

**ACCEPTED
AS CONSTRUCTED**

LEGEND

2/1	- Pit No. 2/Drainline No. 1
(12.000)*	- As constructed top of structure level.
(12.000k)*	- As constructed top of kerb level.
12.000*	- As constructed pipe invert level.
	- Stormwater drain line.
	- Subsoil drainage.
	- uPVC water main.
	- Poly water main.
	- Sewer main.
	- Sewer manhole.
	- Sewer main.

NOTES:

- All Kerb Inlet Grates are Class 'D' and 'Bicycle Safe' to AS 3996 U.N.O.

AS CONSTRUCTED
Rowlands Surveys Pty Ltd (ACN 010 025 260) hereby certify that the works detailed on this drawing, denoted *, have been constructed to the dimensions and levels shown.

Laurence John Nolan
Director/Registered Surveyor
Date:

LAYOUT PLAN

NON STANDARD CHAMBER SIZE TABLE

PIT No.	Structure Type
8/30	1200x1200 Stormwater Manhole Type 2
7/30	1200x1200 Stormwater Manhole Type 2

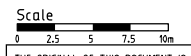
STORMWATER STRUCTURE SETOUT TABLE

PIT No.	EASTING	NORTHING	STRUCTURE TYPE	TOP LEVEL
2/33	464594.509*	7874677.407*	Grated Kerb Inlet (2400C)	7.985k*
1/33	464586.501*	7874678.549*	Grated Kerb Inlet (2400C)	7.998k*
3/32	464608.597*	7874705.811*	Grated Kerb Inlet (2400C)	8.016k*
2/32	464607.511*	7874697.802*	Grated Kerb Inlet (2400C)	8.022k*
1/32	464585.289*	7874696.468*	900x900 Stormwater Manhole, Type 1	8.039*
8/30	464594.586*	7874759.736*	Future Grated Kerb Inlet (2400C)	7.370*
7/30	464602.848*	7874758.961*	Future Grated Kerb Inlet (2400C)	7.382*

- All dimensions are to centre of chamber.
- All grated kerb inlets constructed over 900x900 Type 1 stormwater manhole to Council standard details U.N.O.

REAL PROPERTY DESCRIPTION
Lot 900 on SP271044
Parish of BOHLE
County of ELPHINSTONE
Mount Low Parkway - Mount Low

LEVEL DATUM A.H.D. (Der)
Horizontal Datum GDA' 94 Zone 55
Refer PM 193519 RL. 8.195
Bolt and washer in kerb
FREMONT STREET



THE ORIGINAL OF THIS DOCUMENT IS COMPLETED TO THE SCALE NOTED. AS REPRODUCTION CAN DISTORT SIZE & SHAPE USE ONLY THE DIMENSIONS PROVIDED ON ARCHITECTURAL &/OR ENGINEERING DRAWINGS. VERIFY DIMENSIONS ON SITE BEFORE CONSTRUCTION.

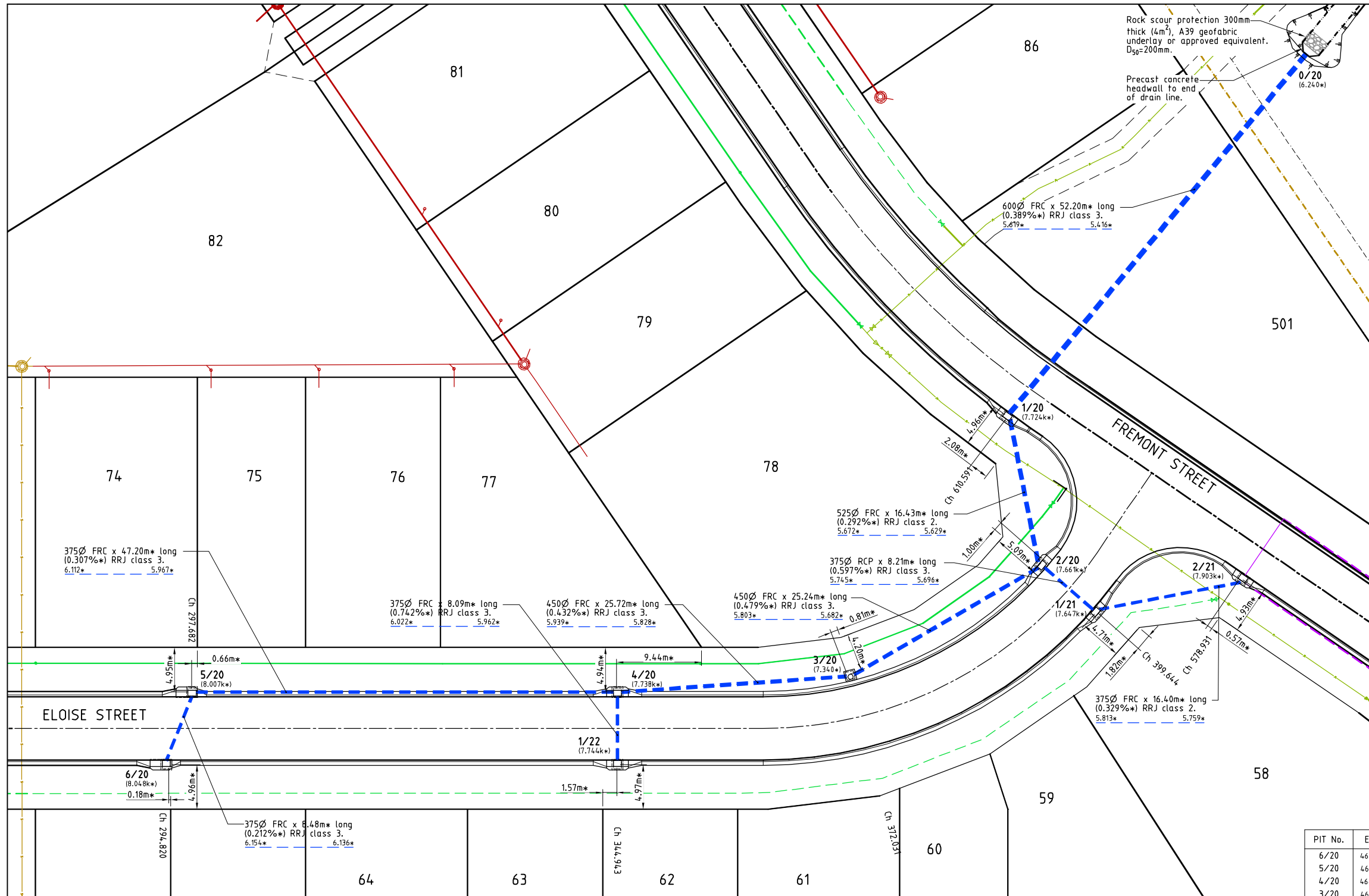
All work has been carried out in accordance with LOCAL AUTHORITIES standard details.



