



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

12th June 2024

Our Reference: 23743:NB1878

Winslow Constructors Pty Ltd
50 Barry Road
CAMPBELLFIELD VIC 3061

Dear Sirs/Madams,

**RE: LEVEL 1 EARTHWORKS INSPECTION AND TESTING
WOODSONG – STAGE 2 (MICKLEHAM)**

Please find attached our Report No's 23743/R001 to 23743/R014 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 October 2023 and was completed in February 2024.

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).

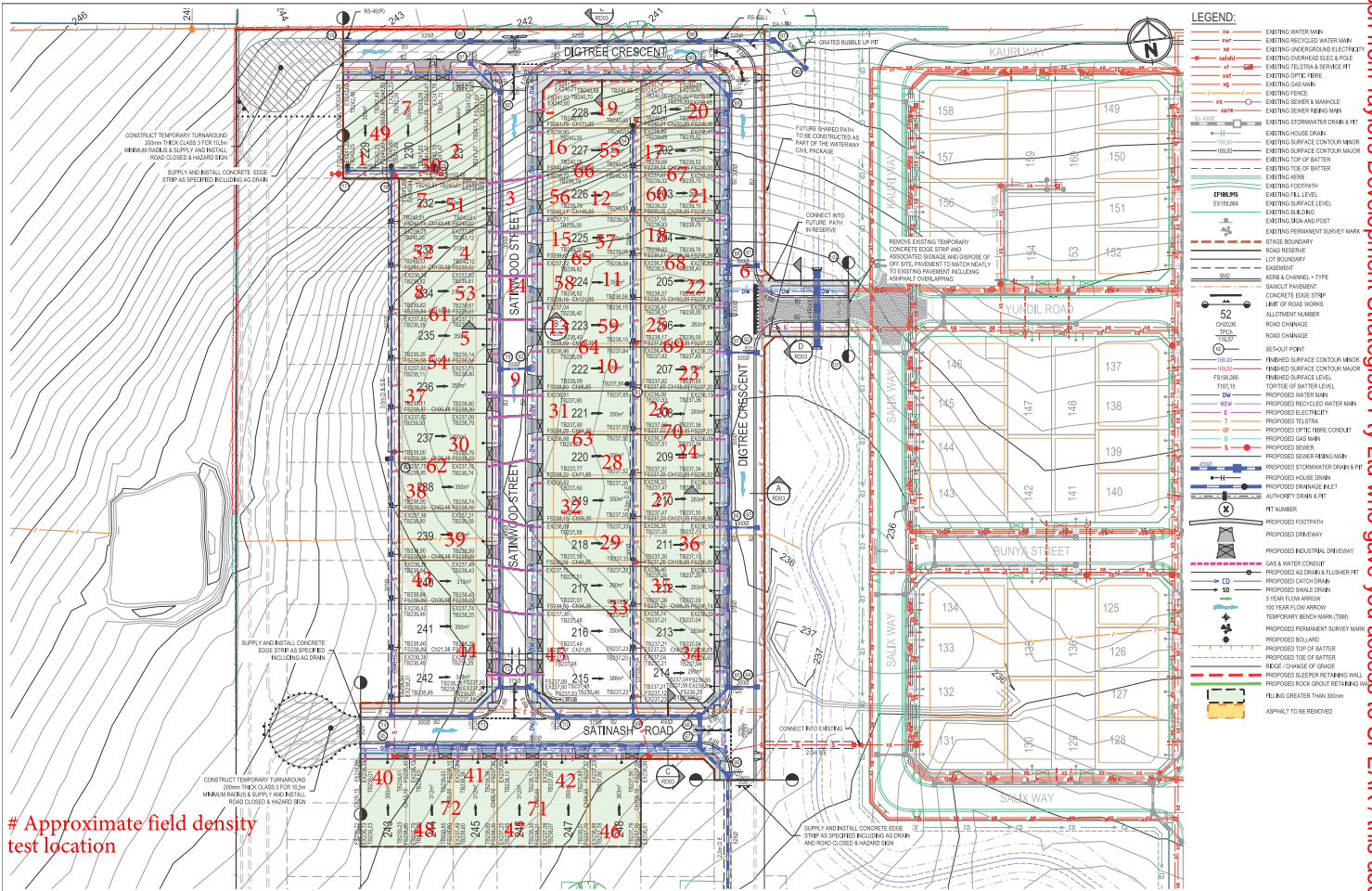
Please contact the undersigned if you require any additional information.

