

- LEGEND**
- 12.000\* - As constructed surface levels.
  - 12.000 - Surface levels.
  - 1% AEP 12.00 - 1% AEP water surface levels.
  - - Stormwater flow arrow.
  - - - - - RP boundary.
  - - - - - Top of batter.
  - - - - - Toe of batter.
  - - - - - Toe of batter.
  - - - - - Sewer main.
  - - - - - Sewer manhole.
  - - - - - uPVC water main.
  - - - - - Poly water main.
  - - - - - Stormwater drain line.
  - - - - - Sewer main.
  - - - - - Sewer manhole.
  - - - - - Water main.
  - - - - - Poly water main.

**NOTES:**

- All approved fill material placed, compacted & tested in accordance with AS 3798 'Guidelines on Earthworks for Commercial & Residential Developments'.

**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.

*[Signature]* Date: 09/03/2018  
Laurence John Nolan  
Director/Registered Surveyor

**AS CONSTRUCTED**  
I, Andrew Ian Wallace of Northern Consulting Engineers hereby certify that the works as shown on the as constructed drawings reflect any changes that were made during the course of construction.

*[Signature]* Date: 26/03/18  
Andrew Ian Wallace - (RPEQ No. 6743)

**PLANNING AND COMMUNITY ENGAGEMENT**  
CITY OF TOWNSVILLE  
RECEIVED: 27/03/2018

**ACCEPTED AS CONSTRUCTED**

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

**REAL PROPERTY DESCRIPTION**  
Lot 900 on SP278572  
Parish of BOHLE  
County of ELPHINSTONE  
Conway Street - Mount Low

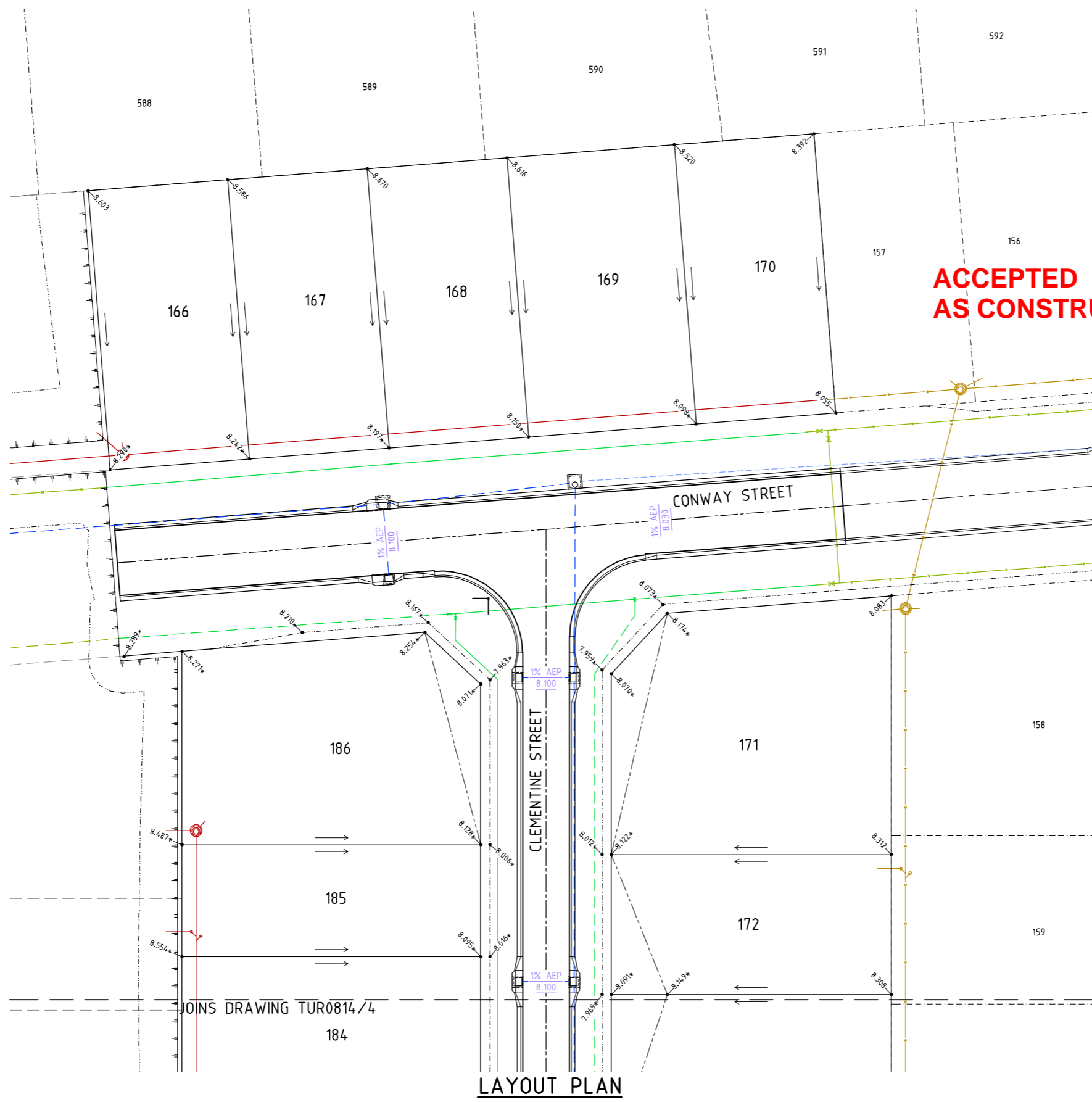
LEVEL DATUM A.H.D. (Der)  
Horizontal Datum GDA' 94 Zone 55  
Refer PM 19351B RL. 8.195  
Bolt and washer in kerb  
FREMONT STREET.

