



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

19th August 2024

Our Reference: 24174:NB1942

Winslow Constructors Pty Ltd
50 Barry Road
CAMPBELLFIELD VIC 3061

Dear Sirs/Madams,

**RE: LEVEL 1 EARTHWORKS INSPECTION AND TESTING
MERRIFIELD RESIDENTIAL – STAGE 6 (MICKLEHAM)**

Please find attached our Report No's 24174/R001 to 24174/R004 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 was performed in July 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).

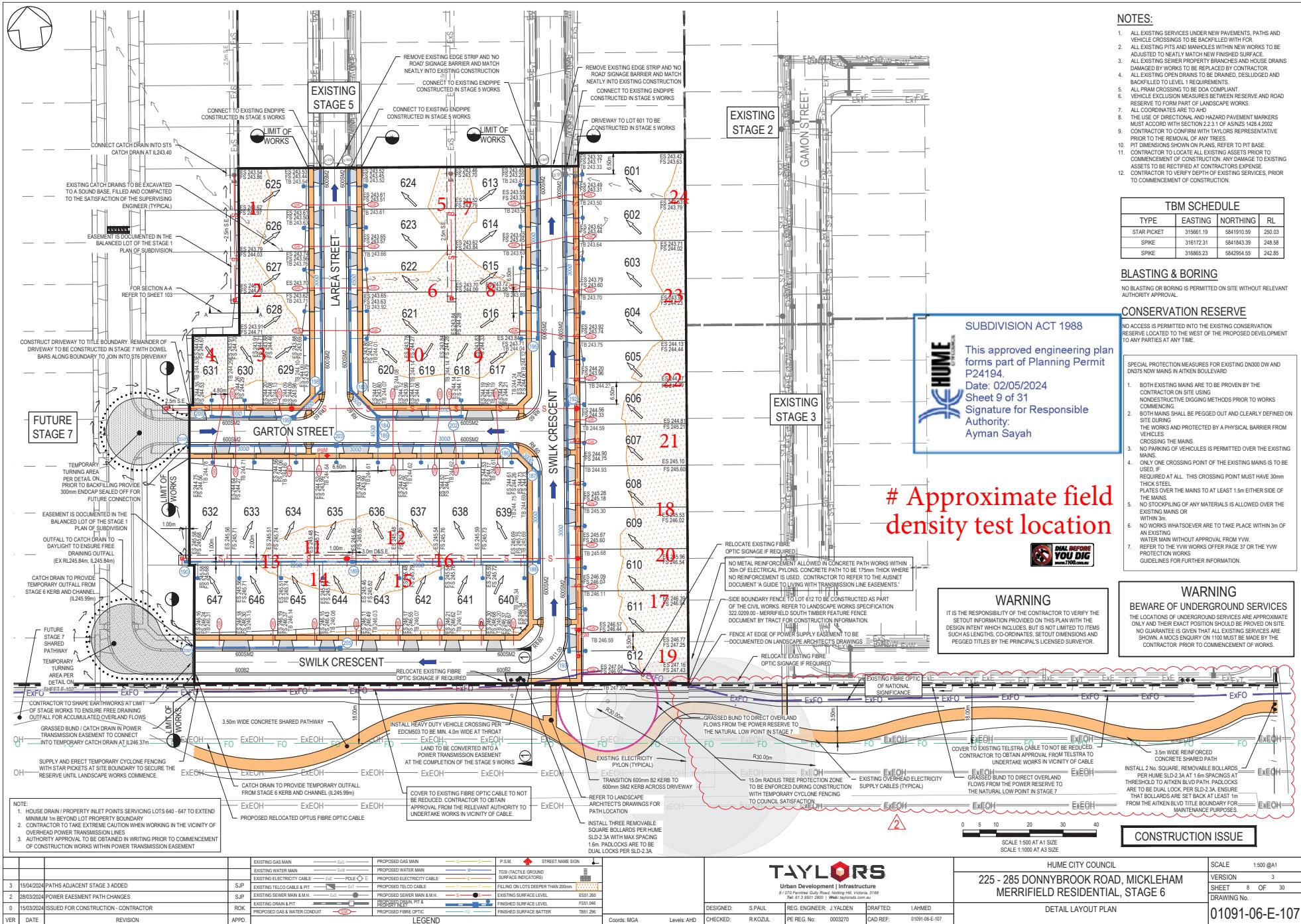
Please contact the undersigned if you require any additional information.

Civil Geotechnical Services

A handwritten signature in blue ink, appearing to read 'Nick Brock'.

