



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

2nd March 2012

Our Reference: 12072:JHF561

Winslow Constructors Pty Ltd
50 Barry Road
CAMPBELLFIELD VIC 3061

Dear Sirs,

**RE: LEVEL 1 EARTHWORKS INSPECTION AND TESTING
ASTON ESTATE (STAGE 2) – CRAIGIEBURN**

Please find attached our Report Nos 12072/R001 to 12072/R002 that 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 late February 2012.

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 an experienced geotechnician from this office. Any areas that were deemed unsatisfactory were reworked and retested under his 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 filled 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 filled 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 black ink, appearing to read 'Justin Fry', written in a cursive style.

Justin Fry



COMPACTION ASSESSMENT

Job No 12072
 Report No 12072/R001
 Date Issued 29/02/12

CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	JAA
Project	ASTON - STAGE 2	Date tested	22/02/12
Location	CRAIGIEBURN	Checked by	JHF

Feature	EARTHWORKS	Layer thickness	200 mm	Time: 12:48
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Test procedure AS 1289.2.1.1 & 5.8.1

Test No	1	2	3	4	-	-
Location	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	-	-
Field wet density t/m³	1.98	1.97	2.04	2.15	-	-
Field moisture content %	22.1	19.5	18.2	13.0	-	-

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	-	-
Percent of oversize material wet	0	0	0	0	-	-
Peak Converted Wet Density t/m³	1.96	1.96	2.02	2.04	-	-
Adjusted Peak Converted Wet Density t/m³	-	-	-	-	-	-
Optimum Moisture Content %	22.5	22.0	18.5	15.5	-	-

Moisture Variation From Optimum Moisture Content	0.5% dry	2.0% dry	0.0%	2.5% dry	-	-
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Density Ratio (R_{HD})	101.5	100.5	101.0	105.5	-	-
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Material description

Test No 1 - 4 Clay Fill

A581HILF V1.10 OCT 09



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Accreditation No 9909

Justin Fry

Approved Signatory : Justin Fry



COMPACTION ASSESSMENT

Job No 12072
 Report No 12072/R002
 Date Issued 29/02/12

CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	JAA
Project	ASTON - STAGE 2	Date tested	24/02/12
Location	CRAIGIEBURN	Checked by	JHF

Feature	EARTHWORKS	Layer thickness	200 mm	Time: 11:35
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Test procedure AS 1289.2.1.1 & 5.8.1

Test No	5	-	-	-	-	-
Location	REFER TO FIGURE 1					
Approximate depth below FSL	-	-	-	-	-	-
Measurement depth	mm	175	-	-	-	-
Field wet density	t/m ³	1.92	-	-	-	-
Field moisture content	%	15.1	-	-	-	-

Test procedure AS 1289.5.7.1

Test No	5	-	-	-	-	-
Compactive effort		Standard				
Oversize rock retained on sieve	mm	19.0	-	-	-	-
Percent of oversize material	wet	0	-	-	-	-
Peak Converted Wet Density	t/m ³	1.92	-	-	-	-
Adjusted Peak Converted Wet Density	t/m ³	-	-	-	-	-
Optimum Moisture Content	%	18.0	-	-	-	-

Moisture Variation From Optimum Moisture Content	3.0% dry	-	-	-	-	-
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Density Ratio (R _{HD})	%	100.5	-	-	-	-
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Material description

Test No 5 Clay Fill

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Accreditation No 9909

Approved Signatory : Justin Fry