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.



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.	06/03/2018
A	ISSUED FOR CONSTRUCTION.	27/03/2017
P1	PRELIMINARY - NOT FOR CONSTRUCTION - ISSUED FOR OPERATIONAL WORKS APPROVAL.	14/12/2016
Issue	Description	Date
Drawn LJ Date 14/12/2016	In Association With <b>BUSHLAND GROVE PTY LTD</b>	CUT/FILL LAYOUT PLAN
Checked HAB Approved	BUSHLAND GROVE ESTATE STAGE 14, 21 ALLOTMENT RESIDENTIAL SUBDIVISION, MOUNT LOW	
COPYRIGHT ©		Drawing Number <b>TUR0814/4</b>
		Issue <b>B</b>



- LEGEND**
- 12.000\* - As constructed surface levels.
  - 12.000 - Surface levels.
  - 1% AEP 12.00 - 1% AEP water surface levels.
  - - Stormwater flow arrow.
  - - - - - RP boundary.
  - - - - - Top of batter.
  - - - - - Toe of batter.
  - - - - - Toe of batter.
  - - - - - Sewer main.
  - - - - - Sewer manhole.
  - - - - - uPVC water main.
  - - - - - Poly water main.
  - - - - - Stormwater drain line.
  - - - - - Stormwater drain line.
  - - - - - Sewer main.
  - - - - - Sewer manhole.
  - - - - - Water main.
  - - - - - Poly water main.

**NOTES:**

- All approved fill material placed, compacted & tested in accordance with AS 3798 'Guidelines on Earthworks for Commercial & Residential Developments'.

**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: 09/03/2018

**AS CONSTRUCTED**  
 I, Andrew Ian Wallace of Northern Consulting Engineers hereby certify that the works as shown on the as constructed drawings reflect any changes that were made during the course of construction.

*Andrew Ian Wallace*  
 Andrew Ian Wallace - (RPEQ No. 6743)  
 Date: 26/03/18



**REAL PROPERTY DESCRIPTION**  
 Lot 900 on SP278572  
 Parish of BOHLE  
 County of ELPHINSTONE  
 Conway Street - Mount Low

LEVEL DATUM A.H.D. (Der)  
 Horizontal Datum GDA 94 Zone 55  
 Refer PM 19351B 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.

