

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

10th June 2022

Our Reference: 22196:NB1267

Winslow Constructors Pty Ltd 50 Barry Road CAMPBELLFIELD VIC 3061

Dear Sirs/Madams,

RE: LEVEL 1 EARTHWORKS INSPECTION AND TESTING ASPIRE – STAGE 28 (PLUMPTON)

Please find attached our Report No's 22196/R001 and 22196/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 June 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





COMPACTION ASSESSMENT

CIVIL GEOTEO	CHNICAL SERVICES	Job No Report No	22196 22196/R001
6 - 8 Rose Avenu	ie, Croydon 3136	Date Issued	10/06/2022
Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	AM
Project	ASPIRE - STAGE 28	Date tested	07/06/22
Location	PLUMPTON	Checked by	JHF

Feature

EARTHWORKS

Layer thickness

200 mm

Time: 17:20

Test procedure AS 1289.2.1.1 & 5.8.1

Location REFER TO FIGURE 1 Refer TO FIGUR 1<	Test No		1	2	3	4	-	-
Measurement depth mm 175 175 175 - - Field wet density t/m³ 1.87 1.81 1.87 1.87 - - Field moisture content % 19.7 21.1 18.3 19.8 - - Test procedure AS 1289.5.7.1 Test procedure AS 1289.5.7.1 1 2 3 4 - - Test procedure AS 1289.5.7.1 Test No 1 2 3 4 - - Compactive effort Standard Standard - - - - Oversize mock retained on sieve mm 19.0 19.0 19.0 - - - Percent of oversize material wet 0 0 0 0 -<	Location		то	то	то	то		
Field wet density t/m³ 1.87 1.81 1.87 1.87 - - Field moisture content % 19.7 21.1 18.3 19.8 - - Test procedure AS 1289.5.7.1 Test procedure AS 1289.5.7.1 Test No 1 2 3 4 - - Compactive effort Oversize rock retained on sieve mm 19.0 19.0 19.0 - - - Percent of oversize material wet 0 0 0 0 - - Peak Converted Wet Density t/m³ 1.95 1.90 1.91 1.94 - - Adjusted Peak Converted Wet Density t/m³ -	Approximate depth below FSL			'		<u> </u>		
Field moisture content % 19.7 21.1 18.3 19.8 - - Test procedure AS 1289.5.7.1 Test No 1 2 3 4 - - - Compactive effort Oversize rock retained on sieve mm 19.0 19.0 19.0 -	Measurement depth	тт	175	175	175	175	-	-
Test procedure AS 1289.5.7.1 Test No 1 2 3 4 - - Compactive effort Standard Oversize rock retained on sieve mm 19.0 19.0 19.0 19.0 19.0 -<	Field wet density	t∕m³	1.87	1.81	1.87	1.87	-	-
Test No1234Compactive effortStandardOversize rock retained on sievemm19.019.019.019.0Percent of oversize materialwet0000Peak Converted Wet Densityt/m³1.951.901.911.94Adjusted Peak Converted Wet Densityt/m³Optimum Moisture Content%21.523.020.022.0Moisture Variation From Optimum Moisture Content1.5% dry2.0% dry1.5% dry2.0% dryMoisture Variation From Optimum Moisture Content1.5% dry2.0% dry1.5% dry2.0% dryMoisture Variation From Optimum Moisture Content1.5% dry2.0% dry1.5% dry2.0% dryMoisture Variation From Optimum Moisture Content1.5% dry2.0% dry1.5% dry2.0% dry	Field moisture content	%	19.7	21.1	18.3	19.8	-	-
Oversize rock retained on sievemm19.019.019.019.0Percent of oversize materialwet00000Peak Converted Wet Densityt/m³1.951.901.911.94Adjusted Peak Converted Wet Densityt/m³Adjusted Peak Converted Wet Densityt/m³Optimum Moisture Content%21.523.020.022.0Moisture Variation From Optimum Moisture Content1.5% dry2.0% dry1.5% dry2.0% drydensity and moisture ratio results relate only to the soil to the depth of test and not to the full depth of the layer			1	2	-		-	-
Percent of oversize materialwet0000Peak Converted Wet Densityt/m³1.951.901.911.94Adjusted Peak Converted Wet Densityt/m³Optimum Moisture Content%21.523.020.022.0Moisture Variation From Optimum Moisture Content1.5% dry2.0% dry1.5% dry2.0% dryMoisture Variation From Optimum Moisture Content1.5% dry2.0% dry1.5% dry2.0% dryMoisture Variation From Optimum Moisture Content1.5% dry2.0% dry1.5% dry2.0% dryMoisture Variation From Optimum Moisture Content1.5% dry2.0% dry1.5% dry2.0% dry			40.0	40.0			1	
Peak Converted Wet Densityt/m³1.951.901.911.94-Adjusted Peak Converted Wet Densityt/m³Optimum Moisture Content%21.523.020.022.0Moisture Variation From Optimum Moisture Content1.5% dry2.0% dry1.5% dry2.0% dryMoisture Variation From Optimum Moisture Content1.5% dry2.0% dry1.5% dry2.0% dryMoisture Variation From Optimum Moisture Content1.5% dry2.0% dry1.5% dry2.0% dryMoisture Variation From Optimum Moisture Content1.5% dry2.0% dry1.5% dry2.0% dry								
Adjusted Peak Converted Wet Density t/m³ -			-	<u> </u>		Ţ	-	
Optimum Moisture Content % 21.5 23.0 20.0 22.0 - - Moisture Variation From Optimum Moisture Content 1.5% 2.0% 1.5% 2.0% - - - dry dry dry dry 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 - - -		-			1.91	1.94	-	-
Moisture Variation From Optimum Moisture Content1.5% dry2.0% dry1.5% dry2.0% 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					- 20.0	- 22.0		
	Moisture Variation From Optimum Moisture Content		1.5% dry	2.0% dry	1.5% dry	2.0% dry	-	-
	-		-					: layei

