



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

5th April 2024

Our Reference: 23436:NB1832

Winslow Constructors Pty Ltd
50 Barry Road
CAMPBELLFIELD VIC 3061

Dear Sirs/Madams,

**RE: LEVEL 1 EARTHWORKS INSPECTION AND TESTING
OLIVINE - STAGE 27 (DONNYBROOK)**

Please find attached our Report No's 23436/R001 and 23436/R002 which relate 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 2023.

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).

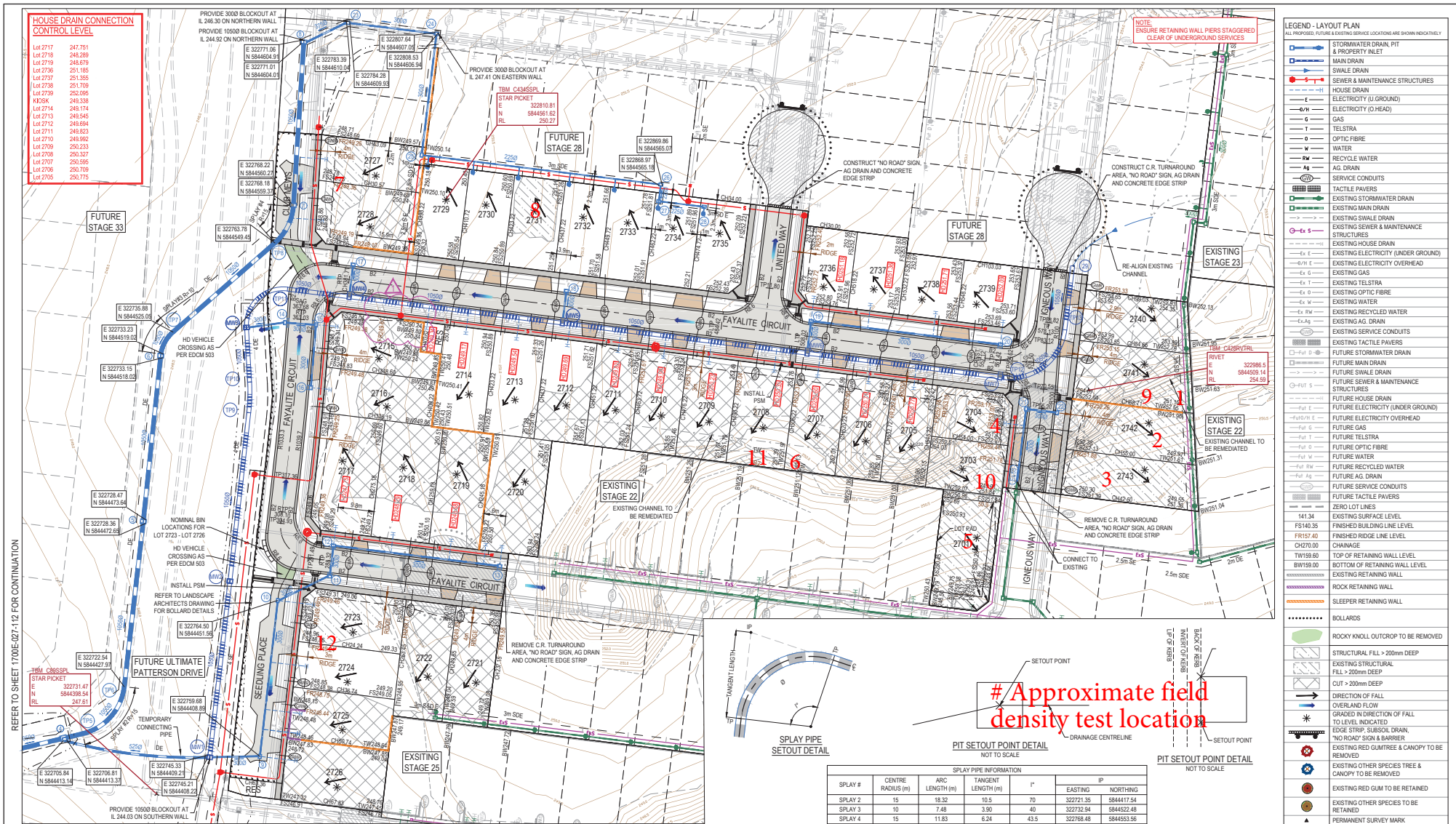
Please contact the undersigned if you require any additional information.

