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

3rd September 2024

Our Reference: 24278:NB1980

Winslow Constructors Pty Ltd
50 Barry Road
CAMPBELLFIELD VIC 3061

Dear Sirs/Madams,

RE: LEVEL 1 EARTHWORKS INSPECTION AND TESTING
SMITHS LANE – STAGE 28 (CLYDE NORTH)

Please find attached our Report No's 24278/R001 to 24278/R012 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 commenced in May 2024 and was completed in July 2024.

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)

LEGEND:

- PAVEMENT TREATMENT
- STRUCTURAL FILL > 200mm DEEP
- EX. STRUCTURAL FILL > 200mm DEEP
- LOT HATCHING
- ROAD PAVEMENT
- FOOTPATH
- DRIVEWAY
- INDUSTRIAL STRENGTH DRV / LANEWAYS
- NATURE STRIP
- RESERVES
- ELECTRICAL KIOSK
- DRAINAGE RESERVE
- MEDIAN DENSITY LOTS
- MAINTENANCE ACCESS TRACK
- DRY OUT AREA
- OMNIGRIP CST COATING (OR APPROVED EQUIVALENT)

LEGEND - LAYOUT PLAN

- STORMWATER DRAIN, PIT & PROPERTY INLET
- MELBOURNE WATER DRAIN & PIT
- SWALE DRAIN
- SEWER & MAINTENANCE STRUCTURES
- HOUSE DRAIN
- SERVICE CONDUITS
- TACTILE PAVERS (INDICATIVE ONLY)
- ELECTRICITY (UNDERGROUND)
- ELECTRICITY (OVERHEAD)
- OPTIC FIBRE
- TELECOMMUNICATIONS
- GAS
- WATER
- RECYCLED WATER
- EXISTING ELECTRICITY (UNDERGROUND)
- EXISTING ELECTRICITY (OVERHEAD)
- EXISTING GAS
- EXISTING OPTIC FIBRE
- EXISTING TELECOMMUNICATIONS
- EXISTING WATER
- EXISTING RECYCLED WATER
- EXISTING STORMWATER DRAIN
- EXISTING MELBOURNE WATER DRAIN
- EXISTING SEWER
- EXISTING HOUSE DRAIN
- EXISTING SWALE DRAIN
- EXISTING SURFACE LEVEL
- FINISHED BUILDING LINE LEVEL
- FINISHED RIDGE LINE LEVEL
- TOP OF RETAINING WALL
- BOTTOM OF RETAINING WALL
- RIDGE LINE
- RETAINING WALL
- ZERO LOT LINES
- PAVEMENT TREATMENT
- STRUCTURAL FILL > 200mm DEEP
- EX. STRUCTURAL FILL > 200mm DEEP
- DIRECTION OF FALL
- OVERLAND FLOW
- ALLOTMENT TO BE GRADED EVENLY IN DIRECTION OF FALL TO LEVELS INDICATED
- CONCRETE EDGE STRIP WITH SUBSOIL DRAIN, "NO ROAD" SIGN & BARRIER
- LIMIT OF WORKS
- EXISTING TREE TO BE REMOVED
- PERMANENT SURVEY MARK
- TEMPORARY BENCH MARK
- PROPOSED DRIVEWAY
- TREE PROTECTION ZONE (TPZ)

