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

6th March 2021

Our Reference: 21054:NB906

Winslow Constructors Pty Ltd
50 Barry Road
CAMPBELLFIELD VIC 3061

Dear Sirs/Madams,

RE: LEVEL 1 EARTHWORKS INSPECTION AND TESTING
ROTHWELL – STAGE 18 (TARNEIT)

Please find attached our Report No's 21054/R001 to 21054/R003 which relate to the field 5density testing that was conducted within the filled allotments at the above subdivision. The level 1 inspections and associated field density testing was performed in February 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

Nick Brock

FIGURE 1

SERVICES OFFSETS AND LOCATIONS

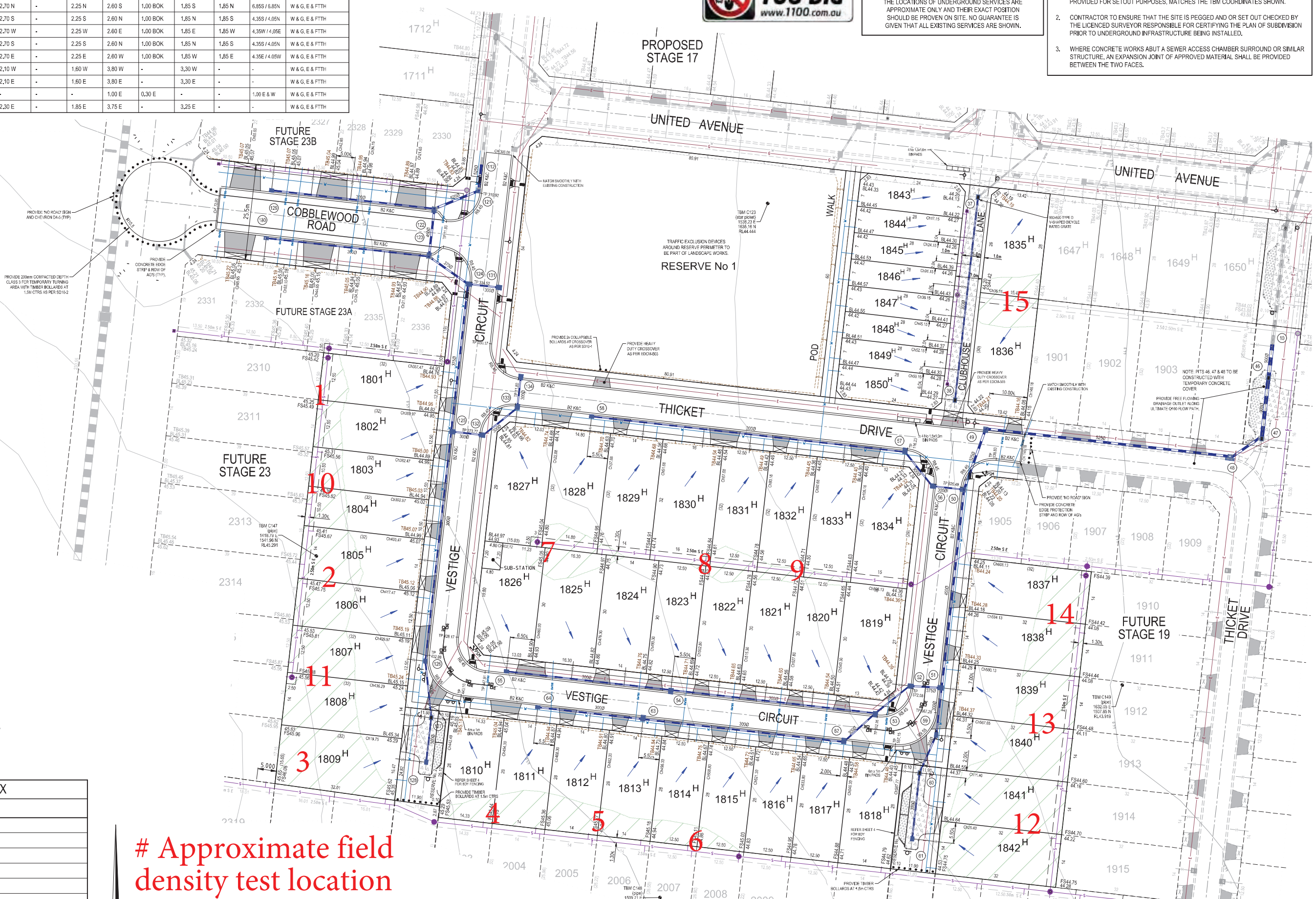
STREET NAME	Rd.RESERVE	WATER DW	WATER NDW	SEWER RISING MAIN	GAS	ELECTRICITY CABLES	ELECTRICITY POLES	FIBRE TO THE HOME FTTH CABLES	FIBRE TO THE HOME FTTH PITS	Bk. of KERB	JOINT TRENCHING
COBBLEWOOD ROAD	25.50	3.20 N	2.70 N	-	2.25 N	2.60 S	1.00 BOK	1.85 S	1.85 N	6.85S / 6.85N	W & G, E & FTTH
THICKET DRIVE	16.00	3.20 S	2.70 S	-	2.25 S	2.60 N	1.00 BOK	1.85 N	1.85 S	4.35S / 4.05N	W & G, E & FTTH
VESTIGE CIRCUIT (N/S Lots 1801-1807)	16.00	3.20 W	2.70 W	-	2.25 W	2.60 E	1.00 BOK	1.85 E	1.85 W	4.35W / 4.05E	W & G, E & FTTH
VESTIGE CIRCUIT (EAST-WEST)	16.00	3.20 S	2.70 S	-	2.25 S	2.60 N	1.00 BOK	1.85 N	1.85 S	4.35S / 4.05N	W & G, E & FTTH
VESTIGE CIRCUIT (N/S Lots 1837-1840)	16.00	3.20 E	2.70 E	-	2.25 E	2.60 W	1.00 BOK	1.85 W	1.85 E	4.35E / 4.05W	W & G, E & FTTH
EXTENDED DRIVEWAY (Lots 1808-1809)	12.00	2.60 W	2.10 W	-	1.60 W	3.80 W	-	3.30 W	-	-	W & G, E & FTTH
EXTENDED DRIVEWAY (Lots 1841-1842)	12.00	2.60 E	2.10 E	-	1.60 E	3.80 E	-	3.30 E	-	-	W & G, E & FTTH
CLUBHOUSE LANE	7.00	-	-	-	-	1.00 E	0.30 E	-	-	1.00 E & W	W & G, E & FTTH
POD WALK	4.00	2.75 E	2.30 E	-	1.85 E	3.75 E	-	3.25 E	-	-	W & G, E & FTTH

