



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

7<sup>th</sup> January 2020

Our Reference: 19543:NB637

Winslow Constructors Pty Ltd  
50 Barry Road  
CAMPBELLFIELD VIC 3061

Dear Sirs/Madams,

**RE: LEVEL 1 EARTHWORKS INSPECTION AND TESTING**  
**TRIJENA – STAGE 7 (MICKLEHAM)**

Please find attached our Report No 19543/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 was performed in October 2019.

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).

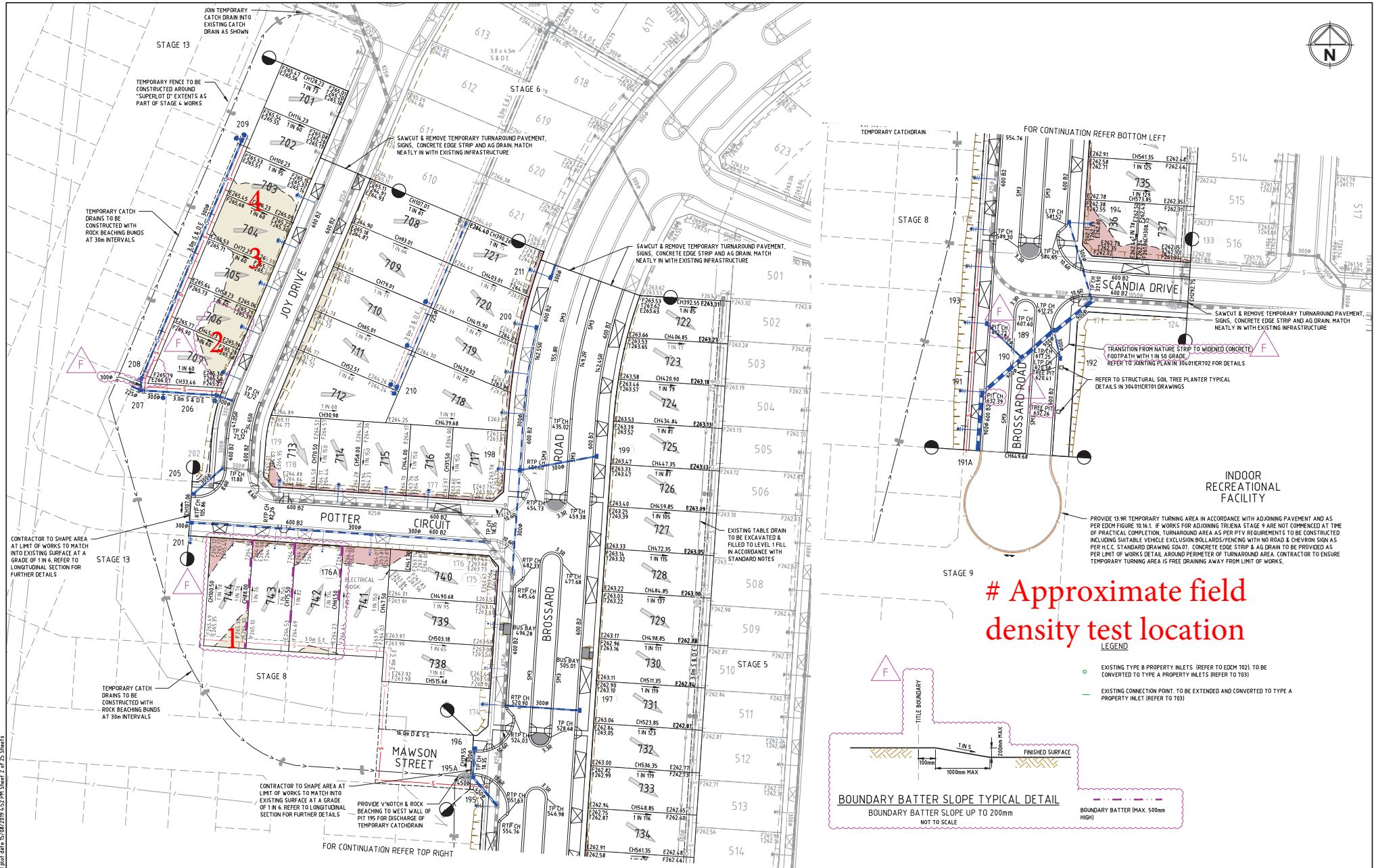
We are of the view that the bulk fill materials that have been placed across the reported allotments by Winslow Constructors during the aforementioned period can be considered as having been placed in a controlled manner to a minimum density ratio of 95% (standard compactive effort).

