



COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon, Vic 3136

Job No 14253
 Report No 14253/R001
 Date Issued 29/07/14

Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	JWM
Project	ASTON - STAGE 14	Date tested	17/07/14
Location	CRAIGIEBURN	Checked by	JHF

Feature	SUBBASE	Layer thickness	75 mm	Time:	11:00:13
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AS 12892.1.1 & 5.8.1

Test No	1	2	3	4	5	6
Location	Euphoria Street			Zealous Way		Stud Road
Chainage Offset	120 2m east of kerb	180 2m west of kerb	240 1m east of kerb	15 1.5m north of kerb	85 2m south of kerb	75 1.5m north 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 203HWBO)

Date of assignment	21/07/14
Material source and location	20mm Class 3 - Hanson, Wollert
Compactive effort	MODIFIED
Maximum Dry Density	t/m ³ 2.25
Optimum Moisture Content	% 8.5

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	0.5%	0.5%	0.5%	0.5%	0.0%	0.0%
	dry	dry	wet	dry	dry	wet

Moisture Ratio (R_m)	%	97.0	94.0	107.5	96.0	98.5	102.0
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Density Ratio (R_D)	%	100.0	105.0	98.0	98.5	98.5	98.0
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The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/National standards. Accredited for compliance to ISO/IEC 17025. Accreditation No 9909

Approved Signatory : Justin Fry



COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon, Vic 3136

Job No 14253
 Report No 14253/R002
 Date Issued 29/07/14

Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	JWM
Project	ASTON - STAGE 14	Date tested	17/07/14
Location	CRAIGIEBURN	Checked by	JHF

Feature	SUBBASE	Layer thickness	75 mm	Time:	11:30:24
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AS 12892.1.1 & 5.8.1

Test No	7					
Location	Stud Road					
Chainage Offset	15 1.5m south of kerb					
Approximate depth from F.S.L.	m					
Measurement depth	mm	50				
Field wet density	t/m ³	2.42				
Field dry density	t/m ³	2.22				
Field moisture content	%	9.0				

Laboratory Compaction AS 1289.5.2.1 & 5.4.2 Assigned Values (See Report No 203HWBO)

Date of assignment	21/07/14
Material source and location	20mm Class 3 - Hanson, Wollert
Compactive effort	MODIFIED
Maximum Dry Density	t/m ³ 2.25
Optimum Moisture Content	% 8.5

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/m ³	-				
Adjusted Optimum Moisture Content	%	-				

Moisture Variation From Optimum Moisture Content	0.5%	wet				
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Moisture Ratio (R_m)	%	106.5				
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Density Ratio (R_D)	%	98.5				
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COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon, Vic 3136

Job No 14253
 Report No 14253/R003
 Date Issued 15/12/2014

Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	JWM
Project	ASTON - STAGE 14	Date tested	30/07/14
Location	CRAIGIEBURN	Checked by	JHF

Feature	SUBBASE	Layer thickness	75 mm	Time:	08:01:19
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AS 12892.1.1 & 5.8.1

Test No	8	9	10	11	12	
Location	Natural Drive			Fame Way		
Chainage Offset	260.0 2m west of kerb	340.0 1.5m east of kerb	430.0 2.5m east of kerb	160.0 2m north of kerb	80.0 3m south 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 233HWAB)

Date of assignment	13/10/2014
Material source and location	20mm Class 3 + 1% CTCR - HANSON, Wollert
Compactive effort	MODIFIED
Maximum Dry Density	t/m ³ 2.21
Optimum Moisture Content	% 9.0

Test procedure AS 1289.5.4.1

Oversize rock retained on sieve	mm	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	1.0%	9.0%	0.5%	2.5%	2.0%	
	wet	wet	wet	wet	wet	

Moisture Ratio (R_m)	%	112.0	201.0	103.5	126.5	122.5	
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Density Ratio (R_D)	%	92.0	85.5	90.5	92.0	93.0	
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CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon, Vic 3136