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

BEFORE YOU DIG

www.byda.com.au

ROAD LAYOUT TABLE

Road Name	Reserve Width (m)	Road Width (m)			Kerb Type		Verge Width (m)	
		Lip to Lip	Inv to Inv	Back to Back	Nth/West	Sth/East	Nth/West	Sth/East
DROMORE AVENUE	20.00	6.40	7.30	7.60	600 B2	600 B2	4.50	8.20
BURNBANK PARADE	25.00	10.30/8.75	11.20/9.65	11.50/9.95	600 B2	600 B2	4.90/4.50	8.90/10.85
BLOOM STREET	16.00	6.40	7.30	7.60	600 B2	600 B2	4.20	4.50
MONOCOT AVENUE (16m RR)	16.00	8.35	9.25	9.55	600 B2	600 B2	2.25	4.50
MONOCOT AVENUE (20m RR)	20.00	6.40	7.30	7.60	600 B2	600 B2	4.50	8.20
ATWELL ROAD	16.00	6.40	7.30	7.60	600 B2	600 B2	4.50	4.20
MODESTA STREET	16.00	6.40	7.30	7.60	600 B2	600 B2	4.20	4.50
CARDWELL ROAD	16.00	6.40	7.30	7.60	600 B2	600 B2	4.20	4.50
RAFFERTY DRIVE	20.00	6.40	7.30	7.60	600 B2	600 B2	6.35	6.35
ZALE ROAD (14.5m RR)	14.50	6.40	7.30	7.60	600 B2	600 B2	2.70	4.50
ZALE ROAD (16m RR)	16.00	6.40	7.30	7.60	600 B2	600 B2	4.20	4.50
HALISEND STREET	16.00	6.40	7.30	7.60	600 B2	600 B2	4.50	4.20

SERVICE OFFSET TABLE

Location	Gas		ND - Water		Water		Electricity		Telecommunication		Sewer	
	Side	Offset (m)	Side	Offset (m)	Side	Offset (m)	Side	Offset (m)	Side	Offset (m)	Side	Offset (m)
DROMORE AVENUE	N	2.25	N	2.70	N	3.20	S	6.25	S	5.50	N	Ex1.0
BURNBANK PARADE	W	2.25	W	2.70	W	3.20	E	2.60	E	1.85	E/W	Ex1.0/Ex1.0
BLOOM STREET	E	2.25	E	2.70	E	3.20	W	2.60	W	1.85	E/W	Ex1.0/1.0
MONOCOT AVENUE (16m)	N	2.25	N	2.70	N	3.20	S	1.25	S	0.50	N	1.0
MONOCOT AVENUE (20m)	N	2.25	N	2.70	N	3.20	S	6.25	S	5.50	N/S	1.0/1.0
ATWELL ROAD	W	2.25	W	2.70	W	3.20	E	2.60	E	1.85	W	1.0
MODESTA STREET	S	2.25	S	2.70	S	3.20	N	2.60	N	1.85	N/S	1.0/1.0
CARDWELL ROAD	E	2.25	E	2.70	E	3.20	W	2.60	W	1.85	E	1.0
RAFFERTY DRIVE	E	2.25	E	2.70	E	3.20	W	2.60	W	1.85	E	1.0
ZALE ROAD (14.5m)	S	2.25	S	2.70	S	3.20	N	1.25	N	0.50	S	1.0
ZALE ROAD (16m)	S	2.25	S	2.70	S	3.20	N	2.60	N	1.85	S	1.0
HALISEND STREET	W	2.25	W	2.70	W	3.20	E	2.60	E	1.85	W	1.0
FUTURE ARUN WALK	E	1.00	E	1.45	E	1.95	-	-	-	-	-	-
FUTURE KAI LANE	-	-	-	-	-	-	E	1.25	E	0.5	W	2.5
FUTURE REGIA LANE	-	-	-	-	-	-	-	-	-	-	N	2.5

NOTE: STREET TREES ARE TO BE PLANTED IN THE CENTRE OF ALL NATURE STRIPS

FOR CONSTRUCTION

REV	DESCRIPTION	DATE	DRN.	APP.
B	LINE 28-07 to 28-08 DIAMETER CHANGED	19.01.24	B.P.	S.Y.
A	ISSUED FOR CONSTRUCTION	08.01.24	B.P.	S.Y.

