

EARTHWORKS CERTIFICATION LEVEL 1 INSPECTION & TESTING PROGRAM Courtney Drive Upper Coomera CCA Winslow March 2025 PG-4116-A



ABN: 62 615 248 952



Ref:PG-4116-A, 2024-07-19, LVR VER 1 (Stage 2)Author:Ben Elsmore

4th March, 2025

CCA Winslow Email: <u>michael.williams@winslow.com.au</u> CC: <u>michaelj@winslow.com.au</u>; <u>aaron.fysh@winslow.com.au</u>

ATTN: MICHAEL WILLIAMS

Dear Sir,

EARTHWORKS CERTIFICATION - LEVEL 1 INSPECTION & TESTING PROGRAM – PROPOSED RESIDENTIAL DEVELOPMENT – STAGE 2 - COURTNEY DRIVE, UPPER COOMERA

1.0 INTRODUCTION

This report summarises the results of the Level 1 Geotechnical Inspection and Testing program carried out by Pacific Geotech Pty Ltd at the above site between October 2023 and June 2024 during the bulk earthworks program.

The scope of the geotechnical services provided comprised the following:

- Assessment of the stripped surface prior to filling.
- General removal of organics and deleterious materials from the stripped surface and transported fill material. It should be noted that under the instructions of the Client, Pacific Geotech was prevented from stick picking while machines were in operation. As a result, a small volume of organic material is present within the lower layers of the fill material.
- Assessment and associated supervision of the removal of unsuitable material.
- Supervision and associated nuclear densometer testing of the placed fill material.

The fill material comprised initially of a sandy clay and gravelly clay fill material won for the upslope cut areas of the development site. As the cuts progressed, stronger less weathered and less fractured rock was encountered which initially broke down to a sandy gravelly clay and clayey sandy gravel with some cobbles and small boulders throughout. As these cuts progressed, the volume of boulders within the fill material increased and the volume of fines decreased. Whilst some effort was made to either break down or remove the over-sized particles from the fill mass, some over-sized particles are present within the material.





The upper approximately 1.0m to 1.5m of the fill material comprised processed rock fill which was put through a crusher and generally broke down to a clayey sandy gravel (GC) with particles between 50mm and 75mm in size within the fill mass making up in the order of 20% to 25% of the total fill volume.

Supervision was generally carried out by Lyle Slater, Dave Trotman and Ian Masman of our office.

2.0 LEVEL 1 INSPECTION & TESTING PROGRAM

2.1 <u>Project Specifications</u>

The engineering inspection and testing program was carried out in general accordance with AS 3798-2007, 'Guidelines on earthworks for commercial and residential developments', Sections 8.2, 'Level 1 Inspection and Testing'.

Project compaction criteria for the earthworks adopted are summarised in Table 1.

TABLE 1PROJECT COMPACTION SPECIFICATION

Location	Minimum Dry Density Ratio (%)	Moisture Specification		
General Development Area	95	±2% of OMC		
Behind Retaining Walls	95	±2% of OMC		
Note:				
The recommended compaction is a percentage of the Maximum Dry Density determined				
by Australian Standard 1289 5.1.1 (Standard C	Compaction).			

2.1 <u>Compaction Methodology</u>

Compaction was carried generally carried out using the combination of a 12 tonne to 15 tonne, vibratory pad foot roller and a Cat 815 compactor.

Initially, general fill layers of approximately 300mm to 400mm (loose) layer thickness were placed. As the material became coarser and more difficult to break down, the fill layers were initially reduced to 150mm to 200mm loose layer thickness in order to more readily identify and remove or otherwise breakdown the over-sized rock particles. The fill layers then increased back to 300mm to 400mm resulting in an increase in oversize material within the fill mass. This is not to say the soil profile is not fit for purpose, just that some oversize material is present within the fill.

Proof rolling carried out at each fill later and at the completion of backfill works, generally indicated no appreciable movement. Areas which displayed excessive movement were generally reworked and a subsequent proof roll carried out.



2.2 Field Density Testing

Compaction control testing was carried out by nuclear field density testing (test method AS1289 5.8.1). Testing was carried out at a frequency in general accordance with AS 3798-2007, Table 8.1 'Frequency of Field Density Tests'. A total of 70 tests were undertaken during the backfill works within these Lots (including retests).

Typically, due to the coarse nature of the fill material, 'B' moulds were used to undertake the laboratory compaction tests in accordance with AS 1289.

The density test results are presented on the Dry Density Ratio Reports. The reports detail the test number, the date of the test, the location of the test and the relative level of the test location together with the test results.

It should be carefully noted that several density tests could not be tested in accordance with the laboratory test method due to the collected samples having greater than 20% of the mass of particles retained on the 37.5mm sieve. These areas were generally reworked until suitable testing using 'B' moulds could be undertaken.

It should be further noted that the moisture variation of several test results is outside specification. Attempts were made to recondition this material during the works to approximate OMC.

Where failures were recorded, retests were generally taken where appropriate tests could be taken in the recompacted material.

The reports are identified by the following report numbers. It should be noted that the attached test reports contain test results from Stages 1 and 3 as well as stage 2. This is due to the bulk earthworks for Stages 1, 2 and 3 being carried out concurrently.

Report Number	Sample Number	Location	Date of Test	Dry Density Ratio (%)	Moisture Ratio (%) ⁽¹⁾
	G23-978-D	527401m E, 6917086mN	24/10/2023	95.0	2.5
FG-4110-A-3	G23-978-E	527381m E, 6917100m N	24/10/2023	95.0	2.5
PG-4116-A-4	G23-981-G	527347m E, 6917157m N	25/10/2023	95.5	2.0
	G23-988-A	527353m E, 6917164m N	26/10/2023	99.0	5.0
	G23-988-B	527351m E, 6917138m N	26/10/2023	93.0*	2.0
FG-4110-A-3	G23-988-C	527382m E, 6917109m N	26/10/2023	102	1.0
	G23-988-D	527382m E, 6917089m N	26/10/2023	98.0	1.5
	G23-991-A	527347m E, 6917165m N	27/10/2023	100.0	5.0
PG-4116-A-6	G23-991-B	527369m E, 6917141m N	27/10/2023	97.5	0.5
	G23-991-C	527320m E, 6917212m N	27/10/2023	99.5	5.0
	G23-992-A	527288m E, 6917135m N	30/10/2023	91.0*	4.0
PG-4116-A-7	G23-992-B	527282m E, 6917202m N	30/10/2023	95.5	3.0
	G23-992-C	527303m E, 6917219m N	30/10/2023	96.0	2.0
	G23-994-F	527286m E, 6917123m N	31/10/2023	99.0	2.0
	G23-994-G	527276m E, 6917077m N	31/10/2023	96.0	1.0
Г G-4110-А-0	G23-994-H	527296m E, 6917142m N	31/10/2023	94.0*	0.0
	G23-994-I	527284m E, 6917157m N	31/10/2023	90.5*	3.5

TABLE 2TEST REPORT SUMMARY



Report	Sample	Location	Date of Dry Density		Moisture
Number	Number	Eocalion	Test	Ratio (%)	Ratio (%) (1)
	G23-1001-E	527295m E, 6917139m N	2/11/2023	99.5	0.5
PG-4116-A-9	G23-1001-F	527284m E, 6917103m N	2/11/2023	94.5*	0.0
	G23-1001-G	527272m E, 6917203m N	2/11/2023	101.5	1.5
	G23-1026-G	527351m E, 6917138m N	9/11/2023	97.0+	0.0
FG-4110-A-14	G23-1026-I	527277m E, 6917135m N	9/11/2023	96.5+	0.5
	G23-1037-F	527284m E, 6917103m N	14/11/2023	95.0+	0.0
FG-4110-A-10	G23-1037-G	527279m E, 6917203m N	14/11/2023	93.0+*	2.0
	G23-1067-A	527336m E, 6917186m N	23/11/2023	97.5	2.0
PG-4116-A-20	G23-1067-B	527330m E, 6917179m N	23/11/2023	99.5	1.5
	G23-1067-C	527312m E, 6917191m N	23/11/2023	100.5	2.0
PG-4116-A-23	G23-1063-A	527361m E, 6917161m N	22/11/2023	100.5	2.0
	G23-1071-C	527353m E, 6917166m N	27/11/2023	100.0	1.5
PG-4116-A-24	G23-1071-D	527332m E, 6917187m N	27/11/2023	95.0	1.0
PG-4116-A-28	G23-1090-B	527334m E, 6917186m N	04/12/2023	95.5	0.0
	G23-1100-A	527345m E, 6917202m N	05/12/2023	95.0	-0.5
PG-4116-A-29	G23-1100-B	527350m E, 6917186m N	05/12/2023	97.5	0.0
PG-4116-A-31	G23-1127-B	527331m E, 6917175m N	11/12/2023	96.0	1.5
PG-4116-A-32	G23-1133-A	527340m E, 6917175m N	12/12/2023	99.5	2.0
PG-4116-A-33	G23-1146-A	527344m E, 6917235m N	14/12/2023	98.0	2.0
	G23-1161-A	527352m E, 6917193m N	19/12/2023	#	#
PG-4116-A-35	G23-1161-B	527344m E, 6917161m N	19/12/2023	#	#
PG-4116-A-36	G23-1140-A	527359m E, 6917171m N	13/12/2023	96.5	2.0
	G23-1161-A	527246m E, 6917141m N	20/12/2023	#	#
PG-4116-A-37	G23-1161-B	527261m E, 6917132m N	20/12/2023	#	#
	G24-1177-A	527367m E, 6917200m N	15/01/2024	97.0	-0.5
PG-4116-A-38	G24-1177-D	527379m E, 6917139m N	15/01/2024	#	#
PG-4116-A-41	G24-1190-A	527343m E, 6917240m N	25/01/2024	101.0	2.0
	G24-1197-A	527352m E, 6917262m N	02/02/2024	101.0	2.5
PG-4116-A-42	G24-1197-C	527361m E, 6917217m N	02/02/2024	97.0	0.5
	G24-1200-A	527365m E, 6917216m N	05/02/2024	99.5	1.5
PG-4116-A-43	G24-1200-C	527389m E, 6917133m N	05/02/2024	97.0	0.5
	G24-1268-A	527401m E, 6917127m N	04/03/2024	95.0	1.5
PG-4116-A-45	G24-1268-B	527360m E 6917112m N	04/03/2024	97.0	4.5
	G24-1276-A	527385m E 6917144m N	07/03/2024	99.0	2.0
PG-4116-A-46	G24-1276-B	527358m E 6917135m N	07/03/2024	99.5	2.0
PG-4116-A-47	G24-1282-A	527392m E 6917111m N	08/03/2024	96.0	1.5
	G24-1287-A	527365m E 6917094m N	13/03/2024	96.0	2.5
PG-4116-A-48	G24-1287-B	527357m E 6917255m N	13/03/2024	96.0	2.5
	G24-1300-A	527413m E 6917114m N	20/03/2024	100.5	3.5
PG-4116-A-49	G24-1300-A	527367m E 6917093m N	20/03/2024	102.0	1.5
PG-4116-A-50	G24-1302-B	527333m E 6917216m N	21/03/2024	101.0	2.0
	G24-1313-A	527376m E 6917104m N	22/03/2024	99.0	2.5
PG-4116-A-51	G24-1313-B	527358m E 6917147m N	22/03/2024	99.5	2.0
PG-4116-A-57	G24-1402-C	527358m E 6917254m N	14/05/2024	95.0	-1.0
PG-4116-A-59	G24-1422-A	527350m F 6917238m N	23/05/2024	103.0	20
PG-4116-A-67	G24-1454-A	527341m E 6917163m N	03/06/2024	96.5	2.5
PG-4116-A-73	G24-1473-R	527351m F_6917160m N	06/06/2024	99.0	-1.0
PG-4116-A-82	G24-1506-A	527367m E, 6917275m N	17/06/2024	98.0	1.0
	G24-1494-A	527366m F 6917100m N	13/06/2024	96.5	1.5
PG-4116-A-83	G24-1494-R	527364m F 6917128m N	13/06/2024	97.5	1.5
	G24-1507-A	527359m E_6917151m N	18/06/2024	99.5	2.5
PG-4116-A-86	G24-1507-R	527364m F 6917137m N	18/06/2024	101.0	3.5
I	021100/D	52, 55 mm E, 67 m 107 mm	10,00,2024	101.0	0.0



Report	Sample	Location	Date of	Dry Density	Moisture
Number	Number		Test	Ratio (%)	Ratio (%) ⁽¹⁾
	G24-1507-D	527401m E, 6917145m N	18/06/2024	101.0	4.0

Notes:

* - Denotes a failed test. Retest taken.

+ - Denotes a retest from a failed test result.

- Sample not testable due to more than 20% of material being retained on the 37.5mm sieve.

(1) Positive values are dry of OMC, negative values are wet of OMC

Given the supervision and testing regime adopted, it should be noted that testing is not undertaken on a per lot basis, but rather the extent of works undertaken. Some individual allotments may not have a specific test undertaken. This is an expected outcome given the testing regime adopted.

3.0 GENERAL STATEMENT OF COMPLIANCE

Pacific Geotech Pty Ltd certify that the bulk earthworks at the site has been carried out in in general accordance with the project specification, under a Level 1 Inspection And Testing Program in accordance with AS 3798-2007 guidelines.

It must be noted that several tested areas, particularly in the lower fill layers which were placed during an extended dry weather period are outside (dry) of the moisture specification. Additionally, as the weathered rock in the cut areas became stronger, less weathered and less fractured, the particle size within the fill material increased and included some particles which exceed the maximum allowable particle size being two-thirds of the layer thickness in size. Whilst the dry material and the over-sized particles do not conform the project specifications, based on our ongoing assessments during the earthworks operation, these issues are not expected to impact the long-term performance of the fill material and the fill is therefore assessed to be fit for purpose.

The fill may be deemed 'Controlled' fill in general accordance with AS 2870-2011 'Residential slabs and footings' clause 6.4.2 'Filling'.

Should you have any queries regarding the Earthworks program please do not hesitate to contact Ben Elsmore or Peter Elkington at our office.

Yours faithfully,

11M Gomore

B. ELSMORE (RPEQ 19656)

For and on behalf of **PACIFIC GEOTECH PTY LTD**

P. ELKINGTON (RPEQ 7226)

Attached:

Dry Density Ratio Reports Site Photographs













Report Number:	PG-4116-A-3		Consulting Geotechnical Engineers
Issue Number:	1		5
Date Issued:	01/11/2023		Pacific Geotech Pty Ltd
Client:	CCA Winslow		ABN: 62 615 248 952
	c/o 3 Jowett Street, Coomera Qld 4209,		Gold Coast Laboratory
Project Number:	PG-4116-A		3 Jowett St Coomera QLD 4209
Project Name:	Residential Subdivision		Phone: (07) 5636 4680
Project Location:	Courtney Drive, Upper Coomera		Email: inio@pacgeo.com.au
Work Request:	978		Accredited for compliance with ISO/IEC 17025 - Testing
Date Sampled:	24/10/2023		() 0
Dates Tested:	24/10/2023 - 31/10/2023	NAIA	Sod land
Sampling Method:	AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted	WORLD RECOGNISED	Approved Signatory: Rob Sharpe
Specification:	Minimum 95% Standard Compaction	ACCREDITATION	Senior Geotechnician
Site Selection:	Selected by GTA		NATA Accredited Laboratory Number: 21130
Location:	Upper Coomera		
Material:	Earthworks Fill		

Compaction Control AS 1289 5.7.1 & 5.8	.1 & 2.1.1				
Sample Number	G23-978A	G23-978B	G23-978C	G23-978D	G23-978E
Client Sample #	**	**	**	**	**
Date Tested	24/10/2023	24/10/2023	24/10/2023	24/10/2023	24/10/2023
Time Tested	10:05	10:10	10:15	10:30	10:35
Test Request #/Location	Stage 1	Stage 1	Stage 1	Stage 2	Stage 2
Easting	527554	527546	527533	527401	527381
Northing	6917153	6917138	6917136	6917086	6917100
Elevation (m)	47.6	45.8	46.1	57.6	56.4
Soil Description	Sandy Clay w/ Gravel, Brown				
Test Depth (mm)	150	150	150	150	150
Sieve used to determine oversize (mm)	19.0	19.0	19.0	19.0	19.0
Percentage of Wet Oversize (%)	9	20	4	4	7
Field Wet Density (FWD) t/m ³	2.08	2.09	1.89	1.94	1.96
Field Moisture Content %	10.3	12.7	13.0	10.8	9.2
Field Dry Density (FDD) t/m ³	1.89	1.86	1.67	1.75	1.79
Peak Converted Wet Density t/m ³	**	**	**	**	**
Adjusted Peak Converted Wet Density t/m ³	2.12	2.21	1.99	2.05	2.06
Moisture Variation (Wv) %	**	**	**	**	**
Adjusted Moisture Variation %	2.0	0.0	0.5	2.5	2.5
Hilf Density Ratio (%)	98.5	95.0	95.0	95.0	95.0
Compaction Method	Standard	Standard	Standard	Standard	Standard
Report Remarks	**	**	**	**	**