Civil & Structural Engineers
50 Punari Street, Currajong 4812
Phone: (07) 4725 5550 Fax: (07) 4725 5850
Email: mail@nceng.com.au
Milton Messer & Associates Pty. Ltd.
ACN 100 817 356

Issue	Description	Date
C	AMENDED TO AS CONSTRUCTED.	09/02/2016
B	LOT LAYOUT AMENDED AND STAGE 12 ADDED AS EXISTING.	03/08/2015
A	AMENDED FOR CONSTRUCTION.	1/10/2014
P2	PRELIMINARY - NOT FOR CONSTRUCTION - AMENDED TO COUNCIL'S REQUIREMENTS.	14/05/2014
P1	PRELIMINARY - NOT FOR CONSTRUCTION - ISSUED FOR OPERATIONAL WORKS APPROVAL.	18/12/2013

Drawn LJ Date 18/12/2013	In Association With BUSHLAND GROVE PTY LTD	STORMWATER DRAIN LINE PLAN 1
Checked Approved	BUSHLAND GROVE ESTATE STAGE 10, 29 ALLOTMENT RESIDENTIAL SUBDIVISION, MOUNT LOW	
COPYRIGHT ©		Drawing Number TUR0810/13
		Issue C



LEGEND

- 2/1 (12.000)* - Pit No. 2/Drainline No. 1
- (12.000k)* - As constructed top of structure level.
- 12.000* - As constructed top of kerb level.
- As constructed pipe invert level.
- Stormwater drain line.
- uPVC water main.
- Poly water main.
- Subsoil drainage.
- Sewer main.
- Sewer manhole.
- Water main.
- Sewer rising main.
- Sewer manhole.
- Sewer main.

NOTES:

- All Kerb Inlet Grates are Class 'D' and 'Bicycle Safe' to AS 3996 U.N.O.

ACCEPTED AS CONSTRUCTED

AS CONSTRUCTED
Rowlands Surveys Pty Ltd (ACN 010 025 260) hereby certify that the works detailed on this drawing, denoted *, have been constructed to the dimensions and levels shown.

Laurence John Nolan
Director/Registered Surveyor
Date:

STORMWATER STRUCTURE SETOUT TABLE

PIT No.	EASTING	NORTHING	STRUCTURE TYPE	TOP LEVEL
6/20	464654.556*	7874693.591*	Grated Kerb Inlet (2400R)	8.048k*
5/20	464657.787*	7874701.433*	Grated Kerb Inlet (2400L)	8.007k*
4/20	464704.798*	7874697.246*	Grated Kerb Inlet (2400C)	7.738k*
3/20	464730.509*	7874696.807*	900x900 Stormwater Manhole, Type 1	7.340*
2/20	464753.327*	7874707.594*	Grated Kerb Inlet (2400C)	7.661k*
1/20	464750.791*	7874723.831*	Grated Kerb Inlet (2400C)	7.724k*
0/20	464787.516*	7874760.931*	Headwall	6.240*
1/22	464704.108*	7874689.188*	Grated Kerb Inlet (2400C)	7.744k*
2/21	464774.931*	7874703.703*	Grated Kerb Inlet (2400C)	7.903k*
1/21	464758.692*	7874701.382*	Grated Kerb Inlet (2400C)	7.647k*

- All dimensions are to centre of chamber.
- All grated kerb inlets constructed over 900x900 Type 1 stormwater manhole to Council standard details U.N.O.
- Setout for outlet structure 0/20 is to the end of pipe.

