



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

1<sup>st</sup> September 2022

Our Reference: 21714:NB1339

Winslow Constructors Pty Ltd  
50 Barry Road  
CAMPBELLFIELD VIC 3061

Dear Sirs/Madams,

**RE: LEVEL 1 EARTHWORKS INSPECTION AND TESTING**  
**SEVENTH BEND – STAGE 17 (MELTON SOUTH)**

Please find attached our Report No's 21714/R001 and 21714/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 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).

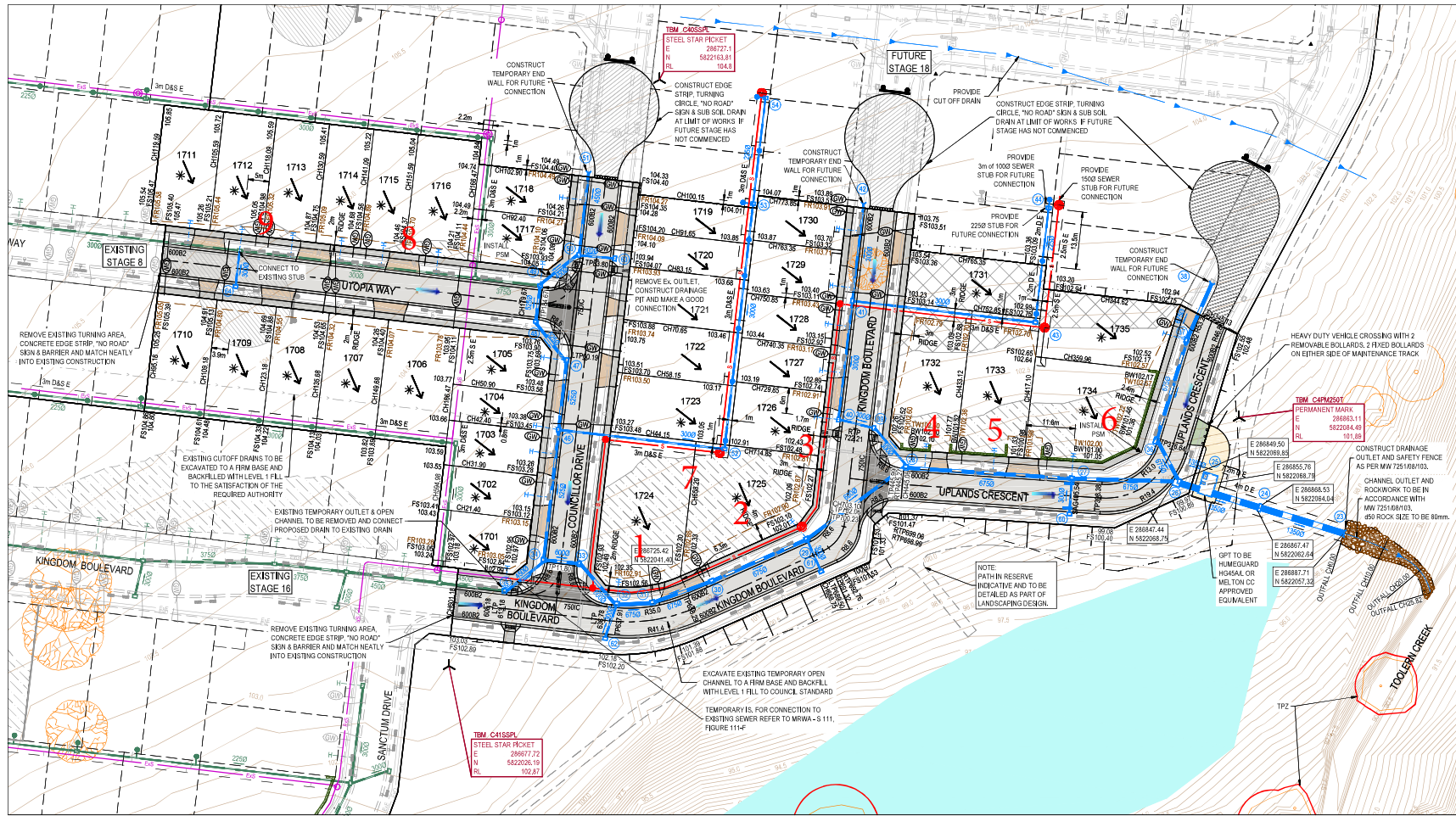
We are of the view that the bulk fill materials that have been placed across the reported allotments by Winslow Constructors during the aforementioned period can be considered as having been placed in a controlled manner to a minimum density ratio of 95% (standard compactive effort).