SMITHS LANE
CLYDE NORTH
mirvac

SCALE 1:500 AT A1 SIZE (0, 5, 10, 20, 30, 40)

Designed	B.PAPPALARDO
Date	19.10.2023
Drawn	M.F. JAURIGUE
Checked	L.MURRAY
Date	24.11.2023
Approved	S.YOUNG
Reg. No.	PE0005609
Date	27.11.2023
PS Number	PS919014R

Beveridge Williams
Development & Infrastructure Consultants
1 Glenferrie Road
Malvern VIC 3144
ph: 03 9524 8888
www.beveridgewilliams.com.au

Project Details: SMITHS LANE
STAGE 28
CITY OF CASEY

Drawing Title: LAYOUT PLAN
(SHEET 1 OF 2)

Sheet 05 of 38

Scale 1:500 @ A1

Project Ref	Stage No	Drawing No	Rev
1101438	28	010	B

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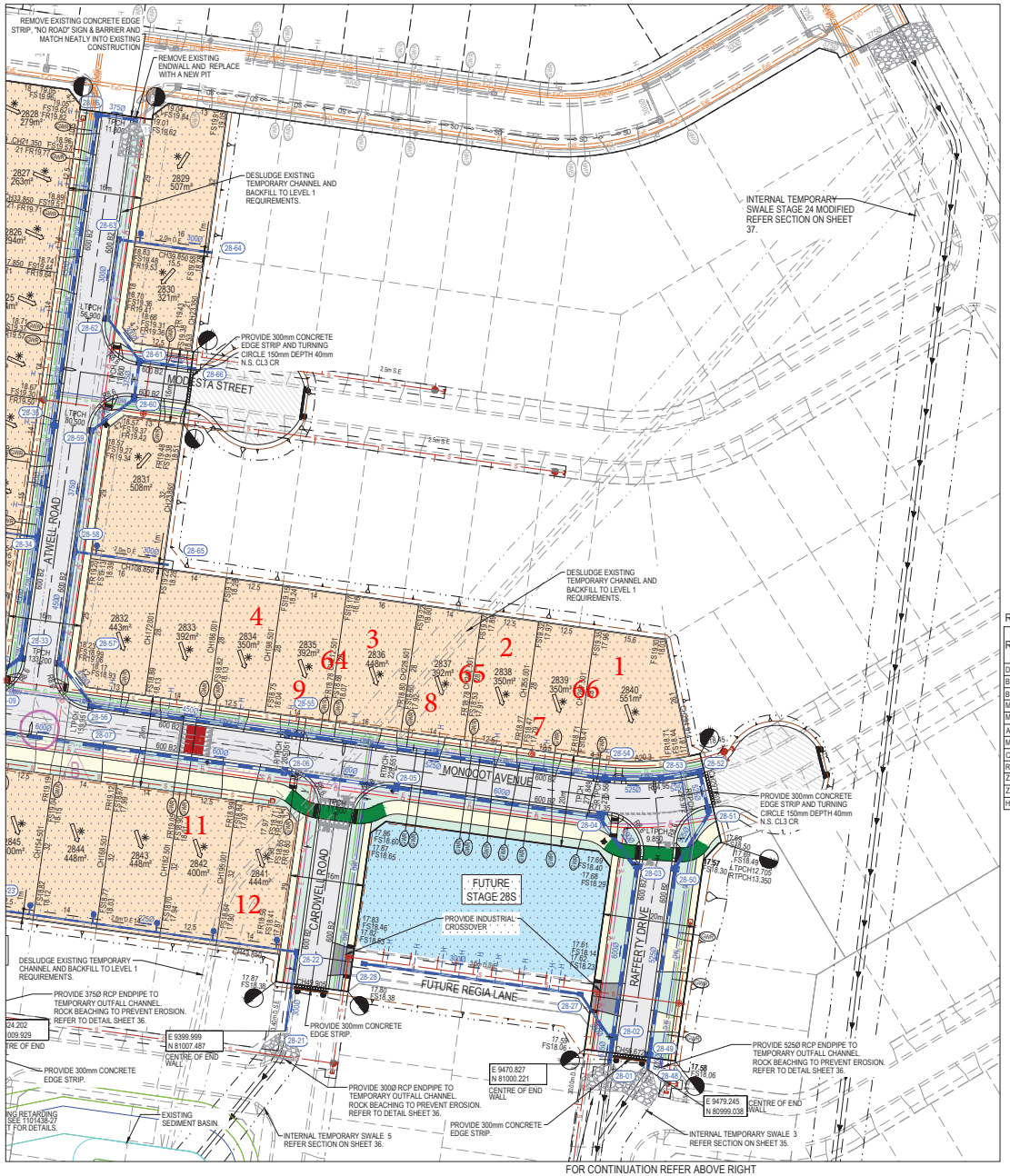
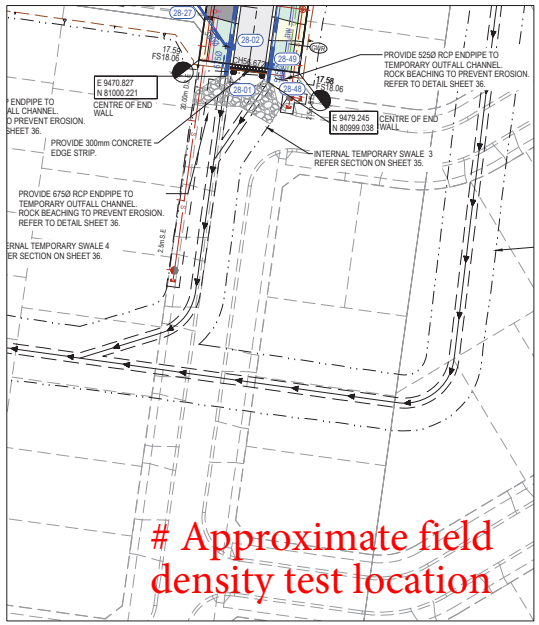
FIGURE 1 (2 of 2)





