



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

1<sup>st</sup> October 2021

Our Reference: 21235:NB1066

Winslow Constructors Pty Ltd  
50 Barry Road  
CAMPBELLFIELD VIC 3061

Dear Sirs/Madams,

**RE: LEVEL 1 EARTHWORKS INSPECTION AND TESTING  
EYNESBURY – STAGE 6A (EYNESBURY)**

Please find attached our Report No's 21235/R001 to 21235/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 testing was performed in April 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).

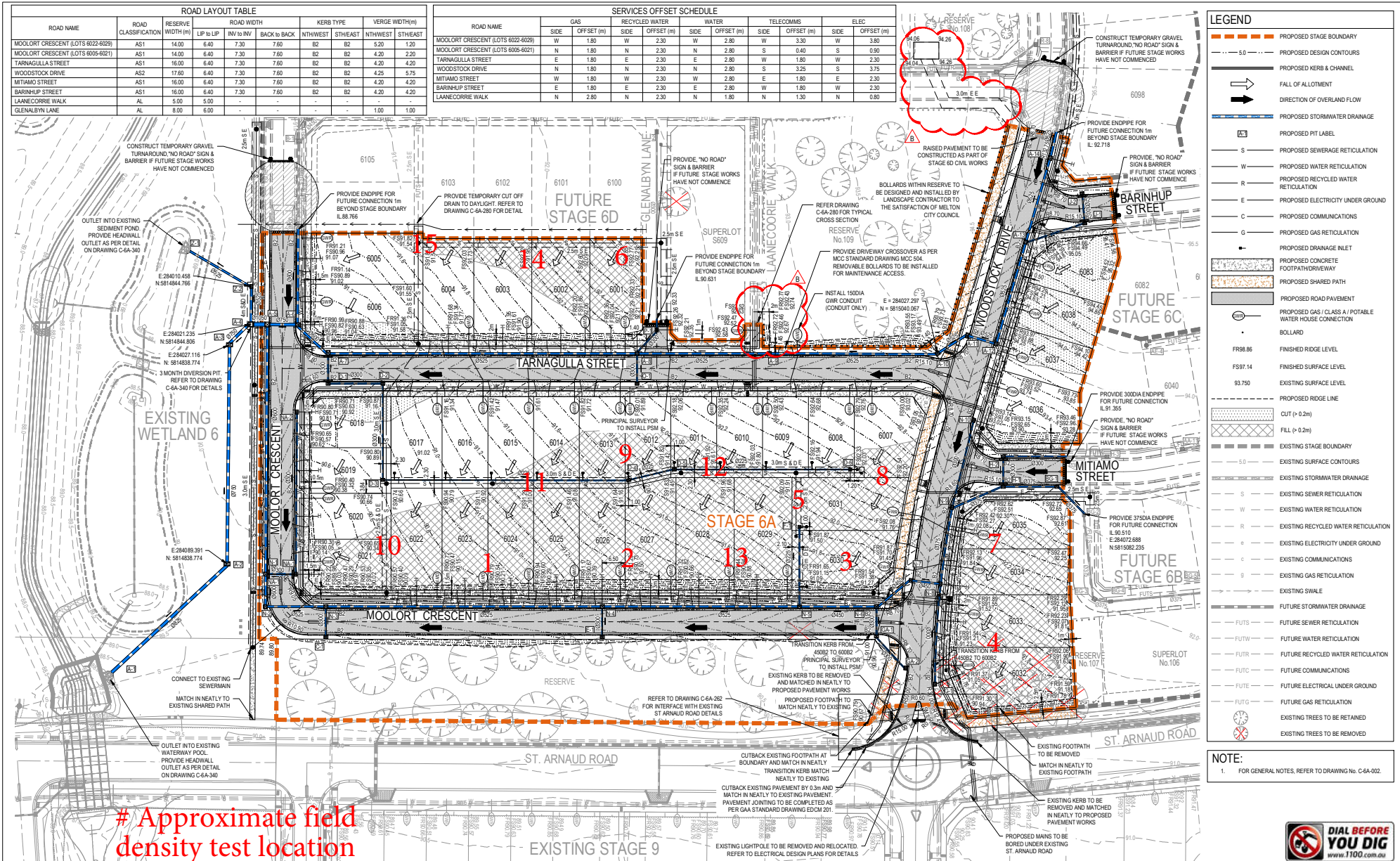
Please contact the undersigned if you require any additional information.

Civil Geotechnical Services

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

Nick Brock

# FIGURE 1



# Approximate field density test location

Issue	Description	By	Chk	PM	Date
B	KIOSK RELOCATION & LANECCORRIE WALK GRAZED AWAY FROM SUPERLOTS	WB	ZS	JM	09.03.21
A	ISSUED FOR CONSTRUCTION	WB	ZS	JM	15.02.21
04	ROAD NAMING UPDATED FOR MITIAMO STREET	WB	ZS	JM	10.02.21
03	CHANGES TO ST. ARNAUD SERVICES & MAJOR CANALWAY SERVICES	WB	ZS	JM	20.01.21
02	UPDATES TO ADDRESS COUNCIL AND LANDSCAPE COMMENTS	WB	ZS	JM	26.11.20
01	ISSUED FOR APPROVAL	WB	ZS	JM	16.10.20

Scale: 1:500

Planner: **RD** RobertsDay *planning.design.place*

Client: **RESIMAX GROUP**

Filename: C-6a-220-10029435-Roadworks&DrainagePlan.dwg

Status: **FOR CONSTRUCTION**

Checker: **Z. STROGUSZ**

Original Issue Signatures: [Signatures]

