



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

7th February 2018

Our Reference: 18070:NB131

Winslow Constructors Pty Ltd
50 Barry Road
CAMPBELLFIELD VIC 3061

Dear Sirs/Madams,

**RE: LEVEL 1 EARTHWORKS INSPECTION AND TESTING
CORNERSTONE – STAGE 3 (WYNDHAM VALE)**

Please find attached our Report No 18070/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 testing commenced in November 2017 and was completed in early February 2018.

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 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).

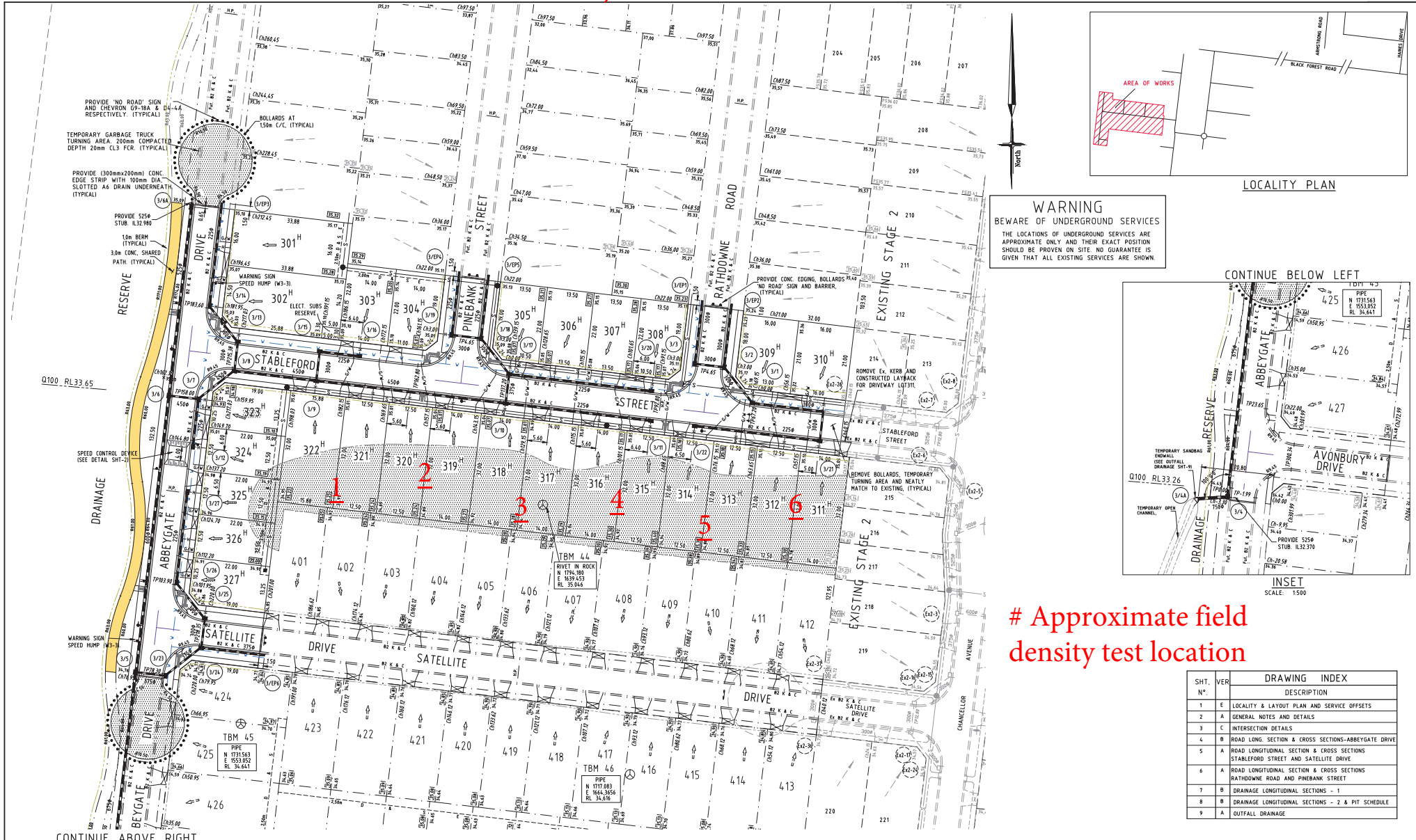
We are of the view that the bulk fill materials that have been placed across the reported allotments by Winslow Constructors during the aforementioned period can be considered as having been placed in a controlled manner to a minimum density ratio of 95% (standard compactive effort).

Please contact the undersigned if you require any additional information.

Civil Geotechnical Services

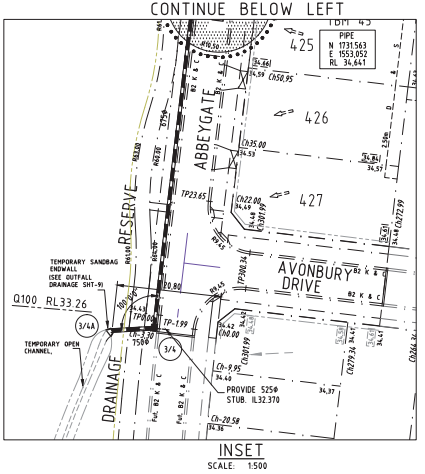
Nick Brock

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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.



