



COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon, Vic 3136

Job No 16427
Report No 16427/R001
Date Issued 18/04/2017

Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	WS
Project	HAVEN ESTATE - STAGE 6	Date tested	02/02/2017
Location	TARNEIT	Checked by	JHF

Feature	DRAINAGE	Layer thickness	200 mm	Time:	14:05:37
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AS 12892.1.1 & 5.8.1

Test No		1	2	3	4	5	6
Location							
	Pit	12 - 30	11 - 29	27 - 10	7 - 6	5 - 15	4 - 14
Approximate depth from F.S.L.	m						
Measurement depth	mm	175	175	175	175	175	175
Field wet density	t/m ³	2.39	2.40	2.43	2.39	2.40	2.40
Field dry density	t/m ³	2.26	2.28	2.26	2.27	2.26	2.28
Field moisture content	%	6.0	5.5	7.0	5.5	6.5	5.5

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

Date of assignment		05/04/17
Material source and location		20mm Class 3 - MVQ, Wyndham Vale
Compactive effort		MODIFIED
Maximum Dry Density	t/m ³	2.29
Optimum Moisture Content	%	8.0

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/m ³	-	-	-	-	-	-
Adjusted Optimum Moisture Content	%	-	-	-	-	-	-

Moisture Variation From Optimum Moisture Content		2.0% dry	2.5% dry	0.5% dry	2.5% dry	1.5% dry	2.5% dry
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Moisture Ratio (R _m)	%	74.0	67.5	91.5	69.5	80.5	67.5
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Density Ratio (R _D)	%	98.5	99.5	99.0	99.0	98.5	99.5
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Approved Signatory : Justin Fry



COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon, Vic 3136

Job No 16427
Report No 16427/R002
Date Issued 18/04/2017

Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	WS
Project	HAVEN ESTATE - STAGE 6	Date tested	02/02/2017
Location	TARNEIT	Checked by	JHF

Feature	DRAINAGE	Layer thickness	200 mm	Time:	14:32:18
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AS 12892.1.1 & 5.8.1

Test No		7	8				
Location							
	Pit	21 - 22	19 - 18				
Approximate depth from F.S.L.	m						
Measurement depth	mm	175	175				
Field wet density	t/m ³	2.38	2.42				
Field dry density	t/m ³	2.24	2.26				
Field moisture content	%	6.0	7.0				

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

Date of assignment		05/04/17
Material source and location		20mm Class 3 - MVQ, Wyndham Vale
Compactive effort		MODIFIED
Maximum Dry Density	t/m ³	2.29
Optimum Moisture Content	%	8.0

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		2.0% dry	1.0% dry				
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Moisture Ratio (R _m)	%	77.0	88.5				
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Density Ratio (R _D)	%	98.0	99.0				
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COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon, Vic 3136

 Job No 16427
 Report No 16427/R003
 Date Issued 03/02/17

Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	NB
Project	HAVEN ESTATE - STAGE 6	Date tested	02/02/17
Location	TARNEIT	Checked by	JHF

Feature	CAPPING	Layer thickness	150 mm	Time:	13:01:02
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AS 12892.1.1 & 5.8.1

Test No	9	10	11	12	13	14
Location	Leo Avenue				Homeland Drive	
Chainage	200	250	300	400	50	100
Offset	2.0	2.0	2.0	2.0	2.0	2.0
	north	south	north	south	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	%					

Laboratory Compaction AS 1289.5.1.1 & 5.4.2 Assigned Values (See Report No 40SMWVAQ)

Date of assignment	19/01/17
Material source and location	40mm Capping - MVQ, Wyndham Vale
Compactive effort	STANDARD
Maximum Dry Density	t/m ³ 1.99
Optimum Moisture Content	% 12.5

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/m ³	-	-	-	-	-	-
Adjusted Optimum Moisture Content	%	-	-	-	-	-	-

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

Moisture Ratio (R_m)	%	90.0	85.5	85.0	93.5	85.0	85.0
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Density Ratio (R_D)	%	99.5	100.0	100.5	99.0	101.5	101.5
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COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon, Vic 3136

Job No 16427
 Report No 16427/R004
 Date Issued 14/02/17

Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	NB
Project	HAVEN ESTATE - STAGE 6	Date tested	03/02/17
Location	TARNEIT	Checked by	JHF

Feature	CAPPING	Layer thickness	150 mm	Time:	13:09:08
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AS 12892.1.1 & 5.8.1

Test No	15	16	17	18	19	
Location	Sidon Circuit		Homeland Drive			
Chainage	25	335	150	200	250	
Offset	2.0	3.6	1.4	2.1	3.0	
	east	west	north	south	north	
	of kerb	of kerb	of kerb	of kerb	of kerb	
Approximate depth from F.S.L.	m					
Measurement depth	mm	125	125	125	125	125
Field wet density	t/m ³	2.17	2.19	2.15	2.18	2.17
Field dry density	t/m ³	1.97	1.98	1.95	1.97	1.97
Field moisture content	%	10.0	10.0	10.0	10.0	10.0

