



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

25th May 2022

Our Reference: 22175:NB1257

Winslow Constructors Pty Ltd
50 Barry Road
CAMPBELLFIELD VIC 3061

Dear Sirs/Madams,

**RE: LEVEL 1 EARTHWORKS INSPECTION AND TESTING
SEVENTH BEND – STAGE 16 (MELTON SOUTH)**

Please find attached our Report No's 22175/R001 and 22175/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 May 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).

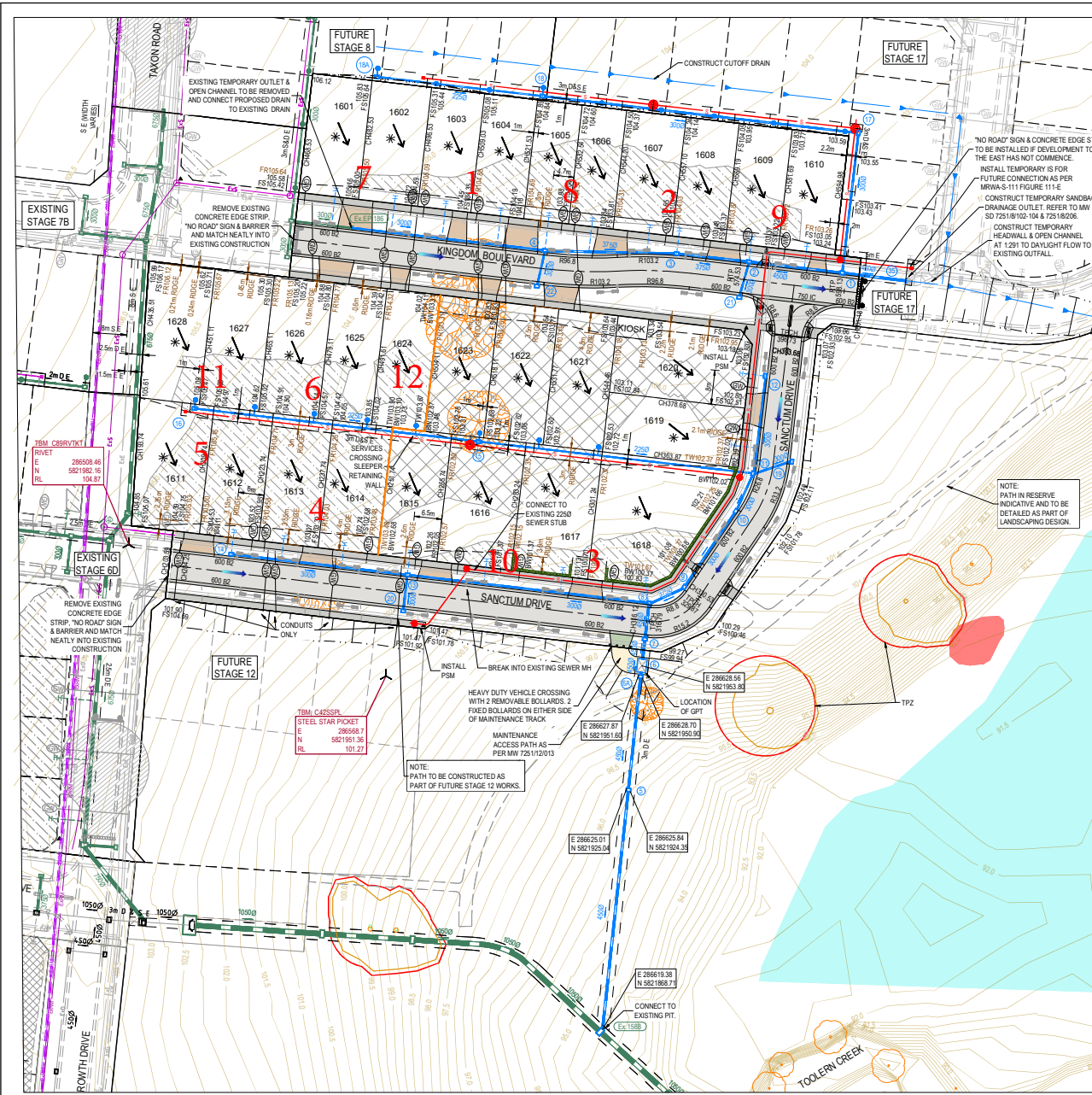
Please contact the undersigned if you require any additional information.

