



Brisbane Soil Testing

20/1191 Anzac Ave

Kallangur, Q. 4503

Ph. (07) 3285 6536

Email. brissoil@bigpond.net.au

Geotechnical Testing Services.

Connemar Pty. Ltd.

ABN 50 065 093 647

Job No.1643

11 May 2017

BMD Urban Pty Ltd

PO Box 197

WYNNUM CENTRAL QLD 4178

Attn Alan Guthrie

RE: CANNON HILL COMMUNITY LINKS – STAGE 4

(Allotment Fill, Pad Mount Transformer Backfill, Road Embankment

Fill & Bio-Basin Backfill – Geotechnical Inspection & Testing)

SCOPE

Brisbane Soil Testing were commissioned by BMD Urban Pty Ltd to provide geotechnical inspection and testing of the allotment earthworks, pad mount transformer backfill, road embankment fill to Sutton Place CH20-CH239 and Driveway No.1 CH00-CH41, and bio-basin backfill on the above stage subdivision.

Some filling was required as part of the development and for this work, our site presence was maintained in accordance with AS3798-2007 "Guidelines on Earthworks for Commercial and Residential Developments" Appendix B, "Level 1". As directed the scope of the Level 1 inspection and testing was:

- (i) check adequacy of pre-fill ground preparation
- (ii) remove unsuitable materials
- (iii) inspect and carry out compaction control testing of placed fill materials

CONTROL INSPECTION AND TESTING

An inspection of the areas to be filled was carried out on 8 November 2016 and on an ongoing basis as the job progressed, by Brisbane Soil Testing staff.

On-site cut materials were used for filling and these materials were generally placed in 0.20m loose horizontal layers and compacted with an 825 compactor and vibrating pad foot roller.

Ninety-eight field density tests were carried between 9 November 2016 and 6 May 2017. These tests recorded Dry Density Ratios between 95.0% and 103.0% relative to the standard compaction test and field moisture contents within -4.0% and +4.0% of their respective optimum moisture contents, AS1289.5.1.1.

The locations of all bio-basin backfill tests are shown on the attached drawing titled Bio-Basin Backfill, Drawing No.B00141-CE003/REV2.

The locations of all pad mount transformer fill tests are shown on the attached drawing titled Transformer Pad Backfill, Drawing No.B00141-CE003/REV2.

The Locations of all road embankment fill tests are shown on the attached drawing titled Embankment Fill, Drawing No.B00141-CE003/REV2.

Attached documents B37/11 (Report Nos. 39462, 39463, 40031, 40034-40054, 40097, 40118, 40179, 40180, 40182, 40183, 40191, 40192, 40194 and 40195) provide full test data for the compaction control tests.

CONCLUSION

Based on the test results and site inspections, we conclude that the fill foundation is considered to comply with requirements of Table 5.1- Item 1 and 3 of AS3798-2007 and the project specifications.

We confirm that all vegetation and topsoil was removed, and that a sound base for the proposed filling was provided. We further confirm that all filling to design final level can be termed controlled filling in accordance with Section 6.4.2. of AS2870-2011, via a "Level 1" inspection and testing commission.



GREG McGRANN
BRISBANE SOIL TESTING



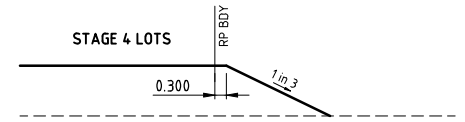
Brisbane Soil Testing

20/1191 Anzac Ave
Kallangur, Q. 4503

LEGEND

- STAGE BOUNDARY
- FINISHED CONTOUR
- TYPE 'D' LAYBACK KERB AND CHANNEL
- CONCRETE SLEEPER RETAINING WALL
- PROPOSED SEWERAGE RETICULATION
- PROPOSED WATER RETICULATION
- PROPOSED WATER CONDUIT CROSSINGS
- NO GO ZONE
- CUT
- FILL
- + = AMOUNT OF FILL
- = AMOUNT OF CUT
FSL = FINISHED SURFACE LEVEL

BIO-BASIN BACKFILL



TYPICAL EARTHWORKS LOT EMBANKMENT TO EXISTING

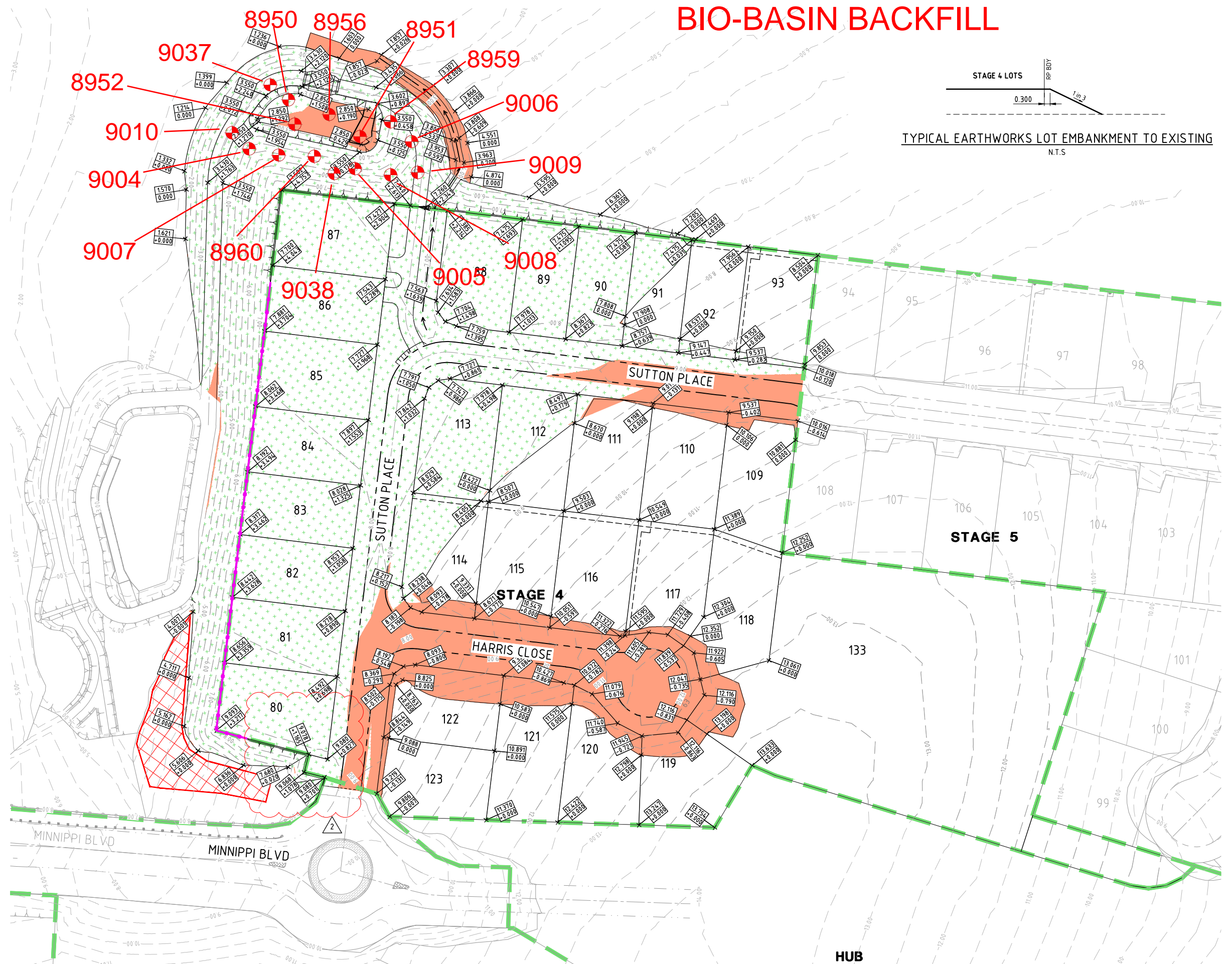
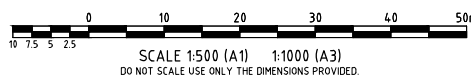
NOTE:-
FOR EROSION AND SEDIMENT CONTROL DETAILS
REFER DRGs B00139-ESC001 to ESC602

NOTE:-
LOCATION & LEVELS OF ALL EXISTING SERVICES TO BE
CONFIRMED ON SITE BY CONTRACTOR PRIOR TO THE
COMMENCEMENT OF CONSTRUCTION. IT IS THE
CONTRACTOR'S RESPONSIBILITY TO PERFORM A DIAL
BEFORE YOU DIG SEARCH PRIOR TO COMMENCEMENT OF
WORKS



NOTE: LOCATION & LEVELS OF ALL EXISTING SERVICES
AND PROPOSED STORMWATER OUTLETS TO BE CONFIRMED
ON SITE BY CONTRACTOR PRIOR TO THE COMMENCEMENT OF
CONSTRUCTION. IT IS THE CONTRACTOR'S RESPONSIBILITY
TO PERFORM A DIAL BEFORE YOU DIG SEARCH PRIOR TO
COMMENCEMENT OF WORKS. ANY POTENTIAL CONFLICT OF
EXISTING SERVICES OR STORMWATER OUTLETS SHALL BE
REPORTED TO THE SUPERINTENDENT.

NOTE:-
THE CUT AND FILL DEPTHS SHOWN ON THIS PLAN
REFLECT THE CUT/FILL REQUIRED TO ACHIEVE THE
DESIGN SURFACE LEVELS, RELATIVE TO THE SURFACE
LEVELS IN PLACE PRIOR TO THIS PACKAGE OF
CONSTRUCTION WORKS. THESE CUT/FILL DEPTHS DO
NOT NECESSARILY RELATE TO THE NATURAL SURFACE
LEVELS, AS OTHER WORKS MAY HAVE BEEN DONE ON
THIS LAND PRIOR TO THIS PACKAGE OF CONSTRUCTION
WORKS.



Plot Date: 29/11/2016 12:26:25 AM User: LACHLAN DARR File Name: B:\Brisbane - Consulting\DRGs\B00141\B00141_Canon Hill Stage 4\4. CIVIL_DRGS\4.2 CURRENT\B00141-EWKS

2	EARTHWORKS UPDATED FOR ELECTRICAL PMT SITE	LD	LD	PI		9424	29/11/16
1	FOR CONSTRUCTION	LD	LD	PI	PI	9424	14/10/16
No.	Amendments	Drawn	Design	Appd	Registered Engineer	Reg No.	Date

This drawing cannot be copied or reproduced in any form or used for any purpose other than that originally intended without the written permission of Empower Engineers and Project Managers ©COPYRIGHT 2016

Empower
ENGINEERS &
PROJECT MANAGERS
ABN 23 010 743 692

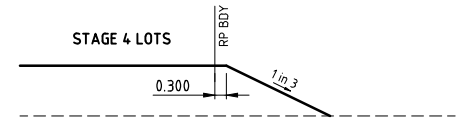
Client
BMD PROPERTIES PTY LTD
Project
COMMUNITY LINKS ESTATE STAGE 4
Title
**EARTHWORKS MANAGEMENT
LAYOUT PLAN**

Datum
AHN
PSM PM119825
RL 2.600
(MGA) COORD
FOR CONSTRUCTION
Project No.
B00141-CE003
Drawing No.
2

LEGEND

- STAGE BOUNDARY
- FINISHED CONTOUR
- TYPE 'D' LAYBACK KERB AND CHANNEL
- CONCRETE SLEEPER RETAINING WALL
- PROPOSED SEWERAGE RETICULATION
- PROPOSED WATER RETICULATION
- PROPOSED WATER CONDUIT CROSSINGS
- NO GO ZONE
- CUT
- FILL
- + = AMOUNT OF FILL
- = AMOUNT OF CUT
FSL = FINISHED SURFACE LEVEL

EMBANKMENT FILL



TYPICAL EARTHWORKS LOT EMBANKMENT TO EXISTING
N.T.S.

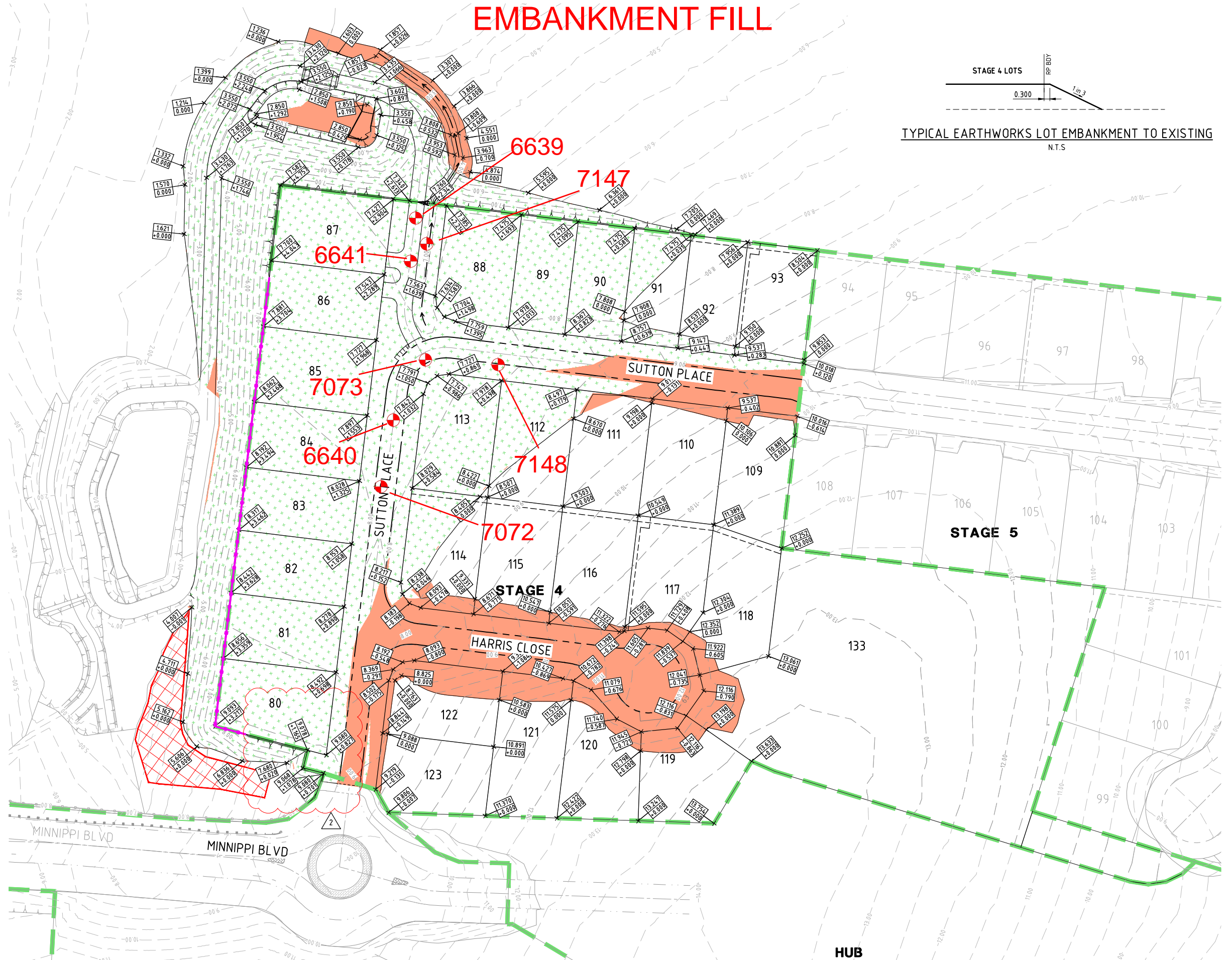
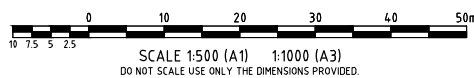
NOTE:-
FOR EROSION AND SEDIMENT CONTROL DETAILS
REFER DRGs B00139-ESC001 to ESC602

NOTE:-
LOCATION & LEVELS OF ALL EXISTING SERVICES TO BE
CONFIRMED ON SITE BY CONTRACTOR PRIOR TO THE
COMMENCEMENT OF CONSTRUCTION. IT IS THE
CONTRACTOR'S RESPONSIBILITY TO PERFORM A DIAL
BEFORE YOU DIG SEARCH PRIOR TO COMMENCEMENT OF
WORKS



NOTE: LOCATION & LEVELS OF ALL EXISTING SERVICES
AND PROPOSED STORMWATER OUTLETS TO BE CONFIRMED
ON SITE BY CONTRACTOR PRIOR TO THE COMMENCEMENT OF
CONSTRUCTION. IT IS THE CONTRACTOR'S RESPONSIBILITY
TO PERFORM A DIAL BEFORE YOU DIG SEARCH PRIOR TO
COMMENCEMENT OF WORKS. ANY POTENTIAL CONFLICT OF
EXISTING SERVICES OR STORMWATER OUTLETS SHALL BE
REPORTED TO THE SUPERINTENDENT.

NOTE:-
THE CUT AND FILL DEPTHS SHOWN ON THIS PLAN
REFLECT THE CUT/FILL REQUIRED TO ACHIEVE THE
DESIGN SURFACE LEVELS, RELATIVE TO THE SURFACE
LEVELS IN PLACE PRIOR TO THIS PACKAGE OF
CONSTRUCTION WORKS. THESE CUT/FILL DEPTHS DO
NOT NECESSARILY RELATE TO THE NATURAL SURFACE
LEVELS, AS OTHER WORKS MAY HAVE BEEN DONE ON
THIS LAND PRIOR TO THIS PACKAGE OF CONSTRUCTION
WORKS.



