



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

6th February 2024

Our Reference: 24046:NB1776

Winslow Constructors Pty Ltd
50 Barry Road
CAMPBELLFIELD VIC 3061

Dear Sirs/Madams,

**RE: LEVEL 1 EARTHWORKS INSPECTION AND TESTING
SMITHS LANE – STAGE 21 (CLYDE NORTH)**

Please find attached our Report No's 24046/R001 and 24046/R002 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 was performed in June 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

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

Nick Brock

FIGURE 1



ROAD NAME	RESERVE WIDTH (m)	ROAD LAYOUT TABLE				KERB TYPE		VERGE WIDTH (m)	
		LIP to LIP	INT to INV	BACK to BACK	NTHWEST	STHEAST	NTHWEST	STHEAST	
BROOKSBANK ROAD	16.00	6.40	7.30	7.60	600 B2	600 B2	4.05	4.35	
O'CONNOR AVENUE	14.50	5.10 (7.20)	6.00 (8.10)	6.30 (8.40)	600 B2	600 B2	4.10	4.10 (2.00)	
GENERATION DRIVE (20.0m)	20.00	6.40	7.30	7.60	600 B2	600 B2	4.35	8.05	
GENERATION DRIVE (14.5m)	14.50	5.10 (7.20)	6.00 (8.10)	6.30 (8.40)	600 B2	600 B2	4.10	4.10 (2.00)	
DIVERSITY ROAD	16.00	6.40	7.30	7.60	600 B2	600 B2	4.35	4.05	
EQUALITY STREET	16.00	6.40	7.30	7.60	600 B2	600 B2	4.35	4.05	

NOTE: DIMENSIONS IN PARENTHESES INCLUDES PARKING LANE

Location	Gas		ND - Water		Water		Electricity		Telecommunication		Sewer		Irrigation	
	Side	Offset (m)	Side	Offset (m)	Side	Offset (m)	Side	Offset (m)	Side	Offset (m)	Side	Offset (m)	Side	Offset (m)
BROOKSBANK ROAD	E	2.25	E	2.70	E	3.20	W	2.60	W	1.85	EW	1.00	-	-
O'CONNOR AVENUE	N	2.00	N	2.45	N	2.95	S	1.20	S	0.85	N	0.80	S	-3.50
GENERATION DRIVE (20.0m)	N	2.25	W	2.70	W	3.20	E	2.60	E	1.85	EW	0.80/1.00	E	6.50
GENERATION DRIVE (14.5m)	W	2.00	N	2.45	N	2.95	S	1.20	S	0.85	N	0.80	S	-3.50
DIVERSITY ROAD	N	2.25	N	2.70	N	3.20	S	2.60	S	1.85	-	-	-	-
EQUALITY STREET	N	2.25	N	2.70	N	3.20	S	2.60	S	1.85	-	-	-	-

NOTE: STREET TREES ARE TO BE PLANTED IN THE CENTRE OF ALL NATURE STRIPS

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 utilities BEFORE YOU DIG
 www.1100.com.au

FOR CONSTRUCTION

REV	DESCRIPTION	DATE	DRN	APP	REV	DESCRIPTION	DATE	DRN	APP
A	ISSUED FOR CONSTRUCTION	02/11/22	CY	LV					

SMITHS LANE
 CIVIL ENGINEERS

Designed by: C.YAP 09/08/2021
 Drawn by: L.SUTHERLAND
 Approved by: L.MURRAY 18/01/2022
 Project No: PS83966T

BW Beveridge Williams
 1 Glenferrie Road
 Malvern VIC 3144
 ph: 03 9244 8888
 www.beveridgewilliams.com.au

Project Name: SMITHS LANE STAGE 21 CITY OF CASEY, R5880
 Drawing Title: LAYOUT PLAN

Sheet 04 of 20
 Scale: 1:500 @ A1
 Project Ref: 1101438 Stage No: 21 Drawing No: 010 A



COMPACTION ASSESSMENT

Job No 24046
 Report No 24046/R001
 Date Issued 30/01/24

CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	CV
Project	SMITHS LANE - STAGE 21	Date tested	26/06/23
Location	CLYDE NORTH	Checked by	JHF

Feature	EARTHWORKS	Layer thickness	200 mm	Time: 15:56
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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	1.94	1.87	2.08	2.00	1.94	1.97
Field moisture content %	17.4	19.7	19.5	18.8	20.4	21.2

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	1.98	1.94	2.06	2.06	1.98	2.04
Adjusted Peak Converted Wet Density t/m ³	-	-	-	-	-	-
Optimum Moisture Content %	19.0	22.0	21.5	20.5	21.5	21.0

Moisture Variation From Optimum Moisture Content	1.5% dry	2.5% dry	2.0% dry	1.5% dry	1.0% dry	0.5% 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})	%	98.0	96.5	101.0	97.0	98.0	96.5
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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

Job No 24046
 Report No 24046/R002
 Date Issued 06/02/24

CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

Tested by CV
 Date tested 27/06/24
 Checked by JHF

Client WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)
 Project SMITHS LANE - STAGE 21
 Location CLYDE NORTH

Feature	EARTHWORKS	Layer thickness	200 mm	Time: 16:00
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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 ³	2.05	1.93	1.92	-	-	-
Field moisture content %	20.1	17.0	22.1	-	-	-

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 ³	2.10	2.00	1.92	-	-	-
Adjusted Peak Converted Wet Density t/m ³	-	-	-	-	-	-
Optimum Moisture Content %	22.0	19.5	22.5	-	-	-

Moisture Variation From Optimum Moisture Content	2.0% dry	2.5% 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})	%	97.5	96.5	99.5	-	-	-
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Material description

No 7 - 9 Clay Fill

AVRLOT HILF V1.10 MAR 13



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 ISO/IEC 17025 - Testing

Approved Signatory : Justin Fry