

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

19th July 2024

Our Reference: 23742:NB1877 (Rev.1)

Winslow Constructors Pty Ltd 50 Barry Road CAMPBELLFIELD VIC 3061

Dear Sirs/Madams,

RE: LEVEL 1 EARTHWORKS INSPECTION AND TESTING WOODSONG – STAGE 1 (MICKLEHAM)

Please find attached our Report No's 23742/R001 and 23048/R001 to 23048/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 commenced in October 2023 and was completed in February 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)



FIGURE 1 (2 of 2)





INICAL SERVICES					Jo Ri	b No eport No	23742 23742/R00
Croydon 3136					Da	ate Issued	15/11/23
WINSLOW CONSTRUC	TORS	PTY LTD (C/	AMPBELLFIE	ELD)	Te	ested by	AC
WOODSONG - STAGE			,	Da	ate tested	25/10/23	
MICKLEHAM				C	Checked by JHF		
EARTHWORKS		Lay	er thickness	200	mm	Time:	12:02
re AS 1289.2.1.1 & 5.8	1.1		2	2	A	E	6
		1	2	3	4	Э	0
		KEFEK	KEFEK		KEFEK	KEFEK	
		FIGURE 1	FIGURE 1	FIGURE 1	FIGURE 1	FIGURE 1	
lenth below ESI							
depth	mm	175	175	175	175	175	175
itv	t/m ³	1.89	1.89	1.85	1.90	1.93	1.96
content	%	19.7	18.2	20.1	20.7	19.6	21.4
re AS 1289.5.7.1		1	2	3	4	5	6
fort				Stan	dard	1	r
retained on sieve	mm	19.0	19.0	19.0	19.0	19.0	19.0
rsize material	wet	0	0	0	0	0	0
ed Wet Density	<u>t/m³</u>	1.93	1.92	1.86	1.94	1.96	2.00
Converted Wet Density	<i>t/m</i> ³	-	-	-	-	-	-
ture Content	%	22.0	20.5	21.0	23.0	21.5	23.5
		2.5%	2.0%	1.0%	2.0%	1.5%	2.0%
re Variation From		2.0/0					
re Variation From m Moisture Content		dry	dry	dry	dry	dry	dry
ire Variation From <u>m Moisture Content</u> and moisture ratio results	relate c	dry only to the so	dry il to the deptl	dry h of test and	dry not to the fu	dry Il depth of the	dry e layer
	Croydon 3136 WINSLOW CONSTRUC WOODSONG - STAGE MICKLEHAM EARTHWORKS re AS 1289.2.1.1 & 5.8 Gepth below FSL depth ity content re AS 1289.5.7.1 fort retained on sieve rsize material ed Wet Density Converted Wet Density ture Content	Croydon 3136 WINSLOW CONSTRUCTORS WOODSONG - STAGE 1 ROAL MICKLEHAM EARTHWORKS re AS 1289.2.1.1 & 5.8.1 Tepth below FSL depth ity t/m³ content % re AS 1289.5.7.1 fort retained on sieve mm rsize material wet ad Wet Density ture Content %	Croydon 3136 WINSLOW CONSTRUCTORS PTY LTD (C/ WOODSONG - STAGE 1 ROAD RESERVE MICKLEHAM EARTHWORKS Lay re AS 1289.2.1.1 & 5.8.1 Image: transmission of the system of the syst	Croydon 3136 WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIE WOODSONG - STAGE 1 ROAD RESERVE MICKLEHAM EARTHWORKS Layer thickness re AS 1289.2.1.1 & 5.8.1 Image: transmission of the system o	Croydon 3136WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD) WOODSONG - STAGE 1 ROAD RESERVE MICKLEHAMEARTHWORKSLayer thickness200re AS 1289.2.1.1 & 5.8.1Te AS 1289.2.1.1 & 5.8.1REFER TO FIGURE 1REFER TO FIGURE 1REFER TO FIGURE 1REFER TO FIGURE 1REFER TO FIGURE 1REFER TO FIGURE 1Te peth below FSL depthmm m175175175depthmm M175175175tryt/m³1.891.891.85content%19.718.220.1re AS 1289.5.7.11233fortStan retained on sievemm m19.019.019.0restand on sievemm m19.019.019.0od Wet Densityt/m³1.931.921.86Converted Wet Densityt/m³2.020.521.0	Croydon 3136 Data WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD) Te WOODSONG - STAGE 1 ROAD RESERVE Data MICKLEHAM California EARTHWORKS Layer thickness 200 mm EARTHWORKS Layer thickness 200 mm re AS 1289.2.1.1 & 5.8.1 1 2 3 4 REFER REFER REFER TO FIGURE 1 FIGUR	Croydon 3136 Date Issued WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD) Tested by WOODSONG - STAGE 1 ROAD RESERVE Date tested MICKLEHAM Checked by EARTHWORKS Layer thickness 200 mm Time: Time: Time: REARTHWORKS Layer thickness 200 mm Time: Time: <td< td=""></td<>