User: LACHLAN DARR File Name: B:\Brisbane - Consulting\DRGs\B00141-CE003\A1 Stage 4\A1 CIVIL_DRGS\A1.2 CURRENT\B00141-CE003.dwg Plot Date: 29/11/2016 12:26:25 AM

2	EARTHWORKS UPDATED FOR ELECTRICAL PMT SITE	LD	LD	PI		9424	29/11/16
1	FOR CONSTRUCTION	LD	LD	PI	PI	9424	14/10/16
No.	Amendments	Drawn	Design	Appd	Registered Engineer	Reg No.	Date

This drawing cannot be copied or reproduced in any form or used for any purpose other than that originally intended without the written permission of Empower Engineers and Project Managers ©COPYRIGHT 2016

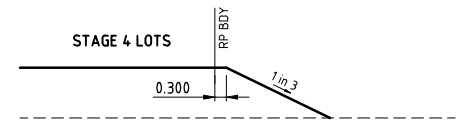
Empower
ENGINEERS &
PROJECT MANAGERS
ABN 23 010 743 692

Client	BMD PROPERTIES PTY LTD	Datum	AHD
Project	COMMUNITY LINKS ESTATE STAGE 4	PSM	PM119825
Title	EARTHWORKS MANAGEMENT LAYOUT PLAN	RL	2.600
		(MGA) COORD	
		FOR CONSTRUCTION	
Project No.	B00141-CE003	Drawing No.	2
Rev			

TRANSFORMER PAD BACKFILL

LEGEND

- STAGE BOUNDARY
- FINISHED CONTOUR
- TYPE 'D' LAYBACK KERB AND CHANNEL
- CONCRETE SLEEPER RETAINING WALL
- PROPOSED SEWERAGE RETICULATION
- PROPOSED WATER RETICULATION
- PROPOSED WATER CONDUIT CROSSINGS
- NO GO ZONE
- CUT
- FILL
- + = AMOUNT OF FILL
- = AMOUNT OF CUT
FSL = FINISHED SURFACE LEVEL



TYPICAL EARTHWORKS LOT EMBANKMENT TO EXISTING
N.T.S.

NOTE:-
FOR EROSION AND SEDIMENT CONTROL DETAILS
REFER DRGS B00139-ESC001 to ESC602

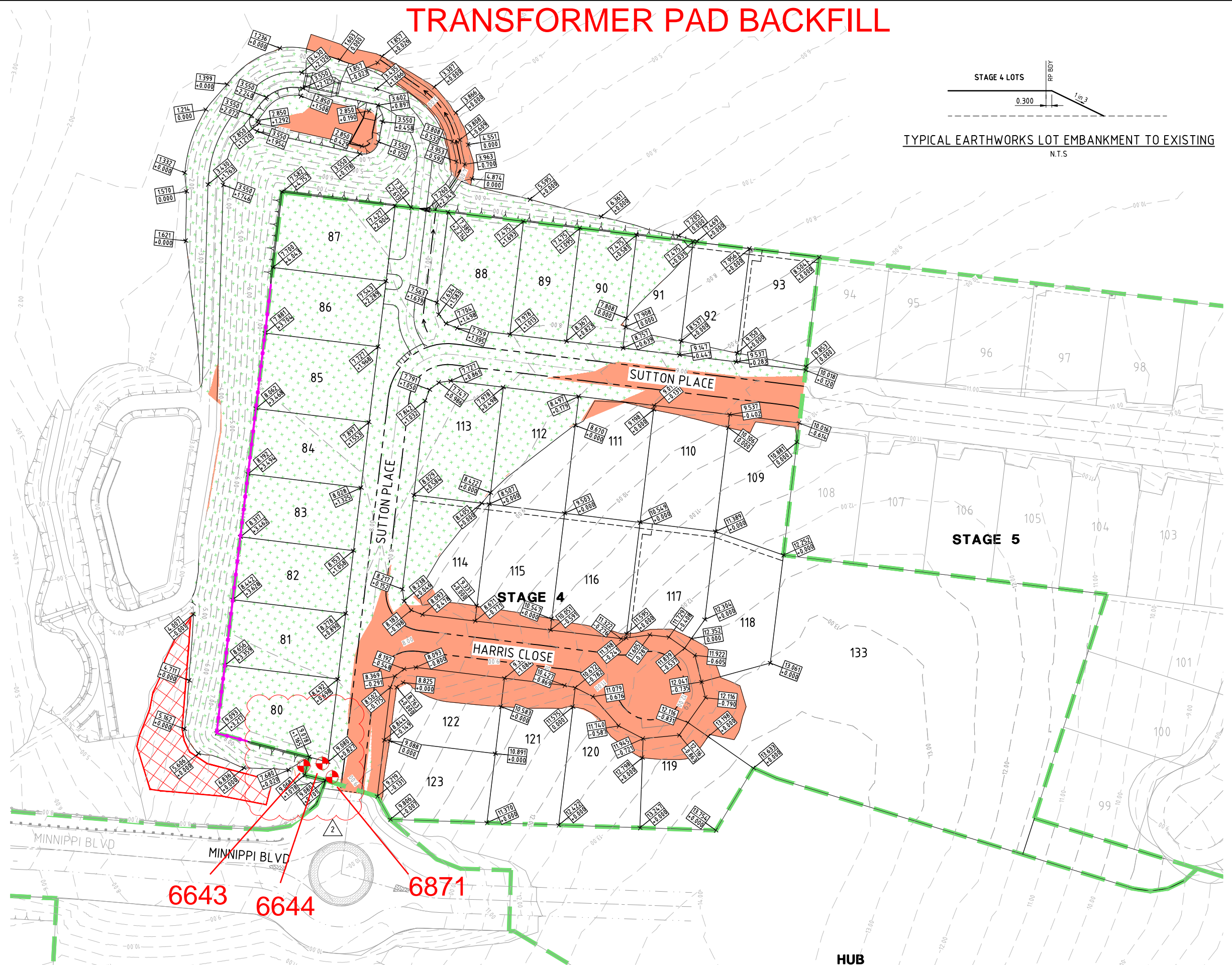
NOTE:-
LOCATION & LEVELS OF ALL EXISTING SERVICES TO BE
CONFIRMED ON SITE BY CONTRACTOR PRIOR TO THE
COMMENCEMENT OF CONSTRUCTION. IT IS THE
CONTRACTOR'S RESPONSIBILITY TO PERFORM A DIAL
BEFORE YOU DIG SEARCH PRIOR TO COMMENCEMENT OF
WORKS



NOTE: LOCATION & LEVELS OF ALL EXISTING SERVICES
AND PROPOSED STORMWATER OUTLETS TO BE CONFIRMED
ON SITE BY CONTRACTOR PRIOR TO THE COMMENCEMENT
OF CONSTRUCTION. IT IS THE CONTRACTOR'S RESPONSIBILITY
TO PERFORM A DIAL BEFORE YOU DIG SEARCH PRIOR TO
COMMENCEMENT OF WORKS. ANY POTENTIAL CONFLICT OF
EXISTING SERVICES OR STORMWATER OUTLETS SHALL BE
REPORTED TO THE SUPERINTENDENT.

NOTE:-
THE CUT AND FILL DEPTHS SHOWN ON THIS PLAN
REFLECT THE CUT/FILL REQUIRED TO ACHIEVE THE
DESIGN SURFACE LEVELS, RELATIVE TO THE SURFACE
LEVELS IN PLACE PRIOR TO THIS PACKAGE OF
CONSTRUCTION WORKS. THESE CUT/FILL DEPTHS DO
NOT NECESSARILY RELATE TO THE NATURAL SURFACE
LEVELS, AS OTHER WORKS MAY HAVE BEEN DONE ON
THIS LAND PRIOR TO THIS PACKAGE OF CONSTRUCTION
WORKS.

SCALE 1:500 (A1) 1:1000 (A3)
DO NOT SCALE USE ONLY THE DIMENSIONS PROVIDED.



6643 6644 6871

Empower
ENGINEERS &
PROJECT MANAGERS
ABN 23 010 743 692

Client
BMD PROPERTIES PTY LTD
Project
COMMUNITY LINKS ESTATE STAGE 4
Title
**EARTHWORKS MANAGEMENT
LAYOUT PLAN**

Datum
AHN
PSM PM119825
RL 2.600
(MGA) COORD
FOR CONSTRUCTION
Project No.
B00141-CE003
Drawing No.
2



Brisbane Soil Testing

20/1191 Anzac Ave

Kallangur Q 4503

Ph.(07) 3285 6536

Email: brissoil@bigpond.net.au

FIELD DENSITY CERTIFICATE

Connemar Pty. Ltd.

ABN 50 065 093 647

Geotechnical Testing Services

Customer	BMD URBAN PTY LTD	Feature	ALLOTMENT FILL	Report No.	39462
Address	PO BOX 197, WYNNUM CENTRAL QLD 4178	Location	SEE BELOW	Job No.	1643
Project	CANNON HILL COMMUNITY LINKS – STAGE 4	Date Tested	9/11/2016	Tested by	AC LM

Field Test N ^o Sample N ^o	Time of Test	Depth of Test mm	Test Location	Lab Compaction N ^o	% Oversize 19mm/37.5mm Wet Dry		Field Moisture Content %	Optimum Moisture Content %	Moisture Variation %	Moisture Ratio %	Field Dry Density t/m ³	Max. Dry Density t/m ³	Dry Density Ratio %
1 6351	8.00	150	LOT 80 4m Rear bdy, 2m Left bdy R.L.6.36	6351	10.0	11.0	9.0	Adj. 9.0	-	100.0	1.96	Adj. 2.06	95.0
Material Description: BROWN SANDY GRAVELLY CLAY.													
2 6352	8.00	150	LOT 81 3m Rear bdy, 3m Left bdy R.L.5.98	6352	-	-	14.0	Adj. 15.0	1.5 DRY	90.5	1.79	Adj. 1.82	98.5
Material Description: BROWN SILTY CLAY & ROCK FRAGMENTS.													
3 6353	8.30	150	LOT 82 6m Rear bdy, 3m Left bdy R.L.5.85	6353	3.0	3.0	12.0	Adj. 11.5	0.5 WET	103.5	1.92	Adj. 2.00	96.0
Material Description: BROWN SILTY SANDY CLAY & ROCK FRAGMENTS.													
4 6354	8.30	150	LOT 83 3m Rear bdy, 4m Left bdy R.L.5.78	6354	3.0	3.0	13.0	Adj. 14.0	1.0 DRY	91.0	1.75	Adj. 1.84	95.0
Material Description: DARK BROWN SILTY SANDY CLAY & ROCK FRAGMENTS.													
5 6355	9.00	150	LOT 80 3m Rear bdy, 2m Right bdy R.L.6.93	6355	5.0	5.0	13.0	Adj. 13.5	0.5 DRY	96.0	1.85	Adj. 1.85	100.0
Material Description: BROWN SILTY SANDY CLAY & ROCK FRAGMENTS.													
6 6356	9.30	150	LOT 81 5m Rear bdy, 4m Left bdy R.L.6.53	6356	5.0	6.0	19.0	Adj. 18.5	0.5 WET	102.0	1.76	Adj. 1.75	100.5
Material Description: BROWN SILTY CLAY & ROCK FRAGMENTS.													

Remarks:

Required Dry Density Ratio 95% STD

Test Procedures: AS1289 5.1.1, 5.3.1, 5.4.1, 2.1.1

Determined on material finer than 19mm

Prepared By: G MCGRANN
Date: 3.2.17



Accredited for compliance with ISO/IEC 17025 – Testing.

Accreditation No. 2415

Checked By: R MCGRANN

RMc

Greg McGrann/Manager
Approved Signatory
Date: 3.2.17

Greg McGrann



Brisbane Soil Testing

20/1191 Anzac Ave

Kallangur Q 4503

Ph.(07) 3285 6536

Email. brissoil@bigpond.net.au

FIELD DENSITY CERTIFICATE

Connemar Pty. Ltd.

ABN 50 065 093 647

Geotechnical Testing Services

Customer	BMD URBAN PTY LTD	Feature	ALLOTMENT FILL	Report No.	39463
Address	PO BOX 197, WYNNUM CENTRAL QLD 4178	Location	SEE BELOW	Job No.	1643
Project	CANNON HILL COMMUNITY LINKS – STAGE 4	Date Tested	10/11/2016	Tested by	JC AC

Field Test N ^o Sample N ^o	Time of Test	Depth of Test mm	Test Location	Lab Compaction N ^o	% Oversize 19mm/37.5mm Wet Dry		Field Moisture Content %	Optimum Moisture Content %	Moisture Variation %	Moisture Ratio %	Field Dry Density t/m ³	Max. Dry Density t/m ³	Dry Density Ratio %
7 6388	8.30	150	LOT 83 5m Rear bdy, 2m Left bdy R.L.6.37	6388	9.0	11.0	17.5	Adj. 15.5	2.0 WET	113.5	1.76	Adj. 1.83	96.0
Material Description: DARK BROWN SILTY CLAY & ROCK FRAGMENTS.													
8 6389	8.30	150	LOT 82 5m Rear bdy, 3m Right bdy R.L.6.49	6389	11.0	13.0	20.0	Adj. 16.5	3.5 WET	120.5	1.75	Adj. 1.73	101.0
Material Description: BROWN SILTY CLAY & ROCK FRAGMENTS.													
9 6390	9.00	150	LOT 81 6m Rear bdy, 5m Left bdy R.L.6.95	6390	2.0	3.0	16.5	Adj. 14.5	2.0 WET	113.0	1.76	Adj. 1.79	98.5
Material Description: DARK BROWN SILTY CLAY & ROCK FRAGMENTS.													
10 6391	9.30	150	LOT 80 7m Rear bdy, 2m Right bdy R.L.7.62	6391	1.0	1.0	15.0	Adj. 16.0	1.0 DRY	95.0	1.85	Adj. 1.81	102.0
Material Description: REDDISH-BROWN SILTY CLAY & ROCK FRAGMENTS.													
								Adj.				Adj.	
Material Description:													
								Adj.				Adj.	
Material Description:													

Remarks:

Required Dry Density Ratio 95% STD

Test Procedures: AS1289 5.1.1,5.3.1, 5.4.1, 2.1.1

Determined on material finer than 19mm

Prepared By: G MCGRANN

Date:3.2.17

Checked By: R MCGRANN

RMc



Accredited for compliance with ISO/IEC 17025 – Testing.

Accreditation No.2415

Greg McGrann/Manager

Approved Signatory

Date:3.2.17

Greg McGrann



Brisbane Soil Testing

20/1191 Anzac Ave

Kallangur Q 4503

Ph.(07) 3285 6536

Email. brissoil@bigpond.net.au

FIELD DENSITY CERTIFICATE

Connemar Pty. Ltd.

ABN 50 065 093 647

Geotechnical Testing Services

Customer	BMD URBAN PTY LTD	Feature	ALLOTMENT FILL	Report No.	40031
Address	PO BOX 197, WYNNUM CENTRAL QLD 4178	Location	SEE BELOW	Job No.	1643
Project	CANNON HILL COMMUNITY LINKS – STAGE 4	Date Tested	11/11/2016	Tested by	JC AC

Field Test N ^o Sample N ^o	Time of Test	Depth of Test mm	Test Location	Lab Compaction N ^o	% Oversize 19mm/37.5mm Wet Dry		Field Moisture Content %	Optimum Moisture Content %	Moisture Variation %	Moisture Ratio %	Field Dry Density t/m ³	Max. Dry Density t/m ³	Dry Density Ratio %
11 6420	10.30	150	LOT 83 6m Rear bdy, 1m Right bdy R.L.7.01	6420	-	-	13.5	Adj. 13.5	-	100.0	1.76	Adj. 1.85	95.0
Material Description: DARK BROWN SILTY SANDY CLAY.													
12 6421	10.30	150	LOT 82 8m Rear bdy, 3m Left bdy R.L.6.98	6421	-	-	16.0	Adj. 20.0	4.0 DRY	80.0	1.64	Adj. 1.64	100.0
Material Description: DARK BROWN CLAY.													
13 6422	11.00	150	LOT 81 7m Rear bdy, 4m Left bdy R.L.7.64	6422	-	-	15.0	Adj. 16.0	1.0 DRY	94.0	1.73	Adj. 1.80	96.0
Material Description: DARK BROWN SILTY CLAY & ROCK FRAGMENTS.													
14 6423	11.00	150	LOT 80 9m Rear bdy, 4m Right bdy R.L.8.13	6423	-	-	16.5	Adj. 19.5	3.0 DRY	84.5	1.70	Adj. 1.70	100.0
Material Description: LIGHT BROWN SILTY CLAY.													
								Adj.				Adj.	
Material Description:													
								Adj.				Adj.	
Material Description:													

Remarks:

Required Dry Density Ratio 95% STD

Test Procedures: AS1289 5.1.1,5.3.1, 5.4.1, 2.1.1

Determined on material finer than 19mm

Prepared By: G MCGRANN

Date:10.4.17

Checked By: R MCGRANN

RMc



Accredited for compliance with ISO/IEC 17025 – Testing.

Accreditation No.2415

Greg McGrann/Manager

Approved Signatory

Date:10.4.17

Greg McGrann



Brisbane Soil Testing

20/1191 Anzac Ave

Kallangur Q 4503

Ph.(07) 3285 6536

Email. brissoil@bigpond.net.au

FIELD DENSITY CERTIFICATE

Connemar Pty. Ltd.