Original Size: **A1**

Height: **AHD**

Datum: **MGA**

Grid: **MGA**

Project: **EYNEBURY TOWNSHIP STAGE 6A**

Title: **ROADWORKS AND DRAINAGE LAYOUT PLAN**

Project Manager: **J.MUNRO**

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**ARCADIS**

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Melbourne VIC 3000  
ABN 76 104 485 289  
Tel No: +61 3 8623 4000  
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Drawing No: **C-6A-220** Project No: **10029435** Issue: **B**

Last Saved: REG\OSK9207 Date Plotted: 9 Mar 2021 - 10:12AM File Name: C:\125\wdata\AUS\01\APP04\10029435-Eynesbury\_46D-DigEng\DA-CAD\DAC-Drawings\10029435-06\10029435-06A-C-6a-220-10029435-Roadworks&DrainagePlan.dwg



# COMPACTION ASSESSMENT

Job No 21235  
 Report No 21235/R001  
 Date Issued 22/09/2021

## CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	WS
Project	EYNESBURY - STAGE 6A	Date tested	19/04/21
Location	EYNESBURY	Checked by	JHF

Feature	EARTHWORKS	Layer thickness	200 mm	Time:	11:30
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Test procedure AS 1289.2.1.1 & 5.8.1

Test No		1	2	3	-	-	-
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 <sup>3</sup>	1.87	1.81	1.86	-	-	-
Field moisture content	%	29.4	32.2	29.1	-	-	-

Test procedure AS 1289.5.7.1

Test No		1	2	3	-	-	-
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 <sup>3</sup>	1.92	1.87	1.92	-	-	-
Adjusted Peak Converted Wet Density	t/m <sup>3</sup>	-	-	-	-	-	-
Optimum Moisture Content	%	30.0	32.5	31.0	-	-	-

Moisture Variation From Optimum Moisture Content		0.5% dry	0.0%	2.0% dry	-	-	-
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Density Ratio ( R <sub>HD</sub> )	%	97.5	96.5	97.0	-	-	-
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Material description

No 1 - 3 Clay Fill
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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 21235  
 Report No 21235/R002  
 Date Issued 25/05/2021

## CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	WS
Project	EYNESBURY - STAGE 6A	Date tested	20/04/21
Location	EYNESBURY	Checked by	JHF

Feature	EARTHWORKS	Layer thickness	200 mm	Time:	11:00
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Test procedure AS 1289.2.1.1 & 5.8.1

Test No	4	5	6	-	-	-
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 <sup>3</sup>	1.90	1.95	1.93	-	-
Field moisture content	%	27.7	23.6	23.5	-	-

Test procedure AS 1289.5.7.1

Test No	4	5	6	-	-	-
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 <sup>3</sup>	1.95	1.97	1.96	-	-
Adjusted Peak Converted Wet Density	t/m <sup>3</sup>	-	-	-	-	-
Optimum Moisture Content	%	26.5	24.0	24.0	-	-

Moisture Variation From Optimum Moisture Content	1.0% wet	0.0%	0.5% dry	-	-	-
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Density Ratio ( R <sub>HD</sub> )	%	97.5	99.5	98.5	-	-
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Material description

No 4 - 6 Clay Fill
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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 21235  
 Report No 21235/R003  
 Date Issued 12/05/2021

## CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	WS
Project	EYNESBURY - STAGE 6A	Date tested	21/04/21
Location	EYNESBURY	Checked by	JHF

Feature	EARTHWORKS	Layer thickness	200 mm	Time:	09:00
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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 <sup>3</sup>	1.85	1.80	1.77	-	-	-
Field moisture content	%	30.5	30.0	26.0	-	-	-

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 <sup>3</sup>	1.82	1.82	1.85	-	-	-
Adjusted Peak Converted Wet Density	t/m <sup>3</sup>	-	-	-	-	-	-
Optimum Moisture Content	%	33.0	32.0	28.5	-	-	-

Moisture Variation From Optimum Moisture Content		2.5% dry	2.0% dry	2.5% dry	-	-	-
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Density Ratio ( R <sub>HD</sub> )	%	102.0	98.5	96.0	-	-	-
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Material description

No 7 - 9 Clay Fill
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AVRLOT HILF V1.10 MAR 13



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 ISO/IEC 17025 - Testing

Approved Signatory : Justin Fry



# COMPACTION ASSESSMENT

## CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

Job No 21235  
Report No 21235/R004  
Date Issued 28/04/2021

Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	WS
Project	EYNESBURY - STAGE 6A	Date tested	22/04/21
Location	EYNESBURY	Checked by	JHF

Feature	EARTHWORKS	Layer thickness	200 mm	Time:	09:30
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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 <sup>3</sup>	1.90	1.90	1.85	1.84	1.88
Field moisture content	%	25.5	24.9	25.3	27.8	28.8

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 <sup>3</sup>	1.91	1.90	1.89	1.86	1.90
Adjusted Peak Converted Wet Density	t/m <sup>3</sup>	-	-	-	-	-
Optimum Moisture Content	%	26.5	27.5	27.0	30.0	29.5

Moisture Variation From Optimum Moisture Content	1.0% dry	2.5% dry	2.0% dry	2.0% dry	0.5% dry	0.5% dry
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Density Ratio ( R <sub>HD</sub> )	%	99.5	100.0	98.0	99.5	99.0	99.5
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Material description

No 10 - 15 Clay Fill
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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