DIAL BEFORE YOU DIG
www.1100.com.au

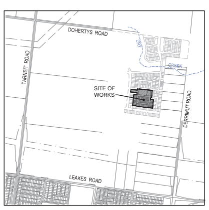
WARNING
BEWARE OF UNDERGROUND SERVICES
THE LOCATIONS OF UNDERGROUND SERVICES ARE APPROXIMATE ONLY AND THEIR EXACT POSITION SHOULD BE PROVEN ON SITE. NO GUARANTEE IS GIVEN THAT ALL EXISTING SERVICES ARE SHOWN.

ATTENTION TO CONTRACTOR

1. IT IS THE CONTRACTORS RESPONSIBILITY TO ENSURE THAT THE DIGITAL PLAN, PROVIDED FOR SETOUT PURPOSES, MATCHES THE TBM COORDINATES SHOWN.
2. CONTRACTOR TO ENSURE THAT THE SITE IS PEGGED AND OR SET OUT CHECKED BY THE LICENCED SURVEYOR RESPONSIBLE FOR CERTIFYING THE PLAN OF SUBDIVISION PRIOR TO UNDERGROUND INFRASTRUCTURE BEING INSTALLED.
3. WHERE CONCRETE WORKS ABUT A SEWER ACCESS CHAMBER SURROUND OR SIMILAR STRUCTURE, AN EXPANSION JOINT OF APPROVED MATERIAL SHALL BE PROVIDED BETWEEN THE TWO FACES.



PLAN
1:500
LENGTHS ARE IN METRES
SCALE 1 : 500 (A1)



LOCALITY PLAN
1:20,000

SHT. No.	VER	DRAWING INDEX DESCRIPTION
1	C	LAYOUT PLAN AND DETAILS - SHEET 1
2	B	NOTES AND TYPICAL CROSS SECTIONS
3	A	INTERSECTION DETAILS - SHEET 1
4	A	INTERSECTION DETAILS - SHEET 2
5	B	VESTIGE CIRCUIT - LONGITUDINAL SECTION
6	B	VESTIGE CIRCUIT - CROSS SECTIONS
7	B	COBBLEWOOD ROAD - LONGITUDINAL & CROSS SECTIONS
8	B	THICKET DRIVE- LONGITUDINAL & CROSS SECTIONS
9	B	ACCESS DRIVEWAYS, CLUBHOUSE LANE - LONGITUDINAL & CROSS SECTIONS
10	C	DRAINAGE LONGITUDINAL SECTIONS - SHEET 1
11	C	DRAINAGE LONGITUDINAL SECTIONS - SHEET 2 & DRAINAGE PIT SCHEDULE
12	C	DRAINAGE LONGITUDINAL SECTIONS - SHEET 3 & DRAINAGE PIT SCHEDULE
13	A	SIGNAGE & LINEMARKING PLAN