Civil Geotechnical Services

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

Nick Brock

FIGURE 1



REV.	REVISIONS	APPD.	DATE
B	TENDER ACCOMMODATION	N. MURTAGH	2025/02/20
A	INITIAL ISSUE	K. ROSSERS	17/02/2023

WARNING
BEWARE OF UNDERGROUND/OVERHEAD SERVICES
THE LOCATION OF SERVICES ARE APPROXIMATE ONLY
AND THEIR EXACT POSITION SHOULD BE PROVIDED ON
SITE. NO GUARANTEE IS GIVEN THAT ALL EXISTING
SERVICES ARE OR WILL BE IDENTIFIED. CONSTRUCTION
SHOULD BE DONE TO CONSTRUCTION PROCEDURES
UNDER OVERHEAD ELECTRICITY TRANSMISSION LINES.



WOODSONGS ESTATE
STAGE 2
HOME CITY COUNCIL
DETAIL PLAN

PRELIMINARY 151000-02RD04



COMPACTION ASSESSMENT

Job No 23743
 Report No 23743/R001
 Date Issued 23/10/23
 Tested by AC
 Date tested 17/10/23
 Checked by JHF

CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

Client WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)
 Project WOODSONG - STAGE 2
 Location MICKLEHAM

Feature	EARTHWORKS	Layer thickness	200 mm	Time: 12:01
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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/m ³	2.03	1.99	2.04	2.03	2.05	2.01
Field moisture content %	22.7	22.7	21.7	22.3	23.5	19.6

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	2.04	2.02	2.08	2.08	2.09	2.04
Adjusted Peak Converted Wet Density t/m ³	-	-	-	-	-	-
Optimum Moisture Content %	23.0	23.0	22.0	22.5	24.0	20.0

Moisture Variation From Optimum Moisture Content	0.0%	0.5% dry	0.0%	0.0%	0.5% dry	0.5% dry
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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	98.0	98.0	98.5
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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

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COMPACTION ASSESSMENT

Job No 23743
 Report No 23743/R002
 Date Issued 23/10/23
 Tested by AC
 Date tested 18/10/23
 Checked by JHF

CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

Client WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)
 Project WOODSONG - STAGE 2
 Location MICKLEHAM

Feature	EARTHWORKS	Layer thickness	200 mm	Time: 13:28
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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/m ³	2.08	2.04	2.06	1.94	1.93	1.96
Field moisture content %	20.4	19.5	19.4	21.8	20.7	17.2

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/m ³	2.11	2.14	2.10	2.00	1.94	2.03
Adjusted Peak Converted Wet Density t/m ³	-	-	-	-	-	-
Optimum Moisture Content %	20.5	19.5	19.5	22.5	21.0	17.5

Moisture Variation From Optimum Moisture Content	0.0%	0.0%	0.5% dry	0.5% dry	0.5% dry	0.0%
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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	96.0	98.0	96.5	99.5	96.5
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Material description

No 7 - 12 Clay Fill

AVRLOT HILF V1.10 MAR 13



NATA Accredited Laboratory No 9909
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COMPACTION ASSESSMENT

Job No 23743
 Report No 23743/R003
 Date Issued 23/10/23

CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	AC
Project	WOODSONG - STAGE 2	Date tested	19/10/23
Location	MICKLEHAM	Checked by	JHF

Feature	EARTHWORKS	Layer thickness	200 mm	Time:	14:29
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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	2.02	1.94	1.98	1.87	1.88
Field moisture content	%	20.7	22.9	18.7	20.5	20.6

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	2.05	1.97	2.03	1.94	1.94
Adjusted Peak Converted Wet Density	t/m ³	-	-	-	-	-
Optimum Moisture Content	%	21.5	23.5	19.0	20.0	21.0

Moisture Variation From Optimum Moisture Content	0.5% dry	0.5% dry	0.5% dry	0.5% wet	0.5% dry	0.5% dry
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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	97.0	97.0	96.5	95.5
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Material description

No 13 - 18 Clay Fill

AVRLOT HILF V1.10 MAR 13



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COMPACTION ASSESSMENT

Job No 23743
 Report No 23743/R004
 Date Issued 15/11/23
 Tested by AC
 Date tested 20/10/23
 Checked by JHF

CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

Client WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)
 Project WOODSONG - STAGE 2
 Location MICKLEHAM