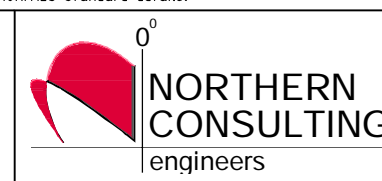


REAL PROPERTY DESCRIPTION
Lot 900 on SP271044
Parish of BOHLE
County of ELPHINSTONE
Mount Low Parkway - Mount Low

LEVEL DATUM A.H.D. (Der)
Horizontal Datum GDA' 94 Zone 55
Refer PM 193519 RL: 8.195
Bolt and washer in kerb
FREMONT STREET

Scale
0 2.5 5 7.5 10m
THE ORIGINAL OF THIS DOCUMENT IS COMPLETED TO THE SCALE NOTED.
AS REPRODUCTION CAN DISTORT SIZE & SHAPE USE ONLY THE DIMENSIONS PROVIDED ON ARCHITECTURAL &/OR ENGINEERING DRAWINGS.
VERIFY DIMENSIONS ON SITE BEFORE CONSTRUCTION.

All work has been carried out in accordance with LOCAL AUTHORITIES standard details.



Civil & Structural Engineers
50 Punari Street, Curralong 4812
Phone: (07) 4725 5550 Fax: (07) 4725 5850
Email: mail@nceng.com.au
Milton Messer & Associates Pty. Ltd.
ACN 100 817 356

C	AMENDED TO AS CONSTRUCTED.	09/02/2016
B	LOT LAYOUT AMENDED AND STAGE 12 ADDED AS EXISTING.	03/08/2015
A	AMENDED FOR CONSTRUCTION.	1/10/2014
P2	PRELIMINARY - NOT FOR CONSTRUCTION - AMENDED TO COUNCIL'S REQUIREMENTS.	14/05/2014
P1	PRELIMINARY - NOT FOR CONSTRUCTION - ISSUED FOR OPERATION WORKS APPROVAL.	18/12/2013

Issue	Description	Date
Drawn	In Association With	
Date	BUSHLAND GROVE PTY LTD	
Checked	BUSHLAND GROVE ESTATE	
Approved	STAGE 10, 29 ALLOTMENT	
COPYRIGHT ©	RESIDENTIAL SUBDIVISION,	
	MOUNT LOW	
	Drawing Number	Issue
	TUR0810/14	C

LEGEND

- 2/1 (12.000)* - Pit No. 2/Drainline No. 1
- (12.000)* - As constructed top of structure level.
- 12.000* - As constructed pipe invert level.
- - RP boundary.
- - Stormwater drain line.
- - Sewer rising main.

NOTES:

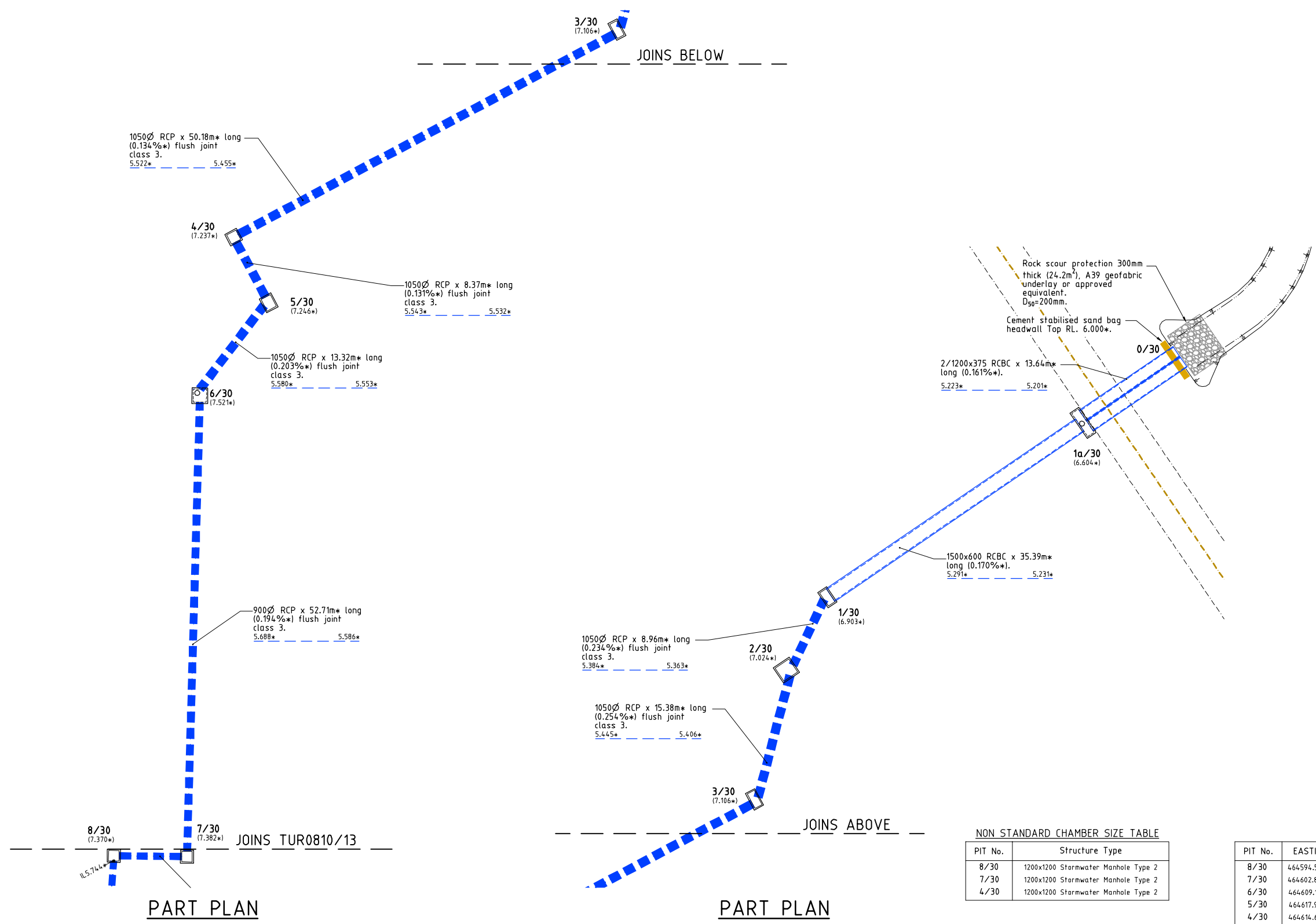
1. All Kerb Inlet Grates are Class 'D' and 'Bicycle Safe' to AS 3996 U.N.O.