ABN 50 065 093 647

Geotechnical Testing Services

Customer	BMD URBAN PTY LTD	Feature	ALLOTMENT FILL	Report No.	40034
Address	PO BOX 197, WYNNUM CENTRAL QLD 4178	Location	SEE BELOW	Job No.	1643
Project	CANNON HILL COMMUNITY LINKS – STAGE 4	Date Tested	14/11/2016	Tested by	AC

Field Test N ^o Sample N ^o	Time of Test	Depth of Test mm	Test Location	Lab Compaction N ^o	% Oversize 19mm/37.5mm Wet Dry		Field Moisture Context %	Optimum Moisture Content %	Moisture Variation %	Moisture Ratio %	Field Dry Density t/m ³	Max. Dry Density t/m ³	Dry Density Ratio %
15 6470	8.00	150	LOT 80 11m Rear bdy, 4m Right bdy R.L.8.65	6470	-	-	18.0	Adj. 15.0	3.0 WET	120.0	1.86	Adj. 1.85	100.5
Material Description: DARK GREY-BROWN SILTY CLAY													
16 6471	8.30	150	LOT 81 10m Front bdy, 3m Left bdy R.L.8.32	8471	-	-	13.5	Adj. 14.0	0.5 DRY	96.5	1.88	Adj. 1.86	101.0
Material Description: DARK BROWN SANDY CLAY													
17 6472	9.00	150	LOT 82 9m Rear bdy, 3m Right bdy R.L.7.57	6472	-	-	14.5	Adj. 14.0	0.5 WET	103.5	1.87	Adj. 1.84	101.5
Material Description: DARK BROWN SILTY SANDY CLAY													
18 6473	9.30	150	LOT 83 9m Front bdy, 3m Left bdy R.L.7.46	6473	-	-	11.5	Adj. 13.5	2.0 DRY	85.0	1.80	Adj. 1.88	95.5
Material Description: DARK BROWN SILTY SANDY CLAY													
19 6474	10.00	150	LOT 84 2m Rear bdy, 4m Left bdy R.L.4.82	6474	-	-	14.0	Adj. 15.5	1.5 DRY	90.5	1.78	Adj. 1.78	100.0
Material Description: BROWN SILTY CLAY													
20 6475	10.30	150	LOT 85 4m Rear bdy, 3m Left bdy R.L.4.81	6475	-	-	12.5	Adj. 13.0	0.5 DRY	96.0	1.81	Adj. 1.89	96.0
Material Description: DARK BROWN SANDY CLAY													

Remarks:

Required Dry Density Ratio 95% STD

Test Procedures: AS1289 5.1.1,5.3.1, 5.4.1, 2.1.1

Determined on material finer than 19mm

Prepared By: G MCGRANN

Date:10.4.17

Checked By: R MCGRANN

RMc



Accredited for compliance with ISO/IEC 17025 – Testing.

Accreditation No.2415

Greg McGrann/Manager

Approved Signatory

Date:10.4.17

Greg McGrann



Brisbane Soil Testing

20/1191 Anzac Ave

Kallangur Q 4503

Ph.(07) 3285 6536

Email. brissoil@bigpond.net.au

FIELD DENSITY CERTIFICATE

Connemar Pty. Ltd.

ABN 50 065 093 647

Geotechnical Testing Services

Customer	BMD URBAN PTY LTD	Feature	ALLOTMENT FILL	Report No.	40035
Address	PO BOX 197, WYNNUM CENTRAL QLD 4178	Location	SEE BELOW	Job No.	1643
Project	CANNON HILL COMMUNITY LINKS – STAGE 4	Date Tested	14/11/2016	Tested by	AC

Field Test N ^o Sample N ^o	Time of Test	Depth of Test mm	Test Location	Lab Compaction N ^o	% Oversize 19mm/37.5mm Wet Dry		Field Moisture Context %	Optimum Moisture Content %	Moisture Variation %	Moisture Ratio %	Field Dry Density t/m ³	Max. Dry Density t/m ³	Dry Density Ratio %
21 6476	11.00	150	LOT 87 4m Rear bdy, 2m Right bdy R.L.3.65	6476	-	-	12.5	Adj. 12.5	-	100.0	1.81	Adj. 1.90	95.0
Material Description: DARK BROWN SANDY CLAY													
22 6477	11.30	150	LOT 86 3m Rear bdy, 4m Right bdy R.L.4.05	6477	-	-	12.0	Adj. 12.5	0.5 DRY	96.0	1.83	Adj. 1.90	96.5
Material Description: DARK BROWN SANDY CLAY													
23 6478	12.00	150	LOT 82 7m Front bdy, 3m Right bdy R.L.7.83	6478	-	-	11.0	Adj. 13.5	2.5 DRY	81.5	1.82	Adj. 1.87	97.5
Material Description: DARK BROWN SANDY CLAY													
24 6479	12.30	150	LOT 83 10m Rear bdy, 2m Left bdy R.L.7.78	6479	-	-	14.5	Adj. 15.0	0.5 DRY	96.5	1.84	Adj. 1.80	102.0
Material Description: DARK BROWN SANDY CLAY													
								Adj.				Adj.	
Material Description:													
								Adj.				Adj.	
Material Description:													

Remarks:

Required Dry Density Ratio 95% STD

Test Procedures: AS1289 5.1.1,5.3.1, 5.4.1, 2.1.1

Determined on material finer than 19mm

Prepared By: G MCGRANN

Date:10.4.17

Checked By: R MCGRANN

RMc



Accredited for compliance with ISO/IEC 17025 – Testing.

Accreditation No.2415

Greg McGrann/Manager

Approved Signatory

Date:10.4.17

Greg McGrann



Brisbane Soil Testing

20/1191 Anzac Ave

Kallangur Q 4503

Ph.(07) 3285 6536

Email: brissoil@bigpond.net.au

FIELD DENSITY CERTIFICATE

Connemar Pty. Ltd.

ABN 50 065 093 647

Geotechnical Testing Services

Customer	BMD URBAN PTY LTD	Feature	ALLOTMENT FILL	Report No.	40036
Address	PO BOX 197, WYNNUM CENTRAL QLD 4178	Location	SEE BELOW	Job No.	1643
Project	CANNON HILL COMMUNITY LINKS – STAGE 4	Date Tested	15/11/2016	Tested by	AC JM

Field Test N ^o Sample N ^o	Time of Test	Depth of Test mm	Test Location	Lab Compaction N ^o	% Oversize 19mm/37.5mm Wet Dry		Field Moisture Content %	Optimum Moisture Content %	Moisture Variation %	Moisture Ratio %	Field Dry Density t/m ³	Max. Dry Density t/m ³	Dry Density Ratio %
25 6502	8.30	150	LOT 84 9m Rear bdy, 3m Left bdy R.L.5.24	6502	-	-	17.0	Adj. 18.5	0.5 DRY	92.0	1.66	Adj. 1.74	95.5
Material Description: LIGHT BROWN SILTY SANDY CLAY.													
26 6503	8.30	150	LOT 85 2m Rear bdy, 3m Right bdy R.L.5.36	6503	-	-	14.5	Adj. 15.0	0.5 DRY	96.5	1.77	Adj. 1.79	99.0
Material Description: LIGHT BROWN SILTY SANDY CLAY.													
27 6504	9.00	150	LOT 86 5m Rear bdy, 3m Right bdy R.L.4.67	6504	-	-	18.0	Adj. 18.0	-	100.0	1.75	Adj. 1.76	99.5
Material Description: GREY-BROWN SANDY CLAY & ROCK FRAGMENTS.													
28 6505	9.00	150	LOT 87 4m Rear bdy, 4m Right bdy R.L.4.15	6505	-	-	16.5	Adj. 17.0	0.5 DRY	97.0	1.73	Adj. 1.78	97.0
Material Description: BROWN SILTY SANDY CLAY & ROCK FRAGMENTS.													
29 6506	9.30	150	LOT 84 6m Rear bdy, 3m Left bdy R.L.5.93	6506	-	-	13.5	Adj. 14.0	0.5 DRY	96.5	1.79	Adj. 1.85	96.5
Material Description: LIGHT BROWN SILTY SANDY CLAY.													
30 6507	9.30	150	LOT 85 9m Rear bdy, 2m Right bdy R.L.5.89	6507	-	-	16.5	Adj. 16.0	0.5 WET	103.0	1.69	Adj. 1.78	95.0
Material Description: LIGHT BROWN SILTY SANDY CLAY.													

Remarks:

Required Dry Density Ratio 95% STD

Test Procedures: AS1289 5.1.1,5.3.1, 5.4.1, 2.1.1

Determined on material finer than 19mm

Prepared By: G MCGRANN

Date:10.4.17

Checked By: R MCGRANN

RMc



Accredited for compliance with ISO/IEC 17025 – Testing.

Accreditation No.2415

Greg McGrann/Manager

Approved Signatory

Date:10.4.17

Greg McGrann



Brisbane Soil Testing

20/1191 Anzac Ave

Kallangur Q 4503

Ph.(07) 3285 6536

Email. brissoil@bigpond.net.au

FIELD DENSITY CERTIFICATE

Connemar Pty. Ltd.

ABN 50 065 093 647

Geotechnical Testing Services

Customer	BMD URBAN PTY LTD	Feature	ALLOTMENT FILL	Report No.	40037
Address	PO BOX 197, WYNNUM CENTRAL QLD 4178	Location	SEE BELOW	Job No.	1643
Project	CANNON HILL COMMUNITY LINKS – STAGE 4	Date Tested	15/11/2016	Tested by	AC JM

Field Test N ^o Sample N ^o	Time of Test	Depth of Test mm	Test Location	Lab Compaction N ^o	% Oversize 19mm/37.5mm Wet Dry		Field Moisture Content %	Optimum Moisture Content %	Moisture Variation %	Moisture Ratio %	Field Dry Density t/m ³	Max. Dry Density t/m ³	Dry Density Ratio %
31 6508	10.00	150	LOT 86 7m Rear bdy, 1m Left bdy R.L.5.31	6508	-	-	11.5	Adj. 13.5	2.0 DRY	85.0	1.79	Adj. 1.86	96.0
Material Description: LIGHT BROWN SILTY SANDY CLAY.													
32 6509	10.30	150	LOT 87 6m Rear bdy, 4m Left bdy R.L.4.76	6509	-	-	12.5	Adj. 14.5	2.0 DRY	86.0	1.79	Adj. 1.84	97.0
Material Description: LIGHT BROWN SILTY SANDY CLAY.													
								Adj.				Adj.	
Material Description:													
								Adj.				Adj.	
Material Description:													
								Adj.				Adj.	
Material Description:													
								Adj.				Adj.	
Material Description:													

Remarks:

Required Dry Density Ratio 95% STD

Test Procedures: AS1289 5.1.1,5.3.1, 5.4.1, 2.1.1

Determined on material finer than 19mm

Prepared By: G MCGRANN

Date:10.4.17

Checked By: R MCGRANN

RMc



Accredited for compliance with ISO/IEC 17025 – Testing.

Accreditation No.2415

Greg McGrann/Manager

Approved Signatory

Date:10.4.17

Greg McGrann



Brisbane Soil Testing

20/1191 Anzac Ave

Kallangur Q 4503

Ph.(07) 3285 6536

Email: brissoil@bigpond.net.au

FIELD DENSITY CERTIFICATE

Connemar Pty. Ltd.

ABN 50 065 093 647

Geotechnical Testing Services

Customer	BMD URBAN PTY LTD	Feature	ALLOTMENT FILL	Report No.	40038
Address	PO BOX 197, WYNNUM CENTRAL QLD 4178	Location	SEE BELOW	Job No.	1643
Project	CANNON HILL COMMUNITY LINKS – STAGE 4	Date Tested	16/11/2016	Tested by	AC LM

Field Test N ^o Sample N ^o	Time of Test	Depth of Test mm	Test Location	Lab Compaction N ^o	% Oversize 19mm/37.5mm Wet Dry		Field Moisture Context %	Optimum Moisture Content %	Moisture Variation %	Moisture Ratio %	Field Dry Density t/m ³	Max. Dry Density t/m ³	Dry Density Ratio %
33 6564	8.00	150	LOT 87 10m Rear bdy, 3m Right bdy R.L.5.53	6564	-	-	17.5	Adj. 16.5	1.0 WET	106.0	1.67	Adj. 1.70	98.5
Material Description: BROWN SILTY CLAY													
34 6565	8.30	150	LOT 86 8m Front bdy, 4m Left bdy R.L.5.92	6565	-	-	17.5	Adj. 16.5	1.0 WET	106.0	1.70	Adj. 1.75	97.0
Material Description: BROWN SILTY CLAY													
35 6566	9.00	150	LOT 85 10m Front bdy, 3m Right bdy R.L.6.61	6566	-	-	16.0	Adj. 15.5	0.5 WET	103.0	1.75	Adj. 1.81	97.0
Material Description: BROWN SILTY CLAY													
36 6567	9.30	150	LOT 84 11m Front bdy, 3m Left bdy R.L.6.54	6567	-	-	11.0	Adj. 13.0	2.0 DRY	84.5	1.82	Adj. 1.88	97.0
Material Description: LIGHT BROWN SILTY SANDY CLAY & ROCK FRAGMENTS													
37 6568	10.00	150	LOT 87 8m Rear bdy, 5m Left bdy R.L.6.02	6568	-	-	18.5	Adj. 16.0	2.5 WET	115.5	1.67	Adj. 1.76	95.0
Material Description: LIGHT BROWN SILTY CLAY													
38 6569	10.30	150	LOT 86 4m Rear bdy, 1m Left bdy R.L.6.44	6569	-	-	16.5	Adj. 17.0	0.5 DRY	97.0	1.77	Adj. 1.77	100.0
Material Description: BROWN SILTY CLAY & ROCK FRAGMENTS													

Remarks:

Required Dry Density Ratio 95% STD

Test Procedures: AS1289 5.1.1,5.3.1, 5.4.1, 2.1.1

Determined on material finer than 19mm

Prepared By: G MCGRANN
Date:10.4.17



Accredited for compliance with ISO/IEC 17025 – Testing.

Checked By: R MCGRANN

RMc

Accreditation No.2415

Greg McGrann/Manager
Approved Signatory
Date:10.4.17

Greg McGrann



Brisbane Soil Testing

20/1191 Anzac Ave

Kallangur Q 4503

Ph.(07) 3285 6536

Email. brissoil@bigpond.net.au

FIELD DENSITY CERTIFICATE

Connemar Pty. Ltd.

ABN 50 065 093 647

Geotechnical Testing Services

Customer	BMD URBAN PTY LTD	Feature	ALLOTMENT FILL	Report No.	40039
Address	PO BOX 197, WYNNUM CENTRAL QLD 4178	Location	SEE BELOW	Job No.	1643
Project	CANNON HILL COMMUNITY LINKS – STAGE 4	Date Tested	16/11/2016	Tested by	AC

Field Test N ^o Sample N ^o	Time of Test	Depth of Test mm	Test Location	Lab Compaction N ^o	% Oversize 19mm/37.5mm		Field Moisture Context %	Optimum Moisture Content %	Moisture Variation %	Moisture Ratio %	Field Dry Density t/m ³	Max. Dry Density t/m ³	Dry Density Ratio %
39 6570	11.00	150	LOT 85 9m Front bdy, 3m Right bdy R.L.7.30	6570	-	-	17.5	Adj. 16.5	1.0 WET	106.0	1.77	Adj. 1.75	101.0
Material Description: BROWN SILTY CLAY & ROCK FRAMGENTS													
40 6571	11.30	150	LOT 84 7m Front bdy, 4m Left bdy R.L.7.19	6571	-	-	16.5	Adj. 17.5	1.0 DRY	94.0	1.77	Adj. 1.74	101.5
Material Description: BROWN SILTY SANDY CLAY													
								Adj.				Adj.	
Material Description:													
								Adj.				Adj.	
Material Description:													
								Adj.				Adj.	
Material Description:													
								Adj.				Adj.	
Material Description:													

Remarks:

Required Dry Density Ratio 95% STD

Test Procedures: AS1289 5.1.1,5.3.1, 5.4.1, 2.1.1

Determined on material finer than 19mm

Prepared By: G MCGRANN

Date:10.4.17



Accredited for compliance with ISO/IEC 17025 – Testing.

Checked By: R MCGRANN

RMc

Accreditation No.2415

Greg McGrann/Manager

Approved Signatory

Date:10.4.17

Greg McGrann



Brisbane Soil Testing

20/1191 Anzac Ave

Kallangur Q 4503

Ph.(07) 3285 6536

Email: brissoil@bigpond.net.au

FIELD DENSITY CERTIFICATE

Connemar Pty. Ltd.

ABN 50 065 093 647

Geotechnical Testing Services

Customer	BMD URBAN PTY LTD	Feature	ALLOTMENT FILL	Report No.	40040
Address	PO BOX 197, WYNNUM CENTRAL QLD 4178	Location	SEE BELOW	Job No.	1643
Project	CANNON HILL COMMUNITY LINKS – STAGE 4	Date Tested	17/11/2016	Tested by	AC LM

Field Test N ^o Sample N ^o	Time of Test	Depth of Test mm	Test Location	Lab Compaction N ^o	% Oversize 19mm/37.5mm Wet Dry		Field Moisture Context %	Optimum Moisture Content %	Moisture Variation %	Moisture Ratio %	Field Dry Density t/m ³	Max. Dry Density t/m ³	Dry Density Ratio %
41 6599	8.00	150	LOT 84 8m Front bdy, 3m Right bdy R.L.7.52	6599	-	-	13.0	Adj. 15.0	2.0 DRY	86.5	1.77	Adj. 1.78	99.5
Material Description: DARK BROWN SILTY CLAY & ROCK FRAMGENTS													
42 6600	8.30	150	LOT 85 7m Front bdy, 2m Right bdy R.L.7.83	6600	-	-	12.5	Adj. 15.5	3.0 DRY	80.5	1.80	Adj. 1.76	102.5
Material Description: DARK BROWN SILTY CLAY & ROCK FRAMGENTS													
43 6601	9.00	150	LOT 86 11m Front bdy, 2m Left bdy R.L.6.87	6601	-	-	12.5	Adj. 14.5	2.0 DRY	86.0	1.84	Adj. 1.80	102.0
Material Description: BROWN SILTY SANDY CLAY													
44 6602	9.30	150	LOT 87 10m Rear bdy, 5m Right bdy R.L.6.70	6602	-	-	12.0	Adj. 15.5	3.5 DRY	77.5	1.80	Adj. 1.76	102.0
Material Description: GREY-BROWN SILTY CLAY													
45 6603	10.00	150	LOT 87 9m Front bdy, 4m Right bdy R.L.7.31	6603	-	-	16.0	Adj. 16.5	0.5 DRY	97.0	1.71	Adj. 1.78	96.0
Material Description: DARK BROWN SILTY CLAY & ROCK FRAGMENTS													
46 6604	10.00	150	LOT 86 2m Front bdy, 3m Left bdy R.L.7.40	6604	-	-	12.5	Adj. 15.5	3.0 DRY	80.5	1.85	Adj. 1.80	102.5
Material Description: BROWN SILTY SANDY CLAY													

Remarks:

Required Dry Density Ratio 95% STD

Test Procedures: AS1289 5.1.1,5.3.1, 5.4.1, 2.1.1

Determined on material finer than 19mm

Prepared By: G MCGRANN

Date:10.4.17

Checked By: R MCGRANN

RMc



Accredited for compliance with ISO/IEC 17025 – Testing.