Feature	EARTHWORKS	Layer thickness	200 mm	Time: 07:31
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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/m ³	2.07	2.08	2.13	2.11	2.10	2.10
Field moisture content %	23.6	22.3	24.4	24.4	22.0	23.2

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/m ³	2.09	2.09	2.14	2.12	2.10	2.14
Adjusted Peak Converted Wet Density t/m ³	-	-	-	-	-	-
Optimum Moisture Content %	25.5	24.5	27.0	26.5	24.5	26.0

Moisture Variation From Optimum Moisture Content	2.0% dry	2.0% dry	2.0% dry	2.0% dry	2.0% dry	2.5% dry
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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	99.5	100.0	99.5	100.0	98.5
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Material description

No 19 - 24 Clay Fill

AVRLOT HILF V1.10 MAR 13



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COMPACTION ASSESSMENT

Job No 23743
 Report No 23743/R005
 Date Issued 15/11/23
 Tested by AC
 Date tested 21/10/23
 Checked by JHF

CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

Client WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)
 Project WOODSONG - STAGE 2
 Location MICKLEHAM

Feature	EARTHWORKS	Layer thickness	200 mm	Time: 08:27
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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	175
Field wet density t/m ³	2.10	2.12	2.10	2.08	2.07	2.13
Field moisture content %	23.3	26.1	25.4	22.1	24.7	21.6

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	19.0
Percent of oversize material wet	0	0	0	0	0	0
Peak Converted Wet Density t/m ³	2.10	2.14	2.10	2.09	2.13	2.14
Adjusted Peak Converted Wet Density t/m ³	-	-	-	-	-	-
Optimum Moisture Content %	26.0	29.0	28.0	24.5	27.5	24.0

Moisture Variation From Optimum Moisture Content	2.5% dry	2.5% dry	2.0% dry	2.5% dry	2.5% dry	2.0% dry
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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	99.0	100.0	100.0	97.5	99.5
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Material description

No 25 - 30 Clay Fill

AVRLOT HILF V1.10 MAR 13



NATA Accredited Laboratory No 9909
 Accredited for compliance with
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Approved Signatory : Justin Fry

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COMPACTION ASSESSMENT

Job No 23743
 Report No 23743/R006
 Date Issued 15/11/23
 Tested by AC
 Date tested 23/10/23
 Checked by JHF

CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

Client WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)
 Project WOODSONG - STAGE 2
 Location MICKLEHAM

Feature	EARTHWORKS	Layer thickness	200 mm	Time: 09:28
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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	2.14	2.16	2.10	2.14	2.13
Field moisture content	%	18.6	16.6	18.3	19.9	16.2

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	2.14	2.18	2.10	2.16	2.15
Adjusted Peak Converted Wet Density	t/m ³	-	-	-	-	-
Optimum Moisture Content	%	21.0	18.5	20.0	21.5	18.5

Moisture Variation From Optimum Moisture Content	2.5% dry	2.0% dry	2.0% dry	1.5% dry	2.0% dry	2.5% dry
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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	100.5	99.0	99.5	99.5
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Material description

No 31 - 36 Clay Fill

AVRLOT HILF V1.10 MAR 13



NATA Accredited Laboratory No 9909
 Accredited for compliance with
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Approved Signatory : Justin Fry

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COMPACTION ASSESSMENT

Job No 23743
 Report No 23743/R007
 Date Issued 15/11/23

CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

Tested by AC
 Date tested 24/10/23
 Checked by JHF

Client WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)
 Project WOODSONG - STAGE 2
 Location MICKLEHAM

Feature	EARTHWORKS	Layer thickness	200 mm	Time: 13:28
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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 <i>mm</i>	175	175	175	175	175	175
Field wet density <i>t/m³</i>	1.93	1.94	1.89	1.97	1.89	1.90
Field moisture content %	19.0	20.0	19.2	19.2	19.5	18.6

Test procedure AS 1289.5.7.1

Test No	37	38	39	40	41	42
Compactive effort	Standard					
Oversize rock retained on sieve <i>mm</i>	19.0	19.0	19.0	19.0	19.0	19.0
Percent of oversize material <i>wet</i>	0	0	0	0	0	0
Peak Converted Wet Density <i>t/m³</i>	1.93	1.97	1.91	2.00	1.89	1.93
Adjusted Peak Converted Wet Density <i>t/m³</i>	-	-	-	-	-	-
Optimum Moisture Content %	21.0	22.0	21.5	21.5	21.5	21.0