**ACCEPTED
AS CONSTRUCTED**

AS CONSTRUCTED

Rowlands Surveys Pty Ltd (ACN 010 025 260) hereby certify that the works detailed on this drawing, denoted *, have been constructed to the dimensions and levels shown.

..... Date:.....
 Laurence John Nolan
 Director/Registered Surveyor



PART PLAN

PART PLAN

NON STANDARD CHAMBER SIZE TABLE

PIT No.	Structure Type
8/30	1200x1200 Stormwater Manhole Type 2
7/30	1200x1200 Stormwater Manhole Type 2
4/30	1200x1200 Stormwater Manhole Type 2

STORMWATER STRUCTURE SETOUT TABLE

PIT No.	EASTING	NORTHING	STRUCTURE TYPE	TOP LEVEL
8/30	464594.586*	7874759.736*	Future Grated Kerb Inlet (2400C)	7.370*
7/30	464602.848*	7874758.961*	Future Grated Kerb Inlet (2400C)	7.382*
6/30	464609.103*	7874811.298*	1500x1500 Stormwater Manhole, Type 3	7.521*
5/30	464617.956*	7874821.256*	Future Grated Kerb Inlet (2400C)	7.246*
4/30	464614.625*	7874828.939*	Future Grated Kerb Inlet (2400C)	7.237*
3/30	464660.644*	7874848.949*	Future Grated Kerb Inlet (2400C)	7.106*
2/30	464665.693*	7874863.474*	Future Grated Kerb Inlet (2400C)	7.024*
1/30	464701.553*	7874871.000*	Future Grated Kerb Inlet (2400C)	6.903*
1a/30	464701.383*	7874888.373*	3200x900 Stormwater Manhole	6.604*
0/30	464713.246*	7874895.102*	Temporary Headwall	6.000*

- All dimensions are to centre of chamber.
- All grated kerb inlets constructed over 900x900 Type 1 stormwater manhole to Council standard details U.N.O.
- Refer to drawing TUR0810/16-17 for 5/30, 3/30, 2/30, 1/30, 1a/30 pit details.
- Setout for outlet structure 0/30 is to end of culvert.

REAL PROPERTY DESCRIPTION
 Lot 900 on SP271044
 Parish of BOHLE
 County of ELPHINSTONE
 Mount Low Parkway - Mount Low

LEVEL DATUM A.H.D. (Der)
 Horizontal Datum GDA' 94 Zone 55
 Refer PM 193519 RL. 8.195
 Bolt and washer in kerb
 FREMONT STREET

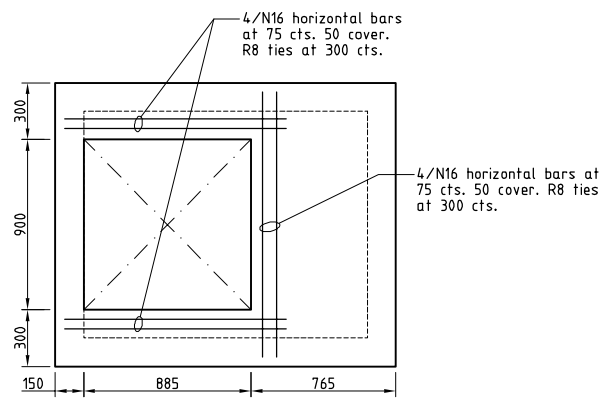
Scale: 0 2.5 5 7.5 10m
 THE ORIGINAL OF THIS DOCUMENT IS COMPLETED TO THE SCALE NOTED.
 AS REPRODUCTION CAN DISTORT SIZE & SHAPE USE ONLY THE DIMENSIONS PROVIDED ON ARCHITECTURAL &/OR ENGINEERING DRAWINGS.
 VERIFY DIMENSIONS ON SITE BEFORE CONSTRUCTION.

All work has been carried out in accordance with LOCAL AUTHORITIES standard details.

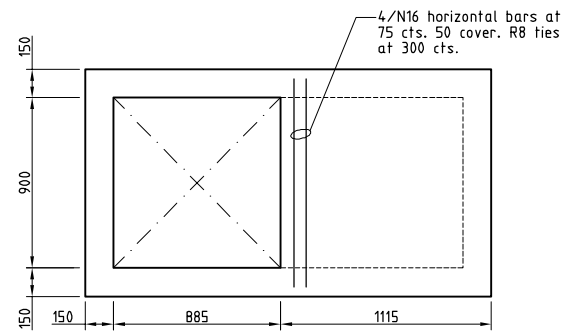


Civil & Structural Engineers
 50 Punari Street, Curralong 4812
 Phone: (07) 4725 5550 Fax: (07) 4725 5850
 Email: mail@nceng.com.au
 Milton Messer & Associates Pty. Ltd.
 ACN 100 817 356

