



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

20<sup>th</sup> August 2024

Our Reference: 23886:NB1945

Winslow Constructors Pty Ltd  
50 Barry Road  
CAMPBELLFIELD VIC 3061

Dear Sirs/Madams,

**RE: LEVEL 1 EARTHWORKS INSPECTION AND TESTING**  
**352 PAYNES ROAD – STAGE 1 (ROCKBANK)**

Please find attached our Report No's 23886/R001 to 23886/R009 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 November 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).

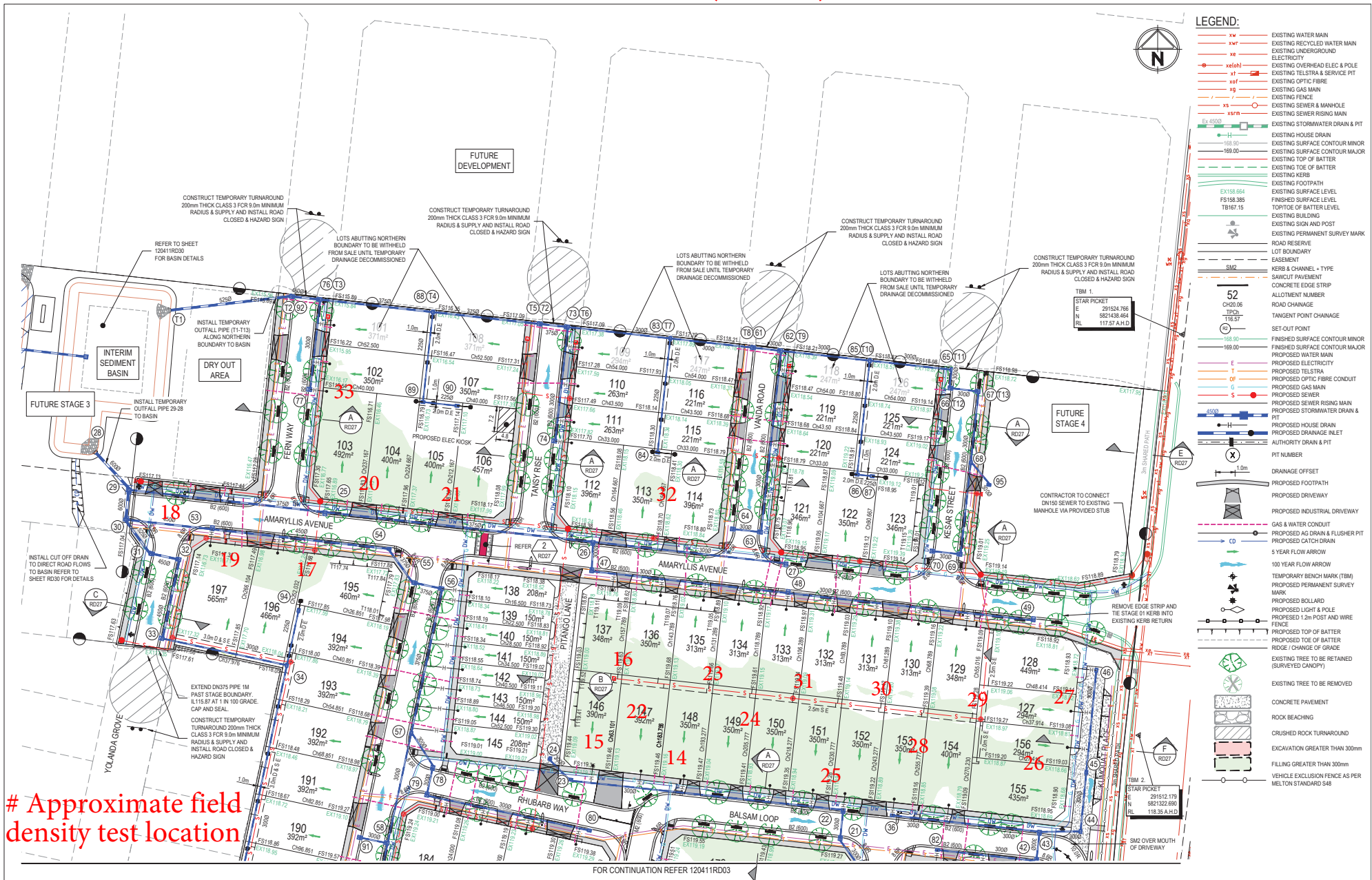
We are of the view that the bulk fill materials that have been placed across the reported allotments by Winslow Constructors during the aforementioned period can be considered as having been placed in a controlled manner to a minimum density ratio of 95% (standard compactive effort).

