



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

5th May 2021

Our Reference: 21139:NB946

Winslow Constructors Pty Ltd
50 Barry Road
CAMPBELLFIELD VIC 3061

Dear Sirs/Madams,

**RE: LEVEL 1 EARTHWORKS INSPECTION AND TESTING
ALAMORA – STAGE 1 (TARNEIT)**

Please find attached our Report No's 21139/R001 to 21139/R004 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 was performed in March 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).

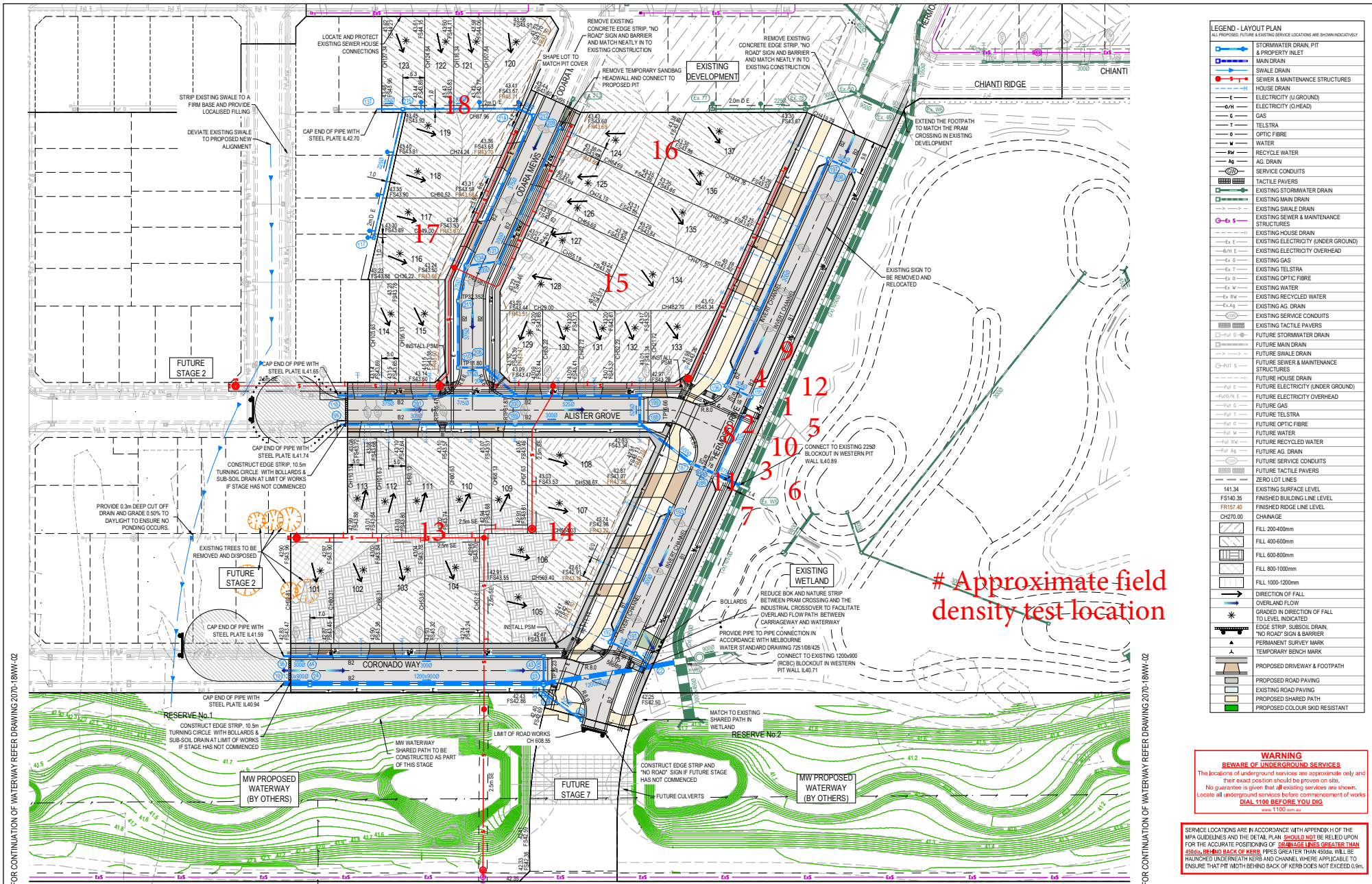
Please contact the undersigned if you require any additional information.