LEGEND - LAYOUT PLAN

- STORMWATER DRAIN, PIT & PROPERTY INLET
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CARDWELL ROAD	16.00	6.40	7.30	7.60	600 B2	600 B2	4.20	4.50
RAFFERTY DRIVE	20.00	6.40	7.30	7.60	600 B2	600 B2	6.35	6.35
ZALE ROAD (14.5m RR)	14.50	6.40	7.30	7.60	600 B2	600 B2	2.70	4.50
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ATWELL ROAD	W	2.25	W	2.70	W	3.20	E	2.60	E	1.85	W	1.0
MODESTA STREET	S	2.25	S	2.70	S	3.20	N	2.60	N	1.85	N/S	1.0/1.0
CARDWELL ROAD	E	2.25	E	2.70	E	3.20	W	2.60	W	1.85	E	1.0
RAFFERTY DRIVE	E	2.25	E	2.70	E	3.20	W	2.60	W	1.85	E	1.0
ZALE ROAD (14.5m)	S	2.25	S	2.70	S	3.20	N	1.25	N	0.50	S	1.0
ZALE ROAD (16m)	S	2.25	S	2.70	S	3.20	N	2.60	N	1.85	S	1.0
HALISEND STREET	W	2.25	W	2.70	W	3.20	E	2.60	E	1.85	W	1.0
FUTURE ARUN WALK	E	1.00	E	1.45	E	1.95	-	-	-	-	-	-
FUTURE KAI LANE	-	-	-	-	-	-	E	1.25	E	0.5	W	2.5
FUTURE REGIA LANE	-	-	-	-	-	-	-	-	-	-	N	2.5

NOTE: STREET TREES ARE TO BE PLANTED IN THE CENTRE OF ALL NATURE STRIPS

LEGEND:

- PAVEMENT TREATMENT
- STRUCTURAL FILL > 200mm DEEP
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FOR CONSTRUCTION

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A	ISSUED FOR CONSTRUCTION	08.01.24	B.P.	S.Y.

SMITHS LANE
CLYDE NORTH

SCALE 1:500 AT A1 SIZE

Designed	B.PAPPALARDO
Date	19.10.2023
Drawn	M.F. JAURIGUE
Checked	L.MURRAY
Date	24.11.2023
Approved	S.YOUNG
Reg. No	PE00059
Date	27.11.2023
PS Number	PS919014R

Beveridge Williams
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www.beveridgewilliams.com.au

Project Details	SMITHS LANE STAGE 28 CITY OF CASEY
Drawing Title	LAYOUT PLAN (SHEET 2 OF 2)

