



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

26<sup>th</sup> July 2023

Our Reference: 23580:NB1622

Winslow Constructors Pty Ltd  
50 Barry Road  
CAMPBELLFIELD VIC 3061

Dear Sirs/Madams,

**RE: LEVEL 1 EARTHWORKS INSPECTION AND TESTING  
UNITY PARK – STAGE 6A (TARNEIT)**

Please find attached our Report No 23580/R001 which relates 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 July 2023.

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).

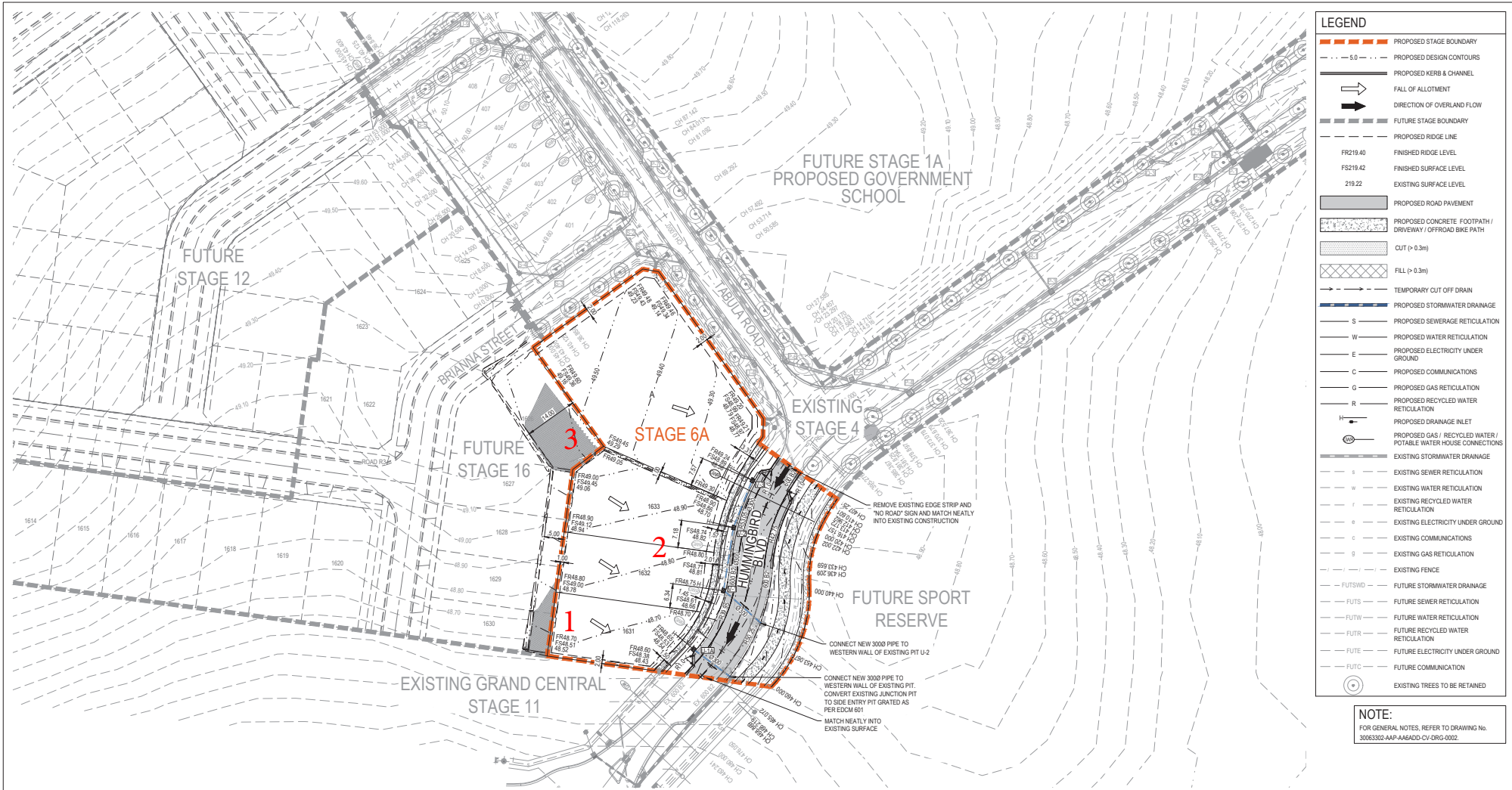
Please contact the undersigned if you require any additional information.

