



COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

Job No 20025
 Report No 20025/R001
 Date Issued 10/09/2020

Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	AC
Project	OLIVINE - STAGE 11	Date tested	01/09/20
Location	DONNYBROOK	Checked by	JHF

Feature	CAPPING	Layer thickness	285 mm	Time: 10:06
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Test procedure AS 1289.2.1.1 & 5.8.1

Test No	1	2	3	4	5	6
Location	Society Vista		Compass Crescent			
	100 1.8 east of kerb	15 1.8 west of kerb	460 1.8 north of kerb	425 1.8 south of kerb	370 1.8 north of kerb	325 1.8 south of kerb
Approximate depth below FSL						
Measurement depth <i>mm</i>	250	250	250	250	250	250
Field wet density <i>t/m³</i>	2.00	2.03	2.04	2.09	2.05	2.05
Field moisture content %	16.7	16.8	17.1	17.1	16.5	18.1

Test procedure AS 1289.5.7.1

Test No	1	2	3	4	5	6
Compactive effort	Standard					
Oversize rock retained on sieve <i>mm</i>	19.0	19.0	19.0	19.0	19.0	19.0
Percent of oversize material <i>wet</i>	0	0	0	0	0	0
Peak Converted Wet Density <i>t/m³</i>	2.03	2.03	2.06	2.09	2.09	2.07
Adjusted Peak Converted Wet Density <i>t/m³</i>	-	-	-	-	-	-
Optimum Moisture Content %	18.0	17.0	17.5	17.0	15.5	18.0

Moisture Variation From Optimum Moisture Content	1.0% dry	0.0%	0.0%	0.0%	1.0% wet	0.5% wet
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Density Ratio (R_{HD})	%	98.5	100.0	98.5	100.0	98.0	99.0
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Material description

No 1 - 6 Boxhill Mudstone

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COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

Job No 20025
Report No 20025/R003
Date Issued 09/09/2020

Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	AC
Project	OLIVINE - STAGE 11	Date tested	01/09/20
Location	DONNYBROOK	Checked by	JHF

Feature	CAPPING	Layer thickness	285 mm	Time: 12:00
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Test procedure AS 1289.2.1.1 & 5.8.1

Test No	13	14	-	-	-	-
Location	Vicinity Road	Median Grange				
	180 west of kerb	150 east of kerb				
Approximate depth below FSL						
Measurement depth	mm	250	250	-	-	-
Field wet density	t/m ³	2.01	2.00	-	-	-
Field moisture content	%	15.4	17.1	-	-	-

Test procedure AS 1289.5.7.1

Test No	13	14	-	-	-	-
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/m ³	2.03	2.02	-	-	-
Adjusted Peak Converted Wet Density	t/m ³	-	-	-	-	-
Optimum Moisture Content	%	14.5	15.5	-	-	-

Moisture Variation From Optimum Moisture Content	1.0% wet	2.0% wet	-	-	-	-
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Density Ratio (R _{HD})	%	99.0	99.0	-	-	-
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Material description

No 13 - 14 Boxhill Mudstone

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COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES
6 - 8 Rose Avenue, *Croydon, Vic 3136*

Job No 20025
Report No 20025/R004
Date Issued 09/09/2020

Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	AC
Project	OLIVINE - STAGE 11	Date tested	08/09/20
Location	DONNYBROOK	Checked by	JHF

Feature	CLASS 3	Layer thickness	110 mm	Time:	07:46:03
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AS 12892.1.1 & 5.8.1							
Test No	15	16	17	18	19	20	
Location	Precinct Way				Compass Crescent		
Chainage	25	75	125	175	225	275	
Offset	1.8	1.8	1.8	1.8	1.8	1.8	
	east	west	east	west	north	south	
	of kerb	of kerb	of kerb	of kerb	of kerb	of kerb	
Approximate depth from F.S.L.	m						
Measurement depth	mm						
Field wet density	t/m ³						
Field dry density	t/m ³						
Field moisture content	%						
	5.0	5.0	5.5	5.5	5.0	5.0	
<i>Laboratory Compaction AS 1289.5.2.1 & 5.4.2 Assigned Values (See Report No 203MVDCH)</i>							
Date of assignment	01/09/2020						
Material source and location	20mm Class 3 - MVQ, Donnybrook						
Compactive effort	MODIFIED						
Maximum Dry Density	t/m ³						
	2.31						
Optimum Moisture Content	%						
	7.5						
<i>Test procedure AS 1289.5.4.1</i>							
Oversize rock retained on sieve	mm						
	19.0	19.0	19.0	19.0	19.0	19.0	
Percent of oversize material	wet						
	-	-	-	-	-	-	
Percent of oversize material	dry						
	-	-	-	-	-	-	
Adjusted Maximum Dry Density	t/m ³						
	-	-	-	-	-	-	
Adjusted Optimum Moisture Content	%						
	-	-	-	-	-	-	
Moisture Variation From Optimum Moisture Content	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
	dry	dry	dry	dry	dry	dry	dry
Moisture Ratio (R _m)	%						
	69.5	71.0	73.0	73.0	71.5	70.0	
Density Ratio (R _D)	%						
	99.0	99.0	99.0	98.5	99.0	98.5	