Sheet 06 of 38
Scale 1:500 @ A1

Project Ref	Stage No	Drawing No	Rev
1101438	28	011	B

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COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

		Job No	24278
		Report No	24278/R001
		Date Issued	06/06/24
Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	*Tested by*	CV
Project	SMITHS LANE - STAGE 28	*Date tested*	15/05/24
Location	CLYDE NORTH	*Checked by*	JHF

Feature **EARTHWORKS** *Layer thickness* 200 mm *Time:* 11:46

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/m³*	1.94	2.02	1.95	2.03	2.01	2.04
Field moisture content	*%*	25.9	18.2	20.0	19.3	19.0	20.5

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/m³*	1.99	2.04	1.97	2.04	2.04	2.06
Adjusted Peak Converted Wet Density	*t/m³*	-	-	-	-	-	-
Optimum Moisture Content	*%*	28.0	20.5	22.5	20.5	20.5	20.5

Moisture Variation From Optimum Moisture Content		2.0% dry	2.0% dry	2.5% dry	1.5% dry	1.5% dry	0.0%

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_{HD})	*%*	**98.0**	**99.5**	**99.0**	**99.5**	**98.5**	**99.0**

Material description

No 1 - 6 Clay Fill

Approved Signatory : Justin Fry

COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES
6 - 8 Rose Avenue, Croydon 3136

		Job No	24278
		Report No	24278/R002
		Date Issued	06/06/24
Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	*Tested by*	CV
Project	SMITHS LANE - STAGE 28	*Date tested*	16/05/24
Location	CLYDE NORTH	*Checked by*	JHF

Feature **EARTHWORKS** *Layer thickness* 200 mm *Time:* 11:51

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/m³*	2.03	2.03	1.96	2.01	2.05	1.85
Field moisture content	*%*	21.3	20.3	19.2	18.2	20.0	24.5

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/m³*	2.06	2.03	1.98	2.02	2.07	1.84
Adjusted Peak Converted Wet Density	*t/m³*	-	-	-	-	-	-
Optimum Moisture Content	*%*	23.5	21.5	19.0	18.0	20.0	27.0

Moisture Variation From Optimum Moisture Content		2.0% dry	1.5% dry	0.5% wet	0.0%	0.0%	2.5% 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

Density Ratio (R_{HD})	*%*	**98.5**	**99.5**	**99.0**	**99.5**	**99.0**	**101.0**

Material description

No 7 - 12 Clay Fill

Approved Signatory : Justin Fry

COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES
6 - 8 Rose Avenue, Croydon 3136

		Job No	24278
		Report No	24278/R003
		Date Issued	08/06/24
Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	CV
Project	SMITHS LANE - STAGE 28	Date tested	17/05/24
Location	CLYDE NORTH	Checked by	JHF

Feature	**EARTHWORKS**	*Layer thickness*	200 mm	*Time:*	11:01

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/m³	1.96	1.93	2.00	2.03	2.08	2.05
Field moisture content	%	14.9	13.3	19.4	19.9	18.0	15.4

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/m³	1.98	1.96	2.04	2.01	2.10	2.07
Adjusted Peak Converted Wet Density	t/m³	-	-	-	-	-	-
Optimum Moisture Content	%	17.5	15.0	19.5	22.0	20.0	16.5

Moisture Variation From Optimum Moisture Content	2.5% dry	1.5% dry	0.0%	2.0% dry	2.0% dry	1.0% 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

Density Ratio (R_{HD})	%	**99.0**	**98.5**	**98.0**	**100.5**	**99.0**	**99.0**

Material description

No 13 - 18 Clay Fill

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

Approved Signatory : Justin Fry

COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

		Job No	24278
		Report No	24278/R004
		Date Issued	06/06/24
Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	*Tested by*	CV
Project	SMITHS LANE - STAGE 28	*Date tested*	21/05/24
Location	CLYDE NORTH	*Checked by*	JHF