Approved Signatory : Justin Fry



VIL GEOTECI 8 Rose Avenue Client Project	HNICAL SERVICES e, Croydon 3136 WINSLOW CONSTRUCT WOODSONG - STAGE 1	ORS	PTY LTD (CA	AMPBELLFIE	ELD)	Re Da Te Da	eport No ate Issued ested by ate tested	23048/R00 13/11/23 AC 31/10/23
Location	MICKLEHAM			CI	пескеа бу	JHF		
Feature	EARTHWORKS		Lay	er thickness	200	mm	Time:	11:15
Test procedu	ure AS 1289.2.1.1 & 5.8.1	1	-			40		
Test No			1	8	9	10	11	12
Location			REFER TO FIGURE 1	REFER TO FIGURE 1				
Approximate (depth below FSL							
Measurement	t depth	mm	175	175	175	175	175	175
Field wet den	sity	t∕m³	1.85	1.88	1.85	1.86	1.83	1.85
Field moisture	e content	%	22.8	25.9	24.4	21.0	24.6	27.7
Test procedu	ure AS 1289.5.7.1							
Test No			7	8	9	10	11	12
Compactive e	ffort				Stan	dard		
Oversize rock	retained on sieve	тт	19.0	19.0	19.0	19.0	19.0	19.0
Percent of ove	ersize material	wet	0	0	0	0	0	0
Peak Convert	ed Wet Density	t∕m³	1.83	1.96	1.90	1.96	1.84	1.86
Adjusted Peal	k Converted Wet Density	t∕m³	-	-	-	-	-	-
Optimum Mois	sture Content	%	25.0	27.5	24.0	22.0	23.5	27.5
			0.00/	4 50/	0.50/	4.00/	4 50/	0.50/
Moisti	ure Variation From		2.0%	1.5%	0.5%	1.0%	1.5%	0.5%
Optimu	Im Moisture Content		ary	ary	wet	ary	wet	wet
density	and moisture ratio results re	elate d	only to the so	I to the dept	n of test and	not to the fu	I depth of the	e layer
A 1 4 1 4 1 4 1 4 1 4 1 4 1 4 1 4 1 4 1	о (R _{HD})	%	101.0	95.5	97.0	95.0	99.5	100.0



AVRLOT HILF V1.10 MAR 13

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VIL GEOTECH 8 Rose Avenue Client Project Location	ANICAL SERVICES 6, Croydon 3136 WINSLOW CONSTRUC WOODSONG - STAGE - MICKLEHAM	TORS 1	PTY LTD (C/	AMPBELLFIE	ELD)	Ri Da Te Da Ci	eport No ate Issued ested by ate tested necked by	23048/R00 05/12/23 AC 29/11/23 JHF
Feature	EARTHWORKS		Lay	er thickness	200	mm	Time:	10:20
Test procedu	ıre AS 1289.2.1.1 & 5.8.	1	10			10	47	
Test No			13	14	15	16	1/	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 c	lepth below FSL							
Measurement	depth	mm	175	175	175	175	175	175
Field wet dens	sity	t∕m³	1.84	1.96	1.87	1.85	1.88	1.84
Field moisture	content	%	22.2	27.4	21.4	26.7	21.4	24.0
-								
Test procedu	ire AS 1289.5.7.1		40	4.4	45	40	47	40
Test No	ffort		13	14	15 Stor	16 dord	17	18
Oversize rock	rotained on sieve	mm	10.0	10.0	3lar		10.0	10.0
Dversize Tock		wot	19.0	19.0	19.0	19.0	19.0	19.0
Peak Convert	ersize material	t/m3	1.88	1.96	1 07	1 01	1 02	1 01
Adjusted Peak	k Converted Wet Density	t/m ³	-	-	-	-	-	-
Optimum Mois	sture Content	%	24.5	26.5	22.5	28.0	23.5	25.5
Maiati	ura Variation From		2.00/	0.5%	1 00/	1 50/	2.00/	1 50/
NOISIL	ure Varialion From		2.0%	0.5%	1.0% dn/	1.3%	2.0%	1.5%
Optimu		-	Uly uly to the ee	Wel	Uly bofteetend		Uly Ulanth of the	
nonem ⁷	and moisture ratio results	relate (only to the so	I to the dept	n of test and			
	$(R_{\rm up})$	%	97.5	100.0	95.0	97.0	98.0	96.5



