



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

26th June 2020

Our Reference: 19751:NB761

Winslow Constructors Pty Ltd
50 Barry Road
CAMPBELLFIELD VIC 3061

Dear Sirs/Madams,

RE: LEVEL 1 EARTHWORKS INSPECTION AND TESTING
OLIVINE – STAGE 10 (DONNYBROOK)

Please find attached our Report No's 19751/R001 to 19751/R003 which relate to the field density testing that was conducted within the filled allotments of the above subdivision. The level 1 inspections and associated field density testing commenced in December 2019 and was completed in January 2020.

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).

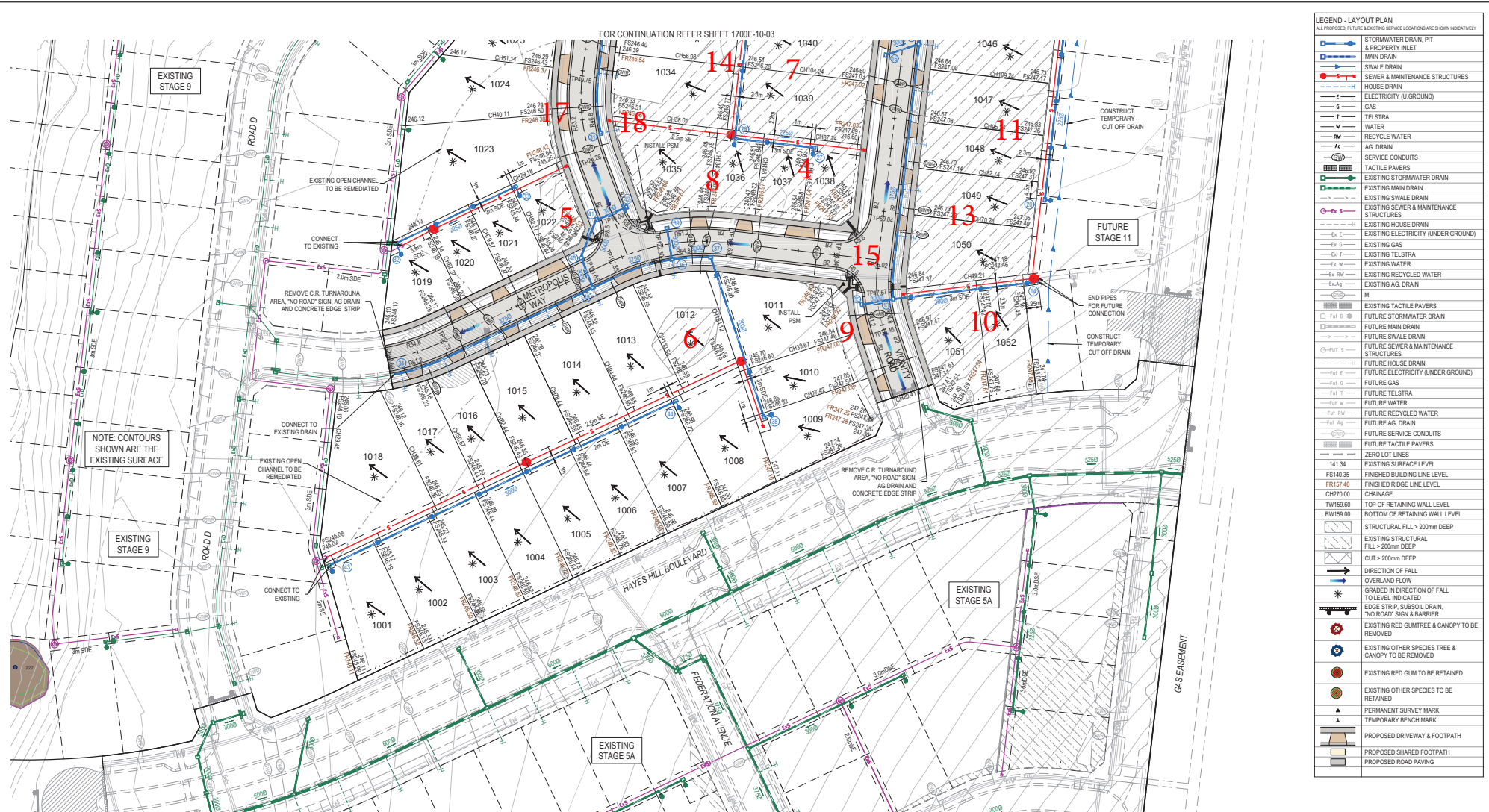
We are of the view that the bulk fill materials that have been placed across the reported allotments by Winslow Constructors during the aforementioned period can be considered as having been placed in a controlled manner to a minimum density ratio of 95% (standard compactive effort).