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COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES
6 - 8 Rose Avenue, Croydon, Vic 3136

Job No 20025
Report No 20025/R005
Date Issued 09/09/2020

Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	AC
Project	OLIVINE - STAGE 11	Date tested	08/09/20
Location	DONNYBROOK	Checked by	JHF

Feature	CLASS 3	Layer thickness	110 mm	Time:	08:26:03
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AS 12892.1.1 & 5.8.1							
Test No	21	22	23	24	25	26	
Location	Compass Crescent				Society Vista		
Chainage	325	375	425	460	100	150	
Offset	1.8	1.8	1.8	1.8	1.8	1.8	
	north	south	north	south	west	east	
	of kerb	of kerb	of kerb	of kerb	of kerb	of kerb	
Approximate depth from F.S.L.	m						
Measurement depth	mm	75	75	75	75	75	75
Field wet density	t/m ³	2.37	2.37	2.39	2.39	2.40	2.40
Field dry density	t/m ³	2.26	2.26	2.27	2.26	2.29	2.28
Field moisture content	%	5.0	5.0	5.0	5.5	5.0	5.0
<i>Laboratory Compaction AS 1289.5.2.1 & 5.4.2 Assigned Values (See Report No 203MVDCH)</i>							
Date of assignment	01/09/2020						
Material source and location	20mm Class 3 - MVQ, Donnybrook						
Compactive effort	MODIFIED						
Maximum Dry Density	t/m ³	2.31					
Optimum Moisture Content	%	7.5					
<i>Test procedure AS 1289.5.4.1</i>							
Oversize rock retained on sieve	mm	19.0	19.0	19.0	19.0	19.0	19.0
Percent of oversize material	wet	-	-	-	-	-	-
Percent of oversize material	dry	-	-	-	-	-	-
Adjusted Maximum Dry Density	t/m ³	-	-	-	-	-	-
Adjusted Optimum Moisture Content	%	-	-	-	-	-	-
Moisture Variation From Optimum Moisture Content		2.0% dry	2.5% dry	2.0% dry	1.5% dry	2.5% dry	2.0% dry
Moisture Ratio (R_m)	%	71.0	67.0	72.5	77.5	65.5	70.0
Density Ratio (R_D)	%	98.0	98.0	98.5	98.0	99.0	99.0

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COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES
6 - 8 Rose Avenue, Croydon, Vic 3136

Job No 20025
Report No 20025/R006
Date Issued 09/09/2020

Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	AC
Project	OLIVINE - STAGE 11	Date tested	08/09/20
Location	DONNYBROOK	Checked by	JHF

Feature	CLASS 3	Layer thickness	110 mm	Time:	09:18:36
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AS 12892.1.1 & 5.8.1						
Test No		27	28			
Location		Median Grange	Vicinity Road			
	Chainage	150	180			
	Offset	1.8	1.8			
		east of kerb	west of kerb			
Approximate depth from F.S.L.	m					
Measurement depth	mm	75	75			
Field wet density	t/m ³	2.38	2.38			
Field dry density	t/m ³	2.27	2.26			
Field moisture content	%	5.0	5.5			
Laboratory Compaction AS 1289.5.2.1 & 5.4.2 Assigned Values (See Report No 203MVDCH)						
Date of assignment		01/09/2020				
Material source and location		20mm Class 3 - MVQ, Donnybrook				
Compactive effort		MODIFIED				
Maximum Dry Density	t/m ³	2.31				
Optimum Moisture Content	%	7.5				
Test procedure AS 1289.5.4.1						
Oversize rock retained on sieve	mm	19.0	19.0			
Percent of oversize material	wet	-	-			
Percent of oversize material	dry	-	-			
Adjusted Maximum Dry Density	t/m ³	-	-			
Adjusted Optimum Moisture Content	%	-	-			
Moisture Variation From Optimum Moisture Content		2.5% dry	2.0% dry			
Moisture Ratio (R_m)	%	67.0	73.0			
Density Ratio (R_D)	%	98.5	98.0			

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COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES
6 - 8 Rose Avenue, Craydon, Vic 3136

Job No 20025
Report No 20025/R007
Date Issued 15/09/2020

Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	AC
Project	OLIVINE - STAGE 11	Date tested	15/09/20
Location	DONNYBROOK	Checked by	JHF