VER.	DATE	REMARKS
C	15/12/20	DRAWING INDEX UPDATED
B	28/11/19	REAR LOT LEVELS UPDATED, LOTS 1809-1818
A	31/05/19	ISSUED FOR CONSTRUCTION

breese pitt dixon pty. ltd.
land surveyors civil engineers
1/19 cato street
hawthorn east, 3123
telephone 8823 2300
fax no. 8823 2310

MELWAY REF. 360-F10
SURVEY BPD
DESIGN TBC
DRAWN
CHECKED

ROTHWELL WEST
STAGE 18
LAYOUT PLAN AND DETAILS

MUNICIPALITY WYNDHAM
REFERENCE 8584 E/18
SCALE As Shown | DATUM AHD | DATE Mar'19 | SHEET 1 OF 13 | C

Plotted: Dec 15, 2020 - 11:10am

COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES
6 - 8 Rose Avenue, Croydon 3136

		Job No	21054
		Report No	21054/R001
		Date Issued	09/02/2021
Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	*Tested by*	BS
Project	ROTHWELL - STAGE 18	*Date tested*	05/02/21
Location	TARNEIT	*Checked by*	JHF

Feature **EARTHWORKS** *Layer thickness* 200 mm *Time:* 13:34

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/m³*	1.74	1.78	1.80	-	-	-
Field moisture content	*%*	30.1	27.8	27.2	-	-	-

Test procedure AS 1289.5.7.1

Test No		1	2	3	-	-	-
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/m³*	1.80	1.85	1.85	-	-	-
Adjusted Peak Converted Wet Density	*t/m³*	-	-	-	-	-	-
Optimum Moisture Content	*%*	32.5	30.5	29.5	-	-	-

Moisture Variation From Optimum Moisture Content		2.5% dry	2.5% dry	2.5% dry	-	-	-

Density Ratio (R_{HD})	*%*	**96.5**	**96.5**	**97.0**	**-**	**-**	**-**

Material description

No 1 - 3 Clay Fill

COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES
6 - 8 Rose Avenue, Croydon 3136

		Job No	21054
		Report No	21054/R002
		Date Issued	06/03/2021
Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	*Tested by*	BS
Project	ROTHWELL - STAGE 18	*Date tested*	08/02/21
Location	TARNEIT	*Checked by*	JHF

Feature	**EARTHWORKS**	*Layer thickness*	200 mm	*Time:*	10:12

Test procedure AS 1289.2.1.1 & 5.8.1

Test No		**4**	**5**	**6**	**7**	**8**	**9**
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/m³*	1.80	1.79	1.76	1.76	1.76	1.76
Field moisture content	*%*	25.7	26.3	23.8	23.8	20.9	26.7

Test procedure AS 1289.5.7.1

Test No		4	5	6	7	8	9
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/m³*	1.83	1.85	1.82	1.85	1.85	1.85
Adjusted Peak Converted Wet Density	*t/m³*	-	-	-	-	-	-
Optimum Moisture Content	*%*	28.0	27.5	26.5	25.0	23.0	28.0

Moisture Variation From Optimum Moisture Content	2.5% dry	1.0% dry	2.5% dry	1.0% dry	2.0% dry	1.5% dry

Density Ratio (R_{HD})	*%*	**98.5**	**96.5**	**96.5**	**95.0**	**95.0**	**95.0**

Material description

No 4 - 9 Clay Fill

COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES
6 - 8 Rose Avenue, Croydon 3136

		Job No	21054
		Report No	21054/R003
		Date Issued	06/03/2021
Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	*Tested by*	BS
Project	ROTHWELL - STAGE 18	*Date tested*	09/02/21
Location	TARNEIT	*Checked by*	JHF

Feature	**EARTHWORKS**	*Layer thickness*	200 mm	*Time:*	10:20

Test procedure AS 1289.2.1.1 & 5.8.1

Test No		**10**	**11**	**12**	**13**	**14**	**15**
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/m³*	1.78	1.78	1.79	1.81	1.72	1.75
Field moisture content	*%*	26.9	22.7	25.1	24.0	20.7	22.7

Test procedure AS 1289.5.7.1

Test No		10	11	12	13	14	15
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/m³*	1.81	1.83	1.83	1.86	1.80	1.83
Adjusted Peak Converted Wet Density	*t/m³*	-	-	-	-	-	-
Optimum Moisture Content	*%*	29.0	24.0	27.5	26.5	22.5	24.0

Moisture Variation From Optimum Moisture Content	2.0% dry	1.5% dry	2.5% dry	2.5% dry	2.0% dry	1.5% dry

Density Ratio (R_{HD})	*%*	**98.5**	**97.0**	**98.0**	**97.0**	**96.0**	**95.5**

Material description

No 10 - 15 Clay Fill