Civil Geotechnical Services

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

Nick Brock

FIGURE 1



LEGEND - LAYOUT PLAN
ALL PROPOSED FUTURE & EXISTING SERVICES LOCATIONS ARE SHOWN INDICATIVELY

- STORMWATER DRAIN, PIT & PROPERTY INLET
- HOUSE DRAIN
- MAIN DRAIN
- SWALE DRAIN
- SEWER & MAINTENANCE STRUCTURES
- ELECTRICITY (U/GROUND)
- ELECTRICITY (O HEAD)
- GAS
- TELSTRA
- OPTIC FIBRE
- WATER
- RECYCLE WATER
- AG DRAIN
- SERVICE CONDUITS
- TACTILE PAVERS
- EXISTING STORMWATER DRAIN
- EXISTING MAIN DRAIN
- EXISTING SEWER & MAINTENANCE STRUCTURES
- EXISTING HOUSE DRAIN
- EXISTING ELECTRICITY (UNDER GROUND)
- EXISTING ELECTRICITY OVERHEAD
- EXISTING GAS
- EXISTING TELSTRA
- EXISTING OPTIC FIBRE
- EXISTING WATER
- EXISTING RECYCLED WATER
- EXISTING AG DRAIN
- EXISTING SERVICE CONDUITS
- EXISTING TACTILE PAVERS
- FUTURE STORMWATER DRAIN
- FUTURE MAIN DRAIN
- FUTURE SWALE DRAIN
- FUTURE SEWER & MAINTENANCE STRUCTURES
- FUTURE HOUSE DRAIN
- FUTURE ELECTRICITY (UNDER GROUND)
- FUTURE ELECTRICITY OVERHEAD
- FUTURE GAS
- FUTURE TELSTRA
- FUTURE OPTIC FIBRE
- FUTURE WATER
- FUTURE RECYCLED WATER
- FUTURE AG DRAIN
- FUTURE SERVICE CONDUITS
- FUTURE TACTILE PAVERS
- ZERO LOT LINES
- 141.34 FINISHED SURFACE LEVEL
- FS140.35 FINISHED BUILDING LINE LEVEL
- FR157.40 FINISHED RIDGE LINE LEVEL
- CH270.00 CHANGING
- TW159.00 TOP OF RETAINING WALL LEVEL
- BW159.00 BOTTOM OF RETAINING WALL LEVEL
- EXISTING RETAINING WALL
- ROCK RETAINING WALL
- SLEEPER RETAINING WALL
- BOLLARDS
- ROCKY KNOLL OUTCROP TO BE REMOVED
- STRUCTURAL FILL > 200mm DEEP
- EXISTING STRUCTURAL FILL > 200mm DEEP
- CLUT > 200mm DEEP
- DIRECTION OF FALL
- OVERLAND FLOW
- GRADED IN DIRECTION OF FALL TO LEVEL INDICATED
- EDGE STRIP, SUBSIDIARY DRAIN, 'NO ROAD' SIGN & BARRIER
- EXISTING RED GUM TREE & CANOPY TO BE REMOVED
- EXISTING OTHER SPECIES TREE & CANOPY TO BE REMOVED
- EXISTING RED GUM TO BE RETAINED
- EXISTING OTHER SPECIES TO BE RETAINED
- PERMANENT SURVEY MARK
- TEMPORARY BENCH MARK
- PROPOSED DRIVEWAY & FOOTPATH
- PROPOSED INDUSTRIAL DRIVEWAY
- PROPOSED SHARED FOOTPATH
- PROPOSED ROAD PAVING
- EXISTING ROAD PAVING

SPLAY PIPE INFORMATION

SPRAY #	CENTRE RADIUS (m)	ARC LENGTH (m)	TANGENT LENGTH (m)	I°	EASTING	NORTHING
SPRAY 2	15	18.32	10.5	70	322731.25	584417.54
SPRAY 3	10	7.48	3.50	40	322732.94	5844522.48
SPRAY 4	15	11.83	6.24	43.5	322768.48	5844535.56

SERVICES OFFSET TABLE

ROAD NAME	GAS	RECYCLED WATER	WATER	ELECTRICITY	OPTIC FIBRE
FAYALITE CIRCUIT (LOTS 2704-2715)	2.10 S	2.60 S	3.10 S	3.10 W	1.85 W
FAYALITE CIRCUIT (LOTS 2716-2720)	2.10 S	2.60 S	3.10 S	3.10 W	1.85 W
FAYALITE CIRCUIT (LOTS 2721-2725)	2.10 E	2.55 E	3.05 E	0.75 W	0.30 W
FAYALITE CIRCUIT (LOTS 2726-2730)	2.10 E	2.60 E	3.10 E	3.50 W	1.85 W
IGNECIOUS WAY (LOTS 2740-2741)	2.10 E	2.60 E	3.10 E	3.50 W	1.85 W
IGNECIOUS WAY (LOTS 2742-2743)	2.10 E	2.60 E	3.10 E	2.45 W	1.45 W
IGNECIOUS WAY (LOTS 2744-2745)	2.10 E	2.60 E	3.10 E	2.55 W	1.45 W
IGNECIOUS WAY (LOTS 2746-2747)	1.80 E	2.20 E	2.70 E	4.10 E	3.00 E
IGNECIOUS WAY (LOTS 2748-2749)	1.80 E	2.20 E	2.70 E	4.10 E	3.00 E