Civil Geotechnical Services

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

Nick Brock

FIGURE 1



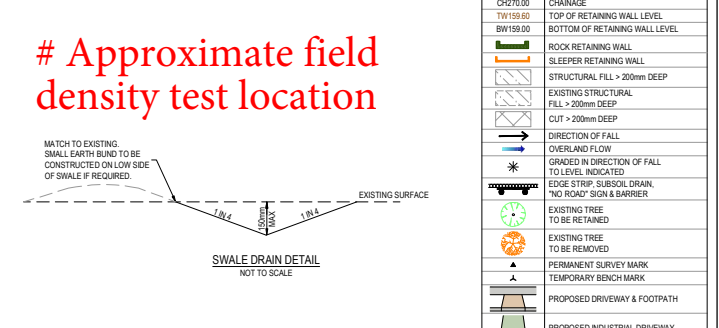
ROAD NAME	ROAD CLASSIFICATION	RESERVE WIDTH (m)	ROAD WIDTH (m)			KERB TYPE		VERGE WIDTH (m)	
			LIP TO LIP	INV TO INV	BACK TO BACK	NTHWEST	STHEAST	NTHWEST	STHEAST
KINGDOM BOULEVARD (LOTS 1601-1605 & 1622-1628)	AS1	20.00	6.40	7.30	7.60	600 B2	600 B2	7.25	5.15
KINGDOM BOULEVARD (LOT 1609-1610)	AS1	20.00	6.40	7.30	7.60	600 B2	600 B2	4.35	8.05
SANCTUM DRIVE (LOTS 1611-1615)	AS1	16.00	6.40	7.30	7.60	600 B2	600 B2	4.35	4.05
SANCTUM DRIVE (LOTS 1616-1620)	AS1	15.00	6.40	7.30	7.60	600 B2	600 B2	4.35	3.05

ROAD NAME	GAS		WATER		ELECTRICITY		OPTIC FIBRE	
	OFFSET (m)	DEPTH (m)	OFFSET (m)	DEPTH (m)	OFFSET (m)	DEPTH (m)	OFFSET (m)	DEPTH (m)
KINGDOM BOULEVARD (LOTS 1601-1608 & 1622-1628)	1.9 N	2.4 N	2.6 S	1.85 S	1.9 S	1.0 S	1.9 S	1.85 S
KINGDOM BOULEVARD (LOT 1609-1610)	1.9 N	2.4 N	1.9 S	1.0 S	1.9 N	2.4 N	2.45 S	1.85 S
SANCTUM DRIVE (LOTS 1611-1615)	1.9 N	2.4 N	1.9 S	1.0 S	1.9 N	2.4 N	1.45 SE	0.7 SE
SANCTUM DRIVE (LOTS 1616-1620)	1.9 N	2.4 N	1.9 S	1.0 S	1.9 N	2.4 N	1.45 SE	0.7 SE