Please contact the undersigned if you require any additional information.

Civil Geotechnical Services

Nick Brock

FIGURE 1 (1 of 2)

[illegible]

**WARNING**  
**BEWARE OF UNDERGROUND/OVERHEAD SERVICES**  
THE LOCATION OF SERVICES ARE APPROXIMATE ONLY  
AND THEIR EXACT POSITION SHOULD BE PROVEN ON  
SITE. NO GUARANTEE IS GIVEN THAT ALL EXISTING  
SERVICES ARE SHOWN. SPECIAL CONSIDERATION  
SHOULD BE GIVEN TO CONSTRUCTION PROCEDURES  
UNDER OVERHEAD ELECTRICITY TRANSMISSION LINES.



352 PAYNES RD - STG 1  
NEW GARDENS THORNHILL PARK  
CITY OF MELTON  
DETAIL PLAN - 1

TENDER	120411RD02	SHEET No.	2 OF 34
		REV.	K

# FIGURE 1 (2 of 2)



REV.	AMENDMENTS	APPD	DATE
K	INTERIM BASIN AND TEMP DRAIN REVISED	A. CHUDLEIGH	19.12.2022
J	AMENDMENTS	A. CHUDLEIGH	31.03.2021
I	AMENDMENTS	A. CHUDLEIGH	12.02.2021
H	COUNCIL AMENDMENTS	A. CHUDLEIGH	01.10.2020
G	ISSUED TO COUNCIL	A. CHUDLEIGH	08.09.2020



PREPARED BY: A. CHUDLEIGH CHECKED BY: B. BAINBRIDGE AUTHORIZED BY: E. ALLEN DATE: 26.02.2023 01.04.2023 07.04.2023 PROJECT: 344 CS DRAWING: PSE0311R	<b>352 PAYNES RD - STG 1</b> <b>NEW GARDENS THORNHILL PARK</b> CITY OF MELTON DETAIL PLAN - 2	TENDER: 120411RD03 SHEET: 3 OF 34 REV: K
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## COMPACTION ASSESSMENT

### CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

Client WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)  
Project 352 PAYNES ROAD  
Location THORNHILL PARK

Job No 23886  
Report No 23886/R001  
Date Issued 24/11/23

Tested by AM  
Date tested 17/11/23  
Checked by JHF

Feature EARTHWORKS

Layer thickness 200 mm

Time: 10:45

Test procedure AS 1289.2.1.1 & 5.8.1

Test No	1	2	3	-	-	-
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 <sup>3</sup>	1.91	1.98	1.91	-	-	-
Field moisture content %	21.3	21.6	23.7	-	-	-

Test procedure AS 1289.5.7.1

Test No	1	2	3	-	-	-
Compactive effort	Standard					
Override 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 <sup>3</sup>	1.94	2.03	1.95	-	-	-
Adjusted Peak Converted Wet Density t/m <sup>3</sup>	-	-	-	-	-	-
Optimum Moisture Content %	24.0	23.5	26.5	-	-	-

Moisture Variation From Optimum Moisture Content	2.5% 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 ( $R_{HD}$ )	%	98.5	97.5	97.5	-	-	-
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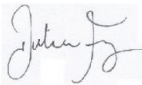
Material description

No 1 - 3 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 23886  
Report No 23886/R002  
Date Issued 27/11/23

Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	AM
Project	352 PAYNES ROAD	Date tested	21/11/23
Location	THORNHILL PARK	Checked by	JHF

Feature	EARTHWORKS	Layer thickness	200 mm	Time: 10:56
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Test procedure AS 1289.2.1.1 & 5.8.1

Test No	4	5	6	-	-	-
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 <sup>3</sup>	2.00	1.87	1.93	-	-	-
Field moisture content %	21.5	22.9	24.0	-	-	-

Test procedure AS 1289.5.7.1

Test No	4	5	6	-	-	-
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 <sup>3</sup>	2.06	1.86	1.91	-	-	-
Adjusted Peak Converted Wet Density t/m <sup>3</sup>	-	-	-	-	-	-
Optimum Moisture Content %	24.5	23.0	26.5	-	-	-

Moisture Variation From Optimum Moisture Content	2.5% dry	0.0%	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 ( $R_{HD}$ )	%	97.0	100.5	101.0	-	-	-
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Material description