Moisture Variation Note:

Material Source:

Onsite

Positive values = test is dry of OMC

Negative values = test is wet of OMC



Report Number:	PG-4116-A-4		Consu
Issue Number:	1	V	
Date Issued:	03/11/2023		
Client:	CCA Winslow		
	c/o 3 Jowett Street, Coomera Qld 4209,		
Project Number:	PG-4116-A		
Project Name:	Residential Subdivision		
Project Location:	Courtney Drive, Upper Coomera		
Work Request:	981		Accredited f
Date Sampled:	25/10/2023	NATA	(.)]
Dates Tested:	25/10/2023 - 02/11/2023		dal
Sampling Method:	AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted	WORLD RECOGNISED	Approved S
Specification:	Minimum 95% Standard Compaction	ACCREDITATION	
Site Selection:	Selected by GTA		NATA Accre
Location:	Upper Coomera		
Material:	Earthworks Fill		
Material Source:	Onsite		

Material Source: Onsite				
Compaction Control AS 1289 5.7.1 & 5.8	3.1 & 2.1.1			
Sample Number	G23-981A	G23-981B	G23-981C	G23-981D
Client Sample #	**	**	**	**
Date Tested	25/10/2023	25/10/2023	25/10/2023	25/10/2023
Time Tested	10:02	10:07	10:15	10:20
Test Request #/Location	Stage 1	Stage 1	Stage 1	Stage 1
Easting	527504	527524	527519	527558
Northing	6917166	6917166	6917151	6917157
Elevation (m)	49.9	48.8	48.5	46.9
Soil Description	Sandy Gravelly Clay, Brown	Sandy Gravelly Clay, Brown	Sandy Gravelly Clay, Brown	Sandy Clay w/ Gravel, Brown
Test Depth (mm)	150	150	150	150
Sieve used to determine oversize (mm)	19.0	19.0	19.0	19.0
Percentage of Wet Oversize (%)	3	6	2	3
Field Wet Density (FWD) t/m ³	2.15	2.08	2.07	2.08
Field Moisture Content %	12.4	13.5	12.5	11.5
Field Dry Density (FDD) t/m ³	1.91	1.83	1.84	1.87
Peak Converted Wet Density t/m ³	**	**	**	**
Adjusted Peak Converted Wet Density t/m ³	2.20	2.15	2.15	2.16
Moisture Variation (Wv) %	**	**	**	**
Adjusted Moisture Variation %	-0.5	0.0	-0.5	2.5
Hilf Density Ratio (%)	97.5	96.5	96.5	96.5
Compaction Method	Standard	Standard	Standard	Standard
Report Remarks	**	**	**	**

Moisture Variation Note:

Positive values = test is dry of OMC

Negative values = test is wet of OMC



Pacific Geotech Pty Ltd ABN: 62 615 248 952 Gold Coast Laboratory 3 Jowett St Coomera QLD 4209 Phone: (07) 5636 4680

Email: info@pacgeo.com.au

for compliance with ISO/IEC 17025 - Testing

ignatory: Rob Sharpe

Senior Geotechnician edited Laboratory Number: 21130

" Pa	icific	Geo	tech
	Consulting G	Seotechnica	al Engineers

Report Number:	PG-4116-A-4
Issue Number:	1
Date Issued:	03/11/2023
Client:	CCA Winslow
	c/o 3 Jowett Street, Coomera Qld 4209,
Project Number:	PG-4116-A
Project Name:	Residential Subdivision
Project Location:	Courtney Drive, Upper Coomera
Work Request:	981
Date Sampled:	25/10/2023
Dates Tested:	25/10/2023 - 02/11/2023
Sampling Method:	AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted
Specification:	Minimum 95% Standard Compaction
Site Selection:	Selected by GTA
Location:	Upper Coomera
Material:	Earthworks Fill
Material Source:	Onsite



Accredited for compliance with ISO/IEC 17025 - Testing

WORLD RECOGNISED ACCREDITATION

Approved Signatory: Rob Sharpe Senior Geotechnician NATA Accredited Laboratory Number: 21130

Compaction Control AS 1289 5.7.1 & 5.8	3.1 & 2.1.1			
Sample Number	G23-981E	G23-981F	G23-981G	
Client Sample #	**	**	**	
Date Tested	25/10/2023	25/10/2023	25/10/2023	
Time Tested	10:25	10:35	10:50	
Test Request #/Location	Stage 1	Stage 1 (Retest G23- 977A)	Stage 2	
Easting	527537	527553	527347	
Northing	6917140	6917153	6917157	
Elevation (m)	46.0	44.8	45.8	
Soil Description	Sandy Gravelly Clay, Brown	Sandy Clay w/ Gravel, Brown	Sandy Gravelly Clay, Orange	
Test Depth (mm)	150	150	150	
Sieve used to determine oversize (mm)	19.0	19.0	19.0	
Percentage of Wet Oversize (%)	6	5	5	
Field Wet Density (FWD) t/m ³	2.01	2.11	1.96	
Field Moisture Content %	13.2	11.3	9.1	
Field Dry Density (FDD) t/m ³	1.78	1.89	1.80	
Peak Converted Wet Density t/m ³	**	**	**	
Adjusted Peak Converted Wet Density	2.11	2.16	2.05	
Moisture Variation (Wv) %	**	**	**	
Adjusted Moisture Variation %	0.0	2.5	2.0	
Hilf Density Ratio (%)	95.5	97.5	95.5	
Compaction Method	Standard	Standard	Standard	
Report Remarks	**	**	**	

Moisture Variation Note:

Report Number:	PG-4116-A-5		Consulting Geotechnical Engineers
Issue Number:	1	V	
Date Issued:	10/11/2023		Pacific Geotech Pty Ltd
Client:	CCA Winslow		ABN: 62 615 248 952
	c/o 3 Jowett Street, Coomera Qld 4209,		Gold Coast Laboratory
Project Number:	PG-4116-A		3 Jowett St Coomera QLD 4209
Project Name:	Residential Subdivision		Phone: (07) 5636 4680
Project Location:	Courtney Drive, Upper Coomera		Email: Inio@pacgeo.com.au
Work Request:	988		Accredited for compliance with ISO/IEC 17025 - Testing
Date Sampled:	26/10/2023	NATA	l el
Dates Tested:	26/10/2023 - 02/11/2023	NAIA	de Maron
Sampling Method:	AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted	WORLD RECOGNISED	Approved Signatory: Ian Masman
Specification:	Minimum 95% Standard Compaction	ACCREDITATION	Laboratory Manager
Site Selection:	Selected by GTA		NATA Accredited Laboratory Number: 21130
Location:	Upper Coomera		
Material:	Earthworks Fill		
Material Source:	Onsite		
Compaction Control	AS 1280 5 7 1 8 5 8 1 8 2 1 1		

Compaction Control AS 1289 5.7.1 & 5.8	3.1 & Z.1.1			
Sample Number	G23-988A	G23-988B	G23-988C	G23-988D
Client Sample #	**	**	**	**
Date Tested	26/10/2023	26/10/2023	26/10/2023	26/10/2023
Time Tested	10:10	10:15	10:22	10:29
Test Request #/Location	Stage 2	Stage 2	Stage 2	Stage 2
Easting	527353	527351	527382	527382
Northing	6917164	6917138	6917109	6917089
Elevation (m)	46.3	49.2	53.9	58.2
Soil Description	Sandy Clay w/ Gravel, Orange	Sandy Clay w/ Gravel, Orange	Sandy Clay w/ Gravel, Brown	Sandy Clay w/ Gravel, Brown
Test Depth (mm)	150	150	150	150
Sieve used to determine oversize (mm)	19.0	19.0	19.0	19.0
Percentage of Wet Oversize (%)	7	18	8	17
Field Wet Density (FWD) t/m ³	2.05	2.04	2.20	2.14
Field Moisture Content %	8.1	9.1	10.3	9.6
Field Dry Density (FDD) t/m ³	1.90	1.87	1.99	1.95
Peak Converted Wet Density t/m ³	**	**	**	**
Adjusted Peak Converted Wet Density t/m ³	2.07	2.19	2.15	2.18
Moisture Variation (Wv) %	**	**	**	**
Adjusted Moisture Variation %	5.0	2.0	1.0	1.5
Hilf Density Ratio (%)	99.0	93.0	102.0	98.0
Compaction Method	Standard	Standard	Standard	Standard
Report Remarks	**	**	**	**

Moisture Variation Note:

Positive values = test is dry of OMC



Report	" (P	acific Geotech
G-4116-A-5		Consulting Geotechnical Engineers
)/11/2023 CA Winslow /o 3 Jowett Street, Coomera Old 4209,		Pacific Geotech Pty Ltd ABN: 62 615 248 952 Gold Coast Laboratory
G-4116-A esidential Subdivision		3 Jowett St Coomera QLD 4209 Phone: (07) 5636 4680 Email: info@pacgeo.com.au
Jurtney Drive, Upper Coomera - 38 - 6/10/2023 - 6/10/2023 - 02/11/2023 -	NATA	Accredited for compliance with ISO/IEC 17025 - Testing
S 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or avement - compacted linimum 95% Standard Compaction	WORLD RECOGNISED	Approved Signatory: Ian Masman Laboratory Manager NATA Accredited Laboratory Number: 21130
pper Coomera arthworks Fill		
	Report 3-4116-A-5 1/11/2023 CA Winslow 5 3 Jowett Street, Coomera Qld 4209, 3-4116-A esidential Subdivision burtney Drive, Upper Coomera 88 3/10/2023 5/10/2023 - 02/11/2023 5/1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or avement - compacted inimum 95% Standard Compaction elected by GTA oper Coomera arthworks Fill	Report 3-4116-A-5 V/11/2023 CA Winslow o 3 Jowett Street, Coomera Qld 4209, 3-4116-A esidential Subdivision purtney Drive, Upper Coomera 88 %10/2023 %10/2023 %10/2023 \$1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or avement - compacted inimum 95% Standard Compaction elected by GTA oper Coomera arthworks Fill

0011pa01011 0011101710 1200 0.1.1 0 0.0				
Sample Number	G23-988E	G23-988F	G23-988G	G23-988H
Client Sample #	**	**	**	**
Date Tested	26/10/2023	26/10/2023	26/10/2023	26/10/2023
Time Tested	10:42	10:47	10:55	11:02
Test Request #/Location	Stage 1	Stage 1	Stage 1	Stage 1
Easting	527503	527511	527522	527531
Northing	6917163	6917146	6917149	6917106
Elevation (m)	51.0	49.9	49.5	47.7
Soil Description	Sandy Clay w/ Gravel, Orange			
Test Depth (mm)	150	150	150	150
Sieve used to determine oversize (mm)	19.0	19.0	19.0	19.0
Percentage of Wet Oversize (%)	7	10	10	11
Field Wet Density (FWD) t/m ³	2.18	2.18	2.01	2.11
Field Moisture Content %	9.2	9.2	9.7	9.6
Field Dry Density (FDD) t/m ³	1.99	2.00	1.83	1.93
Peak Converted Wet Density t/m ³	**	**	**	**
Adjusted Peak Converted Wet Density t/m ³	2.17	2.19	2.16	2.19
Moisture Variation (Wv) %	**	**	**	**
Adjusted Moisture Variation %	1.5	2.0	1.5	2.0
Hilf Density Ratio (%)	100.0	100.0	93.0	96.5
Compaction Method	Standard	Standard	Standard	Standard
Report Remarks	**	**	**	**

Moisture Variation Note:

Positive values = test is dry of OMC

Material Te	st Report	A Pacific Geotech
Report Number: Issue Number:	PG-4116-A-6 1	Consulting Geotechnical Engineers
Date Issued: Client:	10/11/2023 CCA Winslow c/o 3 Jowett Street, Coomera Qld 4209.	Pacific Geotech Pty Ltd ABN: 62 615 248 952 Gold Coast Laboratory
Project Number: Project Name:	PG-4116-A Residential Subdivision	3 Jowett St Coomera QLD 4209 Phone: (07) 5636 4680 Email: info@pacgeo.com.au
Project Location: Work Request: Date Sampled: Dates Tested: Sampling Method:	Courtney Drive, Upper Coomera 991 27/10/2023 27/10/2023 - 01/11/2023 AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or	Accredited for compliance with ISO/IEC 17025 - Testing
Specification: Site Selection: Location: Material: Material Source:	pavement - compacted Minimum 95% Standard Compaction Selected by GTA Upper Coomera Earthworks Fill Onsite	ACCREDITATION Laboratory Number: 21130
Composition Constant		

Compaction Control AS 1289 5.7.1 & 5.8.1 & 2.1.1					
Sample Number	G23-991A	G23-991B	G23-991C	G23-991D	
Client Sample #	**	**	**	**	
Date Tested	27/10/2023	27/10/2023	27/10/2023	27/10/2023	
Time Tested	10:05	10:10	10:20	10:30	
Test Request #/Location	Stage 2	Stage 2	Stage 2	Stage 1	
Easting	527347	527369	527320	527568	
Northing	6917165	6917141	6917212	6917170	
Elevation (m)	47.2	49.9	42.3	48.4	
Soil Description	Sandy Gravelly Clay, Orange	Sandy Gravelly Clay, Orange	Sandy Gravelly Clay, Orange	Sandy Gravelly Clay, Orange	
Test Depth (mm)	150	150	150	150	
Sieve used to determine oversize (mm)	19.0	19.0	19.0	19.0	
Percentage of Wet Oversize (%)	12	19	6	4	
Field Wet Density (FWD) t/m ³	2.09	2.20	2.09	2.15	
Field Moisture Content %	5.8	10.0	5.0	6.7	
Field Dry Density (FDD) t/m ³	1.98	2.00	1.99	2.02	
Peak Converted Wet Density t/m ³	**	**	**	**	
Adjusted Peak Converted Wet Density t/m3	2.09	2.26	2.10	2.17	
Moisture Variation (Wv) %	**	**	**	**	
Adjusted Moisture Variation %	5.0	0.5	5.0	3.0	
Hilf Density Ratio (%)	100.0	97.5	99.5	99.5	
Compaction Method	Standard	Standard	Standard	Standard	
Report Remarks	**	**	**	**	

Moisture Variation Note:

Positive values = test is dry of OMC

Material Te	st Report	A Pacific Geotech
Report Number:	PG-4116-A-6	Consulting Geotechnical Engineers
Date Issued: Client:	10/11/2023 CCA Winslow c/o 3 Jowett Street, Coomera Qld 4209,	Pacific Geotech Pty Ltd ABN: 62 615 248 952 Gold Coast Laboratory
Project Number: Project Name:	PG-4116-A Residential Subdivision	3 Jowett St Coomera QLD 4209 Phone: (07) 5636 4680 Email: info@pacgeo.com.au
Project Location: Work Request: Date Sampled: Dates Tested:	Courtney Drive, Upper Coomera 991 27/10/2023 27/10/2023 - 01/11/2023	Accredited for compliance with ISO/IEC 17025 - Testing
Sampling Method: Specification: Site Selection: Location: Material:	AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted Minimum 95% Standard Compaction Selected by GTA Upper Coomera Farthworks Fill	Approved Signatory: Ian Masman Laboratory Manager NATA Accredited Laboratory Number: 21130
Material Source:	Onsite	

Compaction Control AS 1289 5.7.1 & 5.8	3.1 & 2.1.1			
Sample Number	G23-991E	G23-991F	G23-991G	
Client Sample #	**	**	**	
Date Tested	27/10/2023	27/10/2023	27/10/2023	
Time Tested	10:35	10:40	10:45	
Test Request #/Location	Stage 1	Stage 1	Stage 1	
Easting	527503	527510	527518	
Northing	6917161	6917123	6917096	
Elevation (m)	51.7	51.0	51.9	
Soil Description	Sandy Gravelly Clay, Orange	Sandy Gravelly Clay, Orange	Sandy Gravelly Clay, Orange	
Test Depth (mm)	150	150	150	
Sieve used to determine oversize (mm)	19.0	19.0	19.0	
Percentage of Wet Oversize (%)	15	16	7	
Field Wet Density (FWD) t/m ³	2.16	2.09	2.05	
Field Moisture Content %	11.6	8.1	10.3	
Field Dry Density (FDD) t/m ³	1.94	1.94	1.86	
Peak Converted Wet Density t/m ³	**	**	**	
Adjusted Peak Converted Wet Density t/m ³	2.23	2.16	2.14	
Moisture Variation (Wv) %	**	**	**	
Adjusted Moisture Variation %	0.0	2.5	2.5	
Hilf Density Ratio (%)	97.0	97.0	95.5	
Compaction Method	Standard	Standard	Standard	
Report Remarks	**	**	**	