LEGEND - LAYOUT PLAN

ALL PROPOSED FUTURE EXISTING SERVICE LOCATIONS ARE SHOWN INDICATIVELY

- STORMWATER DRAIN, PIT & PROPERTY INLET
- MAIN DRAIN
- SWALE DRAIN
- SEWER & MAINTENANCE STRUCTURES
- HOUSE DRAIN
- ELECTRICITY (E-GROUND)
- ELECTRICITY (O-GROUND)
- GAS
- TELSTRA
- OPTIC FIBRE
- RECYCLE WATER
- AG DRAIN
- SERVICE CONDUITS
- TACTILE PAVERS
- EXISTING STORMWATER DRAIN
- EXISTING SWALE 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 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 EXISTING SURFACE LEVEL
- FS140.35 FINISHED BUILDING LINE LEVEL
- FR157.40 FINISHED RIDGE LINE LEVEL
- CH270.00 CHAINAGE
- TH 255.00 TOP OF RETAINING WALL LEVEL
- BW150.00 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, SUBSOIL 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 STOOPLES
- EXISTING TREE TO BE RETAINED
- PROPOSED PASSIVE STREET TREE IRRIGATION



AS CONSTRUCTED PLANS

The purpose of these as-constructed plans is to update the design drawings to show significant changes which occurred during construction. Note that the levels shown on these plans are design levels, and have not been verified by survey. All information shown on these plans should be verified on site. SMEC Australia Pty Ltd accept no responsibility for loss or damages resulting from the inappropriate use of these plans.

PLAN OF SUB. NO. PS841628K
 PERMIT REF. NO. PK201956160
ISSUED FOR CONSTRUCTION

SMEC
 Member of the Surlana Junong Group
 AIN 47 965 476 149
 Coles Square, Tower 4, Level 20, 727 Coles St
 Melbourne, VIC 3008
 Ph 03 9514 1500

SEVENTH BEND

Seventh Bend - Stage 16
 Melton City Council
 Road and Drainage
 Layout Plan

MELBOURNE REF: 342 K7
 PROJECT/DRAWING NO: 2250E-016-111
 SHEET NO: 02 of 19



COMPACTION ASSESSMENT

Job No 22175
 Report No 22175/R001
 Date Issued 25/05/2022

CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	JB
Project	SEVENTH BEND - STAGE 16	Date tested	23/05/22
Location	MELTON SOUTH	Checked by	JHF

Feature	EARTHWORKS	Layer thickness	200 mm	Time: 13:00
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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	1.76	1.81	1.79	1.86	1.90
Field moisture content	%	21.0	20.7	24.4	26.9	25.2

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	1.82	1.83	1.83	1.91	1.93
Adjusted Peak Converted Wet Density	t/m ³	-	-	-	-	-
Optimum Moisture Content	%	23.5	22.5	26.5	29.5	24.5

Moisture Variation From Optimum Moisture Content	2.5% dry	2.0% dry	2.0% dry	2.5% dry	2.5% dry	2.0% 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})	%	97.0	98.5	97.5	97.5	99.0	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 22175
 Report No 22175/R002
 Date Issued 25/05/2022

CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	JB
Project	SEVENTH BEND - STAGE 16	Date tested	24/05/22
Location	MELTON SOUTH	Checked by	JHF

Feature	EARTHWORKS	Layer thickness	200 mm	Time: 14:00
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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 <i>mm</i>	175	175	175	175	175	175
Field wet density <i>t/m³</i>	1.85	1.92	1.91	1.90	1.84	1.81
Field moisture content <i>%</i>	23.2	24.5	23.5	22.3	25.8	24.4

Test procedure AS 1289.5.7.1

Test No	7	8	9	10	11	12
Compactive effort	Standard					
Oversize rock retained on sieve <i>mm</i>	19.0	19.0	19.0	19.0	19.0	19.0
Percent of oversize material <i>wet</i>	0	0	0	0	0	0
Peak Converted Wet Density <i>t/m³</i>	1.89	1.94	1.94	1.94	1.86	1.86
Adjusted Peak Converted Wet Density <i>t/m³</i>	-	-	-	-	-	-
Optimum Moisture Content <i>%</i>	25.5	27.0	25.5	24.5	28.5	27.0

Moisture Variation From Optimum Moisture Content	2.0% dry	2.0% dry	2.0% dry	2.0% dry	2.5% dry	2.5% 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})	%	98.0	98.5	98.5	97.5	99.0	97.5
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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