Material description

No 1 - 4 Clay Fill



NATA Accredited Laboratory No 9909 Accredited for compliance with ISO/IEC 17025 - Testing

AVRLOT HILF V1.10 MAR 13

Approved Signatory : Justin Fry



COMPACTION ASSESSMENT

CIVIL GEOTE	CHNICAL SERVICES	Job No Report No	22196 22196/R002
6 - 8 Rose Aven	ue, Croydon 3136	Date Issued	10/06/2022
Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	AM
Project	ASPIRE - STAGE 28	Date tested	08/06/22
Location	PLUMPTON	Checked by	JHF

Feature

EARTHWORKS

Layer thickness

200 mm

Time: 11:57

Test procedure AS 1289.2.1.1 & 5.8.1

		5	6	7	8	9	10
Location							
		REFER	REFER	REFER	REFER	REFER	REFER
	ļ	то	то	то	то	то	то
		FIGURE 1	FIGURE 1	FIGURE 1	FIGURE 1	FIGURE 1	FIGURE 1
					l		
Approximate depth below FSL							
Measurement depth	тт	175	175	175	175	175	175
Field wet density	t∕m³	1.73	1.75	1.77	1.74	1.78	1.77
Field moisture content	%	24.2	27.5	19.2	22.5	20.6	16.7
Test procedure AS 1289.5.7.1							
Test procedure AS 1289.5.7.1 Test No Compactive effort		5	6	7 Stan	8 dard	9	10
Test No Compactive effort				Stan	ndard		
Test No Compactive effort Oversize rock retained on sieve	mm wet	19.0	6 19.0 0		-	9 19.0 0	10 19.0 0
Test No Compactive effort Oversize rock retained on sieve Percent of oversize material	wet	19.0 0	19.0 0	Stan 19.0 0	dard 19.0 0	19.0 0	19.0 0
Test No Compactive effort Oversize rock retained on sieve		19.0	19.0	Stan 19.0	ndard 19.0	19.0	19.0
Test No Compactive effort Oversize rock retained on sieve Percent of oversize material Peak Converted Wet Density	wet t/m³	19.0 0	19.0 0	Stan 19.0 0	dard 19.0 0	19.0 0	19.0 0
Test No Compactive effort Oversize rock retained on sieve Percent of oversize material Peak Converted Wet Density Adjusted Peak Converted Wet Density	wet t/m³ t/m³	19.0 0 1.80	19.0 0 1.84	Stan 19.0 0 1.86 -	dard 19.0 0 1.83 -	19.0 0 1.86	19.0 0 1.83 -
Test No Compactive effort Oversize rock retained on sieve Percent of oversize material Peak Converted Wet Density Adjusted Peak Converted Wet Density	wet t/m³ t/m³	19.0 0 1.80	19.0 0 1.84	Stan 19.0 0 1.86 -	dard 19.0 0 1.83 -	19.0 0 1.86	19.0 0 1.83 -
Test No Compactive effort Oversize rock retained on sieve Percent of oversize material Peak Converted Wet Density Adjusted Peak Converted Wet Density Optimum Moisture Content	wet t/m³ t/m³	19.0 0 1.80 - 26.5	19.0 0 1.84 - 29.0	Stan 19.0 0 1.86 - 21.0	dard 19.0 0 1.83 - 24.5	19.0 0 1.86 - 22.5	19.0 0 1.83 - 17.0
Test No Compactive effort Oversize rock retained on sieve Percent of oversize material Peak Converted Wet Density Adjusted Peak Converted Wet Density Optimum Moisture Content Moisture Variation From	wet t/m³ t/m³ %	19.0 0 1.80 - 26.5 2.0% dry	19.0 0 1.84 - 29.0 1.5% dry	Stan 19.0 0 1.86 - 21.0 2.0% dry	dard 19.0 0 1.83 - 24.5 2.0% dry	19.0 0 1.86 - 22.5 1.5% dry	19.0 0 1.83 - 17.0 0.5% dry

Material description

No 5 - 10 Clay Fill



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Approved Signatory : Justin Fry