Please contact the undersigned if you require any additional information.

Civil Geotechnical Services

Nick Brock

# FIGURE 1



LEGEND - LAYOUT PLAN	
	STORMWATER DRAIN, PIT & PROPERTY INLET
	MAIN DRAIN
	SEWER & MAINTENANCE STRUCTURES
	HOUSE DRAIN
	ELECTRICITY (UNDERGROUND)
	ELECTRICITY (OVERHEAD)
	GAS
	TELSTRA
	OPTIC FIBRE
	WATER
	RECYCLE WATER
	SERVICE CONDUITS
	TACTILE PAVERS
	EXISTING STORMWATER DRAIN
	EXISTING MAIN DRAIN
	EXISTING SEWER & MAINTENANCE STRUCTURES
	EXISTING HOUSE DRAIN
	EXISTING ELECTRICITY (UNDERGROUND)
	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 SEWER & MAINTENANCE STRUCTURES
	FUTURE HOUSE DRAIN
	FUTURE ELECTRICITY (UNDERGROUND)
	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 LINE
	EXISTING SURFACE LEVEL
	FINISHED RIDGE LINE LEVEL
	CHANGE
	TOP OF RETAINING WALL LEVEL
	BOTTOM OF RETAINING WALL LEVEL
	ROCK RETAINING WALL
	SLEEPER RETAINING WALL
	STRUCTURAL FILL > 200mm DEEP
	EXISTING STRUCTURAL FILL > 200mm DEEP
	CUT > 200mm DEEP
	DIRECTION OF FALL
	OVERLAND FLOW
	GRADED IN DIRECTION OF FALL TO LEVEL INDICATED
	EDGE STRIP, SUBROAD DRAIN, 'NO ROAD' SIGN & BARRIER
	EXISTING TREE TO BE RETAINED
	EXISTING TREE TO BE REMOVED
	PERMANENT SURVEY MARK
	TEMPORARY BENCH MARK
	PROPOSED DRIVEWAY & FOOTPATH
	PROPOSED INDUSTRIAL DRIVEWAY
	PROPOSED SHARED FOOTPATH
	PROPOSED ROAD PAVING
	EXISTING ROAD PAVING
	EXISTING CONTOURS
	EXISTING CULTURE HERITAGE
	EXISTING STOCKPILE
	EXISTING TREE TO BE RETAINED
	PROPOSED PASSIVE STREET TREE PLANTATION

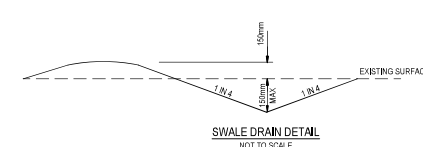
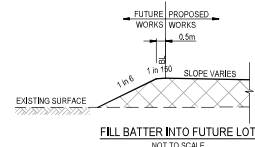
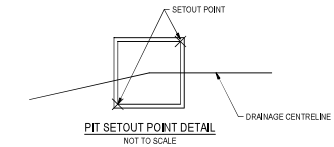
# Approximate field density test location

**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**

SERVICE LOCATIONS ARE IN ACCORDANCE WITH APPENDIX H OF THE MPA GUIDELINES AND THE DETAIL PLAN. SHOULD NOT BE RELIED UPON FOR THE ACCURATE POSITIONING OF DRAINAGE LINES GREATER THAN 450mm BEHIND BACK OF KERB. PIPES GREATER THAN 450mm WILL BE HAUNCHED UNDERNEATH KERB AND CHANNEL WHERE APPLICABLE TO ENSURE THAT PIT WIDTH BEHIND BACK OF KERB DOES NOT EXCEED 0.8m.