Please contact the undersigned if you require any additional information.

Civil Geotechnical Services

Nick Brock

FIGURE 1 (1 of 2)

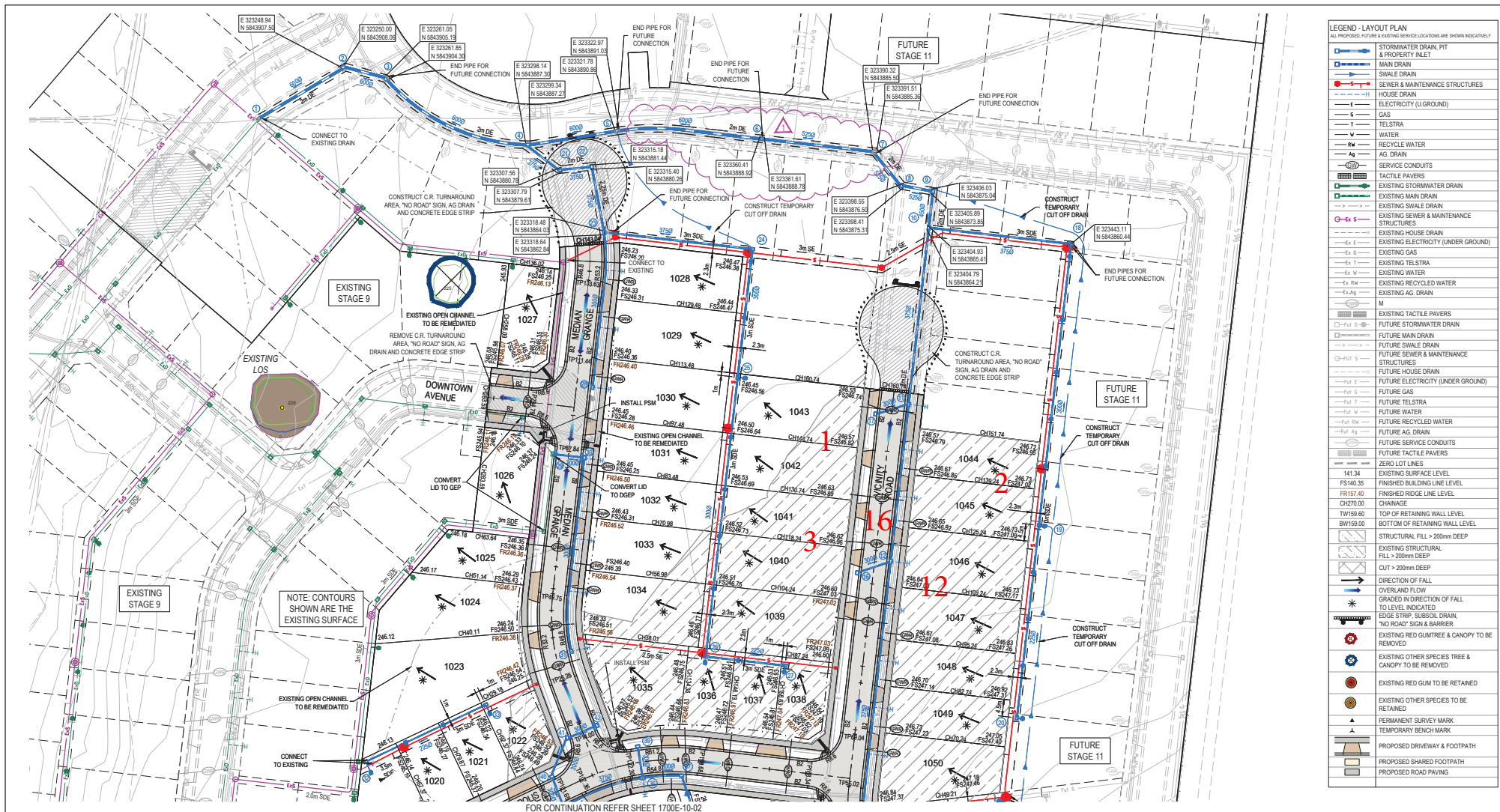


Approximate field density test location

WARNING
BEWARE OF UNDERGROUND SERVICES
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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.com.au




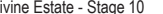
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FIGURE 1 (2 of 2)