Civil Geotechnical Services

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

Nick Brock

FIGURE 1



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 (U GROUND)
	ELECTRICITY (D HEAD)
	GAS
	TELSTRA
	OPTIC FIBRE
	WATER
	RECYCLE WATER
	AG DRAIN
	SERVICE CONDUITS
	TACTILE PAVERS
	EXISTING STORMWATER DRAIN
	EXISTING MAIN 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 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
	441.34 EXISTING SURFACE LEVEL
	FS140.35 FINISHED RIDGE LINE LEVEL
	CH270.00 CHANGE
	FILL 200-400mm
	FILL 400-600mm
	FILL 600-800mm
	FILL 800-1000mm
	FILL 1000-1200mm
	DIRECTION OF FALL
	GRADED IN DIRECTION OF FALL TO LEVEL INDICATED
	EDGE STRIP, SUBSOIL DRAIN, NO ROAD SIGN & BARRIER
	PERMANENT SURVEY MARK
	TEMPORARY BENCH MARK
	PROPOSED DRIVEWAY & FOOTPATH
	PROPOSED ROAD PAVING
	EXISTING ROAD PAVING
	PROPOSED SHARED PATH
	PROPOSED COLOUR SKID RESISTANT

Approximate field density test location

WARNING
BEWARE OF UNDERGROUND SERVICES
The location 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 and channels before commencement of works **DIAL 1100 BEFORE YOU DIG**
www.1100.com.au

SERVICE LOCATIONS ARE IN ACCORDANCE WITH APPENDIX 11 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 HUNG ON UNDERGIRTH KEYS AND CHANNELS WHERE APPLICABLE TO ENSURE THAT PIT WIDTH BEHIND BACK OF KERB DOES NOT EXCEED 0.9m.

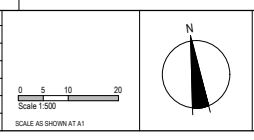
FOR CONTINUATION OF WATERWAY REFER DRAWING 2070E-18MW-02

FOR CONTINUATION OF WATERWAY REFER DRAWING 2070E-18MW-02

REV	DATE	AMENDMENT / REVISION DESCRIPTION	DESIGN	APPROVAL
0	18.02.21	ISSUED FOR CONSTRUCTION	MSMS	CS

ISSUED FOR CONSTRUCTION

TITLE	NAME
DRAFTER	A.Famili
DESIGNER	A.Famili
CHECKED	N.Freeman
AUTHORISED	C.Sexton
REFERENCE No. 1	
REFERENCE No. 2	



ALAMORA Estate, Sayers Road, Tarneit - Stage 1	Wyndham City Council	Road and Drainage	Layout Plan
MELBURN REF: 234 D5	PROJECT/DRAWING No: 2070E-A01-02	SHEET No: 02 of 20	REVISION: 0



COMPACTION ASSESSMENT

Job No 21139
 Report No 21139/R001
 Date Issued 05/03/2021

CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	BS
Project	ALAMORA - STAGE 1	Date tested	05/03/21
Location	TARNEIT	Checked by	JHF

Feature	EARTHWORKS	Layer thickness	200 mm	Time: 14:43
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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	175
Field wet density	t/m ³	1.85	1.79	1.79	1.79	1.83	1.83
Field moisture content	%	27.6	28.3	31.0	31.2	18.3	17.9

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	19.0
Percent of oversize material	wet	0	0	0	0	0	0
Peak Converted Wet Density	t/m ³	1.89	1.77	1.77	1.83	1.83	1.86
Adjusted Peak Converted Wet Density	t/m ³	-	-	-	-	-	-
Optimum Moisture Content	%	29.5	31.0	33.5	33.0	20.5	20.5