Accreditation No.2415

Greg McGrann/Manager

Approved Signatory

Date:10.4.17

Greg McGrann



Brisbane Soil Testing

20/1191 Anzac Ave

Kallangur Q 4503

Ph.(07) 3285 6536

Email. brissoil@bigpond.net.au

FIELD DENSITY CERTIFICATE

Connemar Pty. Ltd.

ABN 50 065 093 647

Geotechnical Testing Services

Customer	BMD URBAN PTY LTD	Feature	EMBANKMENT FILL	Report No.	40041
Address	PO BOX 197, WYNNUM CENTRAL QLD 4178	Location	SEE BELOW	Job No.	1643
Project	CANNON HILL COMMUNITY LINKS – STAGE 4	Date Tested	18/11/2016	Tested by	AC

Field Test N ^o Sample N ^o	Time of Test	Depth of Test mm	Test Location	Lab Compaction N ^o	% Oversize 19mm/37.5mm Wet Dry		Field Moisture Content %	Optimum Moisture Content %	Moisture Variation %	Moisture Ratio %	Field Dry Density t/m ³	Max. Dry Density t/m ³	Dry Density Ratio %
47 6639	8.30	150	DRIVEWAY No.1 o/s 2m L, CH34 1.4m below P.L.	6639	-	-	13.5	Adj. 15.5	2.0 DRY	87.0	1.77	Adj. 1.76	100.5
Material Description: BROWN SILTY CLAY & ROCK FRAGMENTS.													
48 6640	9.00	150	SUTTON PLACE o/s 1m L, CH125 1.0m below P.L.	6640	-	-	13.5	Adj. 16.5	3.0 DRY	82.0	1.71	Adj. 1.77	96.5
Material Description: BROWN SILTY SANDY CLAY.													
49 6641	9.30	150	DRIVEWAY No.1 o/s 1m L, CH28 0.9m below P.L.	6641	-	-	13.5	Adj. 15.0	1.5 DRY	90.0	1.78	Adj. 1.82	98.0
Material Description: BROWN SILTY SANDY CLAY.													
								Adj.				Adj.	
Material Description:													
								Adj.				Adj.	
Material Description:													
								Adj.				Adj.	
Material Description:													

Remarks:

Required Dry Density Ratio 95% STD

Test Procedures: AS1289 5.1.1, 5.3.1, 5.4.1, 2.1.1

Determined on material finer than 19mm

Prepared By: G MCGRANN

Date: 10.4.17

Checked By: R MCGRANN

RMc



Accredited for compliance with ISO/IEC 17025 – Testing.

Accreditation No. 2415

Greg McGrann/Manager

Approved Signatory

Date: 10.4.17

Greg McGrann



Brisbane Soil Testing

20/1191 Anzac Ave

Kallangur Q 4503

Ph.(07) 3285 6536

Email. brissoil@bigpond.net.au

FIELD DENSITY CERTIFICATE

Connemar Pty. Ltd.

ABN 50 065 093 647

Geotechnical Testing Services

Customer	BMD URBAN PTY LTD	Feature	ALLOTMENT FILL	Report No.	40042
Address	PO BOX 197, WYNNUM CENTRAL QLD 4178	Location	SEE BELOW	Job No.	1643
Project	CANNON HILL COMMUNITY LINKS – STAGE 4	Date Tested	18/11/2016	Tested by	AC

Field Test N ^o Sample N ^o	Time of Test	Depth of Test mm	Test Location	Lab Compaction N ^o	% Oversize 19mm/37.5mm		Field Moisture Content %	Optimum Moisture Content %	Moisture Variation %	Moisture Ratio %	Field Dry Density t/m ³	Max. Dry Density t/m ³	Dry Density Ratio %
50 6642	10.00	150	LOT 88 2m Rear bdy, 2m Left bdy R.L.5.39	6642	-	-	14.0	Adj. 17.0	3.0 DRY	82.5	1.78	Adj. 1.73	103.0
								Adj.				Adj.	
								Adj.				Adj.	
								Adj.				Adj.	
								Adj.				Adj.	
								Adj.				Adj.	
								Adj.				Adj.	

Remarks:

Required Dry Density Ratio 95% STD

Test Procedures: AS1289 5.1.1, 5.3.1, 5.4.1, 2.1.1

Determined on material finer than 19mm

Prepared By: G MCGRANN

Date: 10.4.17

Checked By: R MCGRANN

RMc



Accredited for compliance with ISO/IEC 17025 – Testing.

Accreditation No. 2415

Greg McGrann/Manager

Approved Signatory

Date: 10.4.17

Greg McGrann



Brisbane Soil Testing

20/1191 Anzac Ave

Kallangur Q 4503

Ph.(07) 3285 6536

Email. brissoil@bigpond.net.au

FIELD DENSITY CERTIFICATE

Connemar Pty. Ltd.

ABN 50 065 093 647

Geotechnical Testing Services

Customer	BMD URBAN PTY LTD	Feature	PAD MOUNT TRANSFORMER BACKFILL	Report No.	40043
Address	PO BOX 197, WYNNUM CENTRAL QLD 4178	Location	SEE BELOW	Job No.	1643
Project	CANNON HILL COMMUNITY LINKS – STAGE 4	Date Tested	18/11/2017	Tested by	AC

Field Test N ^o Sample N ^o	Time of Test	Depth of Test mm	Test Location	Lab Compaction N ^o	% Oversize 19mm/37.5mm Wet Dry		Field Moisture Content %	Optimum Moisture Content %	Moisture Variation %	Moisture Ratio %	Field Dry Density t/m ³	Max. Dry Density t/m ³	Dry Density Ratio %
51 6643	10.30	150	LOC ON ATT PLAN R.L.7.83	6643	-	-	14.5	Adj. 15.5	1.0 DRY	93.5	1.71	Adj. 1.74	98.0
Material Description: LIGHT BROWN SILTY CLAY.													
52 6644	11.00	150	LOC ON ATT PLAN R.L.8.40	6644	-	-	13.0	Adj. 14.5	1.5 DRY	89.5	1.79	Adj. 1.84	97.5
Material Description: LIGHT BROWN SILTY CLAY.													
								Adj.				Adj.	
Material Description:													
								Adj.				Adj.	
Material Description:													
								Adj.				Adj.	
Material Description:													
								Adj.				Adj.	
Material Description:													

Remarks:

Required Dry Density Ratio 95% STD

Test Procedures: AS1289 5.1.1,5.3.1, 5.4.1, 2.1.1

Determined on material finer than 19mm

Prepared By: G MCGRANN

Date:10.4.17



Accredited for compliance with ISO/IEC 17025 – Testing.

Accreditation No.2415

Checked By: R MCGRANN

RMc

Greg McGrann/Manager

Approved Signatory

Date:10.4.17

Greg McGrann



Brisbane Soil Testing

20/1191 Anzac Ave

Kallangur Q 4503

Ph.(07) 3285 6536

Email. brissoil@bigpond.net.au

FIELD DENSITY CERTIFICATE

Connemar Pty. Ltd.

ABN 50 065 093 647

Geotechnical Testing Services

Customer	BMD URBAN PTY LTD	Feature	ALLOTMENT FILL	Report No.	40044
Address	PO BOX 197, WYNNUM CENTRAL QLD 4178	Location	SEE BELOW	Job No.	1643
Project	CANNON HILL COMMUNITY LINKS – STAGE 4	Date Tested	29/11/2016	Tested by	AC

Field Test N ^o Sample N ^o	Time of Test	Depth of Test mm	Test Location	Lab Compaction N ^o	% Oversize 19mm/37.5mm Wet Dry		Field Moisture Context %	Optimum Moisture Content %	Moisture Variation %	Moisture Ratio %	Field Dry Density t/m ³	Max. Dry Density t/m ³	Dry Density Ratio %
53 6870	8.00	150	LOT 80 9m Front bdy, 5m Left bdy R.L.8.90	6870	-	-	9.0	Adj. 10.5	1.5 DRY	85.5	1.95	Adj. 1.98	98.5
								Adj.				Adj.	
								Adj.				Adj.	
								Adj.				Adj.	
								Adj.				Adj.	
								Adj.				Adj.	
								Adj.				Adj.	

Remarks:

Required Dry Density Ratio 95% STD

Test Procedures: AS1289 5.1.1, 5.3.1, 5.4.1, 2.1.1

Determined on material finer than 19mm

Prepared By: G MCGRANN

Date: 10.4.17

Checked By: R MCGRANN

RMc



Accredited for compliance with ISO/IEC 17025 – Testing.

Accreditation No. 2415

Greg McGrann/Manager

Approved Signatory

Date: 10.4.17

Greg McGrann



Brisbane Soil Testing

20/1191 Anzac Ave

Kallangur Q 4503

Ph.(07) 3285 6536

Email. brissoil@bigpond.net.au

FIELD DENSITY CERTIFICATE

Connemar Pty. Ltd.

ABN 50 065 093 647

Geotechnical Testing Services

Customer	BMD URBAN PTY LTD	Feature	PAD MOUNT TRANSFORMER BACKFILL	Report No.	40045
Address	PO BOX 197, WYNNUM CENTRAL QLD 4178	Location	SEE BELOW	Job No.	1643
Project	CANNON HILL COMMUNITY LINKS – STAGE 4	Date Tested	29/11/2016	Tested by	AC

Field Test N ^o Sample N ^o	Time of Test	Depth of Test mm	Test Location	Lab Compaction N ^o	% Oversize 19mm/37.5mm		Field Moisture Context %	Optimum Moisture Content %	Moisture Variation %	Moisture Ratio %	Field Dry Density t/m ³	Max. Dry Density t/m ³	Dry Density Ratio %
54 6871	8.30	130	LOC ON ATT PLAN R.L.8.87	6871	-	-	10.0	Adj. 10.0	-	100.0	1.99	Adj. 1.98	100.5
								Adj.				Adj.	
								Adj.				Adj.	
								Adj.				Adj.	
								Adj.				Adj.	
								Adj.				Adj.	
								Adj.				Adj.	

Remarks:

Required Dry Density Ratio 95% STD

Test Procedures: AS1289 5.1.1, 5.3.1, 5.4.1, 2.1.1

Determined on material finer than 19mm

Prepared By: G MCGRANN

Date: 10.4.17

Checked By: R MCGRANN

RMc



Accredited for compliance with ISO/IEC 17025 – Testing.

Accreditation No. 2415

Greg McGrann/Manager

Approved Signatory

Date: 10.4.17

Greg McGrann



Brisbane Soil Testing

20/1191 Anzac Ave

Kallangur Q 4503

Ph.(07) 3285 6536

Email. brissoil@bigpond.net.au

FIELD DENSITY CERTIFICATE

Connemar Pty. Ltd.

ABN 50 065 093 647

Geotechnical Testing Services

Customer	BMD URBAN PTY LTD	Feature	ALLOTMENT FILL	Report No.	40046
Address	PO BOX 197, WYNNUM CENTRAL QLD 4178	Location	SEE BELOW	Job No.	1643
Project	CANNON HILL COMMUNITY LINKS – STAGE 4	Date Tested	1/12/2016	Tested by	AC

Field Test N ^o Sample N ^o	Time of Test	Depth of Test mm	Test Location	Lab Compaction N ^o	% Oversize 19mm/37.5mm Wet Dry		Field Moisture Context %	Optimum Moisture Content %	Moisture Variation %	Moisture Ratio %	Field Dry Density t/m ³	Max. Dry Density t/m ³	Dry Density Ratio %
55 6914	8.00	150	LOT 83 11m Front bdy, 6m Left bdy R.L.8.20	6914	-	-	10.5	Adj. 9.5	1.0 WET	110.5	1.97	Adj. 2.01	98.0
Material Description: BROWN SANDY GRAVELLY CLAY													
56 6915	8.30	150	LOT 84 8m Front bdy, 4m Left bdy R.L.8.01	6915	-	-	12.0	Adj. 12.0	-	100.0	1.92	Adj. 1.97	97.5
Material Description: LIGHT BROWN SANDY CLAY & ROCK FRAGMENTS													
57 6916	9.00	150	LOT 82 13m Front bdy, 3m Left bdy R.L.8.21	6916	-	-	10.5	Adj. 10.5	-	100.0	1.96	Adj. 1.99	98.5
Material Description: BROWN SILTY SANDY CLAY & ROCK FRAGMENTS													
								Adj.				Adj.	
Material Description:													
								Adj.				Adj.	
Material Description:													
								Adj.				Adj.	
Material Description:													

Remarks:

Required Dry Density Ratio 95% STD

Test Procedures: AS1289 5.1.1, 5.3.1, 5.4.1, 2.1.1

Determined on material finer than 19mm

Prepared By: G MCGRANN

Date: 10.4.17

Checked By: R MCGRANN

RMc



Accredited for compliance with ISO/IEC 17025 – Testing.

Accreditation No. 2415

Greg McGrann/Manager

Approved Signatory

Date: 10.4.17

Greg McGrann



Brisbane Soil Testing

20/1191 Anzac Ave

Kallangur Q 4503

Ph.(07) 3285 6536

Email. brissoil@bigpond.net.au

FIELD DENSITY CERTIFICATE

Connemar Pty. Ltd.

ABN 50 065 093 647

Geotechnical Testing Services

Customer	BMD URBAN PTY LTD	Feature	EMBANKMENT FILL	Report No.	40047
Address	PO BOX 197, WYNNUM CENTRAL QLD 4178	Location	SEE BELOW	Job No.	1643
Project	CANNON HILL COMMUNITY LINKS – STAGE 4	Date Tested	13/12/2016	Tested by	JC

Field Test N ^o Sample N ^o	Time of Test	Depth of Test mm	Test Location	Lab Compaction N ^o	% Oversize 19mm/37.5mm Wet Dry		Field Moisture Content %	Optimum Moisture Content %	Moisture Variation %	Moisture Ratio %	Field Dry Density t/m ³	Max. Dry Density t/m ³	Dry Density Ratio %
58 7072	9.00	150	SUTTON PLACE CH100 0.75m below P.L.	7072	11.0	13.0	11.5	Adj. 9.5	2.0 WET	120.5	2.00	Adj. 2.05	97.5
Material Description: BROWN SANDY GRAVELLY CLAY.													
59 7073	9.30	150	SUTTON PLACE CH136 0.7m below P.L.	7073	13.0	14.0	11.5	Adj. 8.0	3.5 WET	145.5	2.08	Adj. 2.08	100.0
Material Description: LIGHT BROWN SANDY CLAY & ROCK FRAGMENTS.													
								Adj.				Adj.	
Material Description:													
								Adj.				Adj.	
Material Description:													
								Adj.				Adj.	
Material Description:													
								Adj.				Adj.	
Material Description:													

Remarks:

Required Dry Density Ratio 95% STD

Test Procedures: AS1289 5.1.1, 5.3.1, 5.4.1, 2.1.1

Determined on material finer than 19mm

Prepared By: G MCGRANN

Date: 10.4.17

Checked By: R MCGRANN

RMc



Accredited for compliance with ISO/IEC 17025 – Testing.

Accreditation No. 2415

Greg McGrann/Manager

Approved Signatory

Date: 10.4.17

Greg McGrann



Brisbane Soil Testing

20/1191 Anzac Ave

Kallangur Q 4503

Ph.(07) 3285 6536

Email. brissoil@bigpond.net.au

FIELD DENSITY CERTIFICATE

Connemar Pty. Ltd.

ABN 50 065 093 647

Geotechnical Testing Services

Customer	BMD URBAN PTY LTD	Feature	ALLOTMENT FILL	Report No.	40048
Address	PO BOX 197, WYNNUM CENTRAL QLD 4178	Location	SEE BELOW	Job No.	1643
Project	CANNON HILL COMMUNITY LINKS – STAGE 4	Date Tested	15/12/2016	Tested by	AC

Field Test N ^o Sample N ^o	Time of Test	Depth of Test mm	Test Location	Lab Compaction N ^o	% Oversize 19mm/37.5mm		Field Moisture Context %	Optimum Moisture Content %	Moisture Variation %	Moisture Ratio %	Field Dry Density t/m ³	Max. Dry Density t/m ³	Dry Density Ratio %
60 7145	8.00	150	LOT 88 5m Rear bdy, 6m Left bdy R.L.5.82	7145	-	-	10.0	Adj. 10.0	-	100.0	2.00	Adj. 2.02	99.0
Material Description: BROWN SILTY SANDY CLAY & ROCK FRAGMENTS													
61 7146	8.30	150	LOT 88 7m Front bdy, 3m Left bdy R.L.6.29	7146	-	-	9.0	Adj. 9.5	0.5 DRY	94.5	2.00	Adj. 2.01	99.5
Material Description: BROWN SILTY SANDY CLAY & ROCK FRAGMENTS													
								Adj.				Adj.	
Material Description:													
								Adj.				Adj.	
Material Description:													
								Adj.				Adj.	
Material Description:													
								Adj.				Adj.	
Material Description:													

Remarks:

Required Dry Density Ratio 95% STD

Test Procedures: AS1289 5.1.1, 5.3.1, 5.4.1, 2.1.1

Determined on material finer than 19mm

Prepared By: G MCGRANN

Date: 10.4.17

Checked By: R MCGRANN

RMc



Accredited for compliance with ISO/IEC 17025 – Testing.

Accreditation No. 2415

Greg McGrann/Manager

Approved Signatory

Date: 10.4.17

Greg McGrann



Brisbane Soil Testing

20/1191 Anzac Ave

Kallangur Q 4503

Ph.(07) 3285 6536

Email. brissoil@bigpond.net.au

FIELD DENSITY CERTIFICATE

Connemar Pty. Ltd.