Feature	CLASS 2	Layer thickness	130 mm	Time:	11:33:56
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AS 12892.1.1 & 5.8.1							
Test No	29	30	31	32	33	34	
Location	Society Vista			Compass Crescent			
Chainage	100	150	460	425	375	325	
Offset	1.8	1.8	1.8	1.8	1.8	1.8	1.8
	east of kerb	west of kerb	north of kerb	south of kerb	north of kerb	south of kerb	south of kerb
Approximate depth from F.S.L.	m						
Measurement depth	mm	100	100	100	100	100	100
Field wet density	t/m ³	2.39	2.40	2.41	2.39	2.39	2.40
Field dry density	t/m ³	2.29	2.28	2.29	2.28	2.28	2.28
Field moisture content	%	4.5	5.5	5.5	4.5	5.0	5.0
<i>Laboratory Compaction AS 1289.5.2.1 & 5.4.2 Assigned Values (See Report No 202MVDCl)</i>							
Date of assignment	01/09/2020						
Material source and location	20mm Class 2 - MVQ, Donnybrook						
Compactive effort	MODIFIED						
Maximum Dry Density	t/m ³	2.33					
Optimum Moisture Content	%	7.5					
<i>Test procedure AS 1289.5.4.1</i>							
Oversize rock retained on sieve	mm	19.0	19.0	19.0	19.0	19.0	19.0
Percent of oversize material	wet	-	-	-	-	-	-
Percent of oversize material	dry	-	-	-	-	-	-
Adjusted Maximum Dry Density	t/m ³	-	-	-	-	-	-
Adjusted Optimum Moisture Content	%	-	-	-	-	-	-
Moisture Variation From Optimum Moisture Content		3.0% dry	2.0% dry	2.0% dry	3.0% dry	2.5% dry	2.0% dry
Moisture Ratio (R _m)	%	60.5	72.5	72.0	62.5	67.5	70.5
Density Ratio (R _D)	%	98.5	98.0	98.5	98.0	98.0	98.0

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COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES
6 - 8 Rose Avenue, Croydon, Vic 3136

Job No 20025
Report No 20025/R008
Date Issued 15/09/2020

Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	AC
Project	OLIVINE - STAGE 11	Date tested	15/09/20
Location	DONNYBROOK	Checked by	JHF

Feature	CLASS 2	Layer thickness	130 mm	Time:	12:16:03
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AS 12892.1.1 & 5.8.1

Test No	35	36	37	38	39	40
Location	Compass Crescent		Precinct Way			
Chainage	275	225	175	125	75	25
Offset	1.8	1.8	1.8	1.8	1.8	1.8
	south of kerb	north of kerb	west of kerb	east of kerb	west of kerb	east of kerb
Approximate depth from F.S.L.	m					
Measurement depth	mm					
Field wet density	t/m ³					
Field dry density	t/m ³					
Field moisture content	%					

Laboratory Compaction AS 1289.5.2.1 & 5.4.2 Assigned Values (See Report No 202MVDCl)

Date of assignment	01/09/2020
Material source and location	20mm Class 2 - MVQ, Donnybrook
Compactive effort	MODIFIED
Maximum Dry Density	t/m ³ 2.33
Optimum Moisture Content	% 7.5

Test procedure AS 1289.5.4.1

Oversize rock retained on sieve	mm	19.0	19.0	19.0	19.0	19.0	19.0
Percent of oversize material	wet	-	-	-	-	-	-
Percent of oversize material	dry	-	-	-	-	-	-
Adjusted Maximum Dry Density	t/m ³	-	-	-	-	-	-
Adjusted Optimum Moisture Content	%	-	-	-	-	-	-

Moisture Variation From Optimum Moisture Content	2.5% dry	2.5% dry	2.5% dry	3.0% dry	1.5% dry	3.0% dry
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Moisture Ratio (R_m)	%	69.0	64.0	67.5	56.0	77.5	56.0
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Density Ratio (R_ρ)	%	98.0	98.0	98.0	98.0	98.0	98.0
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COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES
6 - 8 Rose Avenue, Croydon, Vic 3136

Job No 20025
Report No 20025/R009
Date Issued 15/09/2020

Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	AC
Project	OLIVINE - STAGE 11	Date tested	15/09/20
Location	DONNYBROOK	Checked by	JHF

Feature	CLASS 2	Layer thickness	130 mm	Time:	12:59:59
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AS 12892.1.1 & 5.8.1						
Test No		41	42			
Location	Vicinity Road		Median Grange			
	Chainage	180	50			
	Offset	1.8 west of kerb	1.8 east of kerb			
Approximate depth from F.S.L.	m					
Measurement depth	mm	100	100			
Field wet density	t/m ³	2.39	2.40			
Field dry density	t/m ³	2.29	2.29			
Field moisture content	%	4.5	5.0			
Laboratory Compaction AS 1289.5.2.1 & 5.4.2 Assigned Values (See Report No 202MVDCl)						
Date of assignment		01/09/2020				
Material source and location		20mm Class 2 - MVQ, Donnybrook				
Compactive effort		MODIFIED				
Maximum Dry Density	t/m ³	2.33				
Optimum Moisture Content	%	7.5				
Test procedure AS 1289.5.4.1						
Oversize rock retained on sieve	mm	19.0	19.0			
Percent of oversize material	wet	-	-			
Percent of oversize material	dry	-	-			
Adjusted Maximum Dry Density	t/m ³	-	-			
Adjusted Optimum Moisture Content	%	-	-			
Moisture Variation From Optimum Moisture Content		3.0% dry	2.5% dry			
Moisture Ratio (R _m)	%	62.5	65.5			
Density Ratio (R _D)	%	98.0	98.0			

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