No 4 - 6 Clay Fill

AVRLOT HILF V1.10 MAR 13



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Approved Signatory : Justin Fry



# COMPACTION ASSESSMENT

## CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

Job No 23886  
Report No 23886/R003  
Date Issued 12/12/23  
Tested by AM  
Date tested 05/12/23  
Checked by JHF

Client WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)  
Project 352 PAYNES ROAD  
Location ROCKBANK

Feature EARTHWORKS Layer thickness 200 mm Time: 12:06

Test procedure AS 1289.2.1.1 & 5.8.1

Test No	7	8	9	-	-	-
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 <sup>3</sup>	1.90	1.96	1.96	-	-	-
Field moisture content %	24.5	26.4	25.4	-	-	-

Test procedure AS 1289.5.7.1

Test No	7	8	9	-	-	-
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 <sup>3</sup>	1.98	1.99	1.96	-	-	-
Adjusted Peak Converted Wet Density t/m <sup>3</sup>	-	-	-	-	-	-
Optimum Moisture Content %	26.5	28.5	28.0	-	-	-

Moisture Variation From Optimum Moisture Content	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 ( $R_{HD}$ )	%	96.0	98.5	100.0	-	-	-
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Material description

No 7 - 9 Clay Fill

AVRLOT HILF V1.10 MAR 13



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*Justin Fry*

Approved Signatory : Justin Fry



## COMPACTION ASSESSMENT

### CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

Job No 23886  
Report No 23886/R004  
Date Issued 17/01/23

Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	AM
Project	352 PAYNES ROAD	Date tested	06/12/23
Location	ROCKBANK	Checked by	JHF

Feature	EARTHWORKS	Layer thickness	200 mm	Time: 12:48
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Test procedure AS 1289.2.1.1 & 5.8.1

Test No	10	11	12	-	-	-
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 <sup>3</sup>	1.99	1.98	1.85	-	-	-
Field moisture content %	18.9	18.0	21.9	-	-	-

Test procedure AS 1289.5.7.1

Test No	10	11	12	-	-	-
Compactive effort	Standard					
Override rock retained on sieve mm	19.0	19.0	19.0	-	-	-
Percent of override material wet	0	0	0	-	-	-
Peak Converted Wet Density t/m <sup>3</sup>	2.05	1.99	1.90	-	-	-
Adjusted Peak Converted Wet Density t/m <sup>3</sup>	-	-	-	-	-	-
Optimum Moisture Content %	21.0	20.5	24.0	-	-	-

Moisture Variation From Optimum Moisture Content	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 ( $R_{HD}$ )	%	97.0	99.5	97.0	-	-	-
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Material description

No 10 - 12 Clay Fill

AVRLOT HILF V1.10 MAR 13



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Approved Signatory : Justin Fry





## COMPACTION ASSESSMENT

### CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

Job No 23886  
Report No 23886/R005  
Date Issued 18/12/2023

Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	AM
Project	352 PAYNES ROAD	Date tested	13/12/23
Location	ROCKBANK	Checked by	JHF

Feature	EARTHWORKS	Layer thickness	200 mm	Time: 11:38
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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	175
Field wet density t/m <sup>3</sup>	1.87	1.90	1.90	1.90	1.77	1.90
Field moisture content %	22.2	22.4	22.8	20.4	19.9	21.5

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/m <sup>3</sup>	1.89	1.90	1.96	2.00	1.84	1.91
Adjusted Peak Converted Wet Density t/m <sup>3</sup>	-	-	-	-	-	-
Optimum Moisture Content %	24.5	24.5	24.5	23.5	21.5	21.5

Moisture Variation From Optimum Moisture Content	2.5% dry	2.0% dry	1.5% dry	2.5% dry	1.5% 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 ( $R_{HD}$ )	%	99.0	99.5	97.0	95.0	96.5	100.0
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Material description

No 13 - 18 Clay Fill

AVRLOT HILF V1.10 MAR 13



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ISO/IEC 17025 - Testing

Approved Signatory : Justin Fry



## COMPACTION ASSESSMENT

### CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

Job No 23886  
Report No 23886/R006  
Date Issued 17/01/24

Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	AM
Project	352 PAYNES ROAD	Date tested	14/12/23
Location	ROCKBANK	Checked by	JHF

Feature	EARTHWORKS	Layer thickness	200 mm	Time: 11:40
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Test procedure AS 1289.2.1.1 & 5.8.1