Job No 14253
 Report No 14253/R004
 Date Issued 15/12/2014

Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	JWM
Project	ASTON - STAGE 14	Date tested	01/09/14
Location	CRAIGIEBURN	Checked by	JHF

Feature	BASE	Layer thickness	150 mm	Time:	10:35:50
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AS 12892.1.1 & 5.8.1

Test No	13	14	15	16	17	18
Location	Fame Way		Natural Drive		Euphoria Street	
Chainage	85	160	450	330	165	230
Offset	1.2	1.5	2	1.8	1.2	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.	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 202ACMAM)

Date of assignment	14/10/2014
Material source and location	20mm Class 2 - ACM, Epping
Compactive effort	MODIFIED
Maximum Dry Density	t/m ³ 2.27
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	1.5%	3.0%	2.5%	2.5%	3.5%	2.5%
	dry	dry	dry	dry	dry	dry

Moisture Ratio (R_m)	%	77.5	62.0	63.5	64.5	56.0	65.5
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Density Ratio (R_D)	%	98.0	99.5	97.5	96.5	96.5	96.5
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COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon, Vic 3136

Job No 14253
Report No 14253/R005
Date Issued 15/12/14

Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	JWM
Project	ASTON - STAGE 14	Date tested	02/09/14
Location	CRAIGIEBURN	Checked by	JHF

Feature	BASE	Layer thickness	150 mm	Time:	08:30:39
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AS 12892.1.1 & 5.8.1

Test No		19	20	21	22	23	24
Location		Euphoria Street		Stud Road	Natural Drive		Zealous Way
Chainage		225.0	140.0	50.0	295.0	420.0	55.0
Offset		1.2	1.8	1.5	1.2	1.5	1.2
		east of kerb	west of kerb	north of kerb	east of kerb	west of kerb	south of kerb
Approximate depth from F.S.L.	m						
Measurement depth	mm	125	125	125	125	125	125
Field wet density	t/m ³	2.37	2.33	2.33	2.36	2.36	2.36
Field dry density	t/m ³	2.25	2.21	2.21	2.22	2.23	2.23
Field moisture content	%	6.0	5.5	5.5	6.0	6.0	6.0

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

Date of assignment		14/10/14
Material source and location		20mm Class 2 - ACM, Epping
Compactive effort		MODIFIED
Maximum Dry Density	t/m ³	2.27
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		1.5% dry	2.0% dry	2.0% dry	1.5% dry	1.5% dry	1.5% dry
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Moisture Ratio (R _m)	%	77.5	72.0	73.5	80.0	79.0	77.5
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Density Ratio (R _D)	%	99.0	97.5	97.5	98.0	98.5	98.0
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COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon, Vic 3136

Job No 14253
 Report No 14253/R006
 Date Issued 15/12/14

Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	JWM
Project	ASTON - STAGE 14	Date tested	02/09/14
Location	CRAIGIEBURN	Checked by	JHF

Feature	BASE	Layer thickness	150 mm	Time:	09:00:49
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AS 12892.1.1 & 5.8.1

Test No		25	26			
Location		Fame Way				
Chainage		160.0	85.0			
Offset		1.2 north of kerb	1.5 south of kerb			
Approximate depth from F.S.L.	m					
Measurement depth	mm	125	125			
Field wet density	t/m ³	2.24	2.29			
Field dry density	t/m ³	2.13	2.14			
Field moisture content	%	6.0	7.0			

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

Date of assignment	14/10/14
Material source and location	20mm Class 2 - ACM, Epping
Compactive effort	MODIFIED
Maximum Dry Density	t/m ³ 2.27
Optimum Moisture Content	%

Test procedure AS 1289.5.4.1

Test No		25	26			
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		2.0% dry	0.5% dry			
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Moisture Ratio (R_m)		75.5	92.5			
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Density Ratio (R_D)		93.5	94.5			
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