ABN 50 065 093 647

Geotechnical Testing Services

Customer	BMD URBAN PTY LTD	Feature	EMBANKMENT FILL	Report No.	40049
Address	PO BOX 197, WYNNUM CENTRAL QLD 4178	Location	SEE BELOW	Job No.	1643
Project	CANNON HILL COMMUNITY LINKS – STAGE 4	Date Tested	15/12/2016	Tested by	LM

Field Test N ^o Sample N ^o	Time of Test	Depth of Test mm	Test Location	Lab Compaction N ^o	% Oversize 19mm/37.5mm		Field Moisture Context %	Optimum Moisture Content %	Moisture Variation %	Moisture Ratio %	Field Dry Density t/m ³	Max. Dry Density t/m ³	Dry Density Ratio %
62 7147	9.00	150	DRIVEWAY No.1 o/s 2.0m R, CH36 0.6m below P.L.	7147	-	-	9.0	Adj. 8.5	0.5 WET	106.0	2.12	Adj. 2.07	102.5
Material Description: BROWN SILTY SANDY GRAVELLY CLAY													
63 7148	9.30	150	SUTTON PLACE o/s 0.5m L, CH161 0.7m below P.L.	7148	-	-	11.0	Adj. 8.5	2.5 WET	129.5	1.03	Adj. 2.05	99.0
Material Description: BROWN SILTY SANDY GRAVELLY CLAY													
								Adj.				Adj.	
Material Description:													
								Adj.				Adj.	
Material Description:													
								Adj.				Adj.	
Material Description:													
								Adj.				Adj.	
Material Description:													

Remarks:

Required Dry Density Ratio 95% STD

Test Procedures: AS1289 5.1.1, 5.3.1, 5.4.1, 2.1.1

Determined on material finer than 19mm

Prepared By: G MCGRANN

Date: 10.4.17

Checked By: R MCGRANN

RMc



Accredited for compliance with ISO/IEC 17025 – Testing.

Accreditation No. 2415

Greg McGrann/Manager

Approved Signatory

Date: 10.4.17

Greg McGrann



Brisbane Soil Testing

20/1191 Anzac Ave

Kallangur Q 4503

Ph.(07) 3285 6536

Email. brissoil@bigpond.net.au

FIELD DENSITY CERTIFICATE

Connemar Pty. Ltd.

ABN 50 065 093 647

Geotechnical Testing Services

Customer	BMD URBAN PTY LTD	Feature	ALLOTMENT FILL	Report No.	40050
Address	PO BOX 197, WYNNUM CENTRAL QLD 4178	Location	SEE BELOW	Job No.	1643
Project	CANNON HILL COMMUNITY LINKS – STAGE 4	Date Tested	20/1/2017	Tested by	AC

Field Test N ^o Sample N ^o	Time of Test	Depth of Test mm	Test Location	Lab Compaction N ^o	% Oversize 19mm/37.5mm Wet Dry		Field Moisture Content %	Optimum Moisture Content %	Moisture Variation %	Moisture Ratio %	Field Dry Density t/m ³	Max. Dry Density t/m ³	Dry Density Ratio %
64 7496	9.00	150	LOT 88 11m Front bdy, 5m Left bdy R.L.6.86	7496	-	-	11.5	Adj. 11.0	0.5 WET	104.5	1.91	Adj. 1.92	99.5
Material Description: LIGHT BROWN SILTY SANDY CLAY & ROCK FRAGMENTS.													
65 7497	9.30	150	LOT 89 3m Rear bdy, 4m Left bdy R.L.6.44	7497	-	-	12.5	Adj. 13.5	1.0 DRY	92.5	1.93	Adj. 1.89	102.0
Material Description: LIGHT BROWN SILTY SANDY CLAY & ROCK FRAGMENTS.													
66 7498	10.00	150	LOT 90 2m Rear bdy, 4m Left bdy R.L.6.98	7498	-	-	10.0	Adj. 10.0	-	100.0	2.04	Adj. 1.98	103.0
Material Description: DARK BROWN SILTY SANDY CLAY & ROCK FRAGMENTS.													
								Adj.				Adj.	
Material Description:													
								Adj.				Adj.	
Material Description:													
								Adj.				Adj.	
Material Description:													

Remarks:

Required Dry Density Ratio 95% STD

Test Procedures: AS1289 5.1.1, 5.3.1, 5.4.1, 2.1.1

Determined on material finer than 19mm

Prepared By: G MCGRANN

Date: 10.4.17

Checked By: R MCGRANN

RMc



Accredited for compliance with ISO/IEC 17025 – Testing.

Accreditation No. 2415

Greg McGrann/Manager

Approved Signatory

Date: 10.4.17

Greg McGrann



Brisbane Soil Testing

20/1191 Anzac Ave

Kallangur Q 4503

Ph.(07) 3285 6536

Email. brissoil@bigpond.net.au

FIELD DENSITY CERTIFICATE

Connemar Pty. Ltd.

ABN 50 065 093 647

Geotechnical Testing Services

Customer	BMD URBAN PTY LTD	Feature	ALLOTMENT FILL	Report No.	40051
Address	PO BOX 197, WYNNUM CENTRAL QLD 4178	Location	SEE BELOW	Job No.	1643
Project	CANNON HILL COMMUNITY LINKS – STAGE 4	Date Tested	31/1/2017	Tested by	AC

Field Test N ^o Sample N ^o	Time of Test	Depth of Test mm	Test Location	Lab Compaction N ^o	% Oversize 19mm/37.5mm Wet Dry		Field Moisture Context %	Optimum Moisture Content %	Moisture Variation %	Moisture Ratio %	Field Dry Density t/m ³	Max. Dry Density t/m ³	Dry Density Ratio %
67 7651	8.00	150	LOT 88 10m Rear bdy, 4m Right bdy R.L.7.16	7651	-	-	10.0	Adj. 10.0	-	100.0	1.98	Adj. 2.01	98.5
Material Description: DARK BROWN SILTY SANDY CLAY & ROCK FRAGMENTS													
68 7652	8.30	150	LOT 89 7m Rear bdy, 3m Left bdy R.L.6.81	7652	-	-	9.5	Adj. 9.5	-	100.0	2.00	Adj. 2.00	100.0
Material Description: DARK BROWN SILTY SANDY CLAY & ROCK FRAGMENTS													
								Adj.				Adj.	
Material Description:													
								Adj.				Adj.	
Material Description:													
								Adj.				Adj.	
Material Description:													
								Adj.				Adj.	
Material Description:													

Remarks:

Required Dry Density Ratio 95% STD

Test Procedures: AS1289 5.1.1, 5.3.1, 5.4.1, 2.1.1

Determined on material finer than 19mm

Prepared By: G MCGRANN

Date: 10.4.17

Checked By: R MCGRANN

RMc



Accredited for compliance with ISO/IEC 17025 – Testing.

Accreditation No. 2415

Greg McGrann/Manager

Approved Signatory

Date: 10.4.17

Greg McGrann



Brisbane Soil Testing

20/1191 Anzac Ave

Kallangur Q 4503

Ph.(07) 3285 6536

Email. brissoil@bigpond.net.au

FIELD DENSITY CERTIFICATE

Connemar Pty. Ltd.

ABN 50 065 093 647

Geotechnical Testing Services

Customer	BMD URBAN PTY LTD	Feature	ALLOTMENT FILL	Report No.	40052
Address	PO BOX 197, WYNNUM CENTRAL QLD 4178	Location	SEE BELOW	Job No.	1643
Project	CANNON HILL COMMUNITY LINKS – STAGE 4	Date Tested	1/2/2017	Tested by	AC

Field Test N ^o Sample N ^o	Time of Test	Depth of Test mm	Test Location	Lab Compaction N ^o	% Oversize 19mm/37.5mm Wet Dry		Field Moisture Content %	Optimum Moisture Content %	Moisture Variation %	Moisture Ratio %	Field Dry Density t/m ³	Max. Dry Density t/m ³	Dry Density Ratio %
69 7724	9.30	150	LOT 89 11m Front bdy, 3m Right bdy R.L.7.24	7724	-	-	10.0	Adj. 12.5	2.5 DRY	80.0	1.89	Adj. 1.96	96.5
Material Description: BROWN SILTY GRAVELLY CLAY.													
70 7725	10.00	150	LOT 90 9m Rear bdy, 2m Left bdy R.L.7.31	7725	-	-	11.5	Adj. 12.0	0.5 DRY	96.0	1.92	Adj. 1.94	99.0
Material Description: DARK BROWN SILTY SANDY CLAY.													
								Adj.				Adj.	
Material Description:													
								Adj.				Adj.	
Material Description:													
								Adj.				Adj.	
Material Description:													
								Adj.				Adj.	
Material Description:													

Remarks:

Required Dry Density Ratio 95% STD

Test Procedures: AS1289 5.1.1, 5.3.1, 5.4.1, 2.1.1

Determined on material finer than 19mm

Prepared By: G MCGRANN

Date: 10.4.17

Checked By: R MCGRANN

RMc



Accredited for compliance with ISO/IEC 17025 – Testing.

Accreditation No. 2415

Greg McGrann/Manager

Approved Signatory

Date: 10.4.17

Greg McGrann



Brisbane Soil Testing

20/1191 Anzac Ave

Kallangur Q 4503

Ph.(07) 3285 6536

Email. brissoil@bigpond.net.au

FIELD DENSITY CERTIFICATE

Connemar Pty. Ltd.

ABN 50 065 093 647

Geotechnical Testing Services

Customer	BMD URBAN PTY LTD	Feature	ALLOTMENT FILL	Report No.	40053
Address	PO BOX 197, WYNNUM CENTRAL QLD 4178	Location	SEE BELOW	Job No.	1643
Project	CANNON HILL COMMUNITY LINKS – STAGE 4	Date Tested	2/2/2017	Tested by	AC

Field Test N ^o Sample N ^o	Time of Test	Depth of Test mm	Test Location	Lab Compaction N ^o	% Oversize 19mm/37.5mm Wet Dry		Field Moisture Context %	Optimum Moisture Content %	Moisture Variation %	Moisture Ratio %	Field Dry Density t/m ³	Max. Dry Density t/m ³	Dry Density Ratio %
71 7726	8.00	150	LOT 88 6m Front bdy, 6m Right bdy R.L.7.58	7726	-	-	14.5	Adj. 12.5	2.0 WET	116.0	1.87	Adj. 1.95	96.0
Material Description: DARK BROWN SILTY CALY & ROCK FRAGMENTS													
72 7727	8.30	150	LOT 89 9m Front bdy, 5m Left bdy R.L.7.65	7727	-	-	14.0	Adj. 11.5	2.5 WET	121.5	1.92	Adj. 1.96	98.0
Material Description: BROWN SILTY SANDY CLAY													
73 7728	9.00	150	LOT 90 10m Rear bdy, 4m Left bdy R.L.7.80	7728	-	-	12.0	Adj. 10.5	1.5 WET	114.5	1.93	Adj. 2.00	96.5
Material Description: GREY-BROWN SILTY SANDY CLAY													
								Adj.				Adj.	
Material Description:													
								Adj.				Adj.	
Material Description:													
								Adj.				Adj.	
Material Description:													

Remarks:

Required Dry Density Ratio 95% STD

Test Procedures: AS1289 5.1.1, 5.3.1, 5.4.1, 2.1.1

Determined on material finer than 19mm

Prepared By: G MCGRANN

Date: 10.4.17

Checked By: R MCGRANN

RMc



Accredited for compliance with ISO/IEC 17025 – Testing.

Accreditation No. 2415

Greg McGrann/Manager

Approved Signatory

Date: 10.4.17

Greg McGrann



Brisbane Soil Testing

20/1191 Anzac Ave

Kallangur Q 4503

Ph.(07) 3285 6536

Email. brissoil@bigpond.net.au

FIELD DENSITY CERTIFICATE

Connemar Pty. Ltd.

ABN 50 065 093 647

Geotechnical Testing Services

Customer	BMD URBAN PTY LTD	Feature	ALLOTMENT FILL	Report No.	40054
Address	PO BOX 197, WYNNUM CENTRAL QLD 4178	Location	SEE BELOW	Job No.	1643
Project	CANNON HILL COMMUNITY LINKS – STAGE 4	Date Tested	3/2/2017	Tested by	AC

Field Test N ^o Sample N ^o	Time of Test	Depth of Test mm	Test Location	Lab Compaction N ^o	% Oversize 19mm/37.5mm Wet Dry		Field Moisture Context %	Optimum Moisture Content %	Moisture Variation %	Moisture Ratio %	Field Dry Density t/m ³	Max. Dry Density t/m ³	Dry Density Ratio %
74 7759	8.00	150	LOT 91 2m Front bdy, 2m Left bdy R.L.8.42	7759	-	-	10.0	Adj. 12.0	2.0 DRY	83.5	1.93	Adj. 1.96	98.5
Material Description: BROWN SILTY CLAY & ROCK FRAMGENTS													
75 7760	8.30	150	LOT 92 1m Front bdy, 3m Left bdy R.L.8.90	7760	-	-	10.5	Adj. 10.0	0.5 WET	105.0	1.90	Adj. 1.98	96.0
Material Description: BROWN SILTY CLAY & ROCK FRAMGENTS													
76 7761	9.00	150	LOT 93 1m Front bdy, 2m Left bdy R.L.9.46	7761	-	-	11.0	Adj. 11.5	0.5 DRY	95.5	1.88	Adj. 1.83	102.5
Material Description: BROWN SILTY CLAY & ROCK FRAMGENTS													
								Adj.				Adj.	
Material Description:													
								Adj.				Adj.	
Material Description:													
								Adj.				Adj.	
Material Description:													

Remarks:

Required Dry Density Ratio 95% STD

Test Procedures: AS1289 5.1.1, 5.3.1, 5.4.1, 2.1.1

Determined on material finer than 19mm

Prepared By: G MCGRANN

Date: 10.4.17

Checked By: R MCGRANN

RMc



Accredited for compliance with ISO/IEC 17025 – Testing.

Accreditation No. 2415

Greg McGrann/Manager

Approved Signatory

Date: 10.4.17

Greg McGrann



Brisbane Soil Testing

20/1191 Anzac Ave

Kallangur Q 4503

Ph.(07) 3285 6536

Email: brissoil@bigpond.net.au

FIELD DENSITY CERTIFICATE

Connemar Pty. Ltd.

ABN 50 065 093 647

Geotechnical Testing Services

Customer	BMD URBAN PTY LTD	Feature	ALLOTMENT FILL	Report No.	40097
Address	PO BOX 197, WYNNUM CENTRAL QLD 4178	Location	SEE BELOW	Job No.	1643
Project	CANNON HILL COMMUNITY LINKS – STAGE 4	Date Tested	10/4/2017	Tested by	AC

Field Test N ^o Sample N ^o	Time of Test	Depth of Test mm	Test Location	Lab Compaction N ^o	% Oversize 19mm/37.5mm Wet Dry		Field Moisture Context %	Optimum Moisture Content %	Moisture Variation %	Moisture Ratio %	Field Dry Density t/m ³	Max. Dry Density t/m ³	Dry Density Ratio %
77 8762	8.00	150	LOT 112 2m Front bdy, 2m Right bdy R.L.8.19	8762	-	-	10.0	Adj. 10.5	0.5 DRY	95.0	1.99	Adj. 1.95	102.0
Material Description: LIGHT BROWN SILTY SANDY CLAY & ROCK FRAGMENTS													
78 8763	8.30	150	LOT 113 3m Front bdy, 4m Right bdy R.L.7.20	8763	-	-	14.5	Adj. 12.5	2.0 WET	116.0	1.93	Adj. 1.92	100.5
Material Description: LIGHT BROWN SILTY SANDY CLAY & ROCK FRAGMENTS													
79 8764	9.00	150	LOT 114 2m Rear bdy, 3m Left bdy R.L.7.96	8764	-	-	13.0	Adj. 12.5	0.5 WET	104.0	1.94	Adj. 1.91	101.5
Material Description: BROWN SILTY SANDY CLAY & ROCK FRAGMENTS													
80 8765	9.30	150	LOT 85 2m Rear bdy, 5m Left bdy R.L.7.61	8765	-	-	14.0	Adj. 15.5	1.5 DRY	90.5	1.72	Adj. 1.80	95.5
Material Description: BROWN SILTY CLAY													
81 8766	10.00	150	LOT 86 3m Rear bdy, 4m Right bdy R.L.7.63	8766	-	-	11.0	Adj. 13.0	2.0 DRY	84.5	1.91	Adj. 1.89	101.0
Material Description: LIGHT BROWN SILTY SANDY CLAY & ROCK FRAGMENTS													
								Adj.				Adj.	
Material Description:													

Remarks:

Required Dry Density Ratio 95% STD

Test Procedures: AS1289 5.1.1,5.3.1, 5.4.1, 2.1.1

Determined on material finer than 19mm

Prepared By: G MCGRANN

Date:18.4.17

Checked By: R MCGRANN

RMc



Accredited for compliance with ISO/IEC 17025 – Testing.

Accreditation No.2415

Greg McGrann/Manager

Approved Signatory

Date:18.4.17

Greg McGrann



Brisbane Soil Testing

20/1191 Anzac Ave

Kallangur Q 4503

Ph.(07) 3285 6536

Email. brissoil@bigpond.net.au

FIELD DENSITY CERTIFICATE

Connemar Pty. Ltd.