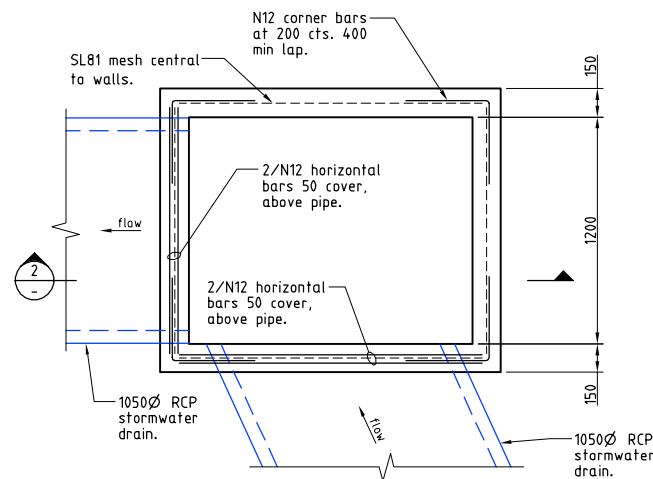
B	AMENDED TO AS CONSTRUCTED.	09/02/2016
A	AMENDED FOR CONSTRUCTION.	1/10/2014
P1	PRELIMINARY - NOT FOR CONSTRUCTION - ISSUED FOR OPERATIONAL WORKS APPROVAL.	18/12/2013
Issue	Description	Date
Drawn	In Association With	STORMWATER DRAIN LINE PLAN 3
Date	BUSHLAND GROVE PTY LTD	
Checked	BUSHLAND GROVE ESTATE	Drawing Number
Approved	STAGE 10, 29 ALLOTMENT	
COPYRIGHT ©	RESIDENTIAL SUBDIVISION, MOUNT LOW	TUR0810/15
		Issue
		B