Laboratory Compaction AS 1289.5.1.1 & 5.4.2 Assigned Values (See Report No 40SMWVAQ)

Date of assignment	19/01/17
Material source and location	40mm Capping - MVQ, Wyndham Vale
Compactive effort	STANDARD
Maximum Dry Density	t/m ³ 1.99
Optimum Moisture Content	% 12.5

Test procedure AS 1289.5.4.1

Oversize rock retained on sieve	mm	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/m ³	-	-	-	-	-	
Adjusted Optimum Moisture Content	%	-	-	-	-	-	

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

Moisture Ratio (R_m)	%	81.0	84.5	81.0	84.5	82.0	
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Density Ratio (R_D)	%	98.5	99.0	98.0	99.0	98.5	
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COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon, Vic 3136

Job No 16427
Report No 16427/R005
Date Issued 30/02/2017

Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	N B
Project	HAVEN ESTATE - STAGE 6	Date tested	23/02/17
Location	TARNEIT	Checked by	JHF

Feature	LCASS 3	Layer thickness	225 mm	Time:	08:05:28
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AS 12892.1.1 & 5.8.1

Test No		20	21	22	23	24	25
Location		Leo Avenue					homeland drive
Chainage		200	250	300	350	400	50
Offset		2.0	2.0	2.0	2.0	2.0	2.0
		north of kerb	south of kerb	north of kerb	south of kerb	north of kerb	south of kerb
Approximate depth from F.S.L.	m						
Measurement depth	mm	175	175	175	175	175	175
Field wet density	t/m ³	2.41	2.44	2.41	2.39	2.45	2.36
Field dry density	t/m ³	2.28	2.31	2.28	2.26	2.32	2.24
Field moisture content	%	6.0	6.0	5.5	6.0	6.0	5.5

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

Date of assignment		17/02/2017
Material source and location		20mm Class 3 - MVQ, Wyndham Vale
Compactive effort		MODIFIED
Maximum Dry Density	t/m ³	2.29
Optimum Moisture Content	%	8.0

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/m ³	-	-	-	-	-	-
Adjusted Optimum Moisture Content	%	-	-	-	-	-	-

Moisture Variation From Optimum Moisture Content		2.0% dry	2.0% dry	2.5% dry	1.5% dry	2.0% dry	2.0% dry
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Moisture Ratio (R _m)	%	76.5	75.5	70.0	77.5	74.0	72.5
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Density Ratio (R _D)	%	99.5	101.0	100.0	98.5	101.5	98.0
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COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon, Vic 3136

Job No 16427
 Report No 16427/R006
 Date Issued 30/02/2017

Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	N B
Project	HAVEN ESTATE - STAGE 6	Date tested	23/02/17
Location	TARNEIT	Checked by	JHF

Feature	CLASS 3	Layer thickness	215 mm	Time:	09:04:03
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AS 12892.1.1 & 5.8.1

Test No	26	27	28	29			
Location	Homeland Drive						
Chainage	100	150	200	250			
Offset	2.0	2.0	2.0	2.0			
	north	south	north	of kerb			
	of kerb	of kerb	of kerb	of kerb			
Approximate depth from F.S.L.	m						
Measurement depth	mm	175	175	175	175		
Field wet density	t/m ³	2.41	2.41	2.39	2.41		
Field dry density	t/m ³	2.26	2.28	2.25	2.26		
Field moisture content	%	6.0	5.5	6.0	6.5		

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

Date of assignment	17/02/2017
Material source and location	20mm Class 3 - MVQ, Wyndham Vale
Compactive effort	MODIFIED
Maximum Dry Density	t/m ³ 2.29
Optimum Moisture Content	% 8.0

Test procedure AS 1289.5.4.1

Oversize rock retained on sieve	mm	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%	2.0%	1.5%	1.5%		
		dry	dry	dry	dry		

Moisture Ratio (R_m)	%	81.0	74.5	78.0	84.0		
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Density Ratio (R_D)	%	99.0	99.5	98.5	99.0		
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COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon, Vic 3136

Job No 16427
Report No 16427/R007
Date Issued 30/02/2017

Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	N B
Project	HAVEN ESTATE - STAGE 6	Date tested	23/02/17
Location	TARNEIT	Checked by	JHF

Feature	CLASS 3	Layer thickness	150 mm	Time:	09:28:58
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AS 12892.1.1 & 5.8.1

Test No		30	31				
Location		Sidon Circuit					
Chainage		25	330				
Offset		2.0	2.0				
		east	west				
		of kerb	of kerb				
Approximate depth from F.S.L.	m						
Measurement depth	mm	125	125				
Field wet density	t/m ³	2.49	2.44				
Field dry density	t/m ³	2.30	2.26				
Field moisture content	%	8.5	7.5				

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

Date of assignment		17/02/2017
Material source and location		20mm Class 3 - MVQ, Wyndham Vale
Compactive effort		MODIFIED
Maximum Dry Density	t/m ³	2.29
Optimum Moisture Content	%	8.0

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		1.0%	0.0%				
		wet	wet				

Moisture Ratio (R _m)	%	111.0	102.5				
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Density Ratio (R _D)	%	100.5	98.5				
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