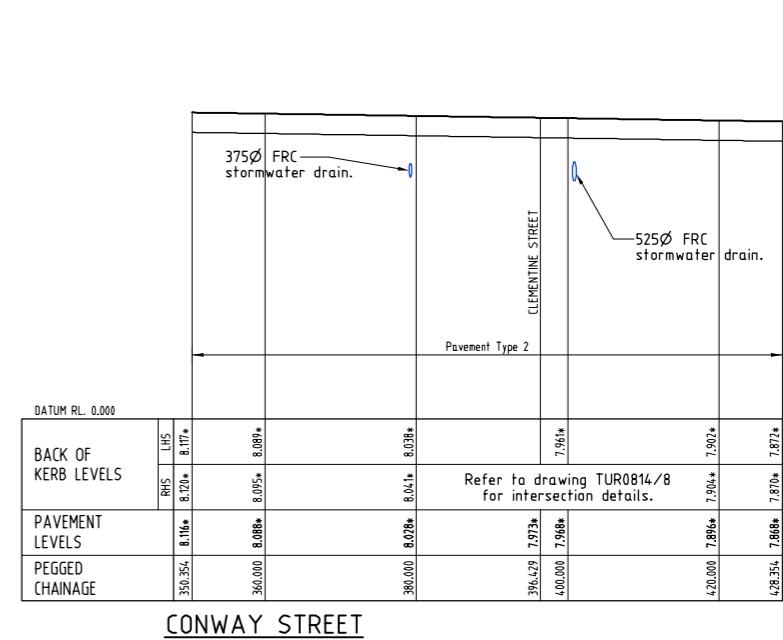
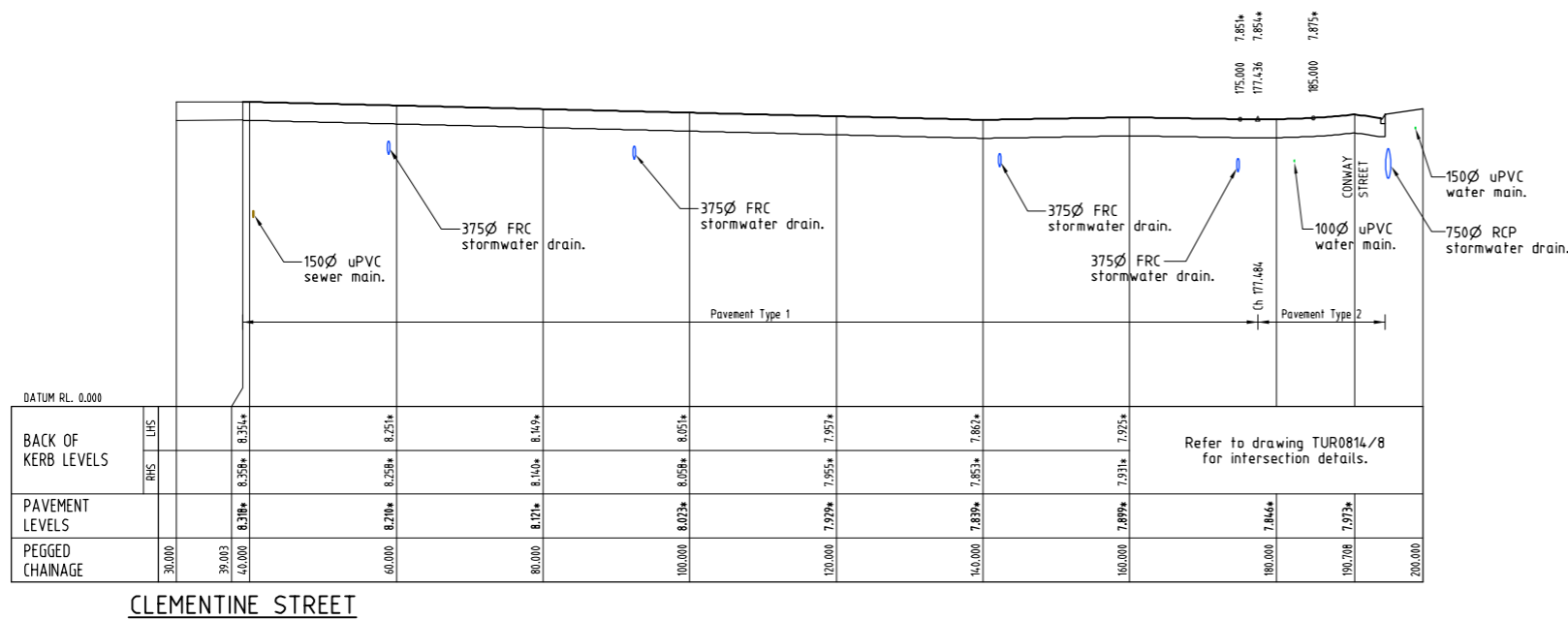
All work carried out in accordance with LOCAL AUTHORITIES standard details.