Nick Brock

FIGURE 1



COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

Job No 24174
 Report No 24174/R001
 Date Issued 19/07/24

Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	AC
Project	MERRIFIELD RESIDENTIAL - STAGE 6	Date tested	02/07/24
Location	MICKLEHAM	Checked by	JHF

Feature	EARTHWORKS	Layer thickness	200 mm	Time: 14:01
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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					
Approximate depth below FSL						
Measurement depth mm	175	175	175	175	175	175
Field wet density t/m ³	1.90	1.88	1.89	1.91	1.85	1.81
Field moisture content %	20.5	17.8	22.0	19.7	16.7	19.1

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	1.95	1.91	1.93	1.94	1.92	1.86
Adjusted Peak Converted Wet Density t/m ³	-	-	-	-	-	-
Optimum Moisture Content %	21.5	20.0	24.5	22.0	19.0	21.0

Moisture Variation From Optimum Moisture Content	1.0% dry	2.0% dry	2.5% 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}) %	97.5	98.5	98.0	98.5	96.5	97.5
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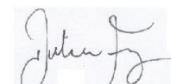
Material description

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

COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

Job No 24174
 Report No 24174/R002
 Date Issued 22/07/24

Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	AC
Project	MERRIFIELD RESIDENTIAL - STAGE 6	Date tested	03/07/24
Location	MICKLEHAM	Checked by	JHF

Feature	EARTHWORKS	Layer thickness	200 mm	Time: 11:06
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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					
Approximate depth below FSL						
Measurement depth mm	175	175	175	175	175	175
Field wet density t/m ³	1.82	1.93	1.84	1.80	1.89	1.83
Field moisture content %	23.2	21.1	19.8	23.4	21.8	24.0

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	1.89	2.00	1.90	1.89	1.92	1.88
Adjusted Peak Converted Wet Density t/m ³	-	-	-	-	-	-
Optimum Moisture Content %	25.0	22.5	22.0	24.0	23.0	25.0

Moisture Variation From Optimum Moisture Content	2.0% dry	1.5% dry	2.0% dry	0.5% dry	1.0% dry	1.0% 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}) %	96.5	96.5	97.0	95.0	98.5	97.5
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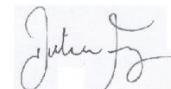
Material description

No 7 - 12 Clay Fill

AVRLOT HILF V1.10 MAR 13



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COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

Job No 24174
Report No 24174/R003
Date Issued 24/07/24

Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	AC
Project	MERRIFIELD RESIDENTIAL - STAGE 6	Date tested	05/07/24
Location	MICKLEHAM	Checked by	JHF

Feature	EARTHWORKS	Layer thickness	200 mm	Time: 10:33
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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					
Approximate depth below FSL						
Measurement depth mm	175	175	175	175	175	175
Field wet density t/m³	1.80	1.93	1.84	1.86	1.89	1.82
Field moisture content %	23.0	20.9	21.7	21.5	21.8	20.2

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	1.88	1.99	1.92	1.88	1.96	1.91
Adjusted Peak Converted Wet Density t/m³	-	-	-	-	-	-
Optimum Moisture Content %	24.5	22.5	21.5	22.0	24.0	21.0

Moisture Variation From Optimum Moisture Content	1.5% dry	1.5% dry	0.0% dry	0.5% dry	2.0% dry	1.0% 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}) %	95.5	97.0	96.0	99.0	96.5	95.5
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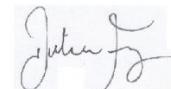
Material description

No 13 - 18 Clay Fill

AVRLOT HILF V1.10 MAR 13



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COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

Job No 24174
Report No 24174/R004
Date Issued 24/07/24

Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	AC
Project	MERRIFIELD RESIDENTIAL - STAGE 6	Date tested	08/07/24
Location	MICKLEHAM	Checked by	JHF

Feature	EARTHWORKS	Layer thickness	200 mm	Time: 12:50
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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					
Approximate depth below FSL						
Measurement depth mm	175	175	175	175	175	175
Field wet density t/m³	1.86	1.92	1.94	1.87	1.89	1.85
Field moisture content %	20.3	24.5	19.8	25.1	20.1	22.7

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	19.0
Percent of oversize material wet	0	0	0	0	0	0
Peak Converted Wet Density t/m³	1.92	1.99	1.96	1.95	1.96	1.90
Adjusted Peak Converted Wet Density t/m³	-	-	-	-	-	-
Optimum Moisture Content %	22.5	25.0	20.0	25.0	22.0	24.0

Moisture Variation From Optimum Moisture Content	2.0% dry	0.5% dry	0.0%	0.0%	2.0% dry	1.5% 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}) %	97.0	96.5	99.0	96.0	96.5	97.5
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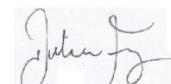
Material description

No 19 - 24 Clay Fill

AVRLOT HILF V1.10 MAR 13



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