

Material Test Report



LABORATORIES

Gympie Laboratory

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Report Number: GSGY-GLN-25-293-4
Issue Number: 1
Date Issued: 05/09/2025
Client: ROBERTS BROS PTY LTD
PO BOX 247, COOROY QLD 4563
Contact: PHIL ROBERTS
Project Number: GSGY-GLN-25-293
Project Name: GREENDALE STAGE 7
Project Location: LOT 99 ON SP345311 (#95) MOOLOO ROAD, PIE CREEK
Work Request: 5746
Dates Tested: 27/08/2025 - 05/09/2025
Sampling Method: AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted
Preparation Method: AS 1289.1.1 - Sampling and Preparation of Soils
Specification: Minimum 95% Hilt Density Ratio
Site Selection: AS 1289.1.4.1
Test Area Bounds: Start: End: Left: Right:
Location: Greendale Stage 7 - Lot 24 - Level 1 Supervision
Lot Number: 24
Material: Embankment Fill
Material Source: Onsite



Accredited for compliance with ISO/IEC 17025 - Testing

Approved Signatory: Cameron Crawford
General Manager

NATA Accredited Laboratory Number: 20956

Compaction Control AS 1289 5.7.1 & 5.8.1 & 2.1.1					
Sample Number	G5746A	G5746B	G5746C	G5746D	G5746E
Date Tested	27/08/2025	27/08/2025	29/08/2025	29/08/2025	29/08/2025
Time Tested	10:50	10:55	14:10	14:15	14:25
Test Request #/Location	27/8/25 Lot 24	27/8/25 Lot 24	29/8/25 Lot 24	29/8/25 Lot 24	29/8/25 Lot 24
Easting	462651.66	462667.48	462657.03	462670.61	462681.40
Northing	7096285.04	7096279.10	7096270.83	7096267.95	7096265.39
Elevation (m)	69.67	69.56	70.41	70.27	70.29
Layer / Reduced Level	Embankment Fill	Embankment Fill	Embankment Fill	Embankment Fill	Embankment Fill
Thickness of Layer (mm)	300	300	300	300	300
Soil Description	Embankment Fill	Embankment Fill	Embankment Fill	Embankment Fill	Embankment Fill
Test Depth (mm)	275	275	275	275	275
Sieve used to determine oversize (mm)	19.0	19.0	19.0	19.0	19.0
Percentage of Wet Oversize (%)	0	0	0	0	0
Field Wet Density (FWD) t/m ³	2.10	2.14	2.03	2.00	2.07
Field Moisture Content %	19.8	20.3	18.6	19.3	19.3
Field Dry Density (FDD) t/m ³	1.76	1.78	1.71	1.68	1.74
Peak Converted Wet Density t/m ³	2.03	2.02	2.00	2.00	1.99
Adjusted Peak Converted Wet Density t/m ³	**	**	**	**	**
Moisture Variation (Wv) %	1.0	-0.5	0.5	1.0	0.5
Adjusted Moisture Variation %	**	**	**	**	**
Hilt Density Ratio (%)	103.5	106.5	101.5	100.0	104.0
Compaction Method	Standard	Standard	Standard	Standard	Standard
Remarks	**	**	**	**	**

Moisture Variation Note:

Positive values = test is dry of OMC

Negative values = test is wet of OMC

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BCaulley

Approved Signatory: Benjamin Caulley

Laboratory Assistant Manager

NATA Accredited Laboratory Number: 20956

Report Number: GSGY-GLN-25-293-12
Issue Number: 2 - This version supersedes all previous issues
Reissue Reason: Additional compaction results
Date Issued: 24/11/2025
Client: ROBERTS BROS PTY LTD
PO BOX 247, COOROY QLD 4563
Contact: PHIL ROBERTS
Project Number: GSGY-GLN-25-293
Project Name: GREENDALE STAGE 7
Project Location: LOT 99 ON SP345311 (#95) MOOLOO ROAD, PIE CREEK
Work Request: 6280
Date Sampled: 11/11/2025
Dates Tested: 12/11/2025 - 20/11/2025
Sampling Method: AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted
Preparation Method: AS 1289.1.1 - Sampling and Preparation of Soils
Specification: Minimum 95% Hilt Density Ratio
Location: Greendale Stage 7 - Lot 24 - Level 1 Supervision
Lot Number: Lot 24
Material: Embankment Fill
Material Source: Onsite