Feature **EARTHWORKS** *Layer thickness* 200 mm *Time:* 11:42

Test procedure AS 1289.2.1.1 & 5.8.1

Test No		**19**	**20**	**21**	**22**	**23**	**24**
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/m³*	1.98	2.08	2.05	2.04	2.04	2.07
Field moisture content	*%*	27.9	20.2	17.7	19.2	17.4	18.6

Test procedure AS 1289.5.7.1

Test No		19	20	21	22	23	24
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/m³*	1.99	2.10	2.09	2.06	2.06	2.09
Adjusted Peak Converted Wet Density	*t/m³*	-	-	-	-	-	-
Optimum Moisture Content	*%*	30.5	22.5	19.5	21.0	20.0	19.0

Moisture Variation From Optimum Moisture Content		2.0% dry	2.0% dry	2.0% dry	2.0% dry	2.5% dry	0.5% 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

Density Ratio (R_{HD})	*%*	**100.0**	**99.0**	**98.0**	**99.0**	**99.0**	**99.0**

Material description

No 19 - 24 Clay Fill

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

Approved Signatory : Justin Fry

COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

		Job No	24278
		Report No	24278/R005
		Date Issued	05/06/24
Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	*Tested by*	CV
Project	SMITHS LANE - STAGE 28	*Date tested*	22/05/24
Location	CLYDE NORTH	*Checked by*	JHF

Feature	**EARTHWORKS**	*Layer thickness*	200 mm	*Time:*	14:03

Test procedure AS 1289.2.1.1 & 5.8.1

Test No		**25**	**26**	**27**	**28**	**29**	**30**
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/m³*	2.05	2.08	2.08	2.08	2.06	2.00
Field moisture content	*%*	18.2	18.6	19.1	19.6	18.4	17.3

Test procedure AS 1289.5.7.1

Test No		25	26	27	28	29	30
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/m³*	2.06	2.11	2.10	2.09	2.08	2.04
Adjusted Peak Converted Wet Density	*t/m³*	-	-	-	-	-	-
Optimum Moisture Content	*%*	20.5	20.0	21.5	21.0	20.5	19.5

Moisture Variation From Optimum Moisture Content	2.0% dry	1.5% dry	2.5% dry	1.5% dry	2.0% dry	2.0% 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

Density Ratio (R_{HD})	*%*	**99.5**	**99.0**	**99.0**	**99.5**	**99.0**	**98.5**

Material description

No 25 - 30 Clay Fill

Approved Signatory : Justin Fry

COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES
6 - 8 Rose Avenue, Croydon 3136

		Job No	24278
		Report No	24278/R006
		Date Issued	05/06/24
Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	CV
Project	SMITHS LANE - STAGE 28	Date tested	23/05/24
Location	CLYDE NORTH	Checked by	JHF

Feature	**EARTHWORKS**	*Layer thickness*	200 mm	*Time:*	14:10

Test procedure AS 1289.2.1.1 & 5.8.1

Test No		**31**	**32**	**33**	**34**	**35**	**36**
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/m³*	2.03	1.97	2.06	2.02	2.11	2.04
Field moisture content	*%*	18.9	19.2	21.5	19.1	17.4	18.6

Test procedure AS 1289.5.7.1

Test No		31	32	33	34	35	36
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/m³*	2.05	2.07	2.05	2.04	2.12	2.05
Adjusted Peak Converted Wet Density	*t/m³*	-	-	-	-	-	-
Optimum Moisture Content	*%*	21.5	17.0	23.5	19.0	18.5	21.0

Moisture Variation From Optimum Moisture Content	2.5% dry	2.0% wet	2.0% dry	0.0%	1.0% dry	2.0% 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

Density Ratio (R_{HD})	*%*	**99.0**	**95.5**	**100.5**	**99.0**	**99.0**	**99.5**

Material description

No 31 - 36 Clay Fill

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

Approved Signatory : Justin Fry

COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

		Job No	24278
		Report No	24278/R007
		Date Issued	06/06/24
Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	*Tested by*	CV
Project	SMITHS LANE - STAGE 28	*Date tested*	24/05/24
Location	CLYDE NORTH	*Checked by*	JHF

