



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

17th May 2021

Our Reference: 21292:NB954

Winslow Constructors Pty Ltd
50 Barry Road
CAMPBELLFIELD VIC 3061

Dear Sirs/Madams,

**RE: LEVEL 1 EARTHWORKS INSPECTION AND TESTING
DELARAY – STAGE 12B (CLYDE NORTH)**

Please find attached our Report No 21292/R001 which relates 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 April 2021.

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).

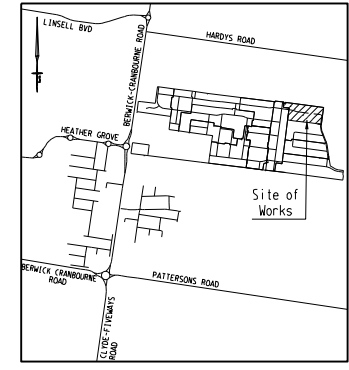
Please contact the undersigned if you require any additional information.

Civil Geotechnical Services

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

Nick Brock

FIGURE 1



LOCALITY PLAN
NTS
MELWAYS: 135 B5

EXISTING WETLAND RESERVE

Approximate field density test location

SHEET INDEX

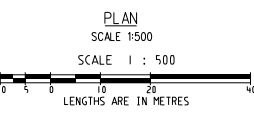
Slit No.	VER	DESCRIPTION
1	PI	DETAIL PLAN, SERVICES SCHEDULE & SHEET INDEX
2	PI	PI NOTES, PAVEMENT DETAILS & TYP. SECTION DETAILS
3	PI	INTERSECTION DETAILS
4	PI	SALAMANCA DRIVE - LONGITUDINAL SECTIONS
5	PI	SALAMANCA DRIVE - CROSS SECTIONS
6	PI	DRAINAGE, LONGITUDINAL SECTIONS & PIT SCHEDULE
7	PI	STORAGE & LINES MARKING PLAN

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.

- ATTENTION TO CONTRACTOR
- IT IS THE CONTRACTORS RESPONSIBILITY TO ENSURE THAT THE DIGITAL PLAN, PROVIDED FOR SETOUT PURPOSES, MATCHES THE TBM COORDINATES SHOWN.
 - Contractor to ensure that the site is pegged and/or set out checked by the Licensed surveyor responsible for certifying the Plan of Subdivision prior to underground Infrastructure being Installed.
 - Where concrete works about a sewer access chamber surround or similar structure, an expansion joint of approved material shall be provided between the two faces.

SERVICES OFFSETS AND LOCATIONS

STREET NAME	R4 RESERVE	WATER	DR	IND	GAS	ELECTRICITY CABLES	POLES	PTM	PTM	FIBRE TO THE HOME CABLES	PTR	PTR	Bt. of R4 RB	JOINT TRENCHING	STREET CLASSIFICATION
SALAMANCA DRIVE (EAST-WEST)	18-00	1-20 S	2-70 S	2-25 S	2-45 N	0-90 BOK	1-95 N	1-70 N/S	1-95 W	1-90 W	1-90 E	1-90 E	G & M, FTTH & E	STREET - LEVEL 1	
SALAMANCA DRIVE (NORTH-SOUTH)	14-00	2-70 W	2-25 W	1-80 W	1-95 W	0-90 BOK	1-20 W						G & M, FTTH & E	STREET - LEVEL 1	



SYMBOL LEGEND

Drains	Ex/Natural/FS Level	FS Building Line	Top/Toe of Batter	Top Ret. Wall Level	100yr Flood Level	Fill Prop/Ex	Cut Prop/Ex
Sewer < 300							
Sewer > 300							
Water							
House Drain							
Property Inlet							
Street Sign							
PST							
Retaining Wall							
Conduits 50mm							
Conduits 100mm							
Ex Gas/Elect/Tel							

breese pitt dixon pty ltd.
land surveyors / civil engineers

1/19 colo street
howthorn east, 3123
telephone 8823 2300
fax no. 8823 2310

MELWAY REF. 135-B-5
SURVEY BPD
DESIGN GL
DRAWN GL

DELARAY ESTATE
STAGE 12B

MUNICIPALITY
CASEY
REFERENCE
8974 E/12B

CHECKED [] SCALE AS SHOWN DATUM AHD DATE FEB'20 SHEET 1 OF 7



COMPACTION ASSESSMENT

Job No 21292
 Report No 21292/R001
 Date Issued 17/05/2021

CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	SB
Project	DELARAY - STAGE 12B	Date tested	29/04/21
Location	CLYDE NORTH	Checked by	JHF

Feature	EARTHWORKS	Layer thickness	200 mm	Time:	14:30
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Test procedure AS 1289.2.1.1 & 5.8.1

Test No	1	2	-	-	-	-
Location	REFER TO FIGURE 1	REFER TO FIGURE 1				
Approximate depth below FSL						
Measurement depth	mm	175	175	-	-	-
Field wet density	t/m ³	1.83	1.83	-	-	-
Field moisture content	%	20.4	21.5	-	-	-

Test procedure AS 1289.5.7.1

Test No	1	2	-	-	-	-
Compactive effort	Standard					
Oversize rock retained on sieve	mm	19.0	19.0	-	-	-
Percent of oversize material	wet	0	0	-	-	-
Peak Converted Wet Density	t/m ³	1.85	1.89	-	-	-
Adjusted Peak Converted Wet Density	t/m ³	-	-	-	-	-
Optimum Moisture Content	%	20.0	19.5	-	-	-

Moisture Variation From Optimum Moisture Content	0.5% wet	2.5% wet	-	-	-	-
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Density Ratio (R _{HD})	%	99.0	97.0	-	-	-
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Material description

No 1 - 2 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