Moisture Variation From Optimum Moisture Content	2.0% dry	2.0% dry	2.0% dry	2.0% dry	2.0% dry	2.5% dry
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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	98.5	100.0	98.0
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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

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COMPACTION ASSESSMENT

Job No 23743
 Report No 23743/R008
 Date Issued 15/11/23
 Tested by AC
 Date tested 25/10/23
 Checked by JHF

CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

Client WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)
 Project WOODSONG - STAGE 2
 Location MICKLEHAM

Feature	EARTHWORKS	Layer thickness	200 mm	Time: 14:31
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Test procedure AS 1289.2.1.1 & 5.8.1

Test No	43	44	45	46	47	48
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	1.98	1.98	1.95	1.95	1.93
Field moisture content	%	23.7	20.1	22.2	21.2	20.1

Test procedure AS 1289.5.7.1

Test No	43	44	45	46	47	48
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	1.98	1.99	1.96	2.03	1.95
Adjusted Peak Converted Wet Density	t/m ³	-	-	-	-	-
Optimum Moisture Content	%	26.0	22.5	24.0	23.5	22.0

Moisture Variation From Optimum Moisture Content	2.0% dry	2.5% dry	1.5% dry	2.0% dry	2.0% dry	2.5% dry
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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	99.5	99.5	96.0	99.0	99.0
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Material description

No 43 - 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

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COMPACTION ASSESSMENT

Job No 23743
 Report No 23743/R009
 Date Issued 15/11/23
 Tested by AC
 Date tested 30/10/23
 Checked by JHF

CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

Client WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)
 Project WOODSONG - STAGE 2
 Location MICKLEHAM

Feature	EARTHWORKS	Layer thickness	200 mm	Time: 13:01
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Test procedure AS 1289.2.1.1 & 5.8.1

Test No	49	50	51	52	53	54
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/m ³	1.99	2.00	2.00	1.96	1.99	2.05
Field moisture content %	18.3	19.2	18.3	19.5	18.2	19.2

Test procedure AS 1289.5.7.1

Test No	49	50	51	52	53	54
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	1.96	2.00	2.00	1.99	1.96	2.07
Adjusted Peak Converted Wet Density t/m ³	-	-	-	-	-	-
Optimum Moisture Content %	20.5	21.5	20.5	22.0	20.5	21.5

Moisture Variation From Optimum Moisture Content	2.0% dry	2.5% dry	2.0% dry	2.5% dry	2.0% dry	2.0% dry
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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})	%	101.5	99.5	100.0	98.5	101.5	99.0
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Material description

No 49 - 54 Clay Fill

AVRLOT HILF V1.10 MAR 13



NATA Accredited Laboratory No 9909
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Approved Signatory : Justin Fry

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COMPACTION ASSESSMENT

Job No 23743
 Report No 23743/R010
 Date Issued 15/11/23

CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	AC
Project	WOODSONG - STAGE 2	Date tested	31/10/23
Location	MICKLEHAM	Checked by	JHF

Feature	EARTHWORKS	Layer thickness	200 mm	Time:	14:03
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Test procedure AS 1289.2.1.1 & 5.8.1

Test No	55	56	57	58	59	60
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	1.94	1.99	1.95	1.96	1.95
Field moisture content	%	20.8	20.0	19.8	21.2	21.7

Test procedure AS 1289.5.7.1

Test No	55	56	57	58	59	60
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	1.96	1.98	1.95
Adjusted Peak Converted Wet Density	t/m ³	-	-	-	-	-
Optimum Moisture Content	%	23.0	21.0	22.5	23.5	24.5

Moisture Variation From Optimum Moisture Content	2.0% dry	1.0% dry	2.5% dry	2.0% dry	2.5% dry	2.0% dry
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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	100.5	99.5	99.0	99.5	99.0
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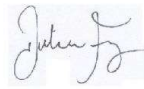
Material description

No 55 - 60 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

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COMPACTION ASSESSMENT

Job No 23743
 Report No 23743/R011
 Date Issued 19/02/24
 Tested by AC
 Date tested 13/02/24
 Checked by JHF

CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

Client WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)
 Project WOODSONG - STAGE 2
 Location MICKLEHAM