ROAD LAYOUT TABLE

ROAD NAME	ROAD RESERVE WIDTH (m)	ROAD WIDTH (m)			KERB TYPE		VERGE WIDTH (m)	
		LIP TO LIP	INV TO INV	BACK TO BACK	NTHWEST	STHEAST	NTHWEST	STHEAST
FAYALITE CIRCUIT (LOTS 2704-2715)	18.00	6.40	7.30	7.60	B2	B2	4.35	4.35
FAYALITE CIRCUIT (LOTS 2716-2720)	16.00	6.40	7.30	7.60	B2	B2	4.35	4.35
FAYALITE CIRCUIT (LOTS 2721-2725)	14.00	6.40	7.30	7.60	B2	B2	2.35	4.35
FAYALITE CIRCUIT (LOTS 2726-2730)	14.00	6.40	7.30	7.60	B2	B2	5.35	4.35
IGNECIOUS WAY (LOTS 2740-2741)	16.00	6.40	7.30	7.60	B2	B2	4.35	4.35
IGNECIOUS WAY (LOTS 2742-2743)	16.00	6.40	7.30	7.60	B2	B2	4.35	4.35
IGNECIOUS WAY (LOTS 2744-2745)	16.00	6.40	7.30	7.60	B2	B2	4.35	4.35
IGNECIOUS WAY (LOTS 2746-2747)	14.00	4.00	-	-	-	-	5.50	5.00
IGNECIOUS WAY (LOTS 2748-2749)	12.00	4.00	-	-	-	-	3.10	4.90

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. Locate all underground services before commencement of works **DIAL 1100 BEFORE YOU DIG**
www.1100.gov.au

REV	DATE	AMENDMENT / REVISION DESCRIPTION	DRAFTER	DESIGNER	CHECKER	APPROVER
0	11.22.22	ISSUED FOR CONSTRUCTION	L CHAPPEL	K KLEKOVIC	Y SONG	A BURROWS
1	23.02.23	RETAINING WALL EXTENT ADJUSTED & SERVICE OFFSETS UPDATED	L CHAPPEL	K KLEKOVIC	Y SONG	A BURROWS

PLAN OF SUB. NO. PS90296T
PERMIT REF. NO. 719067

ISSUED FOR CONSTRUCTION

Scale 1:500
SCALE AS SHOWN AT 1

SMEC
Member of the Surlana Jurong Group
ABN 47 065 475 149
Collins Square, Tower 4, Level 20, 727 Collins St
Melbourne, VIC 3008
Ph 03 9514 1500

mirvac

Olivine Estate - Stage 27
Whittlesea City Council
Road and Drainage
Layout Plan - 1

MELBOURNE REF: 367 G11 1700E-027-111
PROJECT DRAWING NO.: 02 of 27
REVISION: 1



COMPACTION ASSESSMENT

Job No 23436
 Report No 23436/R001
 Date Issued 19/10/23

CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	AC
Project	OLIVINE - STAGE 27	Date tested	04/10/23
Location	DONNYBROOK	Checked by	JHF

Feature	EARTHWORKS	Layer thickness	200 mm	Time: 13:35
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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	mm	175	175	175	175	175
Field wet density	t/m ³	1.99	1.99	2.04	2.01	2.02
Field moisture content	%	22.2	23.9	24.7	25.0	21.7

Test procedure AS 1289.5.7.1

Test No	1	2	3	4	5	6
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	2.03	2.10	2.07	2.08	2.07
Adjusted Peak Converted Wet Density	t/m ³	-	-	-	-	-
Optimum Moisture Content	%	23.0	24.0	25.0	25.5	22.0

Moisture Variation From Optimum Moisture Content	0.5% dry	0.0%	0.5% dry	0.0%	0.0%	0.0%
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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})	%	98.0	95.0	98.5	96.5	97.5	97.5
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Material description

No 1 - 6 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



COMPACTION ASSESSMENT

Job No 23436
 Report No 23436/R002
 Date Issued 19/10/23

CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	AC
Project	OLIVINE - STAGE 27	Date tested	05/10/23
Location	DONNYBROOK	Checked by	JHF

Feature	EARTHWORKS	Layer thickness	200 mm	Time: 14:33
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Test procedure AS 1289.2.1.1 & 5.8.1

Test No	7	8	9	10	11	12
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
Field wet density	t/m ³	2.02	1.97	1.98	1.99	1.99
Field moisture content	%	25.9	23.8	21.5	22.2	24.1

Test procedure AS 1289.5.7.1

Test No	7	8	9	10	11	12
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	2.09	2.05	2.05	2.04	2.10
Adjusted Peak Converted Wet Density	t/m ³	-	-	-	-	-
Optimum Moisture Content	%	26.5	24.5	22.5	23.0	25.5

Moisture Variation From Optimum Moisture Content	0.5% dry	0.5% dry	0.5% dry	0.5% dry	0.0%	0.5% 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})	%	96.5	96.5	97.0	97.5	95.0	95.5
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Material description

No 7 - 12 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