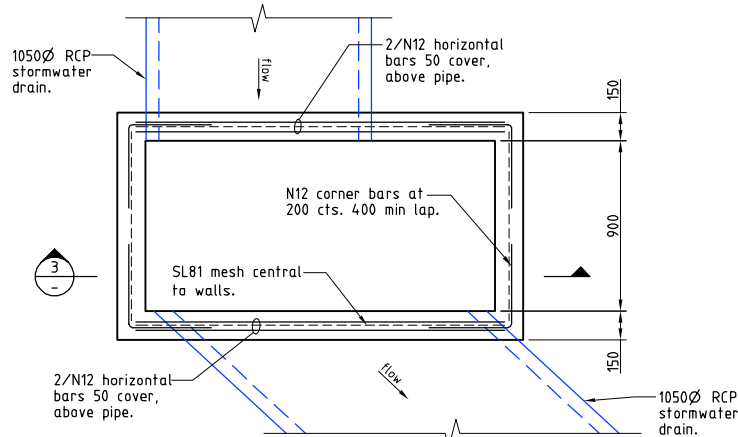
TOP PLAN



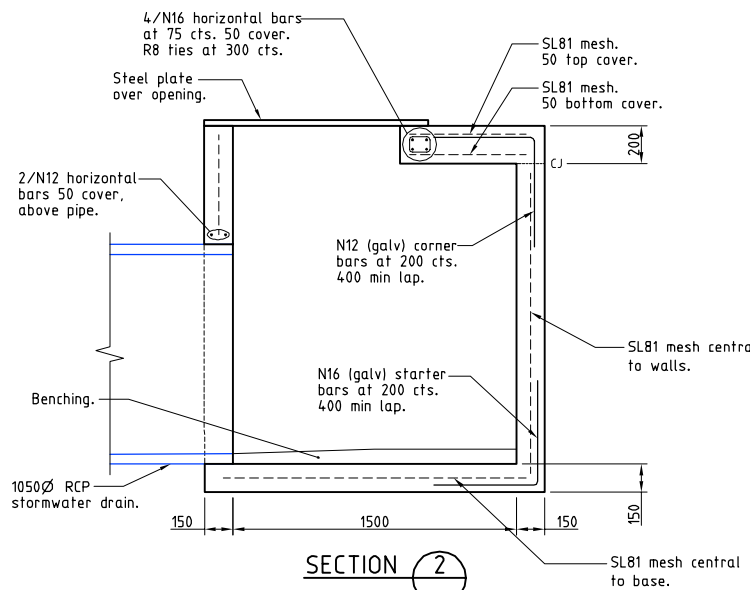
TOP PLAN



WALL PLAN

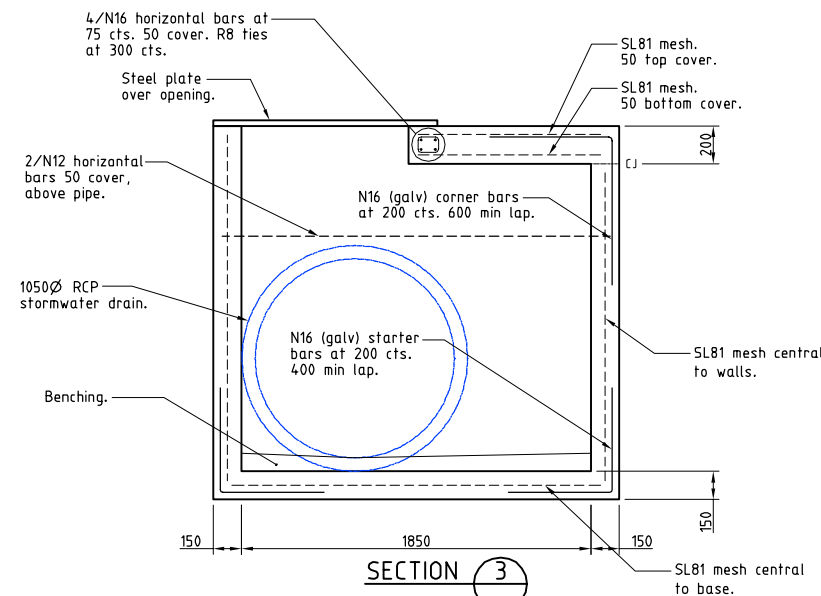


WALL PLAN



SECTION 2

NON-STANDARD CHAMBER - 5/30



SECTION 3

NON-STANDARD CHAMBER - 3/30

ACCEPTED
AS CONSTRUCTED

AS CONSTRUCTED

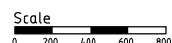
Northern Consulting Engineers hereby certify that the works detailed on this drawing have been constructed to the dimensions and levels detailed.

Andrew Ian Wallace Date:

All work has been carried out in accordance with LOCAL AUTHORITIES standard details.

REAL PROPERTY DESCRIPTION
Lot 900 on SP271044
Parish of BOHLE
County of ELPHINSTONE
Mount Low Parkway - Mount Low

LEVEL DATUM A.H.D. (Der)
Horizontal Datum GDA' 94 Zone 55
Refer PM 193519 RL. 8.195
Bot and washer in kerb
FREMONT STREET

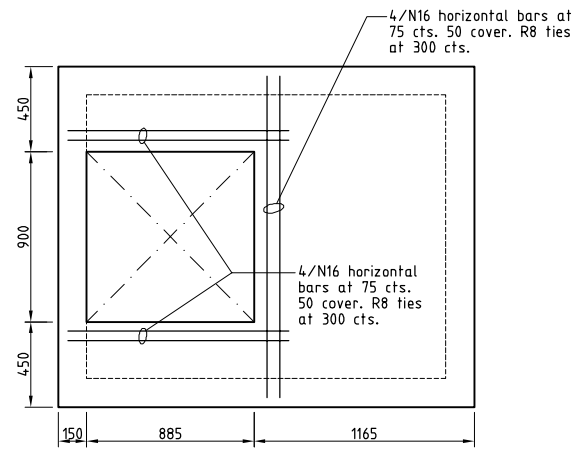


THE ORIGINAL OF THIS DOCUMENT IS COMPLETED TO THE SCALE NOTED. AS REPRODUCTION CAN DISTORT SIZE & SHAPE USE ONLY THE DIMENSIONS PROVIDED ON ARCHITECTURAL &/OR ENGINEERING DRAWINGS. VERIFY DIMENSIONS ON SITE BEFORE CONSTRUCTION.

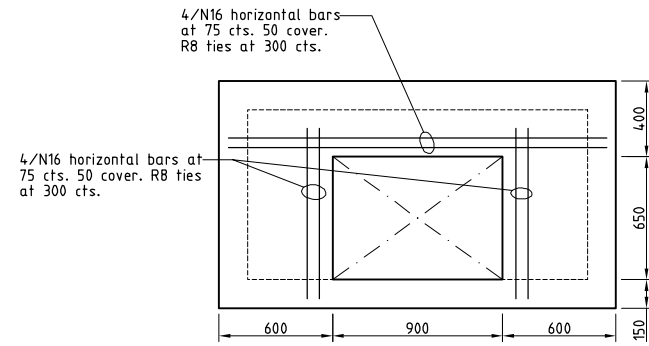


Civil & Structural Engineers
50 Punari Street, Currajong 4812
Phone: (07) 4725 5550 Fax: (07) 4725 5850
Email: mail@nceng.com.au
Milton Messer & Associates Pty. Ltd.
ACN 100 817 356

C	AMENDED TO AS CONSTRUCTED.	09/02/2016
B	LOT LAYOUT AMENDED AND STAGE 12 ADDED AS EXISTING.	03/08/2015
A	AMENDED FOR CONSTRUCTION.	1/10/2014
P1	PRELIMINARY - NOT FOR CONSTRUCTION - ISSUED FOR OPERATIONAL WORKS APPROVAL.	18/12/2013
Issue	Description	Date
Drawn	In Association With	STORMWATER MANHOLE CONSTRUCTION DETAILS
Date	BUSHLAND GROVE PTY LTD	
Checked	BUSHLAND GROVE ESTATE	Drawing Number
Approved	STAGE 10, 29 ALLOTMENT RESIDENTIAL SUBDIVISION, MOUNT LOW	
COPYRIGHT ©		TUR0810/16
		Issue
		C