Moisture Variation Note:

Positive values = test is dry of OMC

Material Te	st Report	A Pacific Geotech
Report Number:	PG-4116-A-7	Consulting Geotechnical Engineers
Issue Number:	1	
Date Issued:	10/11/2023	Pacific Geotech Pty Ltd
Client:	CCA Winslow	ABN: 62 615 248 952
	c/o 3 Jowett Street, Coomera Qld 4209,	Gold Coast Laboratory
Project Number:	PG-4116-A	3 Jowett St Coomera QLD 4209
Project Name:	Residential Subdivision	Phone: (07) 5636 4680
Project Location:	Courtney Drive, Upper Coomera	Email: Info@pacgeo.com.au
Work Request:	992	Accredited for compliance with ISO/IEC 17025 - Lesting
Date Sampled:	30/10/2023	NATA
Dates Tested:	30/10/2023 - 03/11/2023	NATA de Maron
Sampling Method:	AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted	Approved Signatory: Ian Masman
Specification:	Minimum 95% Standard Compaction	ACCREDITATION Laboratory Manager
Site Selection:	Selected by GTA	NATA Accredited Laboratory Number: 21130
Location:	Upper Coomera	
Material:	Earthworks Fill	
Material Source:	Onsite	

Compaction Control AS 1289 5.7.1 & 5.8	3.1 & 2.1.1		
Sample Number	G23-992A	G23-992B	G23-992C
Client Sample #	**	**	**
Date Tested	30/10/2023	30/10/2023	30/10/2023
Time Tested	10:10	10:20	10:25
Test Request #/Location	Stage 2	Stage 2	Stage 2
Easting	527288	527282	527303
Northing	6917135	6917202	6917219
Elevation (m)	0.7m Above Natural	1m Above Natural	0.5m Above Natural
Soil Description	Sandy Gravelly Clay, Orange	Sandy Gravelly Clay, Orange	Sandy Gravelly Clay, Orange
Test Depth (mm)	150	150	150
Sieve used to determine oversize (mm)	19.0	19.0	19.0
Percentage of Wet Oversize (%)	7	17	19
Field Wet Density (FWD) t/m ³	1.81	2.06	2.14
Field Moisture Content %	4.5	7.7	8.8
Field Dry Density (FDD) t/m ³	1.73	1.91	1.97
Peak Converted Wet Density t/m ³	**	**	**
Adjusted Peak Converted Wet Density t/m ³	1.99	2.16	2.23
Moisture Variation (Wv) %	**	**	**
Adjusted Moisture Variation %	4.0	3.0	2.0
Hilf Density Ratio (%)	91.0	95.5	96.0
Compaction Method	Standard	Standard	Standard
Report Remarks	**	**	**

Moisture Variation Note:

Material Te	st Report	A Pacific Geotech
Report Number: Issue Number:	PG-4116-A-8 1	Consulting Geotechnical Engineers
Date Issued: Client:	10/11/2023 CCA Winslow c/o 3 Jowett Street, Coomera Qld 4209,	Pacific Geotech Pty Ltd ABN: 62 615 248 952 Gold Coast Laboratory
Project Number: Project Name:	PG-4116-A Residential Subdivision	3 Jowett St Coomera QLD 4209 Phone: (07) 5636 4680 Email: info@pacgeo.com.au
Project Location: Work Request: Date Sampled: Dates Tested:	Courtney Drive, Upper Coomera 994 31/10/2023 31/10/2023 - 08/11/2023	Accredited for compliance with ISO/IEC 17025 - Testing
Sampling Method: Specification:	 AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted Minimum 95% Standard Compaction 	Approved Signatory: Ian Masman Laboratory Manager
Site Selection: Location: Material:	Selected by GTA Upper Coomera Earthworks Fill	NATA Accredited Laboratory Number: 21130
Material Source:		

Compaction Control AS 1289 5.7.1 & 5.8	I & Z. I. I				
Sample Number	G23-994A	G23-994B	G23-994C	G23-994D	G23-994E
Client Sample #	**	**	**	**	**
Date Tested	31/10/2023	31/10/2023	31/10/2023	31/10/2023	31/10/2023
Time Tested	10:05	10:10	10:20	10:25	10:35
Test Request #/Location	Stage 1				
Easting	527508	527499	527503	527492	527495
Northing	6917096	6917103	6917119	6917128	6917144
Elevation (m)	54.0	54.8	54.1	54.7	54.1
Soil Description	Sandy Gravelly Clay				
Test Depth (mm)	150	150	150	150	150
Sieve used to determine oversize (mm)	19.0	19.0	19.0	19.0	19.0
Percentage of Wet Oversize (%)	15	19	18	9	19
Field Wet Density (FWD) t/m ³	2.00	2.19	2.18	2.07	2.06
Field Moisture Content %	11.1	6.3	6.7	2.4	6.5
Field Dry Density (FDD) t/m ³	1.80	2.06	2.04	2.02	1.93
Peak Converted Wet Density t/m ³	**	**	**	**	**
Adjusted Peak Converted Wet Density t/m ³	2.20	2.15	2.15	2.12	2.14
Moisture Variation (Wv) %	**	**	**	**	**
Adjusted Moisture Variation %	0.0	2.5	2.5	2.5	3.0
Hilf Density Ratio (%)	91.0	102.0	101.0	97.0	96.0
Compaction Method	Standard	Standard	Standard	Standard	Standard
Report Remarks	**	**	**	**	**

Moisture Variation Note:

Positive values = test is dry of OMC

Material Te	st Report	A Pacific Geotech
Report Number: Issue Number:	PG-4116-A-8 1	Consulting Geotechnical Engineers
Date Issued: Client:	10/11/2023 CCA Winslow c/o 3 Jowett Street, Coomera Qld 4209,	Pacific Geotech Pty Ltd ABN: 62 615 248 952 Gold Coast Laboratory
Project Number: PG-4116-A Project Name: Residential Subdivision	3 Jowett St Coomera QLD 4209 Phone: (07) 5636 4680 Email: info@pacgeo.com.au	
Project Location: Work Request: Date Sampled: Dates Tested:	Courtney Drive, Upper Coomera 994 31/10/2023 31/10/2023 - 08/11/2023	Accredited for compliance with ISO/IEC 17025 - Testing
Sampling Method: Specification: Site Selection:	AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted Minimum 95% Standard Compaction Selected by GTA	Approved Signatory: Ian Masman Laboratory Manager NATA Accredited Laboratory Number: 21130
Location: Material: Material Source:	Upper Coomera Earthworks Fill Onsite	
Composition Control		

Compaction Control AS 1289 5.7.1 & 5.8	I & Z. I. I				
Sample Number	G23-994F	G23-994G	G23-994H	G23-994I	
Client Sample #	**	**	**	**	
Date Tested	31/10/2023	31/10/2023	31/10/2023	31/10/2023	
Time Tested	13:15	13:25	13:30	13:35	
Test Request #/Location	Stage 2	Stage 2	Stage 2	Stage 2	
Easting	527286	527276	527296	527284	
Northing	6917123	6917077	6917142	6917157	
Elevation (m)	46.0	47.8	45.0	44.4	
Soil Description	Sandy Gravelly Clay	Sandy Gravelly Clay	Sandy Gravelly Clay	Sandy Gravelly Clay	
Test Depth (mm)	150	150	150	150	
Sieve used to determine oversize (mm)	19.0	19.0	19.0	19.0	
Percentage of Wet Oversize (%)	14	18	14	13	
Field Wet Density (FWD) t/m ³	2.15	2.12	2.09	1.91	
Field Moisture Content %	9.1	9.9	10.9	8.4	
Field Dry Density (FDD) t/m ³	1.97	1.93	1.88	1.77	
Peak Converted Wet Density t/m ³	**	**	**	**	
Adjusted Peak Converted Wet Density t/m ³	2.17	2.21	2.22	2.12	
Moisture Variation (Wv) %	**	**	**	**	
Adjusted Moisture Variation %	2.0	1.0	0.0	3.5	
Hilf Density Ratio (%)	99.0	96.0	94.0	90.5	
Compaction Method	Standard	Standard	Standard	Standard	
Report Remarks	**	**	**	**	

Moisture Variation Note:

Positive values = test is dry of OMC

Material Te	st Report	A Pacific Geotech
Report Number: Issue Number:	PG-4116-A-9 1	Consulting Geotechnical Engineers
Date Issued: Client:	10/11/2023 CCA Winslow c/o 3 Jowett Street, Coomera Qld 4209,	Pacific Geotech Pty Ltd ABN: 62 615 248 952 Gold Coast Laboratory
Project Number: Project Name:	PG-4116-A Residential Subdivision	3 Jowett St Coomera QLD 4209 Phone: (07) 5636 4680 Email: info@pacgeo.com.au
Project Location: Work Request: Date Sampled: Dates Tested:	Courtney Drive, Upper Coomera 1001 02/11/2023 02/11/2023 - 09/11/2023	Accredited for compliance with ISO/IEC 17025 - Testing
Sampling Method:	AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted	Approved Signatory: Ian Masman
Specification: Site Selection: Location: Material:	Minimum 95% Standard Compaction Selected by GTA Upper Coomera Earthworks Fill	ACCREDITATION Laboratory Manager NATA Accredited Laboratory Number: 21130
Material Source:		

Compaction Control AS 1289 5.7.1 & 5.8	3.1 & 2.1.1			
Sample Number	G23-1001A	G23-1001B	G23-1001C	G23-1001D
Client Sample #	**	**	**	**
Date Tested	02/11/2023	02/11/2023	02/11/2023	02/11/2023
Time Tested	10:05	10:10	10:15	10:20
Test Request #/Location	Stage 1	Stage 1	Stage 1	Stage 1
Easting	527497	527502	527486	527483
Northing	6917131	6917101	6917118	6917130
Elevation (m)	56.9	57.1	57.6	57.8
Soil Description	Sandy Gravelly Clay, Brown	Sandy Gravelly Clay, Brown	Sandy Gravelly Clay, Brown	Sandy Gravelly Clay, Brown
Test Depth (mm)	150	150	150	150
Sieve used to determine oversize (mm)	19.0	19.0	19.0	19.0
Percentage of Wet Oversize (%)	15	16	18	19
Field Wet Density (FWD) t/m ³	2.26	2.16	2.15	2.08
Field Moisture Content %	9.8	11.0	10.9	11.4
Field Dry Density (FDD) t/m ³	2.06	1.94	1.94	1.87
Peak Converted Wet Density t/m ³	**	**	**	**
Adjusted Peak Converted Wet Density t/m ³	2.19	2.22	2.23	2.25
Moisture Variation (Wv) %	**	**	**	**
Adjusted Moisture Variation %	1.5	0.0	0.0	0.0
Hilf Density Ratio (%)	103.5	97.0	96.0	92.5
Compaction Method	Standard	Standard	Standard	Standard
Report Remarks	**	**	**	**

Moisture Variation Note:

Positive values = test is dry of OMC

Material Te	st Report	A Pacific Geotech
Report Number: Issue Number:	PG-4116-A-9 1	Consulting Geotechnical Engineers
Date Issued: Client:	10/11/2023 CCA Winslow c/o 3 Jowett Street, Coomera Qld 4209,	Pacific Geotech Pty Ltd ABN: 62 615 248 952 Gold Coast Laboratory
Project Number: Project Name:	PG-4116-A Residential Subdivision	3 Jowett St Coomera QLD 4209 Phone: (07) 5636 4680 Email: info@pacgeo.com.au
Project Location: Work Request: Date Sampled: Dates Tested: Sampling Method:	Courtney Drive, Upper Coomera 1001 02/11/2023 02/11/2023 - 09/11/2023 AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or	Accredited for compliance with ISO/IEC 17025 - Testing
Specification: Site Selection: Location:	Minimum 95% Standard Compaction Selected by GTA	Approved Signatory: Ian Masman Laboratory Manager NATA Accredited Laboratory Number: 21130
Material: Material Source:	Earthworks Fill Onsite	

Compaction Control AS 1289 5.7.1 & 5.8	3.1 & 2.1.1			
Sample Number	G23-1001E	G23-1001F	G23-1001G	
Client Sample #	**	**	**	
Date Tested	02/11/2023	02/11/2023	02/11/2023	
Time Tested	10:35	10:40	10:50	
Test Request #/Location	Stage 2	Stage 2	Stage 2	
Easting	527295	527284	527272	
Northing	6917139	6917103	6917203	
Elevation (m)	46.3	47.9	42.0	
Soil Description	Sandy Gravelly Clay, Brown	Sandy Gravelly Clay, Brown	Sandy Gravelly Clay, Brown	
Test Depth (mm)	150	150	150	
Sieve used to determine oversize (mm)	19.0	19.0	19.0	
Percentage of Wet Oversize (%)	18	19	18	
Field Wet Density (FWD) t/m ³	2.21	2.12	2.24	
Field Moisture Content %	10.0	11.7	9.7	
Field Dry Density (FDD) t/m ³	2.00	1.90	2.04	
Peak Converted Wet Density t/m ³	**	**	**	
Adjusted Peak Converted Wet Density t/m ³	2.22	2.25	2.21	
Moisture Variation (Wv) %	**	**	**	
Adjusted Moisture Variation %	0.5	0.0	1.5	
Hilf Density Ratio (%)	99.5	94.5	101.5	
Compaction Method	Standard	Standard	Standard	
Report Remarks	**	**	**	

Moisture Variation Note:

Positive values = test is dry of OMC

Material Tes	st Report	.6 P	acific Geotech
Report Number: Issue Number:	PG-4116-A-14 1		Consulting Geotechnical Engineers
Date Issued: Client:	21/11/2023 CCA Winslow c/o 3 Jowett Street, Coomera Qld 4209,		Pacific Geotech Pty Ltd ABN: 62 615 248 952 Gold Coast Laboratory
Project Number: Project Name:	PG-4116-A Residential Subdivision		3 Jowett St Coomera QLD 4209 Phone: (07) 5636 4680 Email: info@pacgeo.com.au
Project Location: Work Request: Date Sampled:	Courtney Drive, Upper Coomera 1026 09/11/2023	ΝΑΤΑ	Accredited for compliance with ISO/IEC 17025 - Testing
Dates Tested: Sampling Method:	09/11/2023 - 20/11/2023 AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted	WORLD RECOGNISED	Approved Signatory: Ian Masman
Specification: Site Selection:	Minimum 95% Standard Compaction Selected by GTA	ACCREDITATION	NATA Accredited Laboratory Number: 21130
Material: Material Source:	Earthworks Fill Onsite		
Compaction Control	AS 1289 5.7.1 & 5.8.1 & 2.1.1		

	10.2.1.1				
Sample Number	G23-1026A	G23-1026B	G23-1026C	G23-1026D	G23-1026E
Client Sample #	**	**	**	**	**
Date Tested	09/11/2023	09/11/2023	09/11/2023	09/11/2023	09/11/2023
Time Tested	10:10	10:15	10:25	10:30	10:40
Test Request #/Location	Stage 2 & 3	Stage 1			
Easting	527265	527295	527296	527300	527476
Northing	6917045	6917081	6917128	6917159	6917132
Elevation (m)	50.5	49.9	48.7	48.1	58.3
Soil Description	Sandy Gravelly Clay, Brown				
Test Depth (mm)	150	150	150	150	150
Sieve used to determine oversize (mm)	19.0	19.0	37.5	19.0	19.0
Percentage of Wet Oversize (%)	17	14	19	15	8
Field Wet Density (FWD) t/m ³	2.22	2.04	2.19	2.14	2.02
Field Moisture Content %	10.7	9.9	11.8	10.5	9.5
Field Dry Density (FDD) t/m ³	2.00	1.85	1.96	1.93	1.84
Peak Converted Wet Density t/m ³	**	**	**	**	**
Adjusted Peak Converted Wet Density t/m3	2.24	2.18	2.28	2.21	2.17
Moisture Variation (Wv) %	**	**	**	**	**
Adjusted Moisture Variation %	-0.5	1.5	-1.5	0.0	2.0
Hilf Density Ratio (%)	99.0	93.5	96.0	97.0	93.0
Compaction Method	Standard	Standard	Standard	Standard	Standard
Report Remarks	**	**	**	**	**

Moisture Variation Note:

Positive values = test is dry of OMC

Material Tes	st Report	A Pa	acific Geotech
Report Number: Issue Number:	PG-4116-A-14 1		Consulting Geotechnical Engineers
Date Issued: Client:	21/11/2023 CCA Winslow c/o 3 Jowett Street, Coomera Qld 4209,		Pacific Geotech Pty Ltd ABN: 62 615 248 952 Gold Coast Laboratory
Project Number: Project Name:	PG-4116-A Residential Subdivision		3 Jowett St Coomera QLD 4209 Phone: (07) 5636 4680 Email: info@pacgeo.com.au
Project Location: Work Request: Date Sampled:	Courtney Drive, Upper Coomera 1026 09/11/2023	ΝΑΤΑ	Accredited for compliance with ISO/IEC 17025 - Testing
Dates Tested: Sampling Method:	09/11/2023 - 20/11/2023 AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted	WORLD RECOGNISED	Approved Signatory: Ian Masman
Specification: Site Selection:	Minimum 95% Standard Compaction Selected by GTA	ACCREDITATION	NATA Accredited Laboratory Number: 21130
Material: Material Source:	Earthworks Fill Onsite		
Compaction Control	AS 1289 5.7.1 & 5.8.1 & 2.1.1		

Compaction Control AS 1289 5.7.1 & 5.8.	1 & 2.1.1				
Sample Number	G23-1026F	G23-1026G	G23-1026H	G23-1026I	
Client Sample #	**	**	**	**	
Date Tested	09/11/2023	09/11/2023	09/11/2023	09/11/2023	
Time Tested	10:45	11:00	11:15	11:25	
Test Request #/Location	Stage 1	Stage 2 (Retest G23-988B)	Stage 1 (Retest G23-988G)	Stage 2 (Retest G23-992A)	
Easting	527483	527351	527522	527288	
Northing	6917104	6917138	6917149	6917135	
Elevation (m)	58.7	49.2	49.5	0.7m Above Natural	
Soil Description	Sandy Gravelly Clay, Brown	Sandy Clay w/ Gravel, Brown	Sandy Clay w/ Gravel, Brown	Sandy Gravelly Clay, Brown	
Test Depth (mm)	150	150	150	150	
Sieve used to determine oversize (mm)	19.0	19.0	19.0	19.0	
Percentage of Wet Oversize (%)	7	16	18	9	
Field Wet Density (FWD) t/m ³	2.08	2.17	2.19	2.11	
Field Moisture Content %	10.6	11.7	11.6	11.0	
Field Dry Density (FDD) t/m ³	1.88	1.94	1.96	1.90	
Peak Converted Wet Density t/m ³	**	**	**	**	
Adjusted Peak Converted Wet Density t/m ³	2.19	2.24	2.24	2.19	
Moisture Variation (Wv) %	**	**	**	**	
Adjusted Moisture Variation %	0.0	0.0	1.0	0.5	
Hilf Density Ratio (%)	95.0	97.0	97.5	96.5	
Compaction Method	Standard	Standard	Standard	Standard	
Report Remarks	**	**	**	**	

Moisture Variation Note:

Material Te	st Report	A Pacific Geotech
Report Number: Issue Number:	PG-4116-A-18 1	Consulting Geotechnical Engineers
Date Issued: Client:	27/11/2023 CCA Winslow c/o 3 Jowett Street, Coomera Qld 4209,	Pacific Geotech Pty Ltd ABN: 62 615 248 952 Gold Coast Laboratory
Project Number: Project Name:	PG-4116-A Residential Subdivision	3 Jowett St Coomera QLD 4209 Phone: (07) 5636 4680 Email: info@pacgeo.com.au
Project Location: Work Request: Date Sampled:	Courtney Drive, Upper Coomera 1037 14/11/2023 14/11/2023 - 23/11/2023	Accredited for compliance with ISO/IEC 17025 - Testing
Sampling Method:	AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted	Approved Signatory: Ian Masman
Specification: Site Selection: Location: Material:	Minimum 95% Standard Compaction Selected by GTA Upper Coomera Earthworks Fill	ACCREDITATION Laboratory Manager NATA Accredited Laboratory Number: 21130
Material Source:	Onsite	

Compaction Control AS 1289 5.7.1 & 5.8	3.1 & 2.1.1			
Sample Number	G23-1037A	G23-1037B	G23-1037C	G23-1037D
Client Sample #	**	**	**	**
Date Tested	14/11/2023	14/11/2023	14/11/2023	14/11/2023
Time Tested	10:10	10:15	10:20	10:25
Test Request #/Location	Stage 2 & 3			
Easting	527331	527304	527224	527235
Northing	6917145	6917127	6917029	6917025
Elevation (m)	49.0	49.2	523.0	53.4
Soil Description	Sandy Gravelly Clay, Brown	Sandy Gravelly Clay, Brown	Sandy Gravelly Clay, Brown	Sandy Gravelly Clay, Brown
Test Depth (mm)	150	150	150	150
Sieve used to determine oversize (mm)	19.0	37.5	19.0	19.0
Percentage of Wet Oversize (%)	20	13	19	11
Field Wet Density (FWD) t/m ³	2.17	2.17	2.22	2.15
Field Moisture Content %	10.5	10.3	11.6	9.0
Field Dry Density (FDD) t/m ³	1.96	1.97	1.99	1.97
Peak Converted Wet Density t/m ³	**	**	**	**
Adjusted Peak Converted Wet Density t/m ³	2.20	2.27	2.23	2.26
Moisture Variation (Wv) %	**	**	**	**
Adjusted Moisture Variation %	1.0	0.0	0.0	0.5
Hilf Density Ratio (%)	98.5	95.5	100.0	95.0
Compaction Method	Standard	Standard	Standard	Standard
Report Remarks	**	**	**	**

Moisture Variation Note:

Positive values = test is dry of OMC

Material Tes	st Report	A Pacific Geotech
Report Number: Issue Number:	PG-4116-A-18 1	Consulting Geotechnical Engineers
Date Issued: Client:	27/11/2023 CCA Winslow	Pacific Geotech Pty Ltd ABN: 62 615 248 952 Gold Coast Laboratory
Project Number: Project Name:	PG-4116-A Residential Subdivision	3 Jowett St Coomera QLD 4209 Phone: (07) 5636 4680 Email: info@pacgeo.com.au
Project Location: Work Request: Date Sampled: Dates Tested: Sampling Method:	Courtney Drive, Upper Coomera 1037 14/11/2023 14/11/2023 - 23/11/2023 AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or	Accredited for compliance with ISO/IEC 17025 - Testing
Specification: Site Selection: Location: Material: Material Source:	pavement - compacted Minimum 95% Standard Compaction Selected by GTA Upper Coomera Earthworks Fill Onsite	ACCREDITATION Laboratory Number: 21130
Compaction Control	AS 1289 5 7 1 & 5 8 1 & 2 1 1	

Compaction Control AS 1289 5.7.1 & 5.8	3.1 & 2.1.1			
Sample Number	G23-1037E	G23-1037F	G23-1037G	
Client Sample #	**	**	**	
Date Tested	14/11/2023	14/11/2023	14/11/2023	
Time Tested	10:45	11:05	11:10	
Test Request #/Location	Stage 1 (Retest G23- 1001D)	Stage 2 (Retest G23- 1001F)	Stage 2 (Retest G23- 1009A)	
Easting	527463	527284	527279	
Northing	6917130	6917103	6917203	
Elevation (m)	57.8	47.9	45.9	
Soil Description	Sandy Gravelly Clay, Brown	Sandy Gravelly Clay, Brown	Sandy Gravelly Clay, Brown	
Test Depth (mm)	150	150	150	
Sieve used to determine oversize (mm)	19.0	19.0	19.0	
Percentage of Wet Oversize (%)	18	19	18	
Field Wet Density (FWD) t/m ³	2.12	2.15	2.09	
Field Moisture Content %	11.0	12.2	8.5	
Field Dry Density (FDD) t/m ³	1.91	1.92	1.93	
Peak Converted Wet Density t/m ³	**	**	**	
Adjusted Peak Converted Wet Density t/m ³	2.21	2.26	2.25	
Moisture Variation (Wv) %	**	**	**	
Adjusted Moisture Variation %	0.5	0.0	2.0	
Hilf Density Ratio (%)	96.0	95.0	93.0	
Compaction Method	Standard	Standard	Standard	
Report Remarks	**	**	**	

Moisture Variation Note:

Material Te	st Report	A Pacific Geotech
Report Number:	PG-4116-A-20	Consulting Geotechnical Engineers
Date Issued: Client:	30/11/2023 CCA Winslow c/o 3 Jowett Street, Coomera Old 4209.	Pacific Geotech Pty Ltd ABN: 62 615 248 952 Gold Coast Laboratory
Project Number: Project Name:	PG-4116-A Residential Subdivision	3 Jowett St Coomera QLD 4209 Phone: (07) 5636 4680 Email: info@pacgeo.com.au
Project Location: Work Request: Date Sampled: Dates Tested:	Courtney Drive, Upper Coomera 1067 23/11/2023 23/11/2023 - 29/11/2023	Accredited for compliance with ISO/IEC 17025 - Testing
Sampling Method: Specification:	AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted Minimum 95% Standard Compaction	Approved Signatory: Rob Sharpe Senior Geotechnician
Site Selection: Location: Material:	Selected by GTA Upper Coomera Earthworks Fill	NATA Accredited Laboratory Number. 21130

Compaction Control AS 1289 5.7.1 & 5.8.1 & 2.1.1				
Sample Number	G23-1067A	G23-1067B	G23-1067C	
Client Sample #	**	**	**	
Date Tested	23/11/2023	23/11/2023	23/11/2023	
Time Tested	13:10	13:15	13:20	
Test Request #/Location	Stage 2 & 3	Stage 2 & 3	Stage 2 & 3	
Easting	527336	527330	527312	
Northing	6917186	6917179	6917191	
Elevation (m)	46.0	45.8	45.2	
Soil Description	Sandy Gravelly Clay, Brown	Sandy Gravelly Clay, Brown	Sandy Gravelly Clay, Brown	
Test Depth (mm)	150	150	150	
Sieve used to determine oversize (mm)	19.0	19.0	19.0	
Percentage of Wet Oversize (%)	19	18	19	
Field Wet Density (FWD) t/m ³	2.13	2.18	2.17	
Field Moisture Content %	10.5	10.7	10.3	
Field Dry Density (FDD) t/m ³	1.93	1.96	1.97	
Peak Converted Wet Density t/m ³	**	**	**	
Adjusted Peak Converted Wet Density t/m3	2.18	2.19	2.17	
Moisture Variation (Wv) %	**	**	**	
Adjusted Moisture Variation %	2.0	1.5	2.0	
Hilf Density Ratio (%)	97.5	99.5	100.5	
Compaction Method	Standard	Standard	Standard	
Report Remarks	**	**	**	

Moisture Variation Note:

Material Source:

Onsite

Material Tes	st Report	A Pacific Geotech
Report Number:	PG-4116-A-23	Consulting Geotechnical Engineers
Date Issued: Client:	1 30/11/2023 CCA Winslow c/o 3 Jowett Street, Coomera Qld 4209,	Pacific Geotech Pty Ltd ABN: 62 615 248 952 Gold Coast Laboratory
Project Number: Project Name:	PG-4116-A Residential Subdivision	3 Jowett St Coomera QLD 4209 Phone: (07) 5636 4680 Email: info@pacgeo.com.au
Project Location: Work Request: Date Sampled: Dates Tested:	Courtney Drive, Upper Coomera 1063 22/11/2023 22/11/2023 - 29/11/2023	Accredited for compliance with ISO/IEC 17025 - Testing
Sampling Method: Specification:	AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted Minimum 95% Standard Compaction	Approved Signatory: Dave Trotman ACCREDITATION ACCREDITATION ACCREDITATION Approved Signatory: Dave Trotman Senior Geotechnician NATA Accredited Laboratory Number: 21130
Location: Material:	Upper Coomera Earthworks Fill	

Compaction Control AS 1289 5.7.1 & 5.8	3.1 & 2.1.1		
Sample Number	G23-1063A	G23-1063B	G23-1063C
Client Sample #	**	**	**
Date Tested	22/11/2023	22/11/2023	22/11/2023
Time Tested	10:10	10:20	10:25
Test Request #/Location	Stage 2 & 3	Stage 2 & 3	Stage 2 & 3
Easting	527361	527321	527336
Northing	6917161	6917142	6917132
Elevation (m)	47.8	50.4	51.2
Soil Description	Sandy Gravelly Clay, Brown	Sandy Gravelly Clay, Brown	Sandy Gravelly Clay, Brown
Test Depth (mm)	150	150	150
Sieve used to determine oversize (mm)	19.0	19.0	19.0
Percentage of Wet Oversize (%)	16	15	14
Field Wet Density (FWD) t/m ³	2.24	2.19	2.25
Field Moisture Content %	8.8	15.0	10.1
Field Dry Density (FDD) t/m ³	2.06	1.91	2.04
Peak Converted Wet Density t/m ³	**	**	**
Adjusted Peak Converted Wet Density t/m ³	2.22	2.22	2.29
Moisture Variation (Wv) %	**	**	**
Adjusted Moisture Variation %	2.0	1.0	-0.5
Hilf Density Ratio (%)	100.5	98.5	98.0
Compaction Method	Standard	Standard	Standard
Report Remarks	**	**	**

Moisture Variation Note:

Material Tes	st Report	. (P	acific Geotech
Report Number: Issue Number:	PG-4116-A-24 1		Consulting Geotechnical Engineers
Date Issued: Client:	01/12/2023 CCA Winslow c/o 3 Jowett Street, Coomera Qld 4209,		ABN: 62 615 248 952 Gold Coast Laboratory
Project Number: Project Name:	PG-4116-A Residential Subdivision		3 Jowett St Coomera QLD 4209 Phone: (07) 5636 4680 Email: info@pacgeo.com.au
Project Location: Work Request: Date Sampled:	Courtney Drive, Upper Coomera 1071 27/11/2023 10:00	ΝΑΤΑ	Accredited for compliance with ISO/IEC 17025 - Testing
Dates Tested: Sampling Method:	27/11/2023 - 30/11/2023 AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted	WORLD RECOGNISED	Approved Signatory: Ian Masman
Specification: Site Selection: Location: Material:	Minimum 95% Standard Compaction Selected by GTA Courtney Court, Upper Coomera Various	ACCREDITATION	NATA Accredited Laboratory Number: 21130
Material Source:	Onsite		

Compaction Control AS 1289 5.7.1 & 5.8.1 & 2.1.1				
Sample Number	G23-1071A	G23-1071B	G23-1071C	G23-1071D
Client Sample #	**	**	**	**
Date Tested	27/11/2023	27/11/2023	27/11/2023	27/11/2023
Time Tested	10:00	10:10	10:20	10:30
Test Request #/Location	Stage 1	Stage 1	Stage 2 & 3	Stage 2 & 3
Easting	527414	527401	527353	527332
Northing	6916906	6916920	6917166	6917187
Elevation (m)	51.0	51.5	48.7	47.5
Soil Description	Sandy Gravelly Clay	Sandy Clay	Sandy Gravelly Clay	Sandy Gravelly Clay
Test Depth (mm)	150	150	150	150
Sieve used to determine oversize (mm)	19.0	19.0	19.0	19.0
Percentage of Wet Oversize (%)	15	6	13	9
Field Wet Density (FWD) t/m ³	2.13	2.07	2.22	2.13
Field Moisture Content %	11.1	12.5	10.0	8.6
Field Dry Density (FDD) t/m ³	1.91	1.84	2.02	1.96
Peak Converted Wet Density t/m ³	**	**	**	**
Adjusted Peak Converted Wet Density t/m3	2.23	2.15	2.22	2.23
Moisture Variation (Wv) %	**	**	**	**
Adjusted Moisture Variation %	-0.5	0.5	1.5	1.0
Hilf Density Ratio (%)	95.5	96.5	100.0	95.0
Compaction Method	Standard	Standard	Standard	Standard
Report Remarks	**	**	**	**

Moisture Variation Note:

Material Tes	st Report	A Pacific Geotech
Report Number: Issue Number:	PG-4116-A-28 1	Consulting Geotechnical Engineers
Date Issued:	08/12/2023	Pacific Geotech Pty Ltd
Client:	CCA Winslow	ABN: 62 615 248 952
	c/o 3 Jowett Street, Coomera Qld 4209,	Gold Coast Laboratory
Project Number:	PG-4116-A	3 Jowett St Coomera QLD 4209
Project Name:	Residential Subdivision	Phone: (07) 5636 4680
Project Location:	Courtney Drive, Upper Coomera	
Work Request:	1090	Accredited for compliance with ISO/IEC 17025 - Testing
Date Sampled:	04/12/2023	
Dates Tested:	04/12/2023 - 06/12/2023	NAIA de Mara
Sampling Method:	AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted	Approved Signatory: Ian Masman
Specification:	Minimum 95% Standard Compaction	ACCREDITATION Laboratory Manager
Site Selection:	Selected by GTA	NATA Accredited Laboratory Number: 21130
Location:	Upper Coomera	
Material:	Earthworks Fill	
Material Source:	Onsite	
Compaction Constant		