Feature	EARTHWORKS	Layer thickness	200 mm	Time: 08:31
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Test procedure AS 1289.2.1.1 & 5.8.1

Test No	61	62	63	-	-	-
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	1.94	1.89	-	-	-
Field moisture content %	20.5	18.9	19.3	-	-	-

Test procedure AS 1289.5.7.1

Test No	61	62	63	-	-	-
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	1.95	1.97	1.91	-	-	-
Adjusted Peak Converted Wet Density t/m ³	-	-	-	-	-	-
Optimum Moisture Content %	19.5	21.0	21.5	-	-	-

Moisture Variation From Optimum Moisture Content	1.0% wet	2.0% dry	2.5% dry	-	-	-
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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	99.0	-	-	-
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Material description

No 61 - 63 Clay Fill

AVRLOT HILF V1.10 MAR 13



NATA Accredited Laboratory No 9909
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Approved Signatory : Justin Fry

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COMPACTION ASSESSMENT

Job No 23743
 Report No 23743/R012
 Date Issued 19/02/24
 Tested by AC
 Date tested 14/02/24
 Checked by JHF

CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

Client WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)
 Project WOODSONG - STAGE 2
 Location MICKLEHAM

Feature	EARTHWORKS	Layer thickness	200 mm	Time:	08:02
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Test procedure AS 1289.2.1.1 & 5.8.1

Test No	64	65	66	-	-	-
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	1.87	1.97	1.96	-	-
Field moisture content	%	19.8	20.2	19.6	-	-

Test procedure AS 1289.5.7.1

Test No	64	65	66	-	-	-
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	1.91	1.99	1.96	-	-
Adjusted Peak Converted Wet Density	t/m ³	-	-	-	-	-
Optimum Moisture Content	%	22.5	21.5	21.5	-	-

Moisture Variation From Optimum Moisture Content	2.5% dry	1.5% dry	2.0% dry	-	-	-
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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	99.5	-	-
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Material description

No 64 - 66 Clay Fill

AVRLOT HILF V1.10 MAR 13



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 ISO/IEC 17025 - Testing

Approved Signatory : Justin Fry

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COMPACTION ASSESSMENT

Job No 23743
 Report No 23743/R013
 Date Issued 27/02/24
 Tested by AC
 Date tested 16/02/24
 Checked by JHF

CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

Client WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)
 Project WOODSONG - STAGE 2
 Location MICKLEHAM

Feature	EARTHWORKS	Layer thickness	200 mm	Time:	14:02
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Test procedure AS 1289.2.1.1 & 5.8.1

Test No	67	68	69	-	-	-
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	1.96	1.94	1.96	-	-
Field moisture content	%	17.4	21.8	24.4	-	-

Test procedure AS 1289.5.7.1

Test No	67	68	69	-	-	-
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	1.99	1.97	2.01	-	-
Adjusted Peak Converted Wet Density	t/m ³	-	-	-	-	-
Optimum Moisture Content	%	19.5	24.0	23.5	-	-

Moisture Variation From Optimum Moisture Content	2.0% dry	2.0% dry	1.0% wet	-	-	-
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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	97.5	-	-
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Material description

No 67 - 69 Clay Fill

AVRLOT HILF V1.10 MAR 13



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Approved Signatory : Justin Fry

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COMPACTION ASSESSMENT

Job No 23743
 Report No 23743/R014
 Date Issued 12/06/24
 Tested by AC
 Date tested 19/02/24
 Checked by JHF

CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

Client WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)
 Project WOODSONG - STAGE 2
 Location MICKLEHAM

Feature	EARTHWORKS	Layer thickness	200 mm	Time: 12:31
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Test procedure AS 1289.2.1.1 & 5.8.1

Test No	70	71	72	-	-	-
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	1.96	1.94	1.95	-	-	-
Field moisture content %	21.3	22.0	20.7	-	-	-

Test procedure AS 1289.5.7.1

Test No	70	71	72	-	-	-
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	1.98	1.99	-	-	-
Adjusted Peak Converted Wet Density t/m ³	-	-	-	-	-	-
Optimum Moisture Content %	23.5	22.0	23.0	-	-	-

Moisture Variation From Optimum Moisture Content	2.5% dry	0.0%	2.0% dry	-	-	-
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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	98.0	-	-	-
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Material description

No 70 - 72 Clay Fill

AVRLOT HILF V1.10 MAR 13



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 ISO/IEC 17025 - Testing

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