Approximate field density test location

SHT. N°	VER	DRAWING INDEX DESCRIPTION
1	E	LOCALITY & LAYOUT PLAN AND SERVICE OFFSETS
2	A	GENERAL NOTES AND DETAILS
3	C	INTERSECTION DETAILS
4	B	ROAD LONG SECTION & CROSS SECTIONS- ABBEYGATE DRIVE
5	A	ROAD LONGITUDINAL SECTION & CROSS SECTIONS STABLEFORD STREET AND SATELLITE DRIVE
6	A	ROAD LONGITUDINAL SECTION & CROSS SECTIONS RATHDOWNE ROAD AND PINEBANK STREET
7	B	DRAINAGE LONGITUDINAL SECTIONS - 1
8	B	DRAINAGE LONGITUDINAL SECTIONS - 2 & PIT SCHEDULE
9	A	OUTFALL DRAINAGE

SERVICES OFFSETS AND LOCATIONS

STREET NAME	ROAD RESERVE	WATER (NDW)		GAS		ELECTRICITY		TELECOM		BACK OF KERB		JOINT TRENCHING
		W	E	W	E	CABLES	POLES	NNN	NNN	W	E	
ABBEYGATE DRIVE	14.50	2.70 E	3.20 E	2.25 E	1.15 W	0.80 BOK	0.65 W	4.35 E	2.55 W	4.05 N	4.35 S	W.G & E.T
SATELLITE DRIVE	16.00	2.70 S	3.20 S	2.25 S	2.60 N	0.80 BOK	1.85 N	4.35 S	2.55 W	4.05 N	4.35 S	W.G & E.T
STABLEFORD STREET	16.00	2.70 N	3.20 N	2.25 N	2.60 S	0.80 BOK	1.85 S	4.35 N	2.55 W	4.05 N	4.35 S	W.G & E.T
PINEBANK STREET	16.00	2.70 W	3.20 W	2.25 W	2.60 E	0.80 BOK	1.85 E	4.35 N	2.55 W	4.05 N	4.35 S	W.G & E.T
RATHDOWNE ROAD	16.00	2.70 W	3.20 W	2.25 W	2.60 E	0.80 BOK	1.85 E	4.35 N	2.55 W	4.05 N	4.35 S	W.G & E.T

SYMBOL LEGEND

Prop Drains	—○—○—	Prop 100mm Water Conduit	—V—V—
Exist Drains > 600	—○—○—	House Drain	—H—H—
Exist Drains > 600	—○—○—	Property Shed	—S—S—
Prop Sewers > 300	—○—○—	Street Sign	—S—S—
Exist Sewers > 300	—○—○—	Prop Surface Level	—○—○—
Exist Sewers > 300	—○—○—	Finished Surface Level	—○—○—
Prop Water	—○—○—	Proposed/Future Finished Level	—○—○—
Prop Gas Conduit	—○—○—	Fill > 150mm	—X—X—
Exist Gas	—○—○—	Cut	—X—X—
Exist Electric/Optics	—○—○—		
Exist Electricity	—○—○—		
Ultimate Line Works	—○—○—		

LAYOUT PLAN
SCALE: 1:500

NO.	DATE	REVISIONS	REMARKS	CHECKED
E	20-11-2017	CONDUIT TO LOT 322 RELOCATED.		
D	23-10-2017	SHARED PATH ALONG RESERVE, DRG INDEX REV NO AMENDED		
C	25-8-2017	DRG INDEX REV NO AMENDED		
B	4-7-2017	REV NO. DRG INDEX AMENDED		
A	13-6-2017	ISSUED FOR CONSTRUCTION		

breese pitt dixon pty. ltd.
land surveyors civil engineers

CORNERSTONE ESTATE
STAGE 3
DETAIL LAYOUT PLAN

SCALE AS SHOWN DATUM AND DATE FEB'17 SHEET 1 OF 9 E

1/19 Gato Street
Hawthorne East, 3123
Telephone 8823 2300
Fax no. 8823 2310

MUNICIPALITY
WYNDHAM

REFERENCE
8890 E/03



COMPACTION ASSESSMENT

Job No 18070
 Report No 18070/R001
 Date Issued 07/02/2018

CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	JB
Project	CORNERSTONE - STAGE 3	Date tested	05/02/18
Location	WYNDHAM VALE	Checked by	JHF

Feature	EARTHWORKS	Layer thickness	200 mm	Time: 09:54
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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 <i>mm</i>	175	175	175	175	175	175
Field wet density <i>t/m³</i>	1.78	1.80	1.86	1.88	1.75	1.83
Field moisture content %	22.8	21.4	24.7	17.9	27.8	24.4

Test procedure AS 1289.5.7.1

Test No	1	2	3	4	5	6
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	1	1	0	0
Peak Converted Wet Density <i>t/m³</i>	1.81	1.86	1.92	1.93	1.76	1.86
Adjusted Peak Converted Wet Density <i>t/m³</i>	-	-	1.94	1.96	-	-
Optimum Moisture Content %	25.0	24.0	24.5	19.5	30.5	27.0

Moisture Variation From Optimum Moisture Content	2.0% dry	2.5% dry	0.0%	1.5% dry	2.5% dry	2.5% dry
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Density Ratio (R_{HD})	%	98.5	96.5	95.5	96.0	99.5	98.5
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Material description

No 1 - 6 Clay Fill



The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/National standards. Accredited for compliance to ISO/IEC 17025. Accreditation No 9909

Approved Signatory : Justin Fry