Compaction Control AS 1289 5.7.1 & 5.8	3.1 & 2.1.1		
Sample Number	G23-1090A	G23-1090B	
Client Sample #	**	**	
Date Tested	04/12/2023	04/12/2023	
Time Tested	10:15	10:25	
Test Request #/Location	Stage 2 & 3	Stage 2 & 3	
Easting	527343	527334	
Northing	6917159	6917186	
Elevation (m)	49.0	48.5	
Soil Description	Sandy Gravelly Clay, Brown	Sandy Gravelly Clay, Brown	
Test Depth (mm)	150	150	
Sieve used to determine oversize (mm)	37.5	19.0	
Percentage of Wet Oversize (%)	12	10	
Field Wet Density (FWD) t/m ³	2.18	2.16	
Field Moisture Content %	9.2	9.5	
Field Dry Density (FDD) t/m ³	2.00	1.98	
Peak Converted Wet Density t/m ³	**	**	
Adjusted Peak Converted Wet Density t/m ³	2.29	2.27	
Moisture Variation (Wv) %	**	**	
Adjusted Moisture Variation %	-0.5	0.0	
Hilf Density Ratio (%)	95.0	95.5	
Compaction Method	Standard	Standard	
Report Remarks	**	**	

Moisture Variation Note:

Material Tes	st Report	A Pacific Geotech
Report Number: Issue Number:	PG-4116-A-29 1	Consulting Geotechnical Engineers
Date Issued: Client:	08/12/2023 CCA Winslow c/o 3 Jowett Street, Coomera Qld 4209,	Pacific Geotech Pty Ltd ABN: 62 615 248 952 Gold Coast Laboratory
Project Number: Project Name:	PG-4116-A Residential Subdivision	3 Jowett St Coomera QLD 4209 Phone: (07) 5636 4680 Email: info@pacgeo.com.au
Project Location: Work Request: Date Sampled: Dates Tested:	Courtney Drive, Upper Coomera 1100 05/12/2023 05/12/2023 - 06/12/2023	Accredited for compliance with ISO/IEC 17025 - Testing
Sampling Method:	AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted	Approved Signatory: Ian Masman
Specification: Site Selection: Location: Material: Material Source:	Minimum 95% Standard Compaction Selected by GTA Upper Coomera Earthworks Fill Onsite	ACCREDITATION Laboratory Manager NATA Accredited Laboratory Number: 21130
Compaction Control	AS 1289 5 7 1 & 5 8 1 & 2 1 1	

Compaction Control AS 1289 5.7.1 & 5.8	3.1 & 2.1.1			
Sample Number	G23-1100A	G23-1100B	G23-1100C	G23-1100D
Client Sample #	**	**	**	**
Date Tested	05/12/2023	05/12/2023	05/12/2023	05/12/2023
Time Tested	10:05	10:10	10:20	10:25
Test Request #/Location	Stage 2 & 3			
Easting	527345	527350	527310	527291
Northing	6917202	6917186	6917120	6917107
Elevation (m)	48.0	48.2	51.2	50.8
Soil Description	Sandy Gravelly Clay. Brown	Sandy Gravelly Clay. Brown	Sandy Gravelly Clay. Brown	Sandy Gravelly Clay. Brown
Test Depth (mm)	150	150	150	150
Sieve used to determine oversize (mm)	37.5	19.0	19.0	19.0
Percentage of Wet Oversize (%)	10	14	18	13
Field Wet Density (FWD) t/m ³	2.18	2.22	2.25	2.18
Field Moisture Content %	9.0	11.1	10.5	9.7
Field Dry Density (FDD) t/m ³	2.00	2.00	2.04	1.98
Peak Converted Wet Density t/m ³	**	**	**	**
Adjusted Peak Converted Wet Density t/m ³	2.30	2.28	2.24	2.23
Moisture Variation (Wv) %	**	**	**	**
Adjusted Moisture Variation %	-0.5	0.0	0.5	0.5
Hilf Density Ratio (%)	95.0	97.5	100.5	97.5
Compaction Method	Standard	Standard	Standard	Standard
Report Remarks	**	**	**	**

Moisture Variation Note:

Positive values = test is dry of OMC

Material Tes	st Report	A Pacific Geotech
Report Number: Issue Number:	PG-4116-A-31 1	Consulting Geotechnical Engineers
Date Issued: Client:	18/12/2023 CCA Winslow c/o 3. Jowett Street, Coomera Old 4209	Pacific Geotech Pty Ltd ABN: 62 615 248 952 Gold Coast Laboratory
Project Number: Project Name:	PG-4116-A Residential Subdivision	3 Jowett St Coomera QLD 4209 Phone: (07) 5636 4680 Email: info@pacgeo.com.au
Project Location: Work Request: Date Sampled: Dates Tested:	Courtney Drive, Upper Coomera 1127 11/12/2023 11/12/2023 - 14/12/2023	Accredited for compliance with ISO/IEC 17025 - Testing
Sampling Method: Specification:	AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted Minimum 95% Standard Compaction	Approved Signatory: Ian Masman Laboratory Manager
Site Selection: Location: Material:	Selected by GTA Upper Coomera Farthworks Fill	NATA Accredited Laboratory Number: 21130
Material Source:		

Compaction Control AS 1289 5.7.1 & 5.8	3.1 & 2.1.1			
Sample Number	G23-1127A	G23-1127B	G23-1127C	G23-1127D
Client Sample #	**	**	**	**
Date Tested	11/12/2023	11/12/2023	11/12/2023	11/12/2023
Time Tested	10:15	10:20	10:25	10:30
Test Request #/Location	Stage 2 & 3			
Easting	527314	527331	527327	527320
Northing	6917165	6917175	6917188	6917206
Elevation (m)	49.6	49.3	48.8	49.5
Soil Description	Sandy Gravelly Clay. Brown	Sandy Gravelly Clay. Brown	Sandy Gravelly Clay. Brown	Sandy Gravelly Clay. Brown
Test Depth (mm)	150	150	150	150
Sieve used to determine oversize (mm)	37.5	37.5	37.5	37.5
Percentage of Wet Oversize (%)	16	15	19	16
Field Wet Density (FWD) t/m ³	2.24	2.18	2.22	2.13
Field Moisture Content %	8.2	9.2	9.2	7.8
Field Dry Density (FDD) t/m ³	2.07	1.99	2.03	1.97
Peak Converted Wet Density t/m ³	**	**	**	**
Adjusted Peak Converted Wet Density t/m ³	2.26	2.27	2.31	2.23
Moisture Variation (Wv) %	**	**	**	**
Adjusted Moisture Variation %	2.0	1.5	-0.5	2.5
Hilf Density Ratio (%)	99.0	96.0	96.0	95.5
Compaction Method	Standard	Standard	Standard	Standard
Report Remarks	**	**	**	**

Moisture Variation Note:

Positive values = test is dry of OMC

Material Tes	st Report	A Pacific Geotech
Report Number: Issue Number:	PG-4116-A-32 1	Consulting Geotechnical Engineers
Date Issued: Client:	20/12/2023 CCA Winslow c/o 3 Jowett Street, Coomera Qld 4209,	Pacific Geotech Pty Ltd ABN: 62 615 248 952 Gold Coast Laboratory
Project Number: Project Name:	PG-4116-A Residential Subdivision	3 Jowett St Coomera QLD 4209 Phone: (07) 5636 4680 Email: info@pacgeo.com.au
Work Request: Date Sampled:	Courtney Drive, Opper Coomera 1133 12/12/2023 12/12/2023 - 18/12/2023	Accredited for compliance with ISO/IEC 17025 - Testing
Sampling Method:	AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted	Approved Signatory: Dave Trotman
Specification: Site Selection:	Minimum 95% Standard Compaction Selected by GTA	ACCREDITATION Senior Geotechnician NATA Accredited Laboratory Number: 21130
Location: Material: Material Source:	Upper Coomera Earthworks Fill Onsite	
Compaction Control	AS 1289 5 7 1 & 5 8 1 & 2 1 1	

Compaction Control AS 1289 5.7.1 & 5.8	3.1 & 2.1.1			
Sample Number	G23-1133A	G23-1133B	G23-1133C	G23-1133D
Client Sample #	**	**	**	**
Date Tested	12/12/2023	12/12/2023	12/12/2023	12/12/2023
Time Tested	10:10	10:15	10:20	10:35
Test Request #/Location	Stage 2 & 3			
Easting	527340	527321	527298	527251
Northing	6917175	6917141	6917114	6917189
Elevation (m)	50.9	51.4	51.6	**
Layer / Reduced Level	**	**	**	Finish Level
Soil Description	Sandy Gravelly Clay. Brown	Sandy Gravelly Clay. Brown	Sandy Gravelly Clay. Brown	Sandy Gravelly Clay. Brown
Test Depth (mm)	150	150	150	150
Sieve used to determine oversize (mm)	37.5	19.0	37.5	19.0
Percentage of Wet Oversize (%)	12	17	4	13
Field Wet Density (FWD) t/m ³	2.22	2.21	2.05	2.19
Field Moisture Content %	8.5	11.1	8.2	9.5
Field Dry Density (FDD) t/m ³	2.05	1.99	1.89	2.00
Peak Converted Wet Density t/m ³	**	**	**	**
Adjusted Peak Converted Wet Density t/m ³	2.23	2.27	2.22	2.21
Moisture Variation (Wv) %	**	**	**	**
Adjusted Moisture Variation %	2.0	0.0	0.5	2.0
Hilf Density Ratio (%)	99.5	97.5	92.5	99.5
Compaction Method	Standard	Standard	Standard	Standard
Report Remarks	**	**	**	**

Moisture Variation Note:

Material Tes	st Report	A Pacific Geotech
Report Number:	PG-4116-A-33	Consulting Geotechnical Engineers
Issue Number:	1	•
Date Issued:	20/12/2023	Pacific Geotech Pty Ltd
Client:	CCA Winslow	ABN: 62 615 248 952
	c/o 3 Jowett Street, Coomera Qld 4209,	Gold Coast Laboratory
Project Number:	PG-4116-A	3 Jowett St Coomera QLD 4209
Project Name:	Residential Subdivision	Phone: (07) 5636 4680
Project Location:	Courtney Drive, Upper Coomera	
Work Request:	1146	Accredited for compliance with ISO/IEC 17025 - Testing
Date Sampled:	14/12/2023	
Dates Tested:	14/12/2023 - 18/12/2023	
Sampling Method:	AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted	Approved Signatory: Dave Trotman
Specification:	Minimum 95% Standard Compaction	ACCREDITATION Senior Geotechnician
Site Selection:	Selected by GTA	NATA Accredited Laboratory Number: 21130
Location:	Upper Coomera	
Material:	Earthworks Fill	
Material Source:	Onsite	

Compaction Control AS 1289 5.7.1 & 5.8	3.1 & 2.1.1		
Sample Number	G23-1146A	G23-1146B	
Client Sample #	**	**	
Date Tested	14/12/2023	14/12/2023	
Time Tested	10:15	10:25	
Test Request #/Location	Stage 2 & 3	Stage 2 & 3	
Easting	527344	527316	
Northing	6917235	6917209	
Elevation (m)	49.5	49.8	
Soil Description	Sandy Gravelly Clay. Brown	Sandy Gravelly Clay. Brown	
Test Depth (mm)	150	150	
Sieve used to determine oversize (mm)	37.5	37.5	
Percentage of Wet Oversize (%)	16	15	
Field Wet Density (FWD) t/m ³	2.19	2.22	
Field Moisture Content %	9.0	8.3	
Field Dry Density (FDD) t/m ³	2.01	2.05	
Peak Converted Wet Density t/m ³	**	**	
Adjusted Peak Converted Wet Density t/m3	2.29	2.26	
Moisture Variation (Wv) %	**	**	
Adjusted Moisture Variation %	0.0	2.0	
Hilf Density Ratio (%)	95.5	98.0	
Compaction Method	Standard	Standard	
Report Remarks	**	**	

Moisture Variation Note:

Report Number:	PG-4116-A-35		Consulting Geote
Issue Number:	1		
Date Issued:	22/12/2023		
Client:	CCA Winslow		
	c/o 3 Jowett Street, Coomera Qld 4209,		
Project Number:	PG-4116-A		3 Jo
Project Name:	Residential Subdivision		
Project Location:	Courtney Drive, Upper Coomera		
Work Request:	1161		Accredited for compliance wi
Date Sampled:	19/12/2023	NATA	1 el
Dates Tested:	19/12/2023 - 20/12/2023	NAIA	de Aluan
Sampling Method:	AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted	WORLD RECOGNISED	Approved Signatory: Ian Ma
Remarks:	Samples have greater than 20% by mass of particles retained on the 37.5mm sieve and therefore this test method is not applicable.	ACCREDITATION	Labora NATA Accredited Laboratory
Specification:	Minimum 95% Standard Compaction		
Site Selection:	Selected by GTA		
Location:	Upper Coomera		
Material:	Earthworks Fill		
Material Source:	Onsite		

Compaction Control AS 1289 5 7 1 & 5 8 1 & 2 1 1

Sample Number	G23-1161A	G23-1161B	G23-1161C	G23-1161D	G23-1161E
Client Sample #	**	**	**	**	**
Date Tested	19/12/2023	19/12/2023	19/12/2023	19/12/2023	19/12/2023
Time Tested	10:05	10:10	10:15	10:25	10:35
Test Request #/Location	Stage 2 & 3				
Easting	527352	527344	527330	527309	527285
Northing	6917193	6917161	6917195	6917160	6917146
Elevation (m)	50.6	50.9	51.1	51.5	51.6
Soil Description	Sandy Gravelly Clay. Brown				
Test Depth (mm)	150	150	150	150	150
Sieve used to determine oversize (mm)	37.5	37.5	37.5	37.5	37.5
Percentage of Wet Oversize (%)	22	22	22	26	34
Field Wet Density (FWD) t/m ³	2.23	2.19	2.27	2.30	2.37
Field Moisture Content %	9.0	10.3	8.6	9.3	9.3
Field Dry Density (FDD) t/m ³	2.05	1.98	2.09	2.10	2.17
Peak Converted Wet Density t/m ³	**	**	**	**	**
Adjusted Peak Converted Wet Density t/m ³	**	**	**	**	**
Moisture Variation (Wv) %	**	**	**	**	**
Adjusted Moisture Variation %	**	**	**	**	**
Hilf Density Ratio (%)	**	**	**	**	**
Compaction Method	Standard	Standard	Standard	Standard	Standard
Report Remarks	**	**	**	**	**

Moisture Variation Note:

Positive values = test is dry of OMC Negative values = test is wet of OMC



Pacific Geotech Pty Ltd ABN: 62 615 248 952 Gold Coast Laboratory owett St Coomera QLD 4209 Phone: (07) 5636 4680

Email: info@pacgeo.com.au

vith ISO/IEC 17025 - Testing



Number: 21130

Material:

Material Source:

Material Te	st Report	.6 P	acific Geotech
Report Number:	PG-4116-A-36		Consulting Geotechnical Engineers
Issue Number:	1	V	
Date Issued:	10/01/2024		Pacific Geotech Pty Ltd
Client:	CCA Winslow		ABN: 62 615 248 952
	c/o 3 Jowett Street, Coomera Qld 4209,		Gold Coast Laboratory
Project Number:	PG-4116-A		3 Jowett St Coomera QLD 4209
Project Name:	Residential Subdivision		Phone: (07) 5636 4680
Project Location:	Courtney Drive, Upper Coomera		Email: Info@pacgeo.com.au
Work Request:	1140		Accredited for compliance with ISO/IEC 17025 - Testing
Date Sampled:	13/12/2023	NATA	(.)
Dates Tested:	13/12/2023 - 09/01/2024		Ab land.
Sampling Method:	AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted	WORLD RECOGNISED	Approved Signatory: Rob Sharpe
Specification:	Minimum 95% Standard Compaction	ACCREDITATION	Senior Geotechnician
Site Selection:	Selected by GTA		NATA Accredited Laboratory Number: 21130
Location:	Upper Coomera		

Compaction Control AS 1289 5.7.1 & 5.8.1 & 2.1.1

Onsite

Earthworks Fill

Sample Number	G23-1140A	G23-1140B	
Client Sample #	**	**	
Date Tested	13/12/2023	13/12/2023	
Time Tested	10:10	10:20	
Test Request #/Location	Stage 2 & 3	Stage 2 & 3	
Easting	527359	527352	
Northing	6917171	6917150	
Elevation (m)	51.2	51.2	
Soil Description	Sandy Gravelly Clay. Brown	Sandy Gravelly Clay. Brown	
Test Depth (mm)	150	150	
Sieve used to determine oversize (mm)	19.0	19.0	
Percentage of Wet Oversize (%)	17	18	
Field Wet Density (FWD) t/m ³	2.14	2.08	
Field Moisture Content %	7.3	5.3	
Field Dry Density (FDD) t/m ³	2.00	1.97	
Peak Converted Wet Density t/m ³	**	**	
Adjusted Peak Converted Wet Density t/m3	2.22	2.12	
Moisture Variation (Wv) %	**	**	
Adjusted Moisture Variation %	2.0	2.0	
Hilf Density Ratio (%)	96.5	98.0	
Compaction Method	Standard	Standard	
Report Remarks	**	**	

