

 CIVIL GEOTECHNICAL SERVICES
 Job No
 17703

 6 - 8 Rose Avenue, Croydon, Vic 3136
 Pate Issued
 01/02/2018

 Client
 WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)
 Tested by
 AC

 Project
 ASTON - STAGE 28
 Date tested
 31/01/18

 Location
 CRAGIEBURN
 Checked by
 JHF

FeatureCLASS 3Layer thickness170 mmTime:07:29:39

Test No		1	2	3	4	5	6
Location		Scenery Drive Champion					n Parade
	Chainage	130	80	30	130	200	250
	Offset	1.8	1.8	1.8	1.8	1.8	1.8
		south	north	south	north	west	east
		of kerb	of kerb	of kerb	of kerb	of kerb	of kerb
Approximate depth from F.S.L.	т						
Measurement depth	mm	150	150	150	150	150	150
Field wet density	t/m³	2.37	2.36	2.36	2.36	2.34	2.37
Field dry density	t/m³	2.27	2.25	2.26	2.25	2.23	2.26
Field moisture content	%	4.5	4.5	4.5	5.0	5.0	4.5
Compactive effort Maximum Dry Density	MODIFIED 2.27 8.0						
Optimum Moisture Content Test procedure AS 1289.5.4.1	%			8.	0		
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/m³	-	-	-	-	-	-
Adjusted Optimum Moisture Conten	nt %	-	-	-	-	-	-
Moisture Variation From		4.0%	3.5%	4.0%	3.0%	3.0%	3.5%
Optimum Moisture Conte	nt	dry	dry	dry	drv	dry	dry
.,	-	/	,	<u> /</u>	,	,	/
Moisture Ratio (R _m)	%	53.0	58.5	53.0	61.0	62.0	57.0
		100.0					
Density Ratio (R _D)	%	100.0	99.0	99.5	99.0	98.0	99.5



July J



 CIVIL GEOTECHNICAL SERVICES
 Job No
 17703

 6 - 8 Rose Avenue, Croydon, Vic 3136
 Report No
 17703/R002

 Date Issued
 01/02/2018

 Client
 WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)
 Tested by
 AC

 Project
 ASTON - STAGE 28
 Date tested
 31/01/18

 Location
 CRAGIEBURN
 Checked by
 JHF

FeatureCLASS 3Layer thickness170 mmTime:07:33:55

Test No		7	8	9	10	11	12		
Location		Champion	n Parade	Edgewater Road		Esteem Road	t		
С	hainage	300	350	130	200	150	100		
I	Offset	1.8	1.8	1.8	1.8	1.8	1.8		
I		east	west	south	east	west	east		
		of kerb	of kerb	of kerb	of kerb	of kerb	of kerb		
Approximate depth from F.S.L.	т								
Measurement depth	mm	150	150	150	150	150	150		
Field wet density	t/m³	2.36	2.37	2.36	2.36	2.36	2.36		
Field dry density	t/m³	2.26	2.27	2.26	2.26	2.26	2.27		
Field moisture content	%	4.5	4.5	4.0	4.5	4.5	4.0		
Material source and location Compactive effort		20mm Class 3 - MVQ, Donnybrook MODIFIED							
Maximum Dry Density	t/m³			2.2	7				
Optimum Moisture Content	%			8.0	J				
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		
Oversize rock retained on sieve Percent of oversize material	wet	19.0	19.0	19.0	19.0	19.0	19.0		
Oversize rock retained on sieve Percent of oversize material Percent of oversize material	wet dry	19.0	19.0	19.0	19.0	19.0	19.0		
Oversize rock retained on sieve Percent of oversize material Percent of oversize material Adjusted Maximum Dry Density	wet dry t/m³	19.0 - - -	19.0 - - -	19.0	19.0 - - -	19.0	19.0		
Oversize rock retained on sieve Percent of oversize material Percent of oversize material	wet dry t/m³	-	19.0 - - -	-	19.0	19.0 - - -	19.0 - - - -		
Oversize rock retained on sieve Percent of oversize material Percent of oversize material Adjusted Maximum Dry Density Adjusted Optimum Moisture Content	wet dry t/m³	- - -		-	- - -				
Oversize rock retained on sieve Percent of oversize material Percent of oversize material Adjusted Maximum Dry Density Adjusted Optimum Moisture Content Moisture Variation From	wet dry t/m³ %	- - - - 4.0%	3.5%	4.0%	- - - - 4.0%		- - - - - 4.0%		
Oversize rock retained on sieve Percent of oversize material Percent of oversize material Adjusted Maximum Dry Density Adjusted Optimum Moisture Content	wet dry t/m³ %	- - -		-	- - -				
Oversize rock retained on sieve Percent of oversize material Percent of oversize material Adjusted Maximum Dry Density Adjusted Optimum Moisture Content Moisture Variation From Optimum Moisture Content	wet dry t/m³ %	- - - - 4.0%	3.5%	4.0%	- - - - 4.0%		- - - - 4.0%		
Oversize rock retained on sieve Percent of oversize material Percent of oversize material Adjusted Maximum Dry Density Adjusted Optimum Moisture Content Moisture Variation From	wet dry t/m³ %	- - - - 4.0% dry	3.5% dry	- - - - 4.0% dry	- - - 4.0% dry	- - - - 4.0% dry	- - - - 4.0% dry		