Feature **EARTHWORKS** *Layer thickness* 200 mm *Time:* 13:40

Test procedure AS 1289.2.1.1 & 5.8.1

Test No		**37**	**38**	**39**	**40**	**41**	**42**
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/m³*	1.99	2.11	2.13	2.14	2.09	2.09
Field moisture content	*%*	19.5	17.4	17.9	16.5	19.5	20.7

Test procedure AS 1289.5.7.1

Test No		37	38	39	40	41	42
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/m³*	2.01	2.10	2.15	2.13	2.10	2.09
Adjusted Peak Converted Wet Density	*t/m³*	-	-	-	-	-	-
Optimum Moisture Content	*%*	21.5	19.5	20.5	19.0	21.5	20.5

Moisture Variation From Optimum Moisture Content		2.0% dry	2.0% dry	2.5% dry	2.5% dry	2.0% dry	0.0%

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_{HD})	**%**	**99.0**	**100.0**	**99.0**	**100.5**	**99.5**	**100.0**

Material description

No 37 - 42 Clay Fill

AVRLOT HILF V1.10 MAR 13

NATA Accredited Laboratory No 9909
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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	24278
		Report No	24278/R008
		Date Issued	05/06/24
Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	CV
Project	SMITHS LANE - STAGE 28	Date tested	27/05/24
Location	CLYDE NORTH	Checked by	JHF

Feature	**EARTHWORKS**	*Layer thickness*	200 mm	*Time:*	13:49

Test procedure AS 1289.2.1.1 & 5.8.1

Test No		**43**	**44**	**45**	**46**	**47**	**48**
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/m³	1.97	2.10	2.11	2.14	1.93	2.02
Field moisture content	%	19.1	21.8	18.0	21.7	20.1	19.9

Test procedure AS 1289.5.7.1

Test No		43	44	45	46	47	48
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/m³	2.01	2.13	2.13	2.17	1.96	2.03
Adjusted Peak Converted Wet Density	t/m³	-	-	-	-	-	-
Optimum Moisture Content	%	21.0	24.0	20.0	22.5	22.5	21.5

Moisture Variation From Optimum Moisture Content		2.0% dry	2.0% dry	2.0% dry	1.0% dry	2.0% dry	1.5% 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

Density Ratio (R_{HD})	%	**98.0**	**98.5**	**99.0**	**98.5**	**98.5**	**99.0**

Material description

No 43 - 48 Clay Fill

Approved Signatory : Justin Fry

COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

		Job No	24278
		Report No	24278/R009
		Date Issued	05/06/24
Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	*Tested by*	CV
Project	SMITHS LANE - STAGE 28	*Date tested*	29/05/24
Location	CLYDE NORTH	*Checked by*	JHF

Feature **EARTHWORKS** *Layer thickness* 200 mm *Time:* 11:39

Test procedure AS 1289.2.1.1 & 5.8.1

Test No		**49**	**50**	**51**	**52**	**53**	**54**
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/m³*	2.04	1.97	2.09	2.12	2.11	1.99
Field moisture content	*%*	21.2	20.5	21.7	20.2	20.5	17.6

Test procedure AS 1289.5.7.1

Test No		49	50	51	52	53	54
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/m³*	2.06	2.01	2.08	2.13	2.13	2.00
Adjusted Peak Converted Wet Density	*t/m³*	-	-	-	-	-	-
Optimum Moisture Content	*%*	21.0	22.5	24.0	20.0	20.0	20.0

Moisture Variation From Optimum Moisture Content	0.5% wet	2.0% dry	2.0% dry	0.0%	0.5% wet	2.5% 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

Density Ratio (R_{HD})	*%*	**99.0**	**98.0**	**100.0**	**99.5**	**99.0**	**99.5**

Material description

No 49 - 54 Clay Fill

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

Approved Signatory : Justin Fry

COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

		Job No	24278
		Report No	24278/R010
		Date Issued	05/06/24
Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	*Tested by*	CV
Project	SMITHS LANE - STAGE 28	*Date tested*	30/05/24
Location	CLYDE NORTH	*Checked by*	JHF