ABN 50 065 093 647

Geotechnical Testing Services

Customer	BMD URBAN PTY LTD	Feature	ALLOTMENT FILL	Report No.	40118
Address	PO BOX 197, WYNNUM CENTRAL QLD 4178	Location	SEE BELOW	Job No.	1643
Project	CANNON HILL COMMUNITY LINKS – STAGE 4	Date Tested	19/4/2017	Tested by	AC

Field Test N ^o Sample N ^o	Time of Test	Depth of Test mm	Test Location	Lab Compaction N ^o	% Oversize 19mm/37.5mm Wet Dry		Field Moisture Context %	Optimum Moisture Content %	Moisture Variation %	Moisture Ratio %	Field Dry Density t/m ³	Max. Dry Density t/m ³	Dry Density Ratio %
82 8854	8.00	150	LOT 113 9m Rear bdy, 2m Right bdy R.L.7.76	8854	-	-	12.0	Adj. 11.5	0.5 WET	104.5	1.86	Adj. 1.93	96.5
Material Description: BROWN SILTY SANDY CLAY													
83 8855	8.30	150	LOT 111 2m Front bdy, 1m Right bdy R.L.8.30	8855	-	-	8.5	Adj. 11.0	2.5 DRY	77.0	1.93	Adj. 1.99	97.0
Material Description: BROWN SILTY SANDY CLAY													
								Adj.				Adj.	
Material Description:													
								Adj.				Adj.	
Material Description:													
								Adj.				Adj.	
Material Description:													
								Adj.				Adj.	
Material Description:													

Remarks:

Required Dry Density Ratio 95% STD

Test Procedures: AS1289 5.1.1, 5.3.1, 5.4.1, 2.1.1

Determined on material finer than 19mm

Prepared By: G MCGRANN

Date: 20.4.17

Checked By: R MCGRANN

RMc



Accredited for compliance with ISO/IEC 17025 – Testing.

Accreditation No. 2415

Greg McGrann/Manager

Approved Signatory

Date: 20.4.17

Greg McGrann



Brisbane Soil Testing

20/1191 Anzac Ave

Kallangur Q 4503

Ph.(07) 3285 6536

Email. brissoil@bigpond.net.au

FIELD DENSITY CERTIFICATE

Connemar Pty. Ltd.

ABN 50 065 093 647

Geotechnical Testing Services

Customer	BMD URBAN PTY LTD	Feature	BIO-BASIN BACKFILL	Report No.	40179
Address	PO BOX 197, WYNNUM CENTRAL QLD 4178	Location	SEE BELOW	Job No.	1643
Project	CANNON HILL COMMUNITY LINKS – STAGE 4	Date Tested	27/4/2017	Tested by	AC

Field Test N ^o Sample N ^o	Time of Test	Depth of Test mm	Test Location	Lab Compaction N ^o	% Oversize 19mm/37.5mm Wet Dry		Field Moisture Context %	Optimum Moisture Content %	Moisture Variation %	Moisture Ratio %	Field Dry Density t/m ³	Max. Dry Density t/m ³	Dry Density Ratio %
84 8950	8.00	150	BIORETENTION BASIN B3 LOC ON ATT PLAN R.L.0.50	8950	-	-	15.5	Adj. 14.0	1.5 WET	110.5	1.84	Adj. 1.88	98.0
								Adj.				Adj.	
								Adj.				Adj.	
								Adj.				Adj.	
								Adj.				Adj.	
								Adj.				Adj.	
								Adj.				Adj.	

Remarks:

Required Dry Density Ratio 95% STD

Test Procedures: AS1289 5.1.1, 5.3.1, 5.4.1, 2.1.1

Determined on material finer than 19mm

Prepared By: G MCGRANN

Date: 3.5.17

Checked By: R MCGRANN

RMc



Accredited for compliance with ISO/IEC 17025 – Testing.

Accreditation No. 2415

Greg McGrann/Manager

Approved Signatory

Date: 3.5.17

Greg McGrann



Brisbane Soil Testing

20/1191 Anzac Ave

Kallangur Q 4503

Ph.(07) 3285 6536

Email. brissoil@bigpond.net.au

FIELD DENSITY CERTIFICATE

Connemar Pty. Ltd.

ABN 50 065 093 647

Geotechnical Testing Services

Customer	BMD URBAN PTY LTD	Feature	BIO-BASIN BACKFILL	Report No.	40180
Address	PO BOX 197, WYNNUM CENTRAL QLD 4178	Location	SEE BELOW	Job No.	1643
Project	CANNON HILL COMMUNITY LINKS – STAGE 4	Date Tested	28/4/2017	Tested by	AC

Field Test N ^o Sample N ^o	Time of Test	Depth of Test mm	Test Location	Lab Compaction N ^o	% Oversize 19mm/37.5mm Wet Dry		Field Moisture Context %	Optimum Moisture Content %	Moisture Variation %	Moisture Ratio %	Field Dry Density t/m ³	Max. Dry Density t/m ³	Dry Density Ratio %
85 8951	8.00	150	BIORETENTION BASIN B3 LOC ON ATT PLAN R.L.1.10	8951	-	-	14.5	Adj. 14.0	0.5 WET	103.5	1.83	Adj. 1.87	98.0
Material Description: LIGHT BROWN SILTY CLAY & ROCK FRAGMENTS													
86 8952	8.30	150	BIORETENTION BASIN B3 LOC ON ATT PLAN R.L.1.72	8952	-	-	12.5	Adj. 13.0	0.5 DRY	96.0	1.92	Adj. 1.91	100.5
Material Description: BROWN SILTY SANDY CLAY & ROCK FRAGMENTS													
								Adj.				Adj.	
Material Description:													
								Adj.				Adj.	
Material Description:													
								Adj.				Adj.	
Material Description:													
								Adj.				Adj.	
Material Description:													

Remarks:

Required Dry Density Ratio 95% STD

Test Procedures: AS1289 5.1.1,5.3.1, 5.4.1, 2.1.1

Determined on material finer than 19mm

Prepared By: G MCGRANN

Date:3.5.17



Accredited for compliance with ISO/IEC 17025 – Testing.

Accreditation No.2415

Checked By: R MCGRANN

RMc

Greg McGrann/Manager

Approved Signatory

Date:3.5.17

Greg McGrann



Brisbane Soil Testing

20/1191 Anzac Ave

Kallangur Q 4503

Ph.(07) 3285 6536

Email. brissoil@bigpond.net.au

FIELD DENSITY CERTIFICATE

Connemar Pty. Ltd.

ABN 50 065 093 647

Geotechnical Testing Services

Customer	BMD URBAN PTY LTD	Feature	BIO-BASIN BACKFILL	Report No.	40182
Address	PO BOX 197, WYNNUM CENTRAL QLD 4178	Location	SEE BELOW	Job No.	1643
Project	CANNON HILL COMMUNITY LINKS – STAGE 4	Date Tested	29/4/2017	Tested by	AC

Field Test N ^o Sample N ^o	Time of Test	Depth of Test mm	Test Location	Lab Compaction N ^o	% Oversize 19mm/37.5mm Wet Dry		Field Moisture Context %	Optimum Moisture Content %	Moisture Variation %	Moisture Ratio %	Field Dry Density t/m ³	Max. Dry Density t/m ³	Dry Density Ratio %
87 8956	8.30	150	BIORETENTION BASIN B3 LOC ON ATT PLAN R.L.1.95	8956	-	-	10.5	Adj. 11.5	1.0 DRY	91.5	1.95	Adj. 1.91	102.0
								Adj.				Adj.	
								Adj.				Adj.	
								Adj.				Adj.	
								Adj.				Adj.	
								Adj.				Adj.	
								Adj.				Adj.	

Remarks:

Required Dry Density Ratio 95% STD

Test Procedures: AS1289 5.1.1, 5.3.1, 5.4.1, 2.1.1

Determined on material finer than 19mm

Prepared By: G MCGRANN

Date: 3.5.17



Accredited for compliance with ISO/IEC 17025 – Testing.

Accreditation No. 2415

Checked By: R MCGRANN

RMc

Greg McGrann/Manager

Approved Signatory

Date: 3.5.17

Greg McGrann



Brisbane Soil Testing

20/1191 Anzac Ave

Kallangur Q 4503

Ph.(07) 3285 6536

Email. brissoil@bigpond.net.au

FIELD DENSITY CERTIFICATE

Connemar Pty. Ltd.

ABN 50 065 093 647

Geotechnical Testing Services

Customer	BMD URBAN PTY LTD	Feature	BIO-BASIN BACKFILL	Report No.	40183
Address	PO BOX 197, WYNNUM CENTRAL QLD 4178	Location	SEE BELOW	Job No.	1643
Project	CANNON HILL COMMUNITY LINKS – STAGE 4	Date Tested	2/5/2017	Tested by	AC

Field Test N ^o Sample N ^o	Time of Test	Depth of Test mm	Test Location	Lab Compaction N ^o	% Oversize 19mm/37.5mm Wet Dry		Field Moisture Content %	Optimum Moisture Content %	Moisture Variation %	Moisture Ratio %	Field Dry Density t/m ³	Max. Dry Density t/m ³	Dry Density Ratio %
88 8959	9.00	150	BIORETENTION BASIN B3 LOC ON ATT PLAN R.L.2.53	8959	-	-	23.0	Adj. 19.0	4.0 WET	121.0	1.70	Adj. 1.73	98.0
Material Description: BROWN SILTY CLAY.													
89 8960	9.30	150	BIORETENTION BASIN B3 LOC ON ATT PLAN R.L.2.95	8960	-	-	10.0	Adj. 11.5	1.5 DRY	87.0	2.02	Adj. 1.97	102.5
Material Description: BROWN SANDY CLAY & ROCK FRAGMENTS.													
								Adj.				Adj.	
Material Description:													
								Adj.				Adj.	
Material Description:													
								Adj.				Adj.	
Material Description:													
								Adj.				Adj.	
Material Description:													

Remarks:

Required Dry Density Ratio 95% STD

Test Procedures: AS1289 5.1.1, 5.3.1, 5.4.1, 2.1.1

Determined on material finer than 19mm

Prepared By: G MCGRANN

Date: 4.5.17

Checked By: R MCGRANN

RMc



Accredited for compliance with ISO/IEC 17025 – Testing.

Accreditation No. 2415

Greg McGrann/Manager

Approved Signatory

Date: 4.5.17

Greg McGrann



Brisbane Soil Testing

20/1191 Anzac Ave

Kallangur Q 4503

Ph.(07) 3285 6536

Email. brissoil@bigpond.net.au

FIELD DENSITY CERTIFICATE

Connemar Pty. Ltd.

ABN 50 065 093 647

Geotechnical Testing Services

Customer	BMD URBAN PTY LTD	Feature	BIO-BASIN BACKFILL	Report No.	40191
Address	PO BOX 197, WYNNUM CENTRAL QLD 4178	Location	SEE BELOW	Job No.	1643
Project	CANNON HILL COMMUNITY LINKS – STAGE 4	Date Tested	3/5/2017	Tested by	AC

Field Test N ^o Sample N ^o	Time of Test	Depth of Test mm	Test Location	Lab Compaction N ^o	% Oversize 19mm/37.5mm Wet Dry		Field Moisture Content %	Optimum Moisture Content %	Moisture Variation %	Moisture Ratio %	Field Dry Density t/m ³	Max. Dry Density t/m ³	Dry Density Ratio %
90 9004	9.00	150	BIORETENTION BASIN B3 LOC ON ATT PLAN R.L.3.75	9004	-	-	10.5	Adj. 11.5	1.0 DRY	91.5	1.99	Adj. 1.96	101.5
Material Description: DARK BROWN SILTY SANDY CLAY.													
91 9005	9.30	150	BIORETENTION BASIN B3 LOC ON ATT PLAN R.L.3.03	9005	-	-	12.0	Adj. 10.5	1.5 WET	114.0	1.97	Adj. 1.96	100.5
Material Description: DARK BROWN SILTY SANDY CLAY.													
92 9006	10.00	150	BIORETENTION BASIN B3 LOC ON ATT PLAN R.L.3.26	9006	-	-	12.0	Adj. 12.5	0.5 DRY	96.0	1.90	Adj. 1.95	97.5
Material Description: DARK BROWN SILTY SANDY CLAY.													
								Adj.				Adj.	
Material Description:													
								Adj.				Adj.	
Material Description:													
								Adj.				Adj.	
Material Description:													

Remarks:

Required Dry Density Ratio 95% STD

Test Procedures: AS1289 5.1.1, 5.3.1, 5.4.1, 2.1.1

Determined on material finer than 19mm

Prepared By: G MCGRANN

Date: 9.5.17

Checked By: R MCGRANN

RMc



Accredited for compliance with ISO/IEC 17025 – Testing.

Accreditation No. 2415

Greg McGrann/Manager

Approved Signatory

Date: 9.5.17

Greg McGrann



Brisbane Soil Testing

20/1191 Anzac Ave

Kallangur Q 4503

Ph.(07) 3285 6536

Email. brissoil@bigpond.net.au

FIELD DENSITY CERTIFICATE

Connemar Pty. Ltd.

ABN 50 065 093 647

Geotechnical Testing Services

Customer	BMD URBAN PTY LTD	Feature	BIO-BASIN BACKFILL	Report No.	40192
Address	PO BOX 197, WYNNUM CENTRAL QLD 4178	Location	SEE BELOW	Job No.	1643
Project	CANNON HILL COMMUNITY LINKS – STAGE 4	Date Tested	4/5/2017	Tested by	AC

Field Test N ^o Sample N ^o	Time of Test	Depth of Test mm	Test Location	Lab Compaction N ^o	% Oversize 19mm/37.5mm Wet Dry		Field Moisture Content %	Optimum Moisture Content %	Moisture Variation %	Moisture Ratio %	Field Dry Density t/m ³	Max. Dry Density t/m ³	Dry Density Ratio %
93 9007	8.00	150	BIORETENTION BASIN B3 LOC ON ATT PLAN R.L.4.32	9007	-	-	11.0	Adj. 13.0	2.0 DRY	84.5	1.97	Adj. 1.92	102.5
Material Description: DARK BROWN SANDY CLAY.													
94 9008	8.30	150	BIORETENTION BASIN B3 LOC ON ATT PLAN R.L.4.28	9008	-	-	12.0	Adj. 10.5	1.5 WET	114.0	1.97	Adj. 1.97	100.0
Material Description: BROWN SILTY CLAY & ROCK FRAGMENTS.													
95 9009	9.00	150	BIORETENTION BASIN B3 LOC ON ATT PLAN R.L.4.54	9009	-	-	10.5	Adj. 11.5	1.0 DRY	91.5	2.01	Adj. 1.95	103.0
Material Description: DARK BROWN SILTY SANDY CLAY.													
96 9010	9.30	150	BIORETENTION BASIN B3 LOC ON ATT PLAN R.L.3.17	9010	-	-	10.0	Adj. 11.5	1.5 DRY	87.0	1.98	Adj. 1.96	101.0
Material Description: BROWN SILTY SANDY CLAY & ROCK FRAGMENTS.													
								Adj.				Adj.	
Material Description:													
								Adj.				Adj.	
Material Description:													

Remarks:

Required Dry Density Ratio 95% STD

Test Procedures: AS1289 5.1.1,5.3.1, 5.4.1, 2.1.1

Determined on material finer than 19mm

Prepared By: G MCGRANN

Date:9.5.17

Checked By: R MCGRANN

RMc



Accredited for compliance with ISO/IEC 17025 – Testing.

Accreditation No.2415

Greg McGrann/Manager

Approved Signatory

Date:9.5.17

Greg McGrann



Brisbane Soil Testing

20/1191 Anzac Ave

Kallangur Q 4503

Ph.(07) 3285 6536

Email. brissoil@bigpond.net.au

FIELD DENSITY CERTIFICATE

Connemar Pty. Ltd.

ABN 50 065 093 647

Geotechnical Testing Services

Customer	BMD URBAN PTY LTD	Feature	BIO-BASIN BACKFILL	Report No.	40194
Address	PO BOX 197, WYNNUM CENTRAL QLD 4178	Location	SEE BELOW	Job No.	1643
Project	CANNON HILL COMMUNITY LINKS – STAGE 4	Date Tested	5/5/2017	Tested by	AC

Field Test N ^o Sample N ^o	Time of Test	Depth of Test mm	Test Location	Lab Compaction N ^o	% Oversize 19mm/37.5mm		Field Moisture Content %	Optimum Moisture Content %	Moisture Variation %	Moisture Ratio %	Field Dry Density t/m ³	Max. Dry Density t/m ³	Dry Density Ratio %
97 9037	9.30	150	BIORETENTION BASIN B3 LOC ON ATT PLAN R.L.3.34	9037	-	-	10.5	Adj. 10.5	-	100.0	1.95	Adj. 1.94	100.5
								Adj.				Adj.	
								Adj.				Adj.	
								Adj.				Adj.	
								Adj.				Adj.	
								Adj.				Adj.	
								Adj.				Adj.	

Remarks:

Required Dry Density Ratio 95% STD

Test Procedures: AS1289 5.1.1, 5.3.1, 5.4.1, 2.1.1

Determined on material finer than 19mm

Prepared By: G MCGRANN

Date: 9.5.17

Checked By: R MCGRANN

RMc



Accredited for compliance with ISO/IEC 17025 – Testing.

Accreditation No. 2415

Greg McGrann/Manager

Approved Signatory

Date: 9.5.17

Greg McGrann



Brisbane Soil Testing

20/1191 Anzac Ave

Kallangur Q 4503

Ph.(07) 3285 6536

Email. brissoil@bigpond.net.au

FIELD DENSITY CERTIFICATE

Connemar Pty. Ltd.

ABN 50 065 093 647

Geotechnical Testing Services

Customer	BMD URBAN PTY LTD	Feature	BIO-BASIN BACKFILL	Report No.	40195
Address	PO BOX 197, WYNNUM CENTRAL QLD 4178	Location	SEE BELOW	Job No.	1643
Project	CANNON HILL COMMUNITY LINKS – STAGE 4	Date Tested	6/5/2017	Tested by	AC

Field Test N ^o Sample N ^o	Time of Test	Depth of Test mm	Test Location	Lab Compaction N ^o	% Oversize 19mm/37.5mm		Field Moisture Content %	Optimum Moisture Content %	Moisture Variation %	Moisture Ratio %	Field Dry Density t/m ³	Max. Dry Density t/m ³	Dry Density Ratio %
98 9038	9.00	150	BIORETENTION BASIN B3 LOC ON ATT PLAN R.L.5.48	9038	-	-	11.5	Adj. 11.0	0.5 WET	104.5	1.93	Adj. 1.97	98.0
								Adj.				Adj.	
								Adj.				Adj.	
								Adj.				Adj.	
								Adj.				Adj.	
								Adj.				Adj.	
								Adj.				Adj.	