Moisture Variation Note:

Material Tes	st Report	. (P	acific Geotech
Report Number:	PG-4116-A-37		Consulting Geotechnical Engineers
Date Issued: Client:	' 18/01/2024 CCA Winslow c/o 3 Jowett Street, Coomera Old 4209		Pacific Geotech Pty Ltd ABN: 62 615 248 952 Gold Coast Laboratory
Project Number: Project Name:	PG-4116-A Residential Subdivision		3 Jowett St Coomera QLD 4209 Phone: (07) 5636 4680 Email: info@pacgeo.com.au
Work Request: Date Sampled:	Courtney Drive, Opper Coomera 1166 20/12/2023	NATA	Accredited for compliance with ISO/IEC 17025 - Testing
Dates Tested: Sampling Method:	20/12/2023 - 11/01/2024 AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted	WORLD RECOGNISED	Approved Signatory: Ian Masman
Remarks:	Samples G23-1166A, G23-1166B, & G23-1166D have greater than 20% by mass of particles retained on the 37.5mm sieve and therefore this test method is not applicable.	ACCREDITATION	NATA Accredited Laboratory Number: 21130
Specification:	Minimum 95% Standard Compaction		
Site Selection:	Selected by GTA		
Location:	Upper Coomera		
Material:	Earthworks Fill		
Material Source:	Onsite		

ction Control AS 1289 5 7 1 & 5 8 1 & 2 1 1

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Sample Number	G23-1166A	G23-1166B	G23-1166C	G23-1166D
Client Sample #	**	**	**	**
Date Tested	20/12/2023	20/12/2023	20/12/2023	20/12/2023
Time Tested	10:05	10:10	10:15	10:30
Test Request #/Location	Stage 2 & 3	Stage 2 & 3	Stage 2 & 3	Stage 1
Easting	527246	527261	527279	527416
Northing	6917141	6917132	6917112	6916888
Elevation (m)	50.0	50.8	51.1	53.0
Soil Description	Sandy Gravelly Clay. Brown	Sandy Gravelly Clay. Brown	Sandy Gravelly Clay. Brown	Sandy Gravelly Clay. Brown
Test Depth (mm)	150	150	150	150
Sieve used to determine oversize (mm)	37.5	37.5	37.5	37.5
Percentage of Wet Oversize (%)	29	28	15	31
Field Wet Density (FWD) t/m ³	2.14	2.21	2.24	2.17
Field Moisture Content %	9.4	9.4	7.6	7.9
Field Dry Density (FDD) t/m ³	1.95	2.02	2.08	2.01
Peak Converted Wet Density t/m ³	**	**	**	**
Adjusted Peak Converted Wet Density t/m ³	**	**	2.28	**
Moisture Variation (Wv) %	**	**	**	**
Adjusted Moisture Variation %	**	**	2.0	**
Hilf Density Ratio (%)	**	**	98.0	**
Compaction Method	Standard	Standard	Standard	Standard
Report Remarks	**	**	**	**

Moisture Variation Note:

Material Tes	st Report	. (P	acific Geotech
Report Number:	PG-4116-A-37		Consulting Geotechnical Engineers
Date Issued: Client:	1 18/01/2024 CCA Winslow c/o 3 Jowett Street. Coomera Qld 4209.		Pacific Geotech Pty Ltd ABN: 62 615 248 952 Gold Coast Laboratory
Project Number: Project Name:	PG-4116-A Residential Subdivision		3 Jowett St Coomera QLD 4209 Phone: (07) 5636 4680 Email: info@pacgeo.com.au
Project Location: Work Request: Date Sampled:	Courtney Drive, Upper Coomera 1166 20/12/2023	NATA	Accredited for compliance with ISO/IEC 17025 - Testing
Dates Tested: Sampling Method:	AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted	WORLD RECOGNISED	Approved Signatory: Ian Masman
Remarks:	Samples G23-1166A, G23-1166B, & G23-1166D have greater than 20% by mass of particles retained on the 37.5mm sieve and therefore this test method is not applicable.	ACCREDITATION	Laboratory Manager NATA Accredited Laboratory Number: 21130
Specification: Site Selection:	Minimum 95% Standard Compaction Selected by GTA Upper Coomera		
Material: Material Source:	Earthworks Fill Onsite		

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Sample Number	G23-1166E	G23-1166F	G23-1166G	
Client Sample #	**	**	**	
Date Tested	20/12/2023	20/12/2023	20/12/2023	
Time Tested	10:40	11:05	11:15	
Test Request #/Location	Stage 1	Stage 2 & 3 (Retest G23- 1133C)	Stage 2 & 3 (Retest G23- 1155A)	
Easting	527394	527298	527287	
Northing	6916918	6917114	6917155	
Elevation (m)	53.5	51.6	49.5	
Soil Description	Sandy Gravelly Clay. Brown	Sandy Gravelly Clay. Brown	Sandy Gravelly Clay. Brown	
Test Depth (mm)	150	150	150	
Sieve used to determine oversize (mm)	37.5	37.5	37.5	
Percentage of Wet Oversize (%)	18	8	11	
Field Wet Density (FWD) t/m ³	2.17	2.23	2.23	
Field Moisture Content %	9.2	8.6	8.7	
Field Dry Density (FDD) t/m ³	1.99	2.05	2.05	
Peak Converted Wet Density t/m ³	**	**	**	
Adjusted Peak Converted Wet Density	2.28	2.25	2.31	
Moisture Variation (Wv) %	**	**	**	
Adjusted Moisture Variation %	0.5	1.5	-0.5	
Hilf Density Ratio (%)	95.0	99.0	97.0	
Compaction Method	Standard	Standard	Standard	
Report Remarks	**	**	**	

Moisture Variation Note:

Positive values = test is dry of OMC

Material Tes	st Report	" P	acific Geotech
Report Number: Issue Number:	PG-4116-A-38 1		Consulting Geotechnical Engineers
Date Issued: Client:	18/01/2024 CCA Winslow c/o 3 Jowett Street, Coomera Qld 4209,		Pacific Geotech Pty Ltd ABN: 62 615 248 952 Gold Coast Laboratory
Project Number: Project Name:	PG-4116-A Residential Subdivision		3 Jowett St Coomera QLD 4209 Phone: (07) 5636 4680 Email: info@pacgeo.com.au
Project Location: Work Request: Date Sampled: Dates Tested:	Courtney Drive, Upper Coomera 1177 15/01/2024 15/01/2024 - 17/01/2024	NATA	Accredited for compliance with ISO/IEC 17025 - Testing
Sampling Method:	AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted		Approved Signatory: Ian Masman
Remarks:	Samples G23-1177D to G23-1177F have greater than 20% by mass of particles retained on the 37.5mm sieve and therefore this test is not applicable.	AUTEDIATION	NATA Accredited Laboratory Number: 21130
Specification: Site Selection: Location: Material: Material:	Minimum 95% Standard Compaction Selected by GTA Upper Coomera Earthworks Fill Onsite		
waterial Source.	Onsite		

Compaction Control AS 1289 5.7.1 & 5.	3.1 & 2.1.1					
Sample Number	G24-1177A	G24-1177B	G24-1177C	G24-1177D	G24-1177E	G24-1177F
Client Sample #	**	**	**	**	**	**
Date Tested	15/01/2024	15/01/2024	15/01/2024	15/01/2024	15/01/2024	15/01/2024
Time Tested	10:05	10:10	10:20	10:25	12:30	12:40
Test Request #/Location	Stage 2 & 3	Stage 1	Stage 1			
Easting	527367	527327	527317	527379	527420	527407
Northing	6917200	6917206	6917166	6917139	6916882	6916914
Elevation (m)	51.1	50.3	51.1	52.9	54.2	54.9
Soil Description	Sandy Gravelly Clay. Brown					
Test Depth (mm)	150	150	150	150	150	150
Sieve used to determine oversize (mm)	37.5	37.5	37.5	37.5	37.5	37.5
Percentage of Wet Oversize (%)	14	19	18	24	24	28
Field Wet Density (FWD) t/m ³	2.22	2.26	2.30	2.19	2.14	2.17
Field Moisture Content %	10.1	8.5	7.4	6.9	6.2	5.7
Field Dry Density (FDD) t/m ³	2.01	2.08	2.14	2.05	2.02	2.05
Peak Converted Wet Density t/m ³	**	**	**	**	**	**
Adjusted Peak Converted Wet Density t/m ³	2.28	2.31	2.28	**	**	**
Moisture Variation (Wv) %	**	**	**	**	**	**
Adjusted Moisture Variation %	-0.5	0.0	2.0	**	**	**
Hilf Density Ratio (%)	97.0	98.0	101.0	**	**	**
Compaction Method	Standard	Standard	Standard	Standard	Standard	Standard
Report Remarks	**	**	**	**	**	**

Moisture Variation Note:

Positive values = test is dry of OMC

Material Te	st Report	S A D	acific Geotech
Report Number:	PG-4116-A-41		Consulting Geotechnical Engineers
Issue Number:	1	•	
Date Issued:	01/02/2024		Pacific Geotech Pty Ltd
Client:	CCA Winslow		ABN: 62 615 248 952
	c/o 3 Jowett Street, Coomera Qld 4209,		Gold Coast Laboratory
Project Number:	PG-4116-A		3 Jowett St Coomera QLD 4209
Project Name:	Residential Subdivision		Phone: (07) 5636 4680
Project Location:	Courtney Drive, Upper Coomera		Email. mo@pacgeo.com.au
Work Request:	1190		Accredited for compliance with ISO/IEC 17025 - Testing
Date Sampled:	25/01/2024	NATA	$\sim +$
Dates Tested:	25/01/2024 - 30/01/2024	NAIA	1). 7
Sampling Method:	AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted	WORLD RECOGNISED	Approved Signatory: Dave Trotman
Specification:	Minimum 95% Standard Compaction	ACCREDITATION	Senior Geotechnician
Site Selection:	Selected by GTA		NATA Accredited Laboratory Number: 21130
Location:	Upper Coomera		
Material:	Earthworks Fill		
Material Source:	Onsite		
Composition Control			

Compaction Control AS 1289 5.7.1 & 5.8	3.1 & 2.1.1					
Sample Number	G24-1190A	G24-1190B	G24-1190C	G24-1190D	G24-1190E	G24-1190F
Client Sample #	**	**	**	**	**	**
Date Tested	25/01/2024	25/01/2024	25/01/2024	25/01/2024	25/01/2024	25/01/2024
Time Tested	10:10	10:15	13:10	13:15	13:25	13:30
Test Request #/Location	Stage 2 & 3	Stage 2 & 3	Stage 1	Stage 1	Stage 1	Stage 1
Easting	527343	527341	527405	527422	527444	527390
Northing	6917240	6917226	6916891	6916876	6916934	6916923
Elevation (m)	50.5	51.0	56.2	55.0	56.5	57.1
Soil Description	Sandy Gravelly Clay. Brown					
Test Depth (mm)	150	150	150	150	150	150
Sieve used to determine oversize (mm)	37.5	37.5	37.5	37.5	37.5	37.5
Percentage of Wet Oversize (%)	9	6	19	12	11	5
Field Wet Density (FWD) t/m ³	2.25	2.22	2.25	2.23	2.27	2.18
Field Moisture Content %	7.4	8.3	6.3	6.7	8.3	7.6
Field Dry Density (FDD) t/m ³	2.10	2.05	2.11	2.09	2.09	2.03
Peak Converted Wet Density t/m ³	**	**	**	**	**	**
Adjusted Peak Converted Wet Density t/m ³	2.23	2.25	2.29	2.27	2.31	2.29
Moisture Variation (Wv) %	**	**	**	**	**	**
Adjusted Moisture Variation %	2.0	0.5	0.5	1.0	0.0	0.5
Hilf Density Ratio (%)	101.0	98.5	98.0	98.0	98.0	95.0
Compaction Method	Standard	Standard	Standard	Standard	Standard	Standard
Report Remarks	**	**	**	**	**	**

Moisture Variation Note:

Positive values = test is dry of OMC

Material Tes	st Report	A Pacific Geotech
Report Number: Issue Number:	PG-4116-A-42 1	Consulting Geotechnical Engineers
Date Issued:	09/02/2024	Pacific Geotech Pty Ltd
Client:	CCA Winslow	ABN: 62 615 248 952
	c/o 3 Jowett Street, Coomera Qld 4209,	Gold Coast Laboratory
Project Number:	PG-4116-A	3 Jowett St Coomera QLD 4209
Project Name:	Residential Subdivision	Phone: (07) 5636 4680
Project Location:	Courtney Drive, Upper Coomera	
Work Request:	1197	Accredited for compliance with ISO/IEC 17025 - Testing
Date Sampled:	02/02/2024	
Dates Tested:	02/02/2024 - 06/02/2024	NATA de Maron
Sampling Method:	AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted	Approved Signatory: Ian Masman
Specification:	Minimum 95% Standard Compaction	ACCREDITATION Laboratory Manager
Site Selection:	Selected by GTA	NATA Accredited Laboratory Number: 21130
Location:	Upper Coomera	
Material:	Earthworks Fill	
Material Source:	Onsite	
Composition Control		

Compaction Control AS 1289 5.7.1 & 5.8	3.1 & 2.1.1		
Sample Number	G24-1197A	G24-1197B	G24-1197C
Client Sample #	**	**	**
Date Tested	02/02/2024	02/02/2024	02/02/2024
Time Tested	10:35	10:40	10:50
Test Request #/Location	Stage 2 & 3	Stage 2 & 3	Stage 2 & 3
Easting	527352	527334	527361
Northing	6917262	6917229	6917217
Elevation (m)	50.9	51.2	51.6
Soil Description	Sandy Gravelly Clay. Brown	Sandy Gravelly Clay. Brown	Sandy Gravelly Clay. Brown
Test Depth (mm)	150	150	150
Sieve used to determine oversize (mm)	37.5	37.5	37.5
Percentage of Wet Oversize (%)	6	8	12
Field Wet Density (FWD) t/m ³	2.27	2.28	2.24
Field Moisture Content %	7.7	7.6	7.1
Field Dry Density (FDD) t/m ³	2.10	2.12	2.09
Peak Converted Wet Density t/m ³	**	**	**
Adjusted Peak Converted Wet Density t/m ³	2.25	2.27	2.31
Moisture Variation (Wv) %	**	**	**
Adjusted Moisture Variation %	2.5	1.5	0.5
Hilf Density Ratio (%)	101.0	100.5	97.0
Compaction Method	Standard	Standard	Standard
Report Remarks	**	**	**

Moisture Variation Note:

Material Tes	st Report	A Pacific Geotech
Report Number: Issue Number:	PG-4116-A-43 1	Consulting Geotechnical Engineers
Date Issued: Client:	09/02/2024 CCA Winslow c/o 3 Jowett Street, Coomera Qld 4209,	Pacific Geotech Pty Ltd ABN: 62 615 248 952 Gold Coast Laboratory
Project Number: Project Name:	PG-4116-A Residential Subdivision	3 Jowett St Coomera QLD 4209 Phone: (07) 5636 4680 Email: info@pacgeo.com.au
Project Location: Work Request: Date Sampled: Dates Tested:	Courtney Drive, Upper Coomera 1200 05/02/2024 05/02/2024 - 06/02/2024	Accredited for compliance with ISO/IEC 17025 - Testing
Sampling Method:	AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted	Approved Signatory: Ian Masman
Specification: Site Selection: Location:	Minimum 95% Standard Compaction Selected by GTA Upper Coomera	ACCREDITATION Laboratory Manager NATA Accredited Laboratory Number: 21130
Material: Material Source:	Earthworks Fill Onsite	

Compaction Control AS 1289 5.7.1 & 5.8	3.1 & 2.1.1		
Sample Number	G24-1200A	G24-1200B	G24-1200C
Client Sample #	**	**	**
Date Tested	05/02/2024	05/02/2024	05/02/2024
Time Tested	10:05	10:15	10:25
Test Request #/Location	Stage 2 & 3	Stage 2 & 3	Stage 2 & 3
Easting	527365	527316	527389
Northing	6917216	6917156	6917133
Elevation (m)	60.4	61.2	62.0
Soil Description	Sandy Gravelly Clay. Brown	Sandy Gravelly Clay. Brown	Sandy Gravelly Clay. Brown
Test Depth (mm)	150	150	150
Sieve used to determine oversize (mm)	37.5	37.5	37.5
Percentage of Wet Oversize (%)	15	7	12
Field Wet Density (FWD) t/m ³	2.26	2.22	2.18
Field Moisture Content %	7.4	9.2	7.8
Field Dry Density (FDD) t/m ³	2.10	2.03	2.02
Peak Converted Wet Density t/m ³	**	**	**
Adjusted Peak Converted Wet Density t/m3	2.27	2.29	2.25
Moisture Variation (Wv) %	**	**	**
Adjusted Moisture Variation %	1.5	0.0	0.5
Hilf Density Ratio (%)	99.5	97.0	97.0
Compaction Method	Standard	Standard	Standard
Report Remarks	**	**	**

