



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

8th May 2023

Our Reference: 23142:NB1548

Winslow Constructors Pty Ltd
50 Barry Road
CAMPBELLFIELD VIC 3061

Dear Sirs/Madams,

RE: LEVEL 1 EARTHWORKS INSPECTION AND TESTING
CREEKSTONE – STAGE 3 (TARNEIT)

Please find attached our Report No 23142/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 February 2022.

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

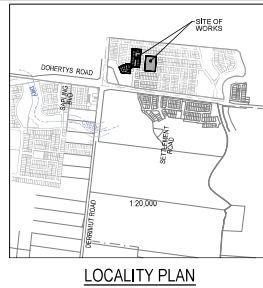
FIGURE 1

- 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 LICENCED 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.

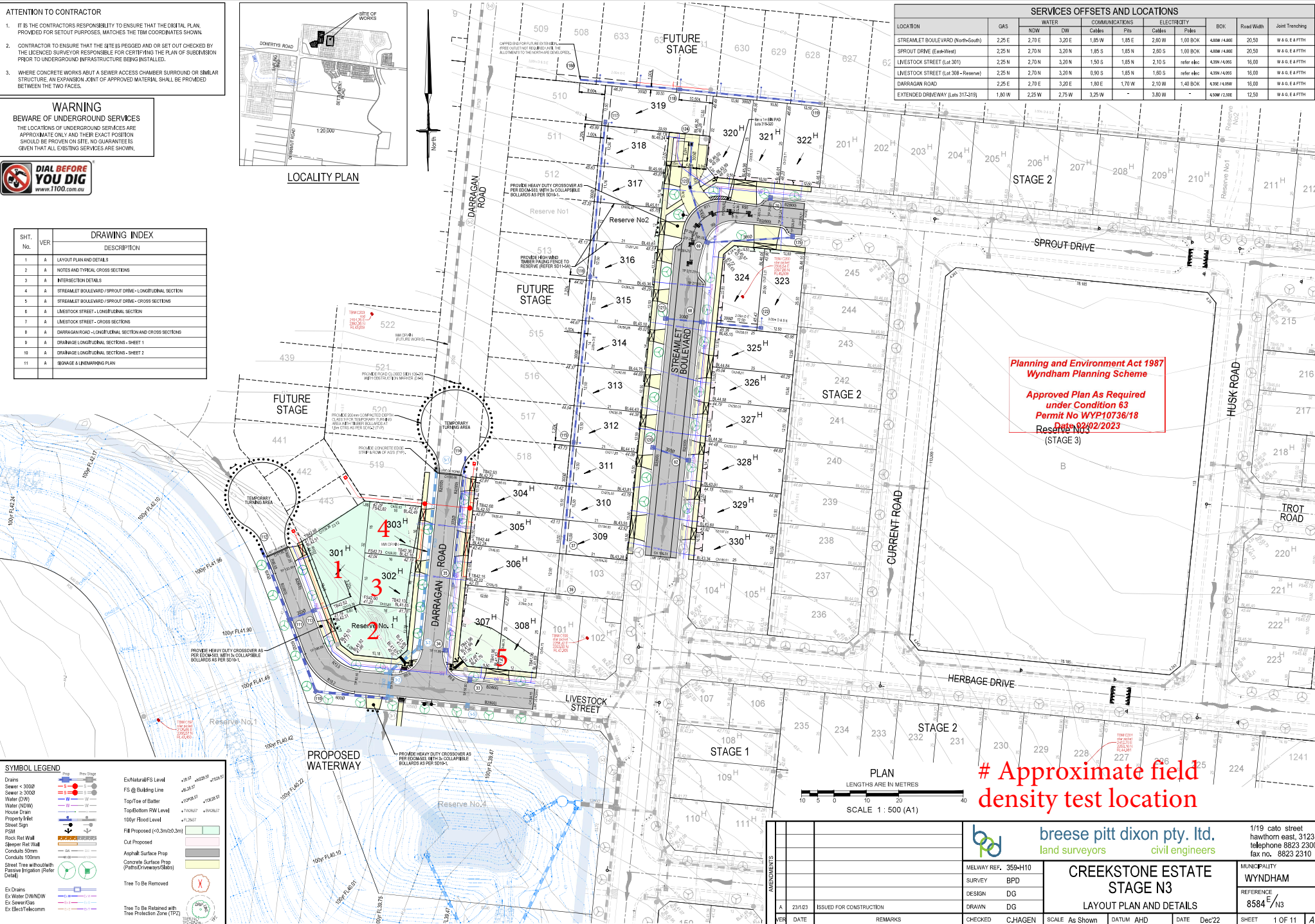
WARNING
BEWARE OF UNDERGROUND SERVICES
THE LOCATIONS OF UNDERGROUND SERVICES ARE APPROXIMATE ONLY AND THEIR EXACT POSITION SHOULD BE PROVIDED ON SITE. NO GUARANTEES GIVEN THAT ALL EXISTING SERVICES ARE SHOWN.