Civil Geotechnical Services

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

Nick Brock

# FIGURE 1



LEGEND	
	PROPOSED STAGE BOUNDARY
	PROPOSED DESIGN CONTOURS
	PROPOSED KERB & CHANNEL
	FALL OF ALLOTMENT
	DIRECTION OF OVERLAND FLOW
	FUTURE STAGE BOUNDARY
	PROPOSED RIDGE LINE
FR219.40	FINISHED RIDGE LEVEL
FS219.42	FINISHED SURFACE LEVEL
219.22	EXISTING SURFACE LEVEL
	PROPOSED ROAD PAVEMENT
	PROPOSED CONCRETE FOOTPATH / DRIVEWAY / OFFROAD BIKE PATH
	CUT (> 0.3m)
	FILL (> 0.3m)
	TEMPORARY CUT OFF DRAIN
	PROPOSED STORMWATER DRAINAGE
	PROPOSED SEWERAGE RETICULATION
	PROPOSED WATER RETICULATION
	PROPOSED ELECTRICITY UNDER GROUND
	PROPOSED COMMUNICATIONS
	PROPOSED GAS RETICULATION
	PROPOSED RECYCLED WATER RETICULATION
	PROPOSED DRAINAGE INLET
	PROPOSED GAS / RECYCLED WATER / POTABLE WATER HOUSE CONNECTIONS
	EXISTING STORMWATER DRAINAGE
	EXISTING SEWER RETICULATION
	EXISTING WATER RETICULATION
	EXISTING RECYCLED WATER RETICULATION
	EXISTING ELECTRICITY UNDER GROUND
	EXISTING COMMUNICATIONS
	EXISTING GAS RETICULATION
	EXISTING FENCE
	FUTURE STORMWATER DRAINAGE
	FUTURE SEWER RETICULATION
	FUTURE WATER RETICULATION
	FUTURE RECYCLED WATER RETICULATION
	FUTURE ELECTRICITY UNDER GROUND
	FUTURE COMMUNICATIONS
	EXISTING TREES TO BE RETAINED

**NOTE:**  
FOR GENERAL NOTES, REFER TO DRAWING No. 30063302-AAP-A6AADD-CV-DRG-0002.

# Approximate field density test location

ROAD LAYOUT TABLE									
ROAD NAME	ROAD CLASSIFICATION	RESERVE WIDTH (m)	ROAD WIDTH			KERB TYPE		VERGE WIDTH (m)	
			LIP TO LIP	INV TO INV	BACK TO BACK	WEST	EAST	WEST	EAST
HUMMINGBIRD BLVD.	CS	25.50	6.10/10.30	7.0/11.20	7.30/11.50	B2	B2	6.60/4.50	VARIES

SERVICES OFFSET TABLE										
ROAD NAME	GAS		WATER		RECYCLED WATER		ELECTRICITY		COMMUNICATIONS	
	SIDE	OFFSET (m)	SIDE	OFFSET (m)	SIDE	OFFSET (m)	SIDE	OFFSET (m)	SIDE	OFFSET (m)
HUMMINGBIRD BLVD.	EAST	Ex. 2.10	EAST	Ex. 3.80	EAST	Ex. 2.90	WEST	2.60	WEST	1.85

Issue	Description	DR	CH	VE	Date
A	ISSUED FOR CONSTRUCTION	HP	SG	SE	08.06.23
02	ISSUED FOR APPROVAL	HP	SG	SE	31.03.23
01	ISSUED FOR APPROVAL	HP	SG	SE	23.01.23

Scales

1 : 500

Client

Status: **FOR CONSTRUCTION**

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Original Issue Signatures

Drawn	H.PALOMIQUE	Original Size	A1
Designed	S.HARMANIS	Height	AHD
Project Manager	S.EISEL	Grid	MGA
Verified	S.GILBERT		

Project: **UNITY PARK STAGE 6A**  
WYNDHAM CITY COUNCIL

Title: **ROADWORKS AND DRAINAGE LAYOUT PLAN**

Arcadis Australia Pacific Pty Limited  
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378-380 Collins Street  
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Tel No: +61 3 8623 4000  
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Project No.: 30063302-AAP-A6AADD-CV-DRG-0220-A



# COMPACTION ASSESSMENT

Job No 23580  
 Report No 23580/R001  
 Date Issued 26/07/23

## CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	JB
Project	UNITY PARK - STAGE 6A	Date tested	19/07/23
Location	TARNEIT	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	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>	1.97	2.00	1.95	-	-
Field moisture content	%	30.3	26.9	27.8	-	-

### 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>	1.99	2.03	1.97	-	-
Adjusted Peak Converted Wet Density	t/m <sup>3</sup>	-	-	-	-	-
Optimum Moisture Content	%	33.0	29.0	30.5	-	-

Moisture Variation From Optimum Moisture Content	2.0% dry	1.5% dry	2.5% dry	-	-	-
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density and moisture ratio results relate only to the soil to the depth of test and not to the full depth of the layer

Density Ratio ( R <sub>HD</sub> )	%	99.0	98.5	99.0	-	-
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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