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
www.1100.com.au

REV	DATE	AMENDMENT / REVISION DESCRIPTION	DESIGN	APPROVAL	<p>As setting out as per as carried out in accordance with UPA/Council's standard drawings or as nominated on hard copy plans provided by SMEC. Any digital information supplied by this office is for information only. Any discrepancies should be discussed with the superintendent.</p>	<table><tr><th>TITLE</th><th>NAME</th></tr><tr><td>DRAFTER</td><td>R.Barua</td></tr><tr><td>DESIGNER</td><td>P.McKay</td></tr><tr><td>CHECKED</td><td>Z.Gosse</td></tr><tr><td>AUTHORISED</td><td>A.Burns</td></tr><tr><td>COUNCIL DRAWING REF.</td><td></td></tr><tr><td>REFERENCE No. 2</td><td></td></tr></table>	TITLE	NAME	DRAFTER	R.Barua	DESIGNER	P.McKay	CHECKED	Z.Gosse	AUTHORISED	A.Burns	COUNCIL DRAWING REF.		REFERENCE No. 2		  Scale 1:500 SCALE AS SHOWN AT 1	 SMEC Member of the Surbana Jurong Group 405-41 565-475-10 Collins Square, Tower 1, Level 20, 727 Collins Street Melbourne, VIC 3000 Ph 03 9514 1000		<p>Olivine Estate - Stage 10 Whittlesea City Council Road and Drainage Layout Plan - 2</p>
TITLE	NAME																							
DRAFTER	R.Barua																							
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COUNCIL DRAWING REF.																								
REFERENCE No. 2																								
0	02.10.19	ISSUED FOR CONSTRUCTION	SMSM	AS																				
1	28.10.19	DRAINAGE AMENDED	SMSM	AS																				

ISSUED FOR CONSTRUCTION



COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

Job No 19751
Report No 19751/R001
Date Issued 03/02/2020

Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	AC
Project	OLIVINE - STAGE 10	Date tested	09/12/19
Location	DONNYBROOK	Checked by	JHF

Feature	EARTHWORKS	Layer thickness	200 mm	Time: 07:05
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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	1.86	1.90	1.90	1.93	1.94	1.96
Field moisture content %	14.3	13.6	14.3	13.5	13.0	15.5

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	1.93	1.95	1.94	1.95	1.96	1.96
Adjusted Peak Converted Wet Density t/m ³	-	-	-	-	-	-
Optimum Moisture Content %	17.0	16.0	17.0	16.0	15.5	18.0

Moisture Variation From Optimum Moisture Content	2.5% dry	2.0% dry	2.0% dry	2.0% dry	2.5% dry	2.5% dry
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Density Ratio (R_{HD})	%	96.5	97.5	98.0	98.5	99.0	100.0
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Material description

No 1 - 6 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

CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

Job No 19751
Report No 19751/R002
Date Issued 12/05/2020

Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	AC
Project	OLIVINE - STAGE 10	Date tested	17/12/19
Location	DONNYBROOK	Checked by	JHF

Feature	EARTHWORKS	Layer thickness	200 mm	Time: 07:35
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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	175
Field wet density t/m ³	1.85	1.85	1.92	1.91	1.96	1.96
Field moisture content %	16.5	18.0	18.5	19.8	21.6	22.4

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	19.0
Percent of oversize material wet	0	0	0	0	0	0
Peak Converted Wet Density t/m ³	1.89	1.91	1.92	1.94	1.99	2.00
Adjusted Peak Converted Wet Density t/m ³	-	-	-	-	-	-
Optimum Moisture Content %	19.0	20.5	21.0	22.0	24.5	25.0

Moisture Variation From Optimum Moisture Content	2.5% dry	2.5% dry	2.5% dry	2.5% dry	2.5% dry	2.5% dry
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Density Ratio (R_{HD})	%	98.0	97.0	100.0	98.5	98.5	98.0
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Material description

No 7 - 12 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

CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

Job No 19751
Report No 19751/R003
Date Issued 20/01/2020

Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	AC
Project	OLIVINE - STAGE 10	Date tested	08/01/20
Location	DONNYBROOK	Checked by	JHF

Feature	EARTHWORKS	Layer thickness	200 mm	Time: 12:23
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Test procedure AS 1289.2.1.1 & 5.8.1

Test No	13	14	15	16	17	18
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	1.93	1.89	1.86	1.91	1.84	1.92
Field moisture content %	18.9	19.7	20.1	20.5	19.9	20.6

Test procedure AS 1289.5.7.1

Test No	13	14	15	16	17	18
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	1.95	1.94	1.90	1.94	1.88	1.95
Adjusted Peak Converted Wet Density t/m ³	-	-	-	-	-	-
Optimum Moisture Content %	21.0	22.0	22.0	24.0	22.0	23.0

Moisture Variation From Optimum Moisture Content	2.0% dry	2.5% dry	2.0% dry	2.5% dry	2.0% dry	2.5% dry
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Density Ratio (R_{HD})	%	99.5	98.0	98.0	98.5	98.0	98.5
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Material description

No 13 - 18 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