Test No	19	20	21	-	-	-
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 <sup>3</sup>	1.99	2.00	1.94	-	-	-
Field moisture content %	21.0	26.9	19.1	-	-	-

Test procedure AS 1289.5.7.1

Test No	19	20	21	-	-	-
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 <sup>3</sup>	2.06	2.10	1.99	-	-	-
Adjusted Peak Converted Wet Density t/m <sup>3</sup>	-	-	-	-	-	-
Optimum Moisture Content %	23.0	29.0	21.0	-	-	-

Moisture Variation From Optimum Moisture Content	2.0% 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 ( $R_{HD}$ )	%	96.5	95.0	97.0	-	-	-
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Material description

No 19 - 21 Clay Fill

AVRLOT HILF V1.10 MAR 13



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ISO/IEC 17025 - Testing

Approved Signatory : Justin Fry



## COMPACTION ASSESSMENT

### CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

Job No 23886  
Report No 23886/R007  
Date Issued 30/01/24

Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	AM
Project	352 PAYNES ROAD - STAGE 1	Date tested	23/01/24
Location	ROCKBANK	Checked by	JHF

Feature	EARTHWORKS	Layer thickness	200 mm	Time: 10:52
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Test procedure AS 1289.2.1.1 & 5.8.1

Test No	22	23	24	25	26	27
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 <sup>3</sup>	1.75	1.74	1.75	1.77	1.81	1.75
Field moisture content %	22.4	25.3	20.7	21.5	22.2	25.1

Test procedure AS 1289.5.7.1

Test No	22	23	24	25	26	27
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 <sup>3</sup>	1.79	1.80	1.77	1.77	1.89	1.83
Adjusted Peak Converted Wet Density t/m <sup>3</sup>	-	-	-	-	-	-
Optimum Moisture Content %	24.5	27.5	23.0	23.5	24.5	27.5

Moisture Variation From Optimum Moisture Content	2.5% dry	2.0% dry	2.5% dry	2.5% 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 ( $R_{HD}$ )	%	97.5	96.5	98.5	99.5	95.5	95.5
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Material description

No 22 - 27 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 23886  
Report No 23886/R008  
Date Issued 02/02/24

Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	AM
Project	352 PAYNES ROAD - STAGE 1	Date tested	30/01/24
Location	ROCKBANK	Checked by	JHF

Feature	EARTHWORKS	Layer thickness	200 mm	Time: 11:30
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Test procedure AS 1289.2.1.1 & 5.8.1

Test No	28	29	30	-	-	-
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 <sup>3</sup>	1.92	1.83	1.88	-	-	-
Field moisture content %	19.8	20.8	18.4	-	-	-

Test procedure AS 1289.5.7.1

Test No	28	29	30	-	-	-
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 <sup>3</sup>	1.98	1.87	1.93	-	-	-
Adjusted Peak Converted Wet Density t/m <sup>3</sup>	-	-	-	-	-	-
Optimum Moisture Content %	21.5	23.0	21.0	-	-	-

Moisture Variation From Optimum Moisture Content	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 ( $R_{HD}$ )	%	97.5	97.5	97.0	-	-	-
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Material description

No 28 - 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 23886  
Report No 23886/R009  
Date Issued 20/03/24

### CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

Tested by AM  
Date tested 12/02/24  
Checked by JHF

Client WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)  
Project 352 PAYNES ROAD - STAGE 1  
Location ROCKBANK

Feature EARTHWORKS Layer thickness 200 mm Time: 09:55

Test procedure AS 1289.2.1.1 & 5.8.1

Test No	31	32	33	-	-	-
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 <sup>3</sup>	2.01	1.95	1.93	-	-	-
Field moisture content %	24.7	22.4	24.6	-	-	-

Test procedure AS 1289.5.7.1

Test No	31	32	33	-	-	-
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 <sup>3</sup>	2.07	1.98	2.00	-	-	-
Adjusted Peak Converted Wet Density t/m <sup>3</sup>	-	-	-	-	-	-
Optimum Moisture Content %	24.0	22.0	27.0	-	-	-

Moisture Variation From Optimum Moisture Content	1.0% wet	0.5% wet	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 ( $R_{HD}$ )	%	97.0	98.5	96.5	-	-	-
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Material description

No 31 - 33 Clay Fill

AVRLOT HILF V1.10 MAR 13



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

*Justin Fry*

Approved Signatory : Justin Fry