Please contact the undersigned if you require any additional information.

Civil Geotechnical Services

Nick Brock

# FIGURE 1



# Approximate field density test location

LEGEND

- EXISTING TYPE B PROPERTY INLETS (REFER TO EDCM 702) TO BE CONVERTED TO TYPE A PROPERTY INLETS (REFER TO 703)
- EXISTING CONNECTION POINT TO BE EXTENDED AND CONVERTED TO TYPE A PROPERTY INLET (REFER TO 703)

BOUNDARY BATTER SLOPE TYPICAL DETAIL

BOUNDARY BATTER SLOPE UP TO 200mm

NOT TO SCALE

BOUNDARY BATTER (MAX. 500mm HIGH)

F	AMENDED CUT & FILL AREAS, BOUNDARY BATTERS, NOTES, DETAILS & CHAINAGES	M.T.	13-08-19
E	AMENDED SERVICES, LEVELS & CONCRETE FOOTPATH	M.T.	22-07-19
D	ISSUED FOR TENDER	M.T.	14-06-19
C	AMENDED IN ACCORDANCE WITH COUNCIL COMMENTS & LOT LEVELS AMENDED	M.T.	01-05-19
B	LOT 722 TO 735 LAYOUT CHANGED RESULTING IN SERVICES AND DRIVEWAYS AMENDED	M.R.	17-12-18
A	ISSUED TO COUNCIL	M.R.	24-10-18
Rev	Amendments	Approved	Date

H 1500  
SCALE @ A1

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Designed  
W.MAY  
Authorised  
M.TOOMER-SMITH

Checked  
J.KOEHLER  
Date  
01-05-19

**TRIJENA  
STAGE 7  
ROAD & DRAINAGE  
DETAIL PLAN**  
HUME CITY COUNCIL  
PGG (MICKLEHAM) PTY LTD  
**PRELIMINARY**  
304011CR200  
F



## COMPACTION ASSESSMENT

### CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

Job No 19543  
Report No 19543/R001  
Date Issued 14/11/2019

Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	AC
Project	TRIJENA - STAGE 7	Date tested	11/10/19
Location	MICKLEHAM	Checked by	JHF

Feature	EARTHWORKS	Layer thickness	200 mm	Time: 10:17
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Test procedure AS 1289.2.1.1 & 5.8.1

Test No	1	2	3	4	-	-
Location	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	-	-
Field wet density t/m <sup>3</sup>	2.07	2.06	1.99	1.98	-	-
Field moisture content %	17.0	17.7	16.1	15.9	-	-

Test procedure AS 1289.5.7.1

Test No	1	2	3	4	-	-
Compactive effort	Standard					
Oversize rock retained on sieve mm	19.0	19.0	19.0	19.0	-	-
Percent of oversize material wet	2	0	0	0	-	-
Peak Converted Wet Density t/m <sup>3</sup>	2.05	2.05	2.03	2.04	-	-
Adjusted Peak Converted Wet Density t/m <sup>3</sup>	2.05	-	-	-	-	-
Optimum Moisture Content %	17.5	18.0	17.0	16.5	-	-

Moisture Variation From Optimum Moisture Content	0.5% dry	0.0%	1.0% dry	0.5% dry	-	-
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Density Ratio ( $R_{HD}$ )	%	101.0	100.5	98.0	97.0	-	-
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Material description

No 1 - 4 Clay Fill

AVRLOT HILF V1.10 MAR 13



The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards. Accredited for compliance with ISO/IEC 17025 - Testing

Accreditation No 9909

Approved Signatory : Justin Fry