Approved Signatory : Justin Fry



Feature

COMPACTION ASSESSMENT

		Job No	17703
CIVIL GEOTEC	CHNICAL SERVICES	Report No	17703/R003
6 - 8 Rose Aven	ue, Croydon, Vic 3136	Date Issued	01/02/2018
Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	AC
Project	ASTON - STAGE 28	Date tested	31/01/18
Location	CRAGIEBURN	Checked by	JHF

170 mm

Time:

07:36:55

Layer thickness

AS 12892.1.1 & 5.8.1 Test No 13 Location Esteem Road Chainage 50 Offset 1.8 east of kerb Approximate depth from F.S.L. m Measurement depth 150 mm Field wet density t/m³ 2.37 Field dry density t/m³ 2.28 Field moisture content % 4.0 Laboratory Compaction AS 1289.5.2.1 & 5.4.2 Assigned Values (See Report No 203MVDBR) Date of assignment 07/12/2017 Material source and location 20mm Class 3 - MVQ, Donnybrook Compactive effort MODIFIED 2.27 Maximum Dry Density t/m³ Optimum Moisture Content % 8.0 Test procedure AS 1289.5.4.1 Oversize rock retained on sieve mm 19.0 Percent of oversize material wet Percent of oversize material dry _ Adjusted Maximum Dry Density t/m³ Adjusted Optimum Moisture Content % 4.5% Moisture Variation From **Optimum Moisture Content** dry Moisture Ratio (R_m) % 47.0 100.5 Density Ratio (RD) %



Approved Signatory: Justin Fry



 CIVIL GEOTECHNICAL SERVICES
 Job No
 17703

 6 - 8 Rose Avenue, Croydon, Vic 3136
 Report No
 17703/R004

 Date Issued
 28/03/2018

ClientWINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)Tested byACProjectASTON - STAGE 28Date tested28/03/18LocationCRAGIEBURNChecked byJHF

Feature CLASS 2 Layer thickness 130 mm Time: 07:50:31

Test No		14	15	16	17	18	19		
Location		Edge		Champio	n Parade		Scenery		
		Water		Drive					
	Chainage	130	350	300	250	200	130		
	Offset	1.8	1.8	1.8	1.8	1.8	1.8		
		south	east	west	east	west	north		
		of kerb	of kerb	of kerb	of kerb	of kerb	of kerb		
Approximate depth from F.S.L.	т								
Measurement depth	mm	100	100	100	100	100	100		
Field wet density	t/m³	2.32	2.30	2.30	2.30	2.28	2.32		
Field dry density	t/m³	2.24	2.23	2.24	2.23	2.22	2.24		
Field moisture content	%	3.5	3.0	3.0	3.5	3.0	3.5		
Compactive effort Maximum Dry Density	MODIFIED 2.27								
Date of assignment Material source and location		06/03/2018 20mm Class 2 - MVQ, Donnybrook							
Compactive effort									
·	t/m³ %	8.0							
Optimum Moisture Content	70			0	.0				
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/m³	-	-	-	-	-	-		
Adimeted Outline on Mainton Onet	ent %	_	_	-	-	-	-		
Adjusted Optimum Moisture Conte	JIIL 70			<u> </u>					
		4.50/	5.00/	5.00/	4.50/	F 00/	4.50/		
Moisture Variation From	m	4.5%	5.0%	5.0%	4.5%	5.0%	4.5%		
	m	4.5% dry	5.0% dry	5.0% dry	4.5% dry	5.0% dry	4.5% dry		
Moisture Variation From	m		0.0,0	0.070	,	0.070			
Moisture Variation From	m ent	dry	dry	dry	dry	dry	dry		