SHT. No.	VER.	DRAWING INDEX
DESCRIPTION		
1	A	LAYOUT PLAN AND DETAILS
2	A	NOTES AND TYPICAL CROSS SECTIONS
3	A	INTERSECTION DETAILS
4	A	STREAMLET BOULEVARD / SPROUT DRIVE - LONGITUDINAL SECTION
5	A	STREAMLET BOULEVARD / SPROUT DRIVE - CROSS SECTIONS
6	A	LIVESTOCK STREET - LONGITUDINAL SECTION
7	A	LIVESTOCK STREET - CROSS SECTIONS
8	A	DARRAGAN ROAD - LONGITUDINAL SECTION AND CROSS SECTIONS
9	A	DRAINAGE LONGITUDINAL SECTIONS - SHEET 1
10	A	DRAINAGE LONGITUDINAL SECTIONS - SHEET 2
11	A	BORAGE & LINEMARKING PLAN



SERVICES OFFSETS AND LOCATIONS											
LOCATION	GAS	WATER	COMMUNICATIONS	ELECTRICITY	POLES	BOK	Road Width	Joint Trenching			
STREAMLET BOULEVARD (North-South)	2.25 E	2.70 E	3.20 E	1.85 W	1.85 E	2.80 W	1.00 BOK	4.00W / 4.00E	20.50	W.A.G. E & PTH	
SPROUT DRIVE (East-West)	2.25 N	2.70 N	3.20 N	1.85 S	1.85 N	2.80 S	1.00 BOK	4.00W / 4.00E	20.50	W.A.G. E & PTH	
LIVESTOCK STREET (Lat 301)	2.25 N	2.70 N	3.20 N	1.50 S	1.85 N	2.10 S	refer elec	4.00W / 4.00E	16.00	W.A.G. E & PTH	
LIVESTOCK STREET (Lat 308 - Reserve)	2.25 N	2.70 N	3.20 N	0.90 S	1.85 N	1.80 S	refer elec	4.00W / 4.00E	16.00	W.A.G. E & PTH	
DARRAGAN ROAD	2.25 E	2.70 E	3.20 E	1.80 W	1.70 W	2.10 W	1.40 BOK	4.00W / 4.00E	16.00	W.A.G. E & PTH	
EXTENDED DRIVEWAY (Lots 317-319)	1.80 W	2.25 W	2.75 W	3.25 W	-	3.80 W	-	4.00W / 4.00E	12.50	W.A.G. E & PTH	



Approximate field density test location

SYMBOL LEGEND	
Drains	Prop. Pre-Stage
Sewer < 3000	Prop. Pre-Stage
Water (DW)	Prop. Pre-Stage
Water (NDW)	Prop. Pre-Stage
House Drain	Prop. Pre-Stage
Property Easement	Prop. Pre-Stage
Street Sign	Prop. Pre-Stage
Rock Ret Wall	Prop. Pre-Stage
Sleeper Ret Wall	Prop. Pre-Stage
Conduits 50mm	Prop. Pre-Stage
Conduits 100mm	Prop. Pre-Stage
Street Tree without/with Reserve Easement (Refer Detail)	Prop. Pre-Stage
Ex Drains	Prop. Pre-Stage
Ex Water/DW/NDW	Prop. Pre-Stage
Ex Sewer/Gas	Prop. Pre-Stage
Ex Electric/Telecom	Prop. Pre-Stage
Ex Natural/FS Level	Prop. Pre-Stage
FS @ Building Line	Prop. Pre-Stage
Top/Free of Water	Prop. Pre-Stage
Top/Bottom (FW) Level	Prop. Pre-Stage
100yr Flood Level	Prop. Pre-Stage
Fill Proposed (<0.3m to 0.3m)	Prop. Pre-Stage
Out Proposed	Prop. Pre-Stage
Asphalt Surface Prop	Prop. Pre-Stage
Concrete Surface Prop (Paths/Driveways/Slabs)	Prop. Pre-Stage
Tree To Be Removed	Prop. Pre-Stage
Tree To Be Retained with Tree Protection Zone (TPZ)	Prop. Pre-Stage

breese pitt dixon pty. ltd. land surveyors civil engineers		1/19 calo street hawthorn east, 3123 telephone 8823 2300 fax no. 8823 2310
MELWAY REF. 359-H10	SURVEY BPD	CREEKSTONE ESTATE STAGE N3
DESIGN DG	DRAWN DG	LAYOUT PLAN AND DETAILS
CHECKED C.HAGEN	SCALE As Shown	DATUM AHD
DATE 23/02	ISSUED FOR CONSTRUCTION	DATE Dec22
REMARKS		SHEET 1 OF 11



COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

Job No 23142
Report No 23142/R001
Date Issued 17/02/23
Tested by JB
Date tested 15/02/23
Checked by JHF

Client WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)
Project CREEKSTONE - STAGE N3
Location TARNEIT

Feature **EARTHWORKS** Layer thickness 200 mm Time: 12:00

Test procedure AS 1289.2.1.1 & 5.8.1

Test No	1	2	3	4	5	-
Location	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	-
Field wet density t/m ³	1.84	1.82	1.83	1.83	1.83	-
Field moisture content %	20.3	25.7	24.6	25.9	20.7	-

Test procedure AS 1289.5.7.1

Test No	1	2	3	4	5	-
Compactive effort	Standard					
Oversize rock retained on sieve mm	19.0	19.0	19.0	19.0	19.0	-
Percent of oversize material wet	0	0	0	0	0	-
Peak Converted Wet Density t/m ³	1.84	1.88	1.86	1.87	1.86	-
Adjusted Peak Converted Wet Density t/m ³	-	-	-	-	-	-
Optimum Moisture Content %	22.5	26.0	26.5	26.5	22.0	-

Moisture Variation From Optimum Moisture Content	2.5% dry	0.5% dry	2.0% dry	0.5% dry	1.0% dry	-
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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})	%	100.0	96.5	98.5	98.0	98.5	-
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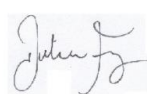
Material description

No 1 - 5 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