ROAD LAYOUT TABLE									
ROAD NAME	ROAD CLASSIFICATION	RESERVE WIDTH (m)	ROAD WIDTH (m)			KERB TYPE		VERGE WIDTH (m)	
			LIP TO LIP	INV TO INV	BACK TO BACK	NTHWEST	STHEAST	NTHWEST	STHEAST
KINGDOM BOULEVARD (LOT 1701)	AS1	16.00	6.40	7.30	7.80	600R2	600R2	4.35	4.35
KINGDOM BOULEVARD (LOT 1724-1725)	AS1	15.00	6.40	7.30	7.80	600R2	600R2	4.35	3.05
KINGDOM BOULEVARD (LOT 1726-1731)	AS1	16.00	6.40	7.30	7.80	600R2	600R2	4.20	4.20
UTOPIA WAY	AS1	16.00	6.40	7.30	7.80	600R2	600R2	4.35	4.95
COUNCILLOR DRIVE	AS1	16.00	6.40	7.30	7.80	600R2	600R2	4.20	4.20
UPLANDS CRESCENT	AS1	15.00	6.40	7.30	7.80	600R2	600R2	4.35	3.05

SERVICES OFFSET TABLE				
ROAD NAME	GAS	WATER	ELECTRICITY	OPTIC FIBRE
	OFFSET (m)	OFFSET (m)	OFFSET (m)	OFFSET (m)
KINGDOM BOULEVARD (LOT 1701)	1.5 N	2.4 N	1.5 S	1.00 S
KINGDOM BOULEVARD (LOT 1724-1725)	1.5 N	2.4 N	1.5 S	0.00 S
KINGDOM BOULEVARD (LOT 1726-1731)	1.5 W	2.3 W	2.4 S	1.00 S
UTOPIA WAY	1.5 N	2.4 N	2.4 S	1.00 S
COUNCILLOR DRIVE	1.5 W	2.3 W	2.4 S	1.00 S
UPLANDS CRESCENT	1.5 NW	2.4 NW	1.5 SE	0.85 SE





## COMPACTION ASSESSMENT

### CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

Job No 21714  
Report No 21714/R001  
Date Issued 08/11/2021

Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	JB
Project	SEVENTH BEND - STAGE 17	Date tested	20/10/21
Location	MELTON SOUTH	Checked by	JHF

Feature	EARTHWORKS	Layer thickness	200 mm	Time: 14:30
---------	------------	-----------------	--------	-------------

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/m <sup>3</sup>	1.99	1.98	1.84	-	-	-
Field moisture content %	35.2	27.5	32.1	-	-	-

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/m <sup>3</sup>	2.07	2.03	1.87	-	-	-
Adjusted Peak Converted Wet Density t/m <sup>3</sup>	-	-	-	-	-	-
Optimum Moisture Content %	34.5	29.5	30.5	-	-	-

Moisture Variation From Optimum Moisture Content	0.5% wet	2.0% dry	1.5% wet	-	-	-
--	----------	----------	----------	---	---	---

Density Ratio ( $R_{HD}$ )	%	96.5	97.5	98.5	-	-	-
----------------------------	---	------	------	------	---	---	---

Material description

No 1 - 3 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

### CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

Job No 21714  
Report No 21714/R002  
Date Issued 13/01/2022

Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	JB
Project	SEVENTH BEND - STAGE 17	Date tested	21/10/21
Location	MELTON SOUTH	Checked by	JHF

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

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/m <sup>3</sup>	1.74	1.92	1.93	1.95	1.98	1.87
Field moisture content %	29.6	27.4	28.4	26.4	27.2	27.8

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/m <sup>3</sup>	1.83	2.01	1.97	2.02	2.00	1.93
Adjusted Peak Converted Wet Density t/m <sup>3</sup>	-	-	-	-	-	-
Optimum Moisture Content %	30.5	25.5	30.0	29.0	26.5	30.5

Moisture Variation From Optimum Moisture Content	1.0% dry	2.0% wet	1.5% dry	2.5% dry	0.5% wet	2.5% dry
--	----------	----------	----------	----------	----------	----------

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 ( $R_{HD}$ )	%	95.5	95.5	98.0	96.5	99.0	97.0
----------------------------	---	------	------	------	------	------	------

Material description

No 4 - 9 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