Moisture Variation Note:

Material Tes	st Report	A Pacific Geotech
Report Number:	PG-4116-A-45	Consulting Geotechnical Engineers
Date Issued: Client:	r 13/03/2024 CCA Winslow c/o 3 Jowett Street, Coomera Qld 4209,	Pacific Geotech Pty Ltd ABN: 62 615 248 952 Gold Coast Laboratory
Project Number: Project Name:	PG-4116-A Residential Subdivision	3 Jowett St Coomera QLD 4209 Phone: (07) 5636 4680 Email: info@pacgeo.com.au
Project Location: Work Request: Date Sampled:	Courtney Drive, Upper Coomera 1268 04/03/2024	Accredited for compliance with ISO/IEC 17025 - Testing
Sampling Method:	AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted	Approved Signatory: Dave Trotman
Specification: Site Selection: Location:	Minimum 95% Standard Compaction Selected by GTA Upper Coomera	ACCREDITATION Senior Geotechnician NATA Accredited Laboratory Number: 21130
Material: Material Source:	Earthworks Fill Onsite	

Compaction Control AS 1289 5.7.1 & 5.8	3.1 & 2.1.1		
Sample Number	G24-1268A	G24-1268B	
Client Sample #	**	**	
Date Tested	04/03/2024	04/03/2024	
Time Tested	11:30	12:15	
Test Request #/Location	Stage 2 & 3	Stage 2 & 3	
Easting	527401	527360	
Northing	6917127	6917112	
Elevation (m)	56.3	55.3	
Soil Description	Sandy Clay w/ Gravel. Brown	Sandy Clay w/ Gravel. Brown	
Test Depth (mm)	150	150	
Sieve used to determine oversize (mm)	37.5	19.0	
Percentage of Wet Oversize (%)	12	7	
Field Wet Density (FWD) t/m ³	2.12	2.08	
Field Moisture Content %	6.9	7.8	
Field Dry Density (FDD) t/m ³	1.98	1.93	
Peak Converted Wet Density t/m ³	**	**	
Adjusted Peak Converted Wet Density t/m3	2.23	2.14	
Moisture Variation (Wv) %	**	**	
Adjusted Moisture Variation %	1.5	4.5	
Hilf Density Ratio (%)	95.0	97.0	
Compaction Method	Standard	Standard	
Report Remarks	**	**	

Moisture Variation Note:

Material Tes	st Report	" P	acific Geotech
Report Number:	PG-4116-A-46		Consulting Geotechnical Engineers
Date Issued: Client:	ı 13/03/2024 CCA Winslow c/o 3 Jowett Street, Coomera Qld 4209,		Pacific Geotech Pty Ltd ABN: 62 615 248 952 Gold Coast Laboratory
Project Number: Project Name:	PG-4116-A Residential Subdivision		3 Jowett St Coomera QLD 4209 Phone: (07) 5636 4680 Email: info@pacgeo.com.au
Project Location: Work Request: Date Sampled:	Courtney Drive, Upper Coomera 1276 07/03/2024	NATA	Accredited for compliance with ISO/IEC 17025 - Testing
Sampling Method:	AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted	WORLD RECOGNISED	Approved Signatory: Dave Trotman
Specification: Site Selection: Location:	Minimum 95% Standard Compaction Selected by GTA Upper Coomera	ACCREDITATION	Senior Geotechnician NATA Accredited Laboratory Number: 21130
Material: Material Source:	Earthworks Fill Onsite		

Compaction Control AS 1289 5.7.1 & 5.8	3.1 & 2.1.1		
Sample Number	G24-1276A	G24-1276B	
Client Sample #	**	**	
Date Tested	07/03/2024	07/03/2024	
Time Tested	07:45	07:55	
Test Request #/Location	Stage 2 & 3	Stage 2 & 3	
Easting	527385	527358	
Northing	6917144	6917135	
Elevation (m)	55.6	54.8	
Soil Description	Clayey Sandy Gravel. Brown	Clayey Sandy Gravel. Brown	
Test Depth (mm)	150	150	
Sieve used to determine oversize (mm)	37.5	37.5	
Percentage of Wet Oversize (%)	6	6	
Field Wet Density (FWD) t/m ³	2.21	2.22	
Field Moisture Content %	8.0	5.8	
Field Dry Density (FDD) t/m ³	2.05	2.10	
Peak Converted Wet Density t/m ³	**	**	
Adjusted Peak Converted Wet Density t/m3	2.24	2.23	
Moisture Variation (Wv) %	**	**	
Adjusted Moisture Variation %	2.0	2.0	
Hilf Density Ratio (%)	99.0	99.5	
Compaction Method	Standard	Standard	
Report Remarks	**	**	

Moisture Variation Note:

Material Te	st Report	" P	acific Geotech
Report Number:	PG-4116-A-47		Consulting Geotechnical Engineers
Issue Number:	1	•	
Date Issued:	13/03/2024		Pacific Geotech Pty Ltd
Client:	CCA Winslow		ABN: 62 615 248 952
	c/o 3 Jowett Street, Coomera Qld 4209,		Gold Coast Laboratory
Project Number:	PG-4116-A		3 Jowett St Coomera QLD 4209
Project Name:	Residential Subdivision		Phone: (07) 5636 4680
Project Location:	Courtney Drive, Upper Coomera		Email: Into@pacyeo.com.au
Work Request:	1282		Accredited for compliance with ISO/IEC 17025 - Testing
Date Sampled:	08/03/2024	NATA	$\sim +$
Dates Tested:	08/03/2024 - 11/03/2024	NAIA	1). 4
Sampling Method:	d: AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted		Approved Signatory: Dave Trotman
Specification:	Minimum 95% Standard Compaction	ACCREDITATION	Senior Geotechnician
Site Selection:	Selected by GTA		NATA Accredited Laboratory Number: 21130
Location:	Upper Coomera		
Material:	Earthworks Fill		
Material Source:	Onsite		
Compaction Control	۸۹ ۱۷۶۵ ۶ 7 1 8 5 8 1 8 2 1 1		

		1	
Sample Number	G24-1282A		
Client Sample #	**		
Date Tested	08/03/2024		
Time Tested	12:35		
Test Request #/Location	Stage 2 & 3		
Easting	527392		
Northing	6917111		
Elevation (m)	57.3		
Soil Description	Clayey Sandy Gravel. Brown		
Test Depth (mm)	150		
Sieve used to determine oversize (mm)	19.0		
Percentage of Wet Oversize (%)	12		
Field Wet Density (FWD) t/m ³	2.10		
Field Moisture Content %	8.3		
Field Dry Density (FDD) t/m ³	1.94		
Peak Converted Wet Density t/m ³	**		
Adjusted Peak Converted Wet Density t/m ³	2.18		
Moisture Variation (Wv) %	**		
Adjusted Moisture Variation %	1.5		
Hilf Density Ratio (%)	96.0		
Compaction Method	Standard		
Report Remarks	**		

Moisture Variation Note:

Material Tes	st Report	" P	acific Geotech
Report Number:	PG-4116-A-48		Consulting Geotechnical Engineers
Issue Number:	1	•	
Date Issued:	19/03/2024		Pacific Geotech Pty Ltd
Client:	CCA Winslow		ABN: 62 615 248 952
	c/o 3 Jowett Street, Coomera Qld 4209,		Gold Coast Laboratory
Project Number:	PG-4116-A		3 Jowett St Coomera QLD 4209
Project Name:	Residential Subdivision		Phone: (07) 5636 4680
Project Location:	Courtney Drive, Upper Coomera		Email: Into@pacgeo.com.au
Work Request:	1287		Accredited for compliance with ISO/IEC 17025 - Testing
Date Sampled:	13/03/2024		\sim \pm
Dates Tested:	13/03/2024 - 18/03/2024		1). 4
Sampling Method:	AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted	WORLD RECOGNISED	Approved Signatory: Dave Trotman
Specification:	Minimum 95% Standard Compaction	ACCREDITATION	Senior Geotechnician
Site Selection:	Selected by GTA		NATA Accredited Laboratory Number: 21130
Location:	Upper Coomera		
Material:	Earthworks Fill		
Material Source:	Onsite		

Compaction Control AS 1289 5.7.1 & 5.8	3.1 & 2.1.1		
Sample Number	G24-1287A	G24-1287B	
Client Sample #	**	**	
Date Tested	13/03/2024	13/03/2024	
Time Tested	12:25	12:50	
Test Request #/Location	Stage 2 & 3	Stage 2 & 3	
Easting	527365	527357	
Northing	6917094	6917255	
Elevation (m)	57.6	51.8	
Soil Description	Clayey Sandy Gravel. Brown	Clayey Sandy Gravel. Brown	
Test Depth (mm)	150	150	
Sieve used to determine oversize (mm)	37.5	37.5	
Percentage of Wet Oversize (%)	7	7	
Field Wet Density (FWD) t/m ³	2.15	2.16	
Field Moisture Content %	6.3	5.5	
Field Dry Density (FDD) t/m ³	2.02	2.04	
Peak Converted Wet Density t/m ³	**	**	
Adjusted Peak Converted Wet Density t/m ³	2.24	2.25	
Moisture Variation (Wv) %	**	**	
Adjusted Moisture Variation %	2.5	2.5	
Hilf Density Ratio (%)	96.0	96.0	
Compaction Method	Standard	Standard	
Report Remarks	**	**	

Moisture Variation Note:

Material Tes	st Report	" P	acific Geotech
Report Number:	PG-4116-A-49		Consulting Geotechnical Engineers
Issue Number:	1	•	
Date Issued:	26/03/2024		Pacific Geotech Pty Ltd
Client:	CCA Winslow		ABN: 62 615 248 952
	c/o 3 Jowett Street, Coomera Qld 4209,		Gold Coast Laboratory
Project Number:	PG-4116-A		3 Jowett St Coomera QLD 4209
Project Name:	Residential Subdivision		Phone: (07) 5636 4680
Project Location:	Courtney Drive, Upper Coomera		Email: Into@pacgeo.com.au
Work Request:	1300		Accredited for compliance with ISO/IEC 17025 - Testing
Date Sampled:	20/03/2024	NATA	$\sim +$
Dates Tested:	20/03/2024 - 25/03/2024	NAIA	1). 4
Sampling Method:	AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted	WORLD RECOGNISED	Approved Signatory: Dave Trotman
Specification:	Minimum 95% Standard Compaction	ACCREDITATION	Senior Geotechnician
Site Selection:	Selected by GTA		NATA Accredited Laboratory Number: 21130
Location:	Upper Coomera		
Material:	Earthworks Fill		
Material Source:	Onsite		

Compaction Control AS 1289 5.7.1 & 5.8	3.1 & 2.1.1		
Sample Number	G24-1300A	G24-1300B	
Client Sample #	**	**	
Date Tested	20/03/2024	20/03/2024	
Time Tested	13:10	13:20	
Test Request #/Location	Stage 2 & 3	Stage 2 & 3	
Easting	527413	527367	
Northing	6917114	6917093	
Elevation (m)	59.5	58.5	
Soil Description	Clayey Sandy Gravel. Brown	Clayey Sandy Gravel. Brown	
Test Depth (mm)	150	150	
Sieve used to determine oversize (mm)	37.5	37.5	
Percentage of Wet Oversize (%)	7	10	
Field Wet Density (FWD) t/m ³	2.23	2.25	
Field Moisture Content %	4.7	4.1	
Field Dry Density (FDD) t/m ³	2.13	2.16	
Peak Converted Wet Density t/m ³	**	**	
Adjusted Peak Converted Wet Density t/m ³	2.22	2.21	
Moisture Variation (Wv) %	**	**	
Adjusted Moisture Variation %	3.5	1.5	
Hilf Density Ratio (%)	100.5	102.0	
Compaction Method	Standard	Standard	
Report Remarks	**	**	

Moisture Variation Note:

Material Tes	st Report	S R	acific Geotech
Report Number:	PG-4116-A-50		Consulting Geotechnical Engineers
Issue Number:	1	•	
Date Issued:	26/03/2024		Pacific Geotech Pty Ltd
Client:	CCA Winslow		ABN: 62 615 248 952
	c/o 3 Jowett Street, Coomera Qld 4209,		Gold Coast Laboratory
Project Number:	PG-4116-A		3 Jowett St Coomera QLD 4209
Project Name:	Residential Subdivision		Phone: (07) 5636 4680
Project Location:	Courtney Drive, Upper Coomera		Email: Info@pacgeo.com.au
Work Request:	1302		Accredited for compliance with ISO/IEC 17025 - Testing
Date Sampled:	21/03/2024	NATA	$\sim +$
Dates Tested:	21/03/2024 - 25/03/2024	NAIA	1). 4
Sampling Method:	AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted	WORLD RECOGNISED	Approved Signatory: Dave Trotman
Specification:	Minimum 95% Standard Compaction	ACCREDITATION	Senior Geotechnician
Site Selection:	Selected by GTA		NATA Accredited Laboratory Number: 21130
Location:	Upper Coomera		
Material:	Earthworks Fill		
Material Source:	Onsite		

Compaction Control AS 1289 5.7.1 & 5.8.1 & 2.1.1				
Sample Number	G24-1302A	G24-1302B		
Client Sample #	**	**		
Date Tested	21/03/2024	21/03/2024		
Time Tested	13:10	13:20		
Test Request #/Location	Stage 2 & 3	Stage 2 & 3		
Easting	527333	527366		
Northing	6917216	6917120		
Elevation (m)	52.1	57.1		
Soil Description	Clayey Sandy Gravel. Brown	Clayey Sandy Gravel. Brown		
Test Depth (mm)	150	150		
Sieve used to determine oversize (mm)	37.5	37.5		
Percentage of Wet Oversize (%)	14	7		
Field Wet Density (FWD) t/m ³	2.24	2.27		
Field Moisture Content %	5.6	5.9		
Field Dry Density (FDD) t/m ³	2.12	2.15		
Peak Converted Wet Density t/m ³	**	**		
Adjusted Peak Converted Wet Density t/m3	2.26	2.25		
Moisture Variation (Wv) %	**	**		
Adjusted Moisture Variation %	2.5	2.0		
Hilf Density Ratio (%)	99.5	101.0		
Compaction Method	Standard	Standard		
Report Remarks	**	**		

Moisture Variation Note:

Material Tes	st Report	" P	acific Geotech
Report Number:	PG-4116-A-51		Consulting Geotechnical Engineers
Issue Number:	1	•	
Date Issued:	26/03/2024		Pacific Geotech Pty Ltd
Client:	CCA Winslow		ABN: 62 615 248 952
	c/o 3 Jowett Street, Coomera Qld 4209,		Gold Coast Laboratory
Project Number:	PG-4116-A		3 Jowett St Coomera QLD 4209
Project Name:	Residential Subdivision		Phone: (07) 5636 4680
Project Location:	Courtney Drive, Upper Coomera		Email: info@pacgeo.com.au
Work Request:	1313		Accredited for compliance with ISO/IEC 17025 - Testing
Date Sampled:	22/03/2024	NATA	$\sim +$
Dates Tested:	22/03/2024 - 25/03/2024	NAIA	1). 7
Sampling Method:	AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted	WORLD RECOGNISED	Approved Signatory: Dave Trotman
Specification:	Minimum 95% Standard Compaction	ACCREDITATION	Senior Geotechnician
Site Selection:	Selected by GTA		NATA Accredited Laboratory Number: 21130
Location:	Upper Coomera		
Material:	Earthworks Fill		
Material Source:	Onsite		

Compaction Control AS 1289 5.7.1 & 5.8.1 & 2.1.1				
Sample Number	G24-1313A	G24-1313B		
Client Sample #	**	**		
Date Tested	22/03/2024	22/03/2024		
Time Tested	13:10	13:20		
Test Request #/Location	Stage 2 & 3	Stage 2 & 3		
Easting	527376	527358		
Northing	6917104	6917147		
Elevation (m)	58.7	54.9		
Soil Description	Clayey Sandy Gravel. Brown	Clayey Sandy Gravel. Brown		
Test Depth (mm)	150	150		
Sieve used to determine oversize (mm)	37.5	37.5		
Percentage of Wet Oversize (%)	9	7		
Field Wet Density (FWD) t/m ³	2.22	2.24		
Field Moisture Content %	5.1	5.0		
Field Dry Density (FDD) t/m ³	2.11	2.13		
Peak Converted Wet Density t/m ³	**	**		
Adjusted Peak Converted Wet Density t/m ³	2.24	2.26		
Moisture Variation (Wv) %	**	**		
Adjusted Moisture Variation %	2.5	2.0		
Hilf Density Ratio (%)	99.0	99.5		
Compaction Method	Standard	Standard		
Report Remarks	**	**		