Remarks:

Required Dry Density Ratio 95% STD

Test Procedures: AS1289 5.1.1, 5.3.1, 5.4.1, 2.1.1

Determined on material finer than 19mm

Prepared By: G MCGRANN

Date: 9.5.17

Checked By: R MCGRANN

RMc



Accredited for compliance with ISO/IEC 17025 – Testing.

Accreditation No. 2415

Greg McGrann/Manager

Approved Signatory

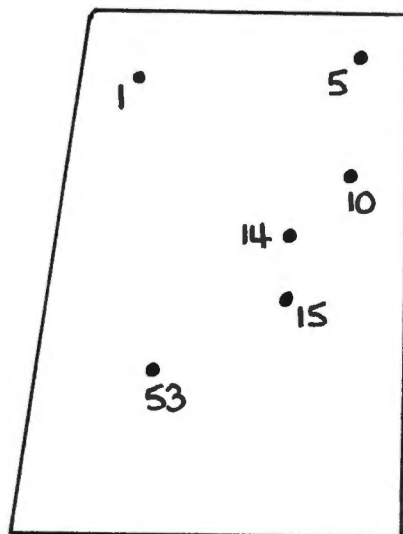
Date: 9.5.17

Greg McGrann

EARTHWORKS SUMMARY REPORT

CANNON HILL COMMUNITY LINKS – STAGE 4

LOT 80



----- SUTTON PLACE -----

Field Density Results

Page 1 of 1

Test No.	Date Tested	Test Location	Dry Density Ratio AS1289 5.4.1 (Standard)
1	9.11.16	o/s 4m Rear bdy, o/s 2m Left bdy. R.L.6.36.	95.0
5	9.11.16	o/s 3m Rear bdy, o/s 2m Right bdy. R.L.6.93.	100.0
10	10.11.16	o/s 7m Rear bdy, o/s 2m Right bdy. R.L.7.62.	102.0
14	11.11.16	o/s 9m Rear bdy, o/s 4m Right bdy. R.L.8.13.	100.0
15	14.11.16	o/s 11m Rear bdy, o/s 4m Right bdy. R.L.8.65.	100.5
53	29.11.16	o/s 9m Front bdy, o/s 5m Left bdy. R.L.8.90.	98.5

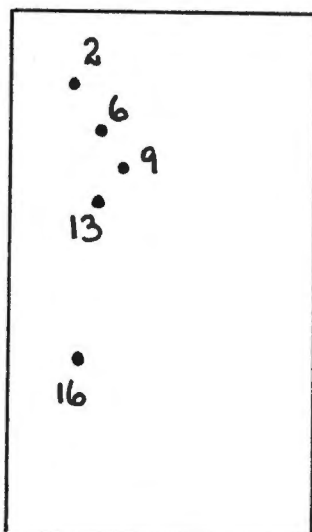
In our opinion fill on Lot 80 has been placed in a controlled manner to achieve a minimum dry density ratio of 95% (AS1289.5.1.1 Standard Compaction) and is considered to comply with the requirements of Table 5.1 of AS3798-2007 and the project specifications. We confirm that filling to design final level can be termed controlled filling in accordance with Section 6.4.2. of AS2870-2011, via a "Level 1" inspection and testing commission.

GREG McGRANN



Brisbane Soil Testing
20/1191 Anzac Ave
Kallangur, Q. 4503
Ph. (07) 3285 6536

**EARTHWORKS SUMMARY REPORT
CANNON HILL COMMUNITY LINKS – STAGE 4
LOT 81**



----- SUTTON PLACE -----

Field Density Results

Page 1 of 1

Test No.	Date Tested	Test Location	Dry Density Ratio AS1289 5.4.1 (Standard)
2	9.11.16	o/s 3m Rear bdy, o/s 3m Left bdy. R.L.5.98.	98.5
6	9.11.16	o/s 5m Rear bdy, o/s 4m Left bdy. R.L.6.53.	100.5
9	10.11.16	o/s 6m Rear bdy, o/s 5m Left bdy. R.L.6.95.	98.5
13	11.11.16	o/s 7m Rear bdy, o/s 4m Left bdy. R.L.7.64.	96.0
16	14.11.16	o/s 10m Front bdy, o/s 3m Left bdy. R.L.8.32.	101.0

In our opinion fill on Lot 81 has been placed in a controlled manner to achieve a minimum dry density ratio of 95% (AS1289.5.1.1 Standard Compaction) and is considered to comply with the requirements of Table 5.1 of AS3798-2007 and the project specifications. We confirm that filling to design final level can be termed controlled filling in accordance with Section 6.4.2. of AS2870-2011, via a "Level 1" inspection and testing commission.

GREG McGRANN

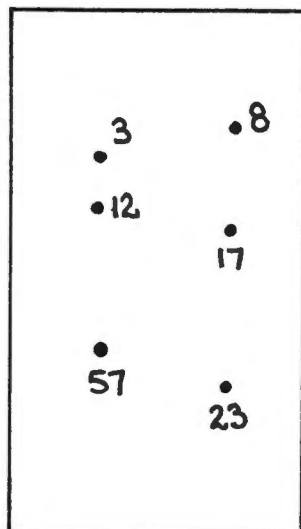


Brisbane Soil Testing
20/1191 Anzac Ave
Kallangur, Q. 4503
Ph. (07) 3285 6536

EARTHWORKS SUMMARY REPORT

CANNON HILL COMMUNITY LINKS – STAGE 4

LOT 82



----- SUTTON PLACE -----

Field Density Results

Page 1 of 1

Test No.	Date Tested	Test Location	Dry Density Ratio AS1289 5.4.1 (Standard)
3	9.11.16	o/s 6m Rear bdy, o/s 3m Left bdy. R.L.5.85.	96.0
8	10.11.16	o/s 5m Rear bdy, o/s 3m Right bdy. R.L.6.49.	101.0
12	11.11.16	o/s 8m Rear bdy, o/s 3m Left bdy. R.L.6.98.	100.0
17	14.11.16	o/s 9m Rear bdy, o/s 3m Right bdy. R.L.7.57.	101.5
23	14.11.16	o/s 7m Front bdy, o/s 3m Right bdy. R.L.7.83.	97.5
57	1.12.16	o/s 13m Front bdy, o/s 3m Left bdy. R.L.8.21.	98.5

In our opinion fill on Lot 82 has been placed in a controlled manner to achieve a minimum dry density ratio of 95% (AS1289.5.1.1 Standard Compaction) and is considered to comply with the requirements of Table 5.1 of AS3798-2007 and the project specifications. We confirm that filling to design final level can be termed controlled filling in accordance with Section 6.4.2. of AS2870-2011, via a "Level 1" inspection and testing commission.

GREG McGRANN

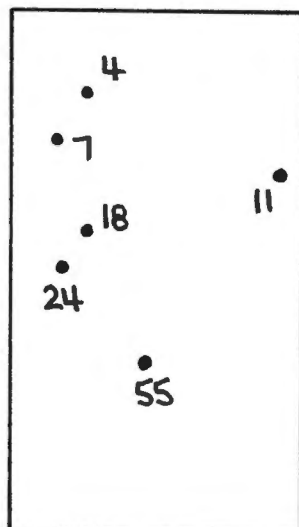


Brisbane Soil Testing
20/1191 Anzac Ave
Kallangur, Q. 4503
Ph. (07) 3285 6536

EARTHWORKS SUMMARY REPORT

CANNON HILL COMMUNITY LINKS – STAGE 4

LOT 83



--- SUTTON PLACE ---

Field Density Results

Page 1 of 1

Test No.	Date Tested	Test Location	Dry Density Ratio AS1289 5.4.1 (Standard)
4	9.11.16	o/s 3m Rear bdy, o/s 4m Left bdy. R.L.5.78.	95.0
7	10.11.16	o/s 5m Rear bdy, o/s 2m Left bdy. R.L.6.37.	96.0
11	11.11.16	o/s 6m Rear bdy, o/s 1m Right bdy. R.L.7.01.	95.0
18	14.11.16	o/s 9m Rear bdy, o/s 3m Left bdy. R.L.7.46.	95.5
24	14.11.16	o/s 10m Rear bdy, o/s 2m Left bdy. R.L.7.78.	102.0
55	1.12.16	o/s 11m Front bdy, o/s 6m Left bdy. R.L.8.20.	98.0

In our opinion fill on Lot 83 has been placed in a controlled manner to achieve a minimum dry density ratio of 95% (AS1289.5.1.1 Standard Compaction) and is considered to comply with the requirements of Table 5.1 of AS3798-2007 and the project specifications. We confirm that filling to design final level can be termed controlled filling in accordance with Section 6.4.2. of AS2870-2011, via a "Level 1" inspection and testing commission.

GREG McGRANN

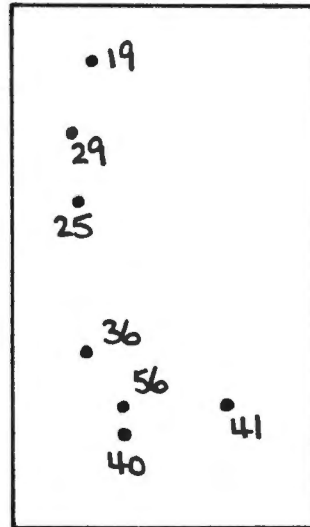


Brisbane Soil Testing
20/1191 Anzac Ave
Kallangur, Q. 4503
Ph. (07) 3285 6536

EARTHWORKS SUMMARY REPORT

CANNON HILL COMMUNITY LINKS – STAGE 4

LOT 84



— — — — —
SUTTON PLACE

Field Density Results

Page 1 of 1

Test No.	Date Tested	Test Location	Dry Density Ratio AS1289 5.4.1 (Standard)
19	14.11.16	o/s 2m Rear bdy, o/s 4m Left bdy. R.L.4.82.	100.0
25	15.11.16	o/s 9m Rear bdy, o/s 3m Left bdy. R.L.5.24.	95.5
29	15.11.16	o/s 6m Rear bdy, o/s 3m Left bdy. R.L.5.93.	96.5
36	16.11.16	o/s 11m Front bdy, o/s 3m Left bdy. R.L.6.54.	97.0
40	16.11.16	o/s 7m Front bdy, o/s 4m Left bdy. R.L.7.19.	101.5
41	17.11.16	o/s 8m Front bdy, o/s 3m Right bdy. R.L.7.52.	99.5
56	1.12.16	o/s 8m Front bdy, o/s 4m Left bdy. R.L.8.01.	97.5

In our opinion fill on Lot 84 has been placed in a controlled manner to achieve a minimum dry density ratio of 95% (AS1289.5.1.1 Standard Compaction) and is considered to comply with the requirements of Table 5.1 of AS3798-2007 and the project specifications. We confirm that filling to design final level can be termed controlled filling in accordance with Section 6.4.2. of AS2870-2011, via a "Level 1" inspection and testing commission.

GREG McGRANN

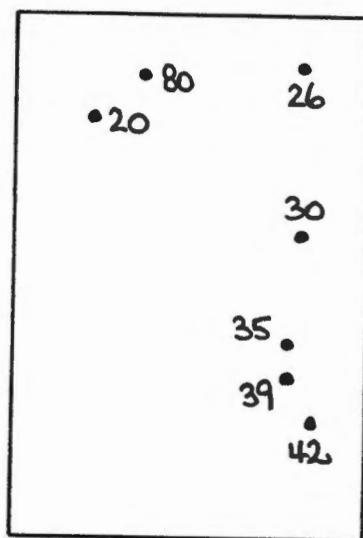


Brisbane Soil Testing
20/1191 Anzac Ave
Kallangur, Q. 4503
Ph. (07) 3285 6536

EARTHWORKS SUMMARY REPORT

CANNON HILL COMMUNITY LINKS – STAGE 4

LOT 85



Field Density Results

Page 1 of 1

Test No.	Date Tested	Test Location	Dry Density Ratio AS1289 5.4.1 (Standard)
20	14.11.16	o/s 4m Rear bdy, o/s 3m Left bdy. R.L.4.81.	96.0
26	15.11.16	o/s 2m Rear bdy, o/s 3m Right bdy. R.L.5.36.	99.0
30	15.11.16	o/s 9m Rear bdy, o/s 2m Right bdy. R.L.5.89.	95.0
35	16.11.16	o/s 10m Front bdy, o/s 3m Right bdy. R.L.6.61.	97.0
39	16.11.16	o/s 9m Front bdy, o/s 3m Right bdy. R.L.7.30.	101.0
42	17.11.16	o/s 7m Front bdy, o/s 2m Right bdy. R.L.7.83.	102.5
80	10.04.17	o/s 2m Rear bdy, o/s 5m Left bdy. R.L.7.61.	95.5

In our opinion fill on Lot 85 has been placed in a controlled manner to achieve a minimum dry density ratio of 95% (AS1289.5.1.1 Standard Compaction) and is considered to comply with the requirements of Table 5.1 of AS3798-2007 and the project specifications. We confirm that filling to design final level can be termed controlled filling in accordance with Section 6.4.2. of AS2870-2011, via a "Level 1" inspection and testing commission.

GREG McGRANN

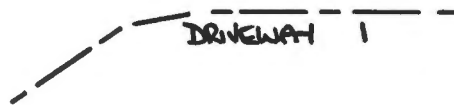
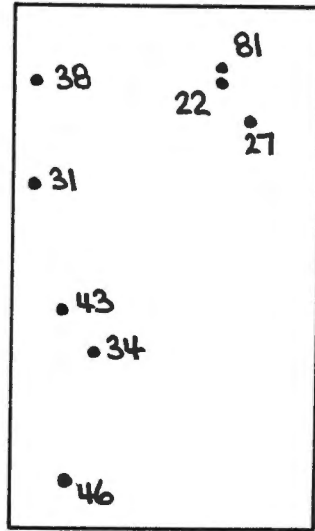


Brisbane Soil Testing
 20/1191 Anzac Ave
 Kallangur, Q. 4503
 Ph. (07) 3285 6536

EARTHWORKS SUMMARY REPORT

CANNON HILL COMMUNITY LINKS – STAGE 4

LOT 86



Field Density Results

Page 1 of 1

Test No.	Date Tested	Test Location	Dry Density Ratio AS1289 5.4.1 (Standard)
22	14.11.16	o/s 3m Rear bdy, o/s 4m Right bdy. R.L.4.05.	96.5
27	15.11.16	o/s 5m Rear bdy, o/s 3m Right bdy. R.L.4.67.	99.5
31	15.11.16	o/s 7m Rear bdy, o/s 1m Left bdy. R.L.5.31.	96.0
34	16.11.16	o/s 8m Front bdy, o/s 4m Left bdy. R.L.5.92.	97.0
38	16.11.16	o/s 4m Rear bdy, o/s 1m Left bdy. R.L.6.44.	100.0
43	17.11.16	o/s 11m Front bdy, o/s 2m Left bdy. R.L.6.87.	102.0
46	17.11.16	o/s 2m Front bdy, o/s 3m Left bdy. R.L.7.40.	102.5
81	10.04.17	o/s 3m Rear bdy, o/s 4m Right bdy. R.L.7.63.	101.0

In our opinion fill on Lot 86 has been placed in a controlled manner to achieve a minimum dry density ratio of 95% (AS1289.5.1.1 Standard Compaction) and is considered to comply with the requirements of Table 5.1 of AS3798-2007 and the project specifications. We confirm that filling to design final level can be termed controlled filling in accordance with Section 6.4.2. of AS2870-2011, via a "Level 1" inspection and testing commission.

GREG McGRANN

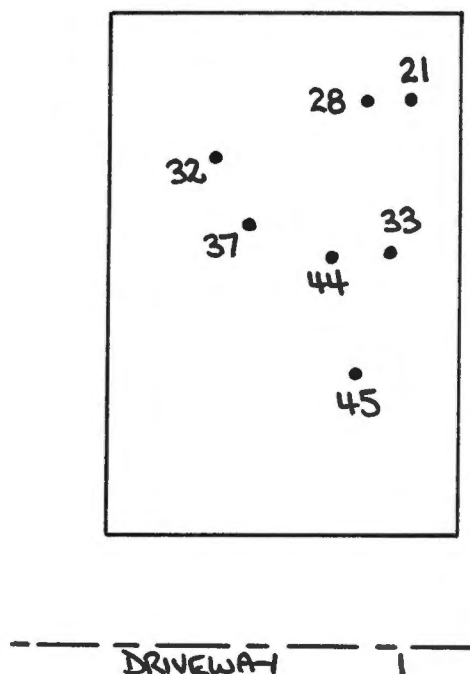


Brisbane Soil Testing
20/1191 Anzac Ave
Kallangur, Q. 4503
Ph. (07) 3285 6536

EARTHWORKS SUMMARY REPORT

CANNON HILL COMMUNITY LINKS – STAGE 4

LOT 87



Field Density Results

Page 1 of 1

Test No.	Date Tested	Test Location	Dry Density Ratio AS1289 5.4.1 (Standard)
21	14.11.16	o/s 4m Rear bdy, o/s 2m Right bdy. R.L.3.65.	95.0
28	15.11.16	o/s 4m Rear bdy, o/s 4m Right bdy. R.L.4.15.	97.0
32	15.11.16	o/s 6m Rear bdy, o/s 4m Left bdy. R.L.4.76.	97.0
33	16.11.16	o/s 10m Rear bdy, o/s 3m Right bdy. R.L.5.53.	98.5
37	16.11.16	o/s 8m Rear bdy, o/s 5m Left bdy. R.L.6.02.	95.5
44	17.11.16	o/s 10m Rear bdy, o/s 5m Right bdy. R.L.6.70.	102.0
45	17.11.16	o/s 9m Front bdy, o/s 4m Right bdy. R.L.7.31.	96.0

In our opinion fill on Lot 87 has been placed in a controlled manner to achieve a minimum dry density ratio of 95% (AS1289.5.1.1 Standard Compaction) and is considered to comply with the requirements of Table 5.1 of AS3798-2007 and the project specifications. We confirm that filling to design final level can be termed controlled filling in accordance with Section 6.4.2. of AS2870-2011, via a "Level 1" inspection and testing commission.