Feature **EARTHWORKS** *Layer thickness* 200 mm *Time:* 13:31

Test procedure AS 1289.2.1.1 & 5.8.1

Test No		**55**	**56**	**57**	**58**	**59**	**60**
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/m³*	1.93	2.10	2.05	2.02	2.10	2.10
Field moisture content	*%*	19.8	18.7	15.6	17.2	18.0	20.4

Test procedure AS 1289.5.7.1

Test No		55	56	57	58	59	60
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/m³*	1.95	2.08	2.06	2.04	2.13	2.11
Adjusted Peak Converted Wet Density	*t/m³*	-	-	-	-	-	-
Optimum Moisture Content	*%*	20.0	18.0	18.0	19.5	18.0	22.5

Moisture Variation From Optimum Moisture Content		0.0%	0.5% wet	2.0% dry	2.0% dry	0.0%	2.0% 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

Density Ratio (R_{HD})	*%*	**99.0**	**101.0**	**99.5**	**99.5**	**98.5**	**99.5**

Material description

No 55 - 60 Clay Fill

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

Approved Signatory : Justin Fry

COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

		Job No	24278
		Report No	24278/R011
		Date Issued	07/06/24
Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	*Tested by*	CV
Project	SMITHS LANE - STAGE 28	*Date tested*	04/06/24
Location	CLYDE NORTH	*Checked by*	JHF

Feature	**EARTHWORKS**	*Layer thickness*	200 mm	*Time:*	11:29

Test procedure AS 1289.2.1.1 & 5.8.1

Test No		**61**	**62**	**63**	**64**	**65**	**66**
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/m³*	2.02	2.00	2.05	2.07	2.12	2.00
Field moisture content	*%*	16.0	14.4	16.3	14.0	14.2	17.4

Test procedure AS 1289.5.7.1

Test No		61	62	63	64	65	66
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/m³*	2.04	2.04	2.08	2.10	2.16	2.05
Adjusted Peak Converted Wet Density	*t/m³*	-	-	-	-	-	-
Optimum Moisture Content	*%*	18.0	14.0	18.5	16.0	14.5	20.0

Moisture Variation From Optimum Moisture Content	2.0% dry	0.0%	2.5% dry	2.0% dry	0.5% dry	2.5% 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

Density Ratio (R_{HD})	*%*	**99.0**	**98.5**	**98.5**	**99.0**	**98.5**	**97.5**

Material description

No 61 - 66 Clay Fill

Approved Signatory : Justin Fry

COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES
6 - 8 Rose Avenue, Croydon 3136

		Job No	24278
		Report No	24278/R012
		Date Issued	31/07/24
Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	CV
Project	SMITHS LANE - STAGE 28	Date tested	29/07/24
Location	CLYDE NORTH	Checked by	JHF

Feature	**TRENCH FILL**	*Layer thickness*	200 mm	*Time:*	09:23

Test procedure AS 1289.2.1.1 & 5.8.1

Test No		**67**	**68**	**-**	**-**	**-**	**-**
Location		REFER TO FIGURE 1	REFER TO FIGURE 1				
Approximate depth below FSL							
Measurement depth	*mm*	175	175	-	-	-	-
Field wet density	*t/m³*	2.01	2.01	-	-	-	-
Field moisture content	*%*	20.1	18.8	-	-	-	-

Test procedure AS 1289.5.7.1

Test No		67	68	-	-	-	-
Compactive effort		Standard					
Oversize rock retained on sieve	*mm*	19.0	19.0	-	-	-	-
Percent of oversize material	*wet*	0	0	-	-	-	-
Peak Converted Wet Density	*t/m³*	2.04	2.00	-	-	-	-
Adjusted Peak Converted Wet Density	*t/m³*	-	-	-	-	-	-
Optimum Moisture Content	*%*	22.5	21.0	-	-	-	-

Moisture Variation From Optimum Moisture Content	2.5% dry	2.0% 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

Density Ratio (R_{HD})	*%*	**98.5**	**100.5**	**-**	**-**	**-**	**-**

Material description

No 67 - 68 Clay Fill

Approved Signatory : Justin Fry