TOP PLAN



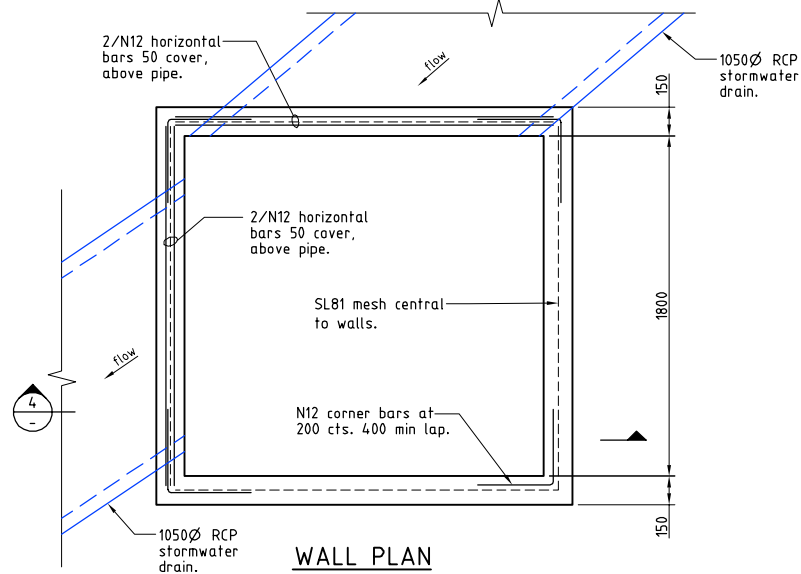
TOP PLAN

ACCEPTED
AS CONSTRUCTED

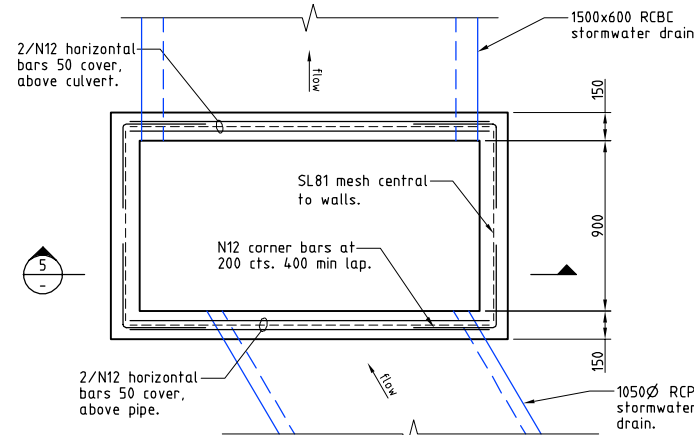
AS CONSTRUCTED

Northern Consulting Engineers hereby certify that the works detailed on this drawing have been constructed to the dimensions and levels detailed.

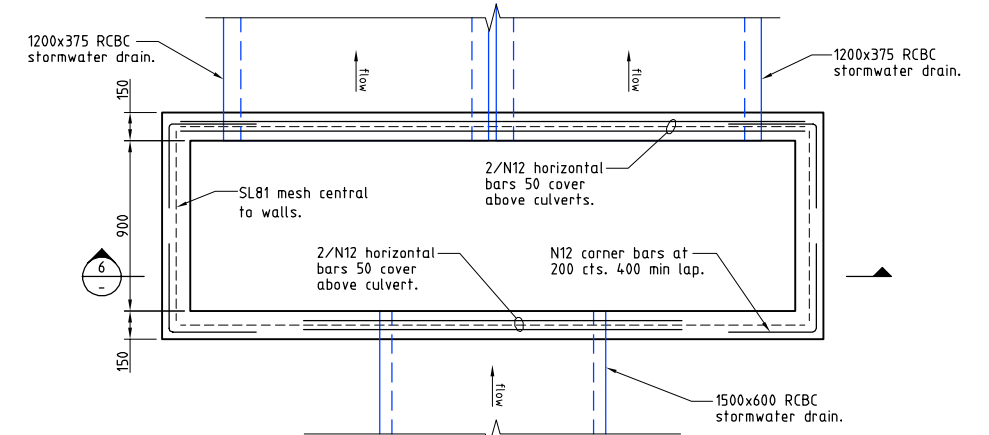
Andrew Ian Wallace Date:



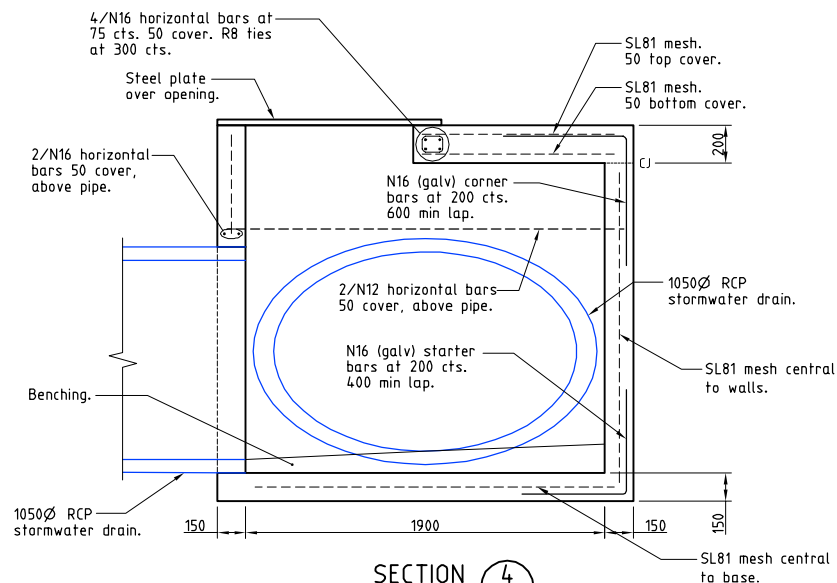
WALL PLAN



WALL PLAN

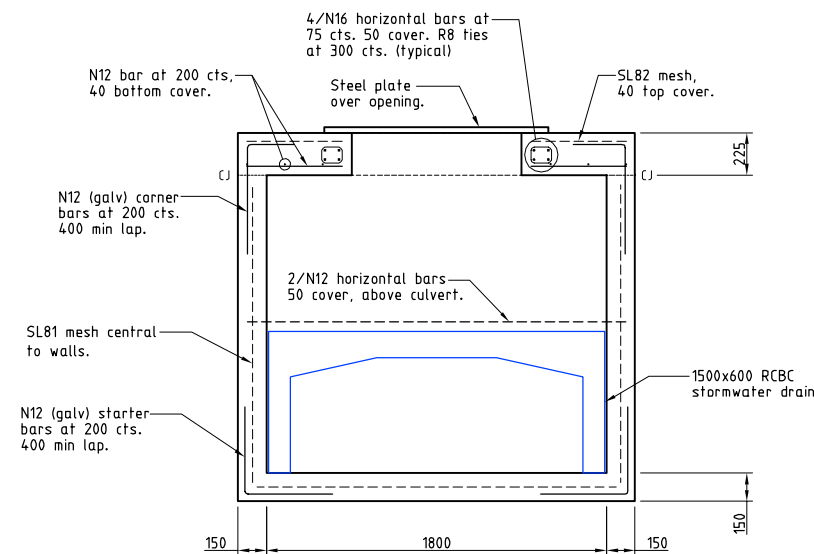


WALL PLAN



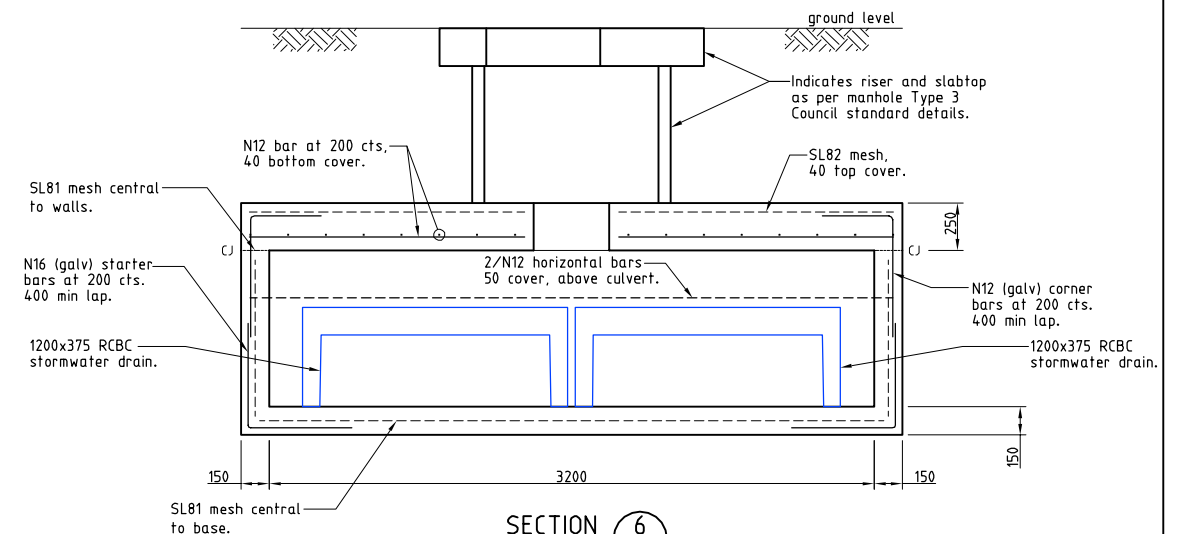
SECTION 4

NON-STANDARD CHAMBER - 2/30



SECTION 5

NON-STANDARD CHAMBER - 1/30



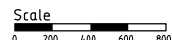
SECTION 6

NON-STANDARD CHAMBER - 1a/30

All work has been carried out in accordance with LOCAL AUTHORITIES standard details.

REAL PROPERTY DESCRIPTION
Lot 900 on SP271044
Parish of BOHLE
County of ELPHINSTONE
Mount Low Parkway - Mount Low

LEVEL DATUM A.H.D. (Der)
Horizontal Datum GDA' 94 Zone 55
Refer PM 193519 RL. 8.195
Bot and washer in kerb
FREMONT STREET



THE ORIGINAL OF THIS DOCUMENT IS COMPLETED TO THE SCALE NOTED.
AS REPRODUCTION CAN DISTORT SIZE & SHAPE USE ONLY THE DIMENSIONS PROVIDED ON ARCHITECTURAL &/OR ENGINEERING DRAWINGS.
VERIFY DIMENSIONS ON SITE BEFORE CONSTRUCTION.



Civil & Structural Engineers
50 Punari Street, Currajong 4812
Phone: (07) 4725 5550 Fax: (07) 4725 5850
Email: mail@nceng.com.au
Milton Messer & Associates Pty. Ltd.
ACN 100 817 356

B	AMENDED TO AS CONSTRUCTED.	09/02/2016
A	AMENDED FOR CONSTRUCTION.	1/10/2014
P1	PRELIMINARY - NOT FOR CONSTRUCTION - ISSUED FOR OPERATIONAL WORKS APPROVAL.	18/12/2013
Issue	Description	Date
Drawn	In Association With	
LJ	BUSHLAND GROVE PTY LTD	
Date		
18/12/2013		
Checked	BUSHLAND GROVE ESTATE	
Approved	STAGE 10, 29 ALLOTMENT	
COPYRIGHT ©	RESIDENTIAL SUBDIVISION,	
	MOUNT LOW	
	Drawing Number	Issue
	TUR0810/17	B