 GREG McGRANN

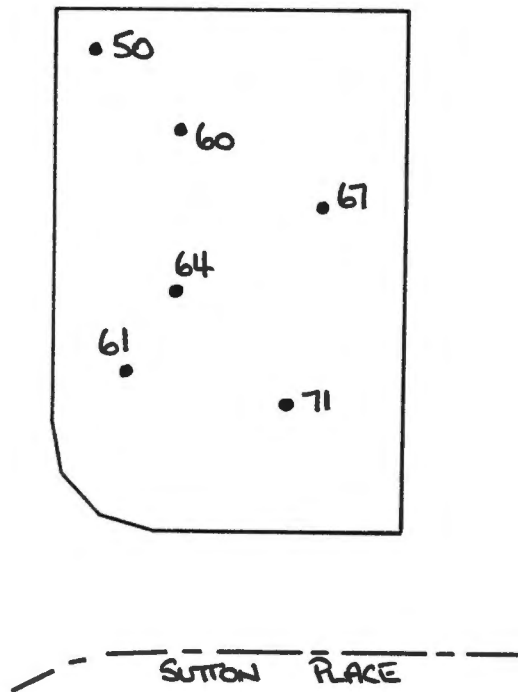


Brisbane Soil Testing
 20/1191 Anzac Ave
 Kallangur, Q. 4503
 Ph. (07) 3285 6536

EARTHWORKS SUMMARY REPORT

CANNON HILL COMMUNITY LINKS – STAGE 4

LOT 88



Field Density Results

Page 1 of 1

Test No.	Date Tested	Test Location	Dry Density Ratio AS1289 5.4.1 (Standard)
50	18.11.16	o/s 2m Rear bdy, o/s 2m Left bdy. R.L.5.39.	103.0
60	15.12.16	o/s 5m Rear bdy, o/s 6m Left bdy. R.L.5.82.	99.0
61	15.12.16	o/s 7m Front bdy, o/s 3m Left bdy. R.L.6.29.	99.5
64	20.01.17	o/s 11m Front bdy, o/s 5m Left bdy. R.L.6.86.	99.5
67	31.01.17	o/s 10m Rear bdy, o/s 4m Right bdy. R.L.7.16.	98.5
71	2.02.17	o/s 6m Front bdy, o/s 6m Right bdy. R.L.7.58.	96.0

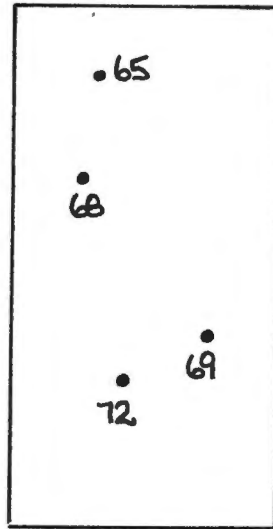
In our opinion fill on Lot 88 has been placed in a controlled manner to achieve a minimum dry density ratio of 95% (AS1289.5.1.1 Standard Compaction) and is considered to comply with the requirements of Table 5.1 of AS3798-2007 and the project specifications. We confirm that filling to design final level can be termed controlled filling in accordance with Section 6.4.2. of AS2870-2011, via a "Level 1" inspection and testing commission.

GREG McGRANN



Brisbane Soil Testing
20/1191 Anzac Ave
Kallangur, Q. 4503
Ph. (07) 3285 6536

**EARTHWORKS SUMMARY REPORT
CANNON HILL COMMUNITY LINKS – STAGE 4
LOT 89**



SUTTON PLACE

Field Density Results

Page 1 of 1

Test No.	Date Tested	Test Location	Dry Density Ratio AS1289 5.4.1 (Standard)
65	20.01.17	o/s 3m Rear bdy, o/s 4m Left bdy. R.L.6.44.	102.0
68	31.01.17	o/s 7m Rear bdy, o/s 3m Left bdy. R.L.6.81.	100.0
69	1.02.17	o/s 11m Front bdy, o/s 3m Right bdy. R.L.7.24.	96.5
72	2.02.17	o/s 9m Front bdy, o/s 5m Left bdy. R.L.7.65.	98.0

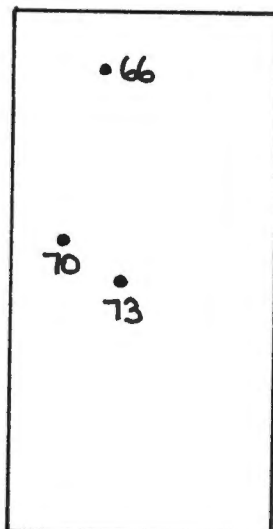
In our opinion fill on Lot 89 has been placed in a controlled manner to achieve a minimum dry density ratio of 95% (AS1289.5.1.1 Standard Compaction) and is considered to comply with the requirements of Table 5.1 of AS3798-2007 and the project specifications. We confirm that filling to design final level can be termed controlled filling in accordance with Section 6.4.2. of AS2870-2011, via a "Level 1" inspection and testing commission.

GREG McGRANN



Brisbane Soil Testing
20/1191 Anzac Ave
Kallangur, Q. 4503
Ph. (07) 3285 6536

**EARTHWORKS SUMMARY REPORT
CANNON HILL COMMUNITY LINKS – STAGE 4
LOT 90**



SUTTON RACE

Field Density Results

Page 1 of 1

Test No.	Date Tested	Test Location	Dry Density Ratio AS1289 5.4.1 (Standard)
66	20.01.17	o/s 2m Rear bdy, o/s 4m Left bdy. R.L.6.98.	103.0
70	1.02.17	o/s 9m Rear bdy, o/s 2m Left bdy. R.L.7.31.	99.0
73	2.02.17	o/s 10m Rear bdy, o/s 4m Left bdy. R.L.7.80.	96.5

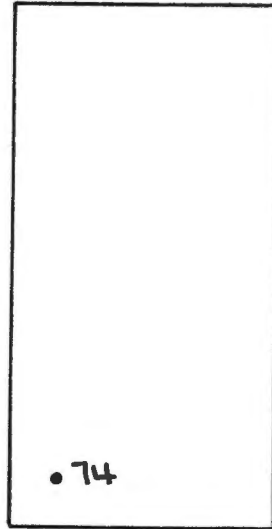
In our opinion fill on Lot 90 has been placed in a controlled manner to achieve a minimum dry density ratio of 95% (AS1289.5.1.1 Standard Compaction) and is considered to comply with the requirements of Table 5.1 of AS3798-2007 and the project specifications. We confirm that filling to design final level can be termed controlled filling in accordance with Section 6.4.2. of AS2870-2011, via a "Level 1" inspection and testing commission.

GREG McGRANN



Brisbane Soil Testing
20/1191 Anzac Ave
Kallangur, Q. 4503
Ph. (07) 3285 6536

**EARTHWORKS SUMMARY REPORT
CANNON HILL COMMUNITY LINKS – STAGE 4
LOT 91**



----- SUTTON PLACE -----

Field Density Results

Page 1 of 1

Test No.	Date Tested	Test Location	Dry Density Ratio AS1289 5.4.1 (Standard)
74	3.02.17	o/s 2m Front bdy, o/s 2m Left bdy. R.L.8.42.	98.5

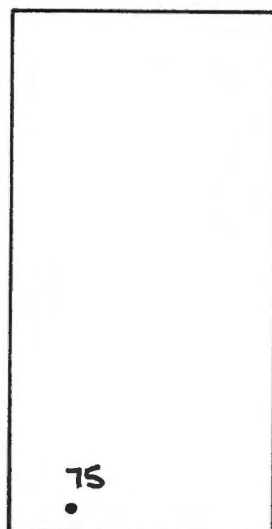
In our opinion fill on Lot 91 has been placed in a controlled manner to achieve a minimum dry density ratio of 95% (AS1289.5.1.1 Standard Compaction) and is considered to comply with the requirements of Table 5.1 of AS3798-2007 and the project specifications. We confirm that filling to design final level can be termed controlled filling in accordance with Section 6.4.2. of AS2870-2011, via a "Level 1" inspection and testing commission.

GREG McGRANN



Brisbane Soil Testing
20/1191 Anzac Ave
Kallangur, Q. 4503
Ph. (07) 3285 6536

**EARTHWORKS SUMMARY REPORT
CANNON HILL COMMUNITY LINKS – STAGE 4
LOT 92**



SUTTON PLACE

Field Density Results

Page 1 of 1

Test No.	Date Tested	Test Location	Dry Density Ratio AS1289 5.4.1 (Standard)
75	3.02.17	o/s 1m Front bdy, o/s 3m Left bdy. R.L.8.90.	96.0

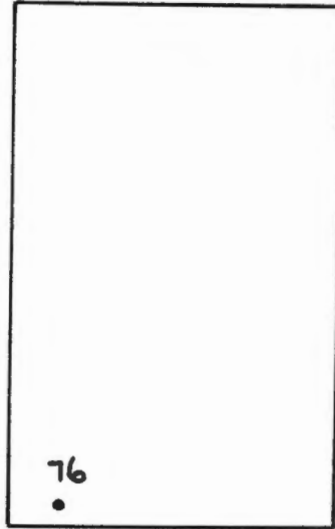
In our opinion fill on Lot 92 has been placed in a controlled manner to achieve a minimum dry density ratio of 95% (AS1289.5.1.1 Standard Compaction) and is considered to comply with the requirements of Table 5.1 of AS3798-2007 and the project specifications. We confirm that filling to design final level can be termed controlled filling in accordance with Section 6.4.2. of AS2870-2011, via a "Level 1" inspection and testing commission.

GREG McGRANN



Brisbane Soil Testing
20/1191 Anzac Ave
Kallangur, Q. 4503
Ph. (07) 3285 6536

**EARTHWORKS SUMMARY REPORT
CANNON HILL COMMUNITY LINKS – STAGE 4
LOT 93**



SUTTON PLACE

Field Density Results

Page 1 of 1

Test No.	Date Tested	Test Location	Dry Density Ratio AS1289 5.4.1 (Standard)
76	3.02.17	o/s 1m Front bdy, o/s 2m Left bdy. R.L.9.46.	102.5

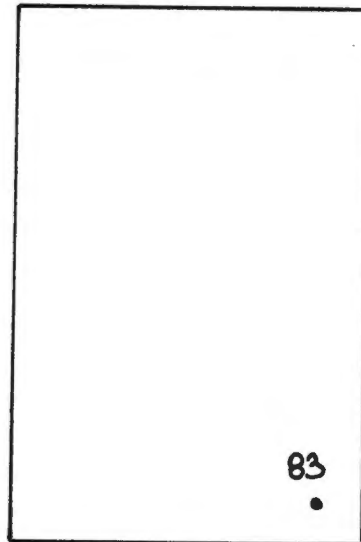
In our opinion fill on Lot 93 has been placed in a controlled manner to achieve a minimum dry density ratio of 95% (AS1289.5.1.1 Standard Compaction) and is considered to comply with the requirements of Table 5.1 of AS3798-2007 and the project specifications. We confirm that filling to design final level can be termed controlled filling in accordance with Section 6.4.2. of AS2870-2011, via a "Level 1" inspection and testing commission.

.....
GREG McGRANN



Brisbane Soil Testing
20/1191 Anzac Ave
Kallangur, Q. 4503
Ph. (07) 3285 6536

**EARTHWORKS SUMMARY REPORT
CANNON HILL COMMUNITY LINKS – STAGE 4
LOT 111**



----- SUTTON ----- PLACE -----

Field Density Results

Page 1 of 1

Test No.	Date Tested	Test Location	Dry Density Ratio AS1289 5.4.1 (Standard)
83	19.4.17	o/s 2m Front bdy, o/s 1m Right bdy. R.L.8.30.	97.0

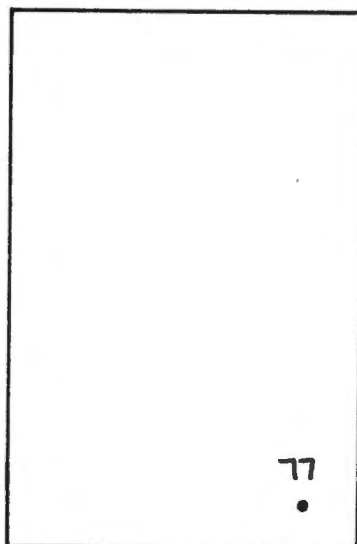
In our opinion fill on Lot 111 has been placed in a controlled manner to achieve a minimum dry density ratio of 95% (AS1289.5.1.1 Standard Compaction) and is considered to comply with the requirements of Table 5.1 of AS3798-2007 and the project specifications. We confirm that filling to design final level can be termed controlled filling in accordance with Section 6.4.2. of AS2870-2011, via a "Level 1" inspection and testing commission.

GREG McGRANN



Brisbane Soil Testing
20/1191 Anzac Ave
Kallangur, Q. 4503
Ph. (07) 3285 6536

**EARTHWORKS SUMMARY REPORT
CANNON HILL COMMUNITY LINKS – STAGE 4
LOT 112**



SUTTON PLACE

Field Density Results

Page 1 of 1

Test No.	Date Tested	Test Location	Dry Density Ratio AS1289 5.4.1 (Standard)
77	10.4.17	o/s 2m Front bdy, o/s 2m Right bdy. R.L.8.19.	102.0

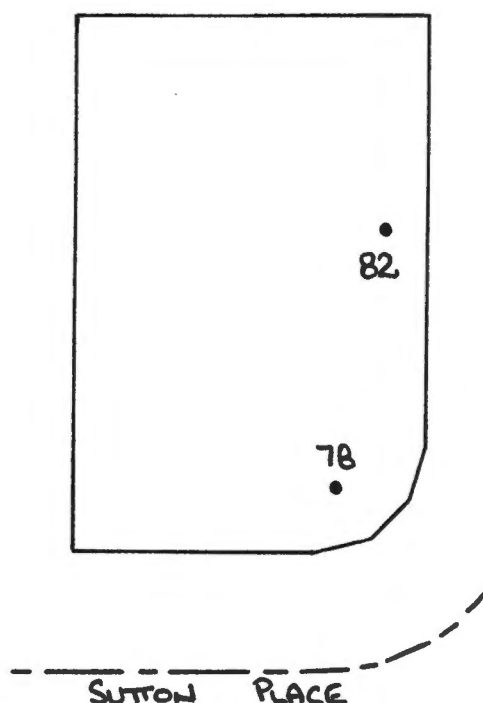
In our opinion fill on Lot 112 has been placed in a controlled manner to achieve a minimum dry density ratio of 95% (AS1289.5.1.1 Standard Compaction) and is considered to comply with the requirements of Table 5.1 of AS3798-2007 and the project specifications. We confirm that filling to design final level can be termed controlled filling in accordance with Section 6.4.2. of AS2870-2011, via a "Level 1" inspection and testing commission.

.....
GREG McGRANN



Brisbane Soil Testing
20/1191 Anzac Ave
Kallangur, Q. 4503
Ph. (07) 3285 6536

**EARTHWORKS SUMMARY REPORT
CANNON HILL COMMUNITY LINKS – STAGE 4
LOT 113**



Field Density Results

Page 1 of 1

Test No.	Date Tested	Test Location	Dry Density Ratio AS1289 5.4.1 (Standard)
78	10.4.17	o/s 3m Front bdy, o/s 4m Right bdy. R.L.7.20.	100.5
82	19.4.17	o/s 9m Rear bdy, o/s 2m Right bdy. R.L.7.76.	96.5

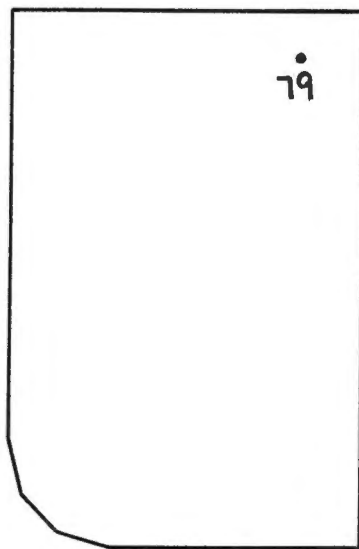
In our opinion fill on Lot 113 has been placed in a controlled manner to achieve a minimum dry density ratio of 95% (AS1289.5.1.1 Standard Compaction) and is considered to comply with the requirements of Table 5.1 of AS3798-2007 and the project specifications. We confirm that filling to design final level can be termed controlled filling in accordance with Section 6.4.2. of AS2870-2011, via a "Level 1" inspection and testing commission.

GREG McGRANN



Brisbane Soil Testing
20/1191 Anzac Ave
Kallangur, Q. 4503
Ph. (07) 3285 6536

**EARTHWORKS SUMMARY REPORT
CANNON HILL COMMUNITY LINKS – STAGE 4
LOT 114**



----- HARRIS CLOSE -----

Field Density Results

Page 1 of 1

Test No.	Date Tested	Test Location	Dry Density Ratio AS1289 5.4.1 (Standard)
79	10.4.17	o/s 2m Rear bdy, o/s 3m Left bdy. R.L.7.96.	101.5

In our opinion fill on Lot 114 has been placed in a controlled manner to achieve a minimum dry density ratio of 95% (AS1289.5.1.1 Standard Compaction) and is considered to comply with the requirements of Table 5.1 of AS3798-2007 and the project specifications. We confirm that filling to design final level can be termed controlled filling in accordance with Section 6.4.2. of AS2870-2011, via a "Level 1" inspection and testing commission.

GREG McGRANN



Brisbane Soil Testing
20/1191 Anzac Ave
Kallangur, Q. 4503
Ph. (07) 3285 6536