July Jo



 CIVIL GEOTECHNICAL SERVICES
 Job No
 17703

 6 - 8 Rose Avenue, Croydon, Vic 3136
 Report No
 17703/R005

 Date Issued
 28/03/2018

ClientWINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)Tested byACProjectASTON - STAGE 28Date tested28/03/18LocationCRAGIEBURNChecked byJHF

Feature CLASS 2 Layer thickness 130 mm Time: 07:54:27

Test No		20	21	22	23	24	25	
Location		S	cenery Parad	de	Esteem Road			
	Chainage	30	80	130	50	100	150	
	Offset	1.8	1.8	1.8	1.8	1.8	1.8	
		south	north	south	east	west	east	
		of kerb	of kerb	of kerb	of kerb	of kerb	of kerb	
Approximate depth from F.S.L.	т							
Measurement depth	mm	100	100	100	100	100	100	
Field wet density	t/m³	2.33	2.33	2.32	2.33	2.33	2.32	
Field dry density	t/m³	2.24	2.24	2.22	2.24	2.23	2.23	
Field moisture content	%	4.0	4.0	4.5	4.5	4.5	4.5	
Maximum Dry Density Optimum Moisture Content	t/m³ %							
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/m³	-	-	-	-	-	-	
Adjusted Optimum Moisture Conte	ent %	-	-	-	-	-	-	
Moisture Variation From	n	4.0%	4.0%	3.5%	4.0%	3.5%	3.5%	
Optimum Moisture Cont	ent	dry	dry	dry	dry	dry	dry	
Moisture Ratio (R _m)	%	50.0	47.5	54.5	53.0	53.5	53.5	



Approved Signatory: Justin Fry



		Job No	17703
CIVIL GEOTE	CHNICAL SERVICES	Report No	17703/R006
6 - 8 Rose Ave	nue, Croydon, Vic 3136	Date Issued	28/03/2018
Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	AC
Project	ASTON - STAGE 28	Date tested	28/03/18
Location	CRAGIEBURN	Checked by	JHF

FeatureCLASS 2Layer thickness130 mmTime:07:57:11

Test No		26				
Location		Esteem				
		Road				
С	hainage	200	1			
	Offset	1.8				
		west				
		of kerb				
Approximate depth from F.S.L.	т					
Measurement depth	mm	100				
Field wet density	t/m³	2.38				
Field dry density	t/m³	2.22				
Field moisture content	%	6.5				
•	4/202			MOI	MVQ, Donny DIFIED	
Compactive effort Maximum Dry Density Optimum Moisture Content	t/m³ %			MOI 2		
Maximum Dry Density Optimum Moisture Content				MOI 2	DIFIED .27	
Maximum Dry Density Optimum Moisture Content Test procedure AS 1289.5.4.1		19.0		MOI 2	DIFIED .27	
Maximum Dry Density Optimum Moisture Content Test procedure AS 1289.5.4.1 Oversize rock retained on sieve	%	19.0		MOI 2	DIFIED .27	
Maximum Dry Density Optimum Moisture Content Test procedure AS 1289.5.4.1 Oversize rock retained on sieve Percent of oversize material	mm			MOI 2	DIFIED .27	
Maximum Dry Density Optimum Moisture Content Test procedure AS 1289.5.4.1 Oversize rock retained on sieve Percent of oversize material Percent of oversize material	mm wet	-		MOI 2	DIFIED .27	
Maximum Dry Density Optimum Moisture Content Test procedure AS 1289.5.4.1 Oversize rock retained on sieve Percent of oversize material Percent of oversize material Adjusted Maximum Dry Density	mm wet dry t/m³	-		MOI 2	DIFIED .27	
Maximum Dry Density Optimum Moisture Content Test procedure AS 1289.5.4.1 Oversize rock retained on sieve Percent of oversize material Percent of oversize material Adjusted Maximum Dry Density Adjusted Optimum Moisture Content	mm wet dry t/m³	- - -		MOI 2	DIFIED .27	
Maximum Dry Density Optimum Moisture Content Test procedure AS 1289.5.4.1 Oversize rock retained on sieve Percent of oversize material Percent of oversize material Adjusted Maximum Dry Density Adjusted Optimum Moisture Content Moisture Variation From	mm wet dry t/m³ %	1.0%		MOI 2	DIFIED .27	
Maximum Dry Density Optimum Moisture Content Test procedure AS 1289.5.4.1 Oversize rock retained on sieve Percent of oversize material Percent of oversize material Adjusted Maximum Dry Density Adjusted Optimum Moisture Content	mm wet dry t/m³ %	- - -		MOI 2	DIFIED .27	
Maximum Dry Density Optimum Moisture Content Test procedure AS 1289.5.4.1 Oversize rock retained on sieve Percent of oversize material Percent of oversize material Adjusted Maximum Dry Density Adjusted Optimum Moisture Content Moisture Variation From	mm wet dry t/m³ %	1.0%		MOI 2	DIFIED .27	