Moisture Variation From Optimum Moisture Content	2.0% dry	2.5% dry	2.5% dry	2.0% dry	2.0% dry	2.5% dry
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Density Ratio (R _{HD})	%	98.0	101.0	101.0	98.0	100.0	98.5
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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

CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

Job No 21139
Report No 21139/R002
Date Issued 24/03/2021

Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	BS
Project	ALAMORA - STAGE 1	Date tested	10/03/21
Location	TARNEIT	Checked by	JHF

Feature	EARTHWORKS	Layer thickness	200 mm	Time: 13:27
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Test procedure AS 1289.2.1.1 & 5.8.1

Test No	7	8	9	-	-	-
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 ³	1.80	1.84	1.91	-	-
Field moisture content	%	28.6	27.6	26.9	-	-

Test procedure AS 1289.5.7.1

Test No	7	8	9	-	-	-
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 ³	1.81	1.87	1.89	-	-
Adjusted Peak Converted Wet Density	t/m ³	-	-	-	-	-
Optimum Moisture Content	%	31.0	29.5	29.5	-	-

Moisture Variation From Optimum Moisture Content	2.5% dry	2.0% dry	2.5% dry	-	-	-
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Density Ratio (R _{HD})	%	99.5	98.5	101.0	-	-
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Material description

No 7 - 9 Clay Fill

AVRLOT HILF V1.10 MAR 13



The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards. Accredited for compliance with ISO/IEC 17025 - Testing

Accreditation No 9909

Approved Signatory : Justin Fry



COMPACTION ASSESSMENT

Job No 21139
 Report No 21139/R003
 Date Issued 25/03/2021

CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	BS
Project	ALAMORA - STAGE 1	Date tested	11/03/21
Location	TARNEIT	Checked by	JHF

Feature	EARTHWORKS	Layer thickness	200 mm	Time: 14:10
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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
Field wet density	t/m ³	1.94	1.92	1.83	1.83	1.85
Field moisture content	%	23.6	22.8	23.9	16.4	21.0

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
Percent of oversize material	wet	0	0	0	0	0
Peak Converted Wet Density	t/m ³	1.96	1.95	1.86	1.92	1.89
Adjusted Peak Converted Wet Density	t/m ³	-	-	-	-	-
Optimum Moisture Content	%	26.0	25.0	24.0	17.0	21.0

Moisture Variation From Optimum Moisture Content	2.5% dry	2.0% dry	0.0%	0.5% dry	0.0%	2.0% wet
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Density Ratio (R _{HD})	%	99.0	98.5	98.5	95.5	97.5	95.5
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Material description

No 10 - 15 Clay Fill

AVRLOT HILF V1.10 MAR 13



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Accreditation No 9909

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COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

Job No 21139
Report No 21139/R004
Date Issued 25/03/2021

Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	BS
Project	ALAMORA - STAGE 1	Date tested	12/03/21
Location	TARNEIT	Checked by	JHF

Feature	EARTHWORKS	Layer thickness	200 mm	Time: 15:02
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Test procedure AS 1289.2.1.1 & 5.8.1

Test No	16	17	18	-	-	-
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 ³	1.82	1.93	1.84	-	-
Field moisture content	%	27.4	26.2	25.3	-	-

Test procedure AS 1289.5.7.1

Test No	16	17	18	-	-	-
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 ³	1.87	1.93	1.94	-	-
Adjusted Peak Converted Wet Density	t/m ³	-	-	-	-	-
Optimum Moisture Content	%	30.0	28.5	28.0	-	-

Moisture Variation From Optimum Moisture Content	2.5% dry	2.0% dry	2.5% dry	-	-	-
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Density Ratio (R _{HD})	%	97.5	100.0	95.0	-	-
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Material description

No 16 - 18 Clay Fill

AVRLOT HILF V1.10 MAR 13



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