Compaction Control AS 1289 5.7.1 & 5.8.1 & 2.1.1				
Sample Number	G6280A	G6280B	G6280C	G6280D
Date Tested	11/11/2025	11/11/2025	11/11/2025	19/11/2025
Time Tested	09:15	09:20	09:25	11:00
Test Request #/Location	Lot 24	Lot 24	Lot 24	Lot 24
Easting	462662.24	462693.57	462661.27	462685.30
Northing	7096295.66	7096262.22	7096275.09	7096260.88
Elevation (m)	70.72	70.18	70.60	70.82
Layer / Reduced Level	Embankment Fill	Embankment Fill	Embankment Fill	Embankment Fill
Thickness of Layer (mm)	300	300	300	300
Soil Description	Embankment Fill	Embankment Fill	Embankment Fill	Embankment Fill
Test Depth (mm)	275	275	275	275
Sieve used to determine oversize (mm)	19.0	19.0	19.0	19.0
Percentage of Wet Oversize (%)	**	0	**	**
Field Wet Density (FWD) t/m ³	2.02	2.09	2.11	2.01
Field Moisture Content %	16.2	16.0	15.7	14.5
Field Dry Density (FDD) t/m ³	1.74	1.80	1.83	1.76
Peak Converted Wet Density t/m ³	1.94	2.02	2.02	2.09
Adjusted Peak Converted Wet Density t/m ³	**	**	**	**
Moisture Variation (Wv) %	4.0	2.0	2.0	1.0
Adjusted Moisture Variation %	**	**	**	**
Hilt Density Ratio (%)	104.5	103.5	105.0	96.5
Compaction Method	Standard	Standard	Standard	Standard
Remarks	**	**	**	**

Moisture Variation Note:

Positive values = test is dry of OMC

Negative values = test is wet of OMC

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Approved Signatory: Benjamin Caulley

Laboratory Assistant Manager

NATA Accredited Laboratory Number: 20956

Report Number: GSGY-GLN-25-293-12
Issue Number: 2 - This version supersedes all previous issues
Reissue Reason: Additional compaction results
Date Issued: 24/11/2025
Client: ROBERTS BROS PTY LTD
PO BOX 247, COOROY QLD 4563
Contact: PHIL ROBERTS
Project Number: GSGY-GLN-25-293
Project Name: GREENDALE STAGE 7
Project Location: LOT 99 ON SP345311 (#95) MOOLOO ROAD, PIE CREEK
Work Request: 6280
Date Sampled: 11/11/2025
Dates Tested: 12/11/2025 - 20/11/2025
Sampling Method: AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted
Preparation Method: AS 1289.1.1 - Sampling and Preparation of Soils
Specification: Minimum 95% Hilt Density Ratio
Location: Greendale Stage 7 - Lot 24 - Level 1 Supervision
Lot Number: Lot 24
Material: Embankment Fill
Material Source: Onsite

Compaction Control AS 1289 5.7.1 & 5.8.1 & 2.1.1				
Sample Number	G6280E	G6280F	G6280G	
Date Tested	19/11/2025	19/11/2025	19/11/2025	
Time Tested	11:05	11:15	11:20	
Test Request #/Location	Lot 24	Lot 24	Lot 24	
Easting	462686.98	462662.71	462657.70	
Northing	7096282.80	7096289.61	709627.78	
Elevation (m)	70.85	71.10	71.12	
Layer / Reduced Level	Embankment Fill	Embankment Fill	Embankment Fill	
Thickness of Layer (mm)	300	300	300	
Soil Description	Embankment Fill	Embankment Fill	Embankment Fill	
Test Depth (mm)	275	275	275	
Sieve used to determine oversize (mm)	19.0	19.0	19.0	
Percentage of Wet Oversize (%)	**	**	**	
Field Wet Density (FWD) t/m ³	2.00	2.03	2.06	
Field Moisture Content %	14.5	14.7	14.7	
Field Dry Density (FDD) t/m ³	1.75	1.77	1.79	
Peak Converted Wet Density t/m ³	2.03	2.00	2.08	
Adjusted Peak Converted Wet Density t/m ³	**	**	**	
Moisture Variation (Wv) %	1.5	2.0	1.5	
Adjusted Moisture Variation %	**	**	**	
Hilt Density Ratio (%)	98.5	101.5	98.5	
Compaction Method	Standard	Standard	Standard	
Remarks	**	**	**	

Moisture Variation Note:

Positive values = test is dry of OMC

Negative values = test is wet of OMC