Moisture Variation Note:

Material Tes	st Report	A Pacific Geotech
Report Number: Issue Number:	PG-4116-A-57 1	Consulting Geotechnical Engineers
Date Issued:	05/06/2024	Pacific Geotech Pty Ltd ABN: 62 615 248 952
Client:	c/o 3 Jowett Street, Coomera Qld 4209,	Gold Coast Laboratory
Project Number: Project Name:	PG-4116-A Residential Subdivision	3 Jowett St Coomera QLD 4209 Phone: (07) 5636 4680 Email: info@pacgeo.com.au
Project Location: Work Request: Date Sampled:	Courtney Drive, Upper Coomera 1402 14/05/2024	Accredited for compliance with ISO/IEC 17025 - Testing
Dates Tested: Sampling Method:	14/05/2024 - 21/05/2024 AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted	Approved Signatory: Ian Masman
Specification: Site Selection:	Minimum 95% Standard Compaction Selected by GTA	ACCREDITATION Laboratory Manager NATA Accredited Laboratory Number: 21130
Location: Material:	Upper Coomera Earthworks Fill	
Material Source:	Onsite	

Compaction Control AS 1289 5.7.1 & 5.8	3.1 & 2.1.1		
Sample Number	G24-1402A	G24-1402B	G24-1402C
Client Sample #	**	**	**
Date Tested	14/05/2024	14/05/2024	14/05/2024
Time Tested	07:30	11:45	14:14
Test Request #/Location	Stage 2 & 3	Stage 2 & 3	Stage 2 & 3
Easting	527316	527300	527358
Northing	6917200	6917163	6917254
Elevation (m)	52.4	51.7	51.4
Soil Description	Sandy Clay w/ Gravel. Brown	Sandy Clay w/ Gravel. Brown	Clayey Sandy Gravel. Brown
Test Depth (mm)	150	150	150
Sieve used to determine oversize (mm)	19.0	19.0	37.5
Percentage of Wet Oversize (%)	9	11	15
Field Wet Density (FWD) t/m ³	2.14	2.13	2.17
Field Moisture Content %	9.3	9.8	9.0
Field Dry Density (FDD) t/m ³	1.95	1.94	1.99
Peak Converted Wet Density t/m ³	**	**	**
Adjusted Peak Converted Wet Density t/m3	2.16	2.15	2.28
Moisture Variation (Wv) %	**	**	**
Adjusted Moisture Variation %	2.5	2.5	-1.0
Hilf Density Ratio (%)	98.5	99.0	95.0
Compaction Method	Standard	Standard	Standard
Report Remarks	**	**	**

Moisture Variation Note:

Material Tes	st Report	" P	acific Geotech
Report Number: Issue Number:	PG-4116-A-59 1		Consulting Geotechnical Engineers
Date Issued: Client:	06/06/2024 CCA Winslow c/o 3 Jowett Street, Coomera Qld 4209,		Pacific Geotech Pty Ltd ABN: 62 615 248 952 Gold Coast Laboratory
Project Number: Project Name:	PG-4116-A Residential Subdivision		3 Jowett St Coomera QLD 4209 Phone: (07) 5636 4680 Email: info@pacgeo.com.au
Project Location: Work Request: Date Sampled:	Courtney Drive, Upper Coomera 1422 23/05/2024 23/05/2024	NATA	Accredited for compliance with ISO/IEC 17025 - Testing
Sampling Method:	AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted	WORLD RECOGNISED	Approved Signatory: Dave Trotman
Specification: Site Selection: Location: Material:	Minimum 95% Standard Compaction Selected by GTA Upper Coomera Earthworks Fill	ACCREDITATION	NATA Accredited Laboratory Number: 21130
Material Source:	Onsite		

Compaction Control AS 1289 5.7.1 & 5.8	3.1 & 2.1.1	
Sample Number	G24-1422A	
Client Sample #	**	
Date Tested	23/05/2024	
Time Tested	13:05	
Test Request #/Location	Stage 2 & 3	
Easting	527350	
Northing	6917238	
Elevation (m)	52.3	
Soil Description	Sandy Clay w/ Gravel. Brown	
Test Depth (mm)	150	
Sieve used to determine oversize (mm)	19.0	
Percentage of Wet Oversize (%)	6	
Field Wet Density (FWD) t/m ³	2.22	
Field Moisture Content %	9.3	
Field Dry Density (FDD) t/m ³	2.03	
Peak Converted Wet Density t/m ³	**	
Adjusted Peak Converted Wet Density t/m ³	2.16	
Moisture Variation (Wv) %	**	
Adjusted Moisture Variation %	2.0	
Hilf Density Ratio (%)	103.0	
Compaction Method	Standard	
Report Remarks	**	

Moisture Variation Note:

Material Tes	st Report	A Pacific Geotech
Report Number: Issue Number:	PG-4116-A-67 1	Consulting Geotechnical Engineers
Date Issued: Client:	18/06/2024 CCA Winslow c/o 3 Jowett Street, Coomera Qld 4209,	Pacific Geotech Pty Ltd ABN: 62 615 248 952 Gold Coast Laboratory
Project Number: Project Name:	PG-4116-A Residential Subdivision	3 Jowett St Coomera QLD 4209 Phone: (07) 5636 4680 Email: info@pacgeo.com.au
Project Location: Work Request: Date Sampled:	Courtney Drive, Opper Coomera 1454 03/06/2024	Accredited for compliance with ISO/IEC 17025 - Testing
Dates Tested: Sampling Method:	03/06/2024 - 07/06/2024 AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted	Approved Signatory: Dave Trotman
Specification: Site Selection:	Minimum 95% Standard Compaction Selected by GTA	NATA Accredited Laboratory Number: 21130
Material: Material Source:	Earthworks Fill Onsite	

Compaction Control AS 1289 5.7.1 & 5.8.1 & 2.1.1				
Sample Number	G24-1454A			
Client Sample #	**			
Date Tested	03/06/2024			
Time Tested	13:10			
Test Request #/Location	Stage 2 & 3			
Easting	527341			
Northing	6917163			
Elevation (m)	52.7			
Soil Description	Sandy Clay w/ Gravel. Brown			
Test Depth (mm)	150			
Sieve used to determine oversize (mm)	19.0			
Percentage of Wet Oversize (%)	5			
Field Wet Density (FWD) t/m ³	2.00			
Field Moisture Content %	8.4			
Field Dry Density (FDD) t/m ³	1.85			
Peak Converted Wet Density t/m ³	**			
Adjusted Peak Converted Wet Density t/m ³	2.08			
Moisture Variation (Wv) %	**			
Adjusted Moisture Variation %	2.5			
Hilf Density Ratio (%)	96.5			
Compaction Method	Standard			
Report Remarks	**			

Moisture Variation Note:

Material Tes	st Report	A Pacific Geotech
Report Number: Issue Number:	PG-4116-A-73 1	Consulting Geotechnical Engineers
Date Issued:	18/06/2024	Pacific Geotech Pty Lto
Client:	CCA Winslow	ABN: 62 615 248 952
	c/o 3 Jowett Street, Coomera Qld 4209,	Gold Coast Laboratory
Project Number:	PG-4116-A	3 Jowett St Coomera QLD 4205
Project Name:	Residential Subdivision	Phone: (07) 5636 4680
Project Location:	Courtney Drive, Upper Coomera	
Work Request:	1473	Accredited for compliance with ISO/IEC 17025 - Testing
Date Sampled:	06/06/2024	
Dates Tested:	06/06/2024 - 12/06/2024	NATA D. T.
Sampling Method:	AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted	Approved Signatory: Dave Trotman
Specification:	Minimum 95% Standard Compaction	ACCREDITATION Senior Geotechnician
Site Selection:	Selected by GTA	NATA Accredited Laboratory Number: 21130
Location:	Upper Coomera	
Material:	Earthworks Fill	
Material Source:	Onsite	

Compaction Control AS 1289 5.7.1 & 5.8	3.1 & 2.1.1		
Sample Number	G24-1473A	G24-1473B	G24-1473C
Client Sample #	**	**	**
Date Tested	06/06/2024	06/06/2024	06/06/2024
Time Tested	10:05	10:20	13:00
Test Request #/Location	Stage 2 & 3	Stage 2 & 3	Stage 2 & 3
Easting	527318	527351	527278
Northing	6917065	6917160	6917030
Elevation (m)	56.6	54.1	57.5
Soil Description	Sandy Clay w/ Gravel. Brown	Sandy Clay w/ Gravel. Brown	Sandy Clay. Brown
Test Depth (mm)	150	150	150
Sieve used to determine oversize (mm)	19.0	19.0	19.0
Percentage of Wet Oversize (%)	9	10	9
Field Wet Density (FWD) t/m ³	2.22	2.19	2.05
Field Moisture Content %	12.3	12.2	12.7
Field Dry Density (FDD) t/m ³	1.98	1.95	1.82
Peak Converted Wet Density t/m ³	**	**	**
Adjusted Peak Converted Wet Density t/m3	2.21	2.22	2.08
Moisture Variation (Wv) %	**	**	**
Adjusted Moisture Variation %	-1.0	-1.0	2.5
Hilf Density Ratio (%)	100.5	99.0	98.5
Compaction Method	Standard	Standard	Standard
Report Remarks	**	**	**

Moisture Variation Note:

Report Number: PG-4116-A-82	Consulting Geotechnical Engineers
Issue Number: 1	
Date Issued: 19/06/2024	Pacific Geotech Pty Ltd
Client: CCA Winslow	ABN: 62 615 248 952
c/o 3 Jowett Street, Coomera Qld 4209,	Gold Coast Laboratory
Project Number: PG-4116-A	3 Jowett St Coomera QLD 4209
Project Name: Residential Subdivision	Phone: (07) 5636 4680
Project Location: Courtney Drive, Upper Coomera	
Work Request: 1506	Accredited for compliance with ISO/IEC 17025 - Testing
Date Sampled: 17/06/2024	() ()
Dates Tested: 18/06/2024 - 18/06/2024	Aby land
Sampling Method: AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted	Approved Signatory: Rob Sharpe
Specification: Minimum 95% Standard Compaction	Senior Geotechnician
Site Selection: Selected by GTA	NATA Accredited Laboratory Number: 21130
Location: Upper Coomera	
Material: Clayey Sandy Gravel	
Material Source: Onsite	

Compaction Control AS 1289 5.7.1 & 5.8	3.1 & 2.1.1		
Sample Number	G24-1506A	G24-1506B	
Client Sample #	**	**	
Date Tested	17/06/2024	17/06/2024	
Time Tested	13:00	13:10	
Test Request #/Location	Stages 2 & 3 (Lot 186)	Stages 2 & 3 (Lot 196)	
Easting	527367	527290	
Northing	6917275	6917144	
Elevation (m)	51.6	53.3	
Soil Description	Clayey Sandy Gravel	Sandy Gravelly Clay	
Test Depth (mm)	150	150	
Sieve used to determine oversize (mm)	19.0	19.0	
Percentage of Wet Oversize (%)	18	19	
Field Wet Density (FWD) t/m ³	2.29	2.12	
Field Moisture Content %	5.5	8.5	
Field Dry Density (FDD) t/m ³	2.17	1.95	
Peak Converted Wet Density t/m ³	**	**	
Adjusted Peak Converted Wet Density t/m3	2.34	2.19	
Moisture Variation (Wv) %	**	**	
Adjusted Moisture Variation %	1.0	1.5	
Hilf Density Ratio (%)	98.0	97.0	
Compaction Method	Standard	Standard	
Report Remarks	**	**	

Moisture Variation Note:

Positive values = test is dry of OMC Negative values = test is wet of OMC



1

PG-4116-A-83

20/06/2024

Report Number:

Issue Number:

Date Issued:

	Consulting Geotechnical Engineers
	Pacific Geotech Pty Ltd
	ABN: 62 615 248 952
et Coomera Old 4209	Gold Coast Laboratory
	3 Jowett St Coomera QLD 4209
	Phone: (07) 5636 4680

Email: info@pacgeo.com.au

i.

Client: CCA Winslow c/o 3 Jowett Stre **Project Number:** PG-4116-A **Project Name: Residential Subdivision Project Location:** Courtney Drive, Upper Coomera Work Request: 1494 **Date Sampled:** 13/06/2024 **Dates Tested:** 13/06/2024 - 19/06/2024 Sampling Method: AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compactéd Specification: Minimum 95% Standard Compaction Site Selection: Selected by GTA Location: Upper Coomera Material: Earthworks Fill **Material Source:** Onsite



WORLD RECOGNISED

Approved Signatory: Rob Sharpe Senior Geotechnician NATA Accredited Laboratory Number: 21130

Compaction Control AS 1289 5.7.1 & 5.8.1 & 2.1.1 Sample Number G24-1494A G24-1494B ** ** Client Sample # Date Tested 13/06/2024 13/06/2024 Time Tested 08:30 09:15 Test Request #/Location Stage 2 & 3 Stage 2 & 3 Easting 527364 527366 Northing 6917100 6917128 Elevation (m) 59.8 57.7 Clayey Sandy Gravel. Brown Soil Description Clayey Sandy Gravel. Brown Test Depth (mm) 150 150 Sieve used to determine oversize (mm) 19.0 19.0 Percentage of Wet Oversize (%) 17 17 Field Wet Density (FWD) t/m³ 2.22 2.23 Field Moisture Content % 5.0 5.2 Field Dry Density (FDD) t/m³ 2.11 2.12 ** ** Peak Converted Wet Density t/m³ Adjusted Peak Converted Wet Density t/m³ 2.30 2.29 ** ** Moisture Variation (Wv) % Adjusted Moisture Variation % 1.5 1.5 96.5 97.5 Hilf Density Ratio (%) **Compaction Method** Standard Standard ** ** Report Remarks

Moisture Variation Note:

Material Tes	st Report	. (P	acific Geotech
Report Number: Issue Number:	PG-4116-A-86 1		Consulting Geotechnical Engineers
Date Issued: Client:	25/06/2024 CCA Winslow		Pacific Geotech Pty Ltd ABN: 62 615 248 952 Gold Coast Laboratory
Project Number: Project Name: Project Location:	PG-4116-A Residential Subdivision		3 Jowett St Coomera QLD 4209 Phone: (07) 5636 4680 Email: info@pacgeo.com.au
Work Request: Date Sampled: Dates Tested:	1507 18/06/2024 18/06/2024 - 20/06/2024	NATA	Accredited for compliance with ISO/IEC 17025 - Testing
Sampling Method:	AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted	WORLD RECOGNISED	Approved Signatory: Dave Trotman
Specification: Site Selection:	Minimum 95% Standard Compaction Selected by GTA	ACCREDITATION	NATA Accredited Laboratory Number: 21130
Location: Material:	Upper Coomera Earthworks Fill		
Material Source:	Unsite		

Compaction Control AS 1289 5.7.1 & 5.8	3.1 & 2.1.1			
Sample Number	G24-1507A	G24-1507B	G24-1507C	G24-1507D
Client Sample #	**	**	**	**
Date Tested	18/06/2024	18/06/2024	18/06/2024	18/06/2024
Time Tested	08:15	08:25	08:30	09:05
Test Request #/Location	Stage 2 & 3			
Easting	527359	527364	527269	527401
Northing	6917151	6917137	6917113	6917145
Elevation (m)	55.6	56.6	59.2	57.1
Soil Description	Sandy Clay w/ Gravel. Brown			
Test Depth (mm)	150	150	150	150
Sieve used to determine oversize (mm)	19.0	19.0	19.0	19.0
Percentage of Wet Oversize (%)	11	18	18	13
Field Wet Density (FWD) t/m ³	2.06	2.15	2.12	2.15
Field Moisture Content %	9.5	8.9	8.2	8.2
Field Dry Density (FDD) t/m ³	1.88	1.97	1.96	1.99
Peak Converted Wet Density t/m ³	**	**	**	**
Adjusted Peak Converted Wet Density t/m ³	2.07	2.13	2.14	2.13
Moisture Variation (Wv) %	**	**	**	**
Adjusted Moisture Variation %	2.5	3.5	4.0	4.0
Hilf Density Ratio (%)	99.5	101.0	99.0	101.0
Compaction Method	Standard	Standard	Standard	Standard
Report Remarks	**	**	**	**

Moisture Variation Note:

Positive values = test is dry of OMC