Approved Signatory: Justin Fry



 CIVIL GEOTECHNICAL SERVICES
 Job No
 17703

 6 - 8 Rose Avenue, Croydon, Vic 3136
 Report No
 17703/R002

 Date Issued
 09/04/2018

ClientWINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)Tested byACProjectASTON - STAGE 28Date tested11/12/2017LocationCRAGIEBURNChecked byJHF

Feature CAPPING Layer thickness 150 mm Time: 08:02:22

Test No		27	28	29	30	31	32
Location		Scenery Drive	Edgewater Road		Champio	n Parade	
	Chainage	130	130	200	250	300	350
	Offset	1.8	1.8	1.8	1.8	1.8	1.8
		north	south	west	east	west	east
		of kerb	of kerb	of kerb	of kerb	of kerb	of kerb
Approximate depth from F.S.L.	т						
Measurement depth	mm	150	150	150	150	150	150
Field wet density	t/m³	2.36	2.37	2.36	2.36	2.36	2.36
Field dry density	t/m³	2.13	2.14	2.14	2.13	2.14	2.12
Field moisture content	%	10.0	10.0	9.0	10.0	9.5	10.0
Compactive effort Maximum Dry Density Optimum Moisture Content	t/m³ %	2.16 9.5					
Maximum Dry Density	-						
Test procedure AS 1289.5.4.1							
Oversize rock retained on sieve	mm	37.5	37.5	37.5	37.5	37.5	37.5
Percent of oversize material	wet	-	-	-	-	-	-
Percent of oversize material	dry	-	-	-	-	-	-
Adjusted Maximum Dry Density	t/m³	•	-	-	-	-	
Adjusted Optimum Moisture Content	: %	-	-	-	-	-	-
		1.0%	1.5%	0.5%	1.0%	0.5%	1.5%
Moisture Variation From		1.076	1.070	0.070	1.070	0.070	1.570
Moisture Variation From Optimum Moisture Conten	t	wet	wet	wet	wet	wet	wet
	nt %						



Approved Signatory: Justin Fry



 CIVIL GEOTECHNICAL SERVICES
 Report No
 17703/R008

 6 - 8 Rose Avenue, Croydon, Vic 3136
 Date Issued
 09/04/2018

ClientWINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)Tested byACProjectASTON - STAGE 28Date tested11/12/2017LocationCRAGIEBURNChecked byJHF

Feature CAPPING Layer thickness 150 mm Time: 08:55:31

Test No		33	34	35	36	37	38	
Location		Scener	Scenery Drive			Esteem Road		
	Chainage	60	120	50	100	150	200	
	Offset	1.8	1.8	1.8	1.8	1.8	1.8	
		south	north	west	east	west	east	
		of kerb	of kerb	of kerb	of kerb	of kerb	of kerb	
Approximate depth from F.S.L.	m							
Measurement depth	mm	150	150	150	150	150	150	
Field wet density	t/m³	2.37	2.36	2.36	2.36	2.34	2.37	
Field dry density	t/m³	2.14	2.12	2.16	2.12	2.15	2.13	
Field moisture content	%	10.0	10.5	8.5	10.5	8.5	10.0	
Compactive effort Maximum Dry Density	STANDARD 2.16							
Maximum Dry Density Optimum Moisture Content	t/m³ %	2.16 9.5						
Test procedure AS 1289.5.4.1						T		
Oversize rock retained on sieve	mm	37.5	37.5	37.5	37.5	37.5	37.5	
Percent of oversize material	wet	-	-	-	-	-	-	
Percent of oversize material	dry	-	•	-	-	-	-	
Adjusted Maximum Dry Density Adjusted Optimum Moisture Conte	t/m³ nt %	-	-	-	-	-	-	
Adjusted Optimum Moisture Conte	π 70		-	-	-	-		
Moisture Variation From	,	1.5%	1.5%	0.0%	2.0%	0.5%	1.5%	
Optimum Moisture Conte	ent	wet	wet	dry	wet	dry	wet	
Moisture Ratio (R _m)	%	113.5	117.0	97.5	118.5	92.5	115.0	
Density Ratio (R _D)	%	99.0	98.5	100.0	98.5	99.5	99.0	



July Jo