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VIL GEOTEC 8 Rose Avenu Client Project Location	CHNICAL SERVICES Je, Croydon 3136 WINSLOW CONSTRUC WOODSONG - STAGE MICKLEHAM	PTY LTD (C/	AMPBELLFIE	R D Ti D C	eport No ate Issued ested by ate tested hecked by	23048/R00 22/02/24 AC 09/02/24 JHF		
Feature	EARTHWORKS		Lay	er thickness	200	mm	Time:	14:52
Test proced	dure 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	e depth below FSL							
Measuremer	nt depth	mm	175	175	175	175	175	175
Field wet der	nsity	t∕m³	1.86	1.86	1.84	1.83	1.85	1.88
Field moistu	re content	%	23.2	27.8	26.3	22.9	24.0	26.8
Test proced	dure AS 1289.5.7.1		10	20	21	22	23	24
Compactive	effort		15	20	 Star	dard	20	4 -1
Oversize roc	ck retained on sieve	mm	19.0	19.0	19.0	19.0	19.0	19.0
Percent of o	versize material	wet	0	0	0	0	0	0
Peak Conve	erted Wet Density	t/m³	1.88	1.86	1.90	1.89	1.86	1.97
Adjusted Pea	ak Converted Wet Density	t/m³	-	-	-	-	-	-
Optimum Mc	pisture Content	%	24.5	25.5	26.0	25.0	25.5	26.5
Mois	sture Variation From		1.5%	2.5%	0.0%	2.0%	1.5%	0.0%
Optin	num Moisture Content		dry	wet	0.070	dry	drv	0.070
densit	v and moisture ratio results	relate (only to the so	il to the dept	h of test and	not to the fu	III depth of the	e laver
Donaity Pat		0/			06.5	96.5		055
Material des	IO (K _{HD})	70	99.0	100.0	90.5	90.0	99.0	90.0
No 19 - 2	24 Clay Fill							



NATA Accredited Laboratory No 9909 Accredited for compliance with ISO/IEC 17025 - Testing AVRLOT HILF V1.10 MAR 13

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8 Rose Avenue, Client Project Location	Croydon 3136 WINSLOW CONSTRUC WOODSONG - STAGE MICKLEHAM	PTY LTD (C/	AMPBELLFIE	D T D C	ate Issued ested by ate tested hecked by	06/03/24 AC 26/02/24 JHF		
Feature	EARTHWORKS		Lay	er thickness	200	mm	Time:	13:53
Test procedu	re 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 d	lepth below FSL							
Measurement	depth	тт	175	175	175	175	175	175
Field wet dens	ity	t∕m³	1.83	1.87	1.84	1.90	1.85	1.87
Field moisture	content	%	22.1	23.4	25.5	20.5	23.1	26.3
Test procedu	re AS 1289.5.7.1							
Test No			25	26	27	28	29	30
Compactive ef	fort				Stan	dard		
Oversize rock	retained on sieve	тт	19.0	19.0	19.0	19.0	19.0	19.0
Percent of ove	rsize material	wet	0	0	0	0	0	0
Peak Converte	ed Wet Density	t∕m³	1.89	1.96	1.91	1.94	1.84	1.88
Adjusted Peak	Converted Wet Density	t∕m³	-	-	-	-	-	-
Optimum Mois	ture Content	%	24.0	25.5	27.5	22.0	25.0	25.5
							<u>.</u>	
Moistu	re Variation From		1.5%	2.0%	2.0%	1.5%	2.0%	1.0%
Optimu	m Moisture Content		dry	dry	dry	dry	dry	wet
density a	and moisture ratio results	relate o	only to the so	il to the dept	h of test and	not to the fu	Il depth of the	e layer
Density Ratio	(R _{HD})	%	97.0	95.5	96.5	98.0	100.5	99.0
<u>Material descri</u> No 25 - 30	<i>iption</i> Clay Fill							



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