moisture Content	1.5% 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})	%	97.0	98.0	97.5	-	-
-----------------------------------	---	------	------	------	---	---

Material description

No 49 - 51 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

Job No 22371
 Report No 22371/R011
 Date Issued 16/06/2022

CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	JB
Project	MARIGOLD - STAGE 6	Date tested	07/06/22
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	52	53	54	-	-	-
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/m ³	1.73	1.73	1.70	-	-
Field moisture content	%	32.9	27.8	26.9	-	-

Test procedure AS 1289.5.7.1

Test No	52	53	54	-	-	-
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/m ³	1.76	1.78	1.77	-	-
Adjusted Peak Converted Wet Density	t/m ³	-	-	-	-	-
Optimum Moisture Content	%	34.0	29.5	28.0	-	-

Moisture Variation From Optimum Moisture Content	1.5% 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})	%	98.5	97.5	96.0	-	-
-----------------------------------	---	------	------	------	---	---

Material description

No 52 - 54 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

Job No 22371
 Report No 22371/R012
 Date Issued 05/08/2022

CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	JB
Project	MARIGOLD - STAGE 6	Date tested	28/06/22
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	55	56	57	-	-	-
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/m ³	1.91	1.88	1.85	-	-
Field moisture content	%	21.3	20.5	22.4	-	-

Test procedure AS 1289.5.7.1

Test No	55	56	57	-	-	-
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/m ³	2.00	1.97	1.94	-	-
Adjusted Peak Converted Wet Density	t/m ³	-	-	-	-	-
Optimum Moisture Content	%	21.5	22.5	25.0	-	-

Moisture Variation From Optimum Moisture Content	0.0%	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})	%	95.5	95.5	95.0	-	-
-----------------------------------	---	------	------	------	---	---

Material description

No 55 - 57 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