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
B	AMENDED TO AS CONSTRUCTED.	06/03/2018
A	ISSUED FOR CONSTRUCTION.	27/03/2017
P2	PRELIMINARY - NOT FOR CONSTRUCTION - ISSUED FOR REQUEST FOR INFORMATION.	27/02/2017
P1	PRELIMINARY - NOT FOR CONSTRUCTION - ISSUED FOR OPERATIONAL WORKS APPROVAL.	14/12/2016

Drawn LJ Date 14/12/2016	In Association With <b>BUSHLAND GROVE PTY LTD</b>	<b>CUT/FILL LAYOUT PLAN</b>
Checked HAB Approved	<b>BUSHLAND GROVE ESTATE STAGE 14, 21 ALLOTMENT RESIDENTIAL SUBDIVISION, MOUNT LOW</b>	
COPYRIGHT ©	Drawing Number <b>TUR0814/5</b>	Issue <b>B</b>



### LONGITUDINAL SECTIONS

Scale 'A' - Horizontal  
Scale 'B' - Vertical

PAVEMENT TABLE

PAVEMENT TYPE	PAVEMENT DESCRIPTION
Type 1	30mm AC10M Asphalt. Prime 125mm cement modified base course, DTMR Type 2.1, 28 day UCS = 0.7-1.0 MPa 100mm cement modified sub-base course, DTMR Type 2.3, 28 day UCS = 0.7-1.0 MPa 250mm insitu lime stabilised subgrade, 3.1% quicklime, spread rate = 15kg/m <sup>2</sup>
Type 2	30mm AC10M Asphalt. Prime 130mm cement modified base course, DTMR Type 2.1, 28 day UCS = 0.7-1.0 MPa 130mm cement modified sub-base course, DTMR Type 2.3, 28 day UCS = 0.7-1.0 MPa 250mm insitu lime stabilised subgrade, 3.1% quicklime, spread rate = 15kg/m <sup>2</sup>

**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: 09/03/2018

**AS CONSTRUCTED**

I, Andrew Ian Wallace of Northern Consulting Engineers hereby certify that the works as shown on the as constructed drawings reflect any changes that were made during the course of construction.

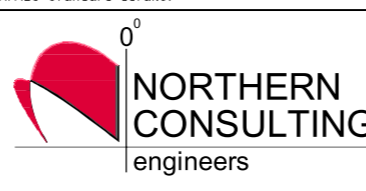
*Andrew Ian Wallace*  
Andrew Ian Wallace - (RPEQ No. 6743)  
Date: 26/03/18



REAL PROPERTY DESCRIPTION  
Lot 900 on SP278572  
Parish of BOHLE  
County of ELPHINSTONE  
Conway Street - Mount Low

LEVEL DATUM A.H.D. (Der)  
Horizontal Datum GDA' 94 Zone 55  
Refer PM 19351B RL. 8.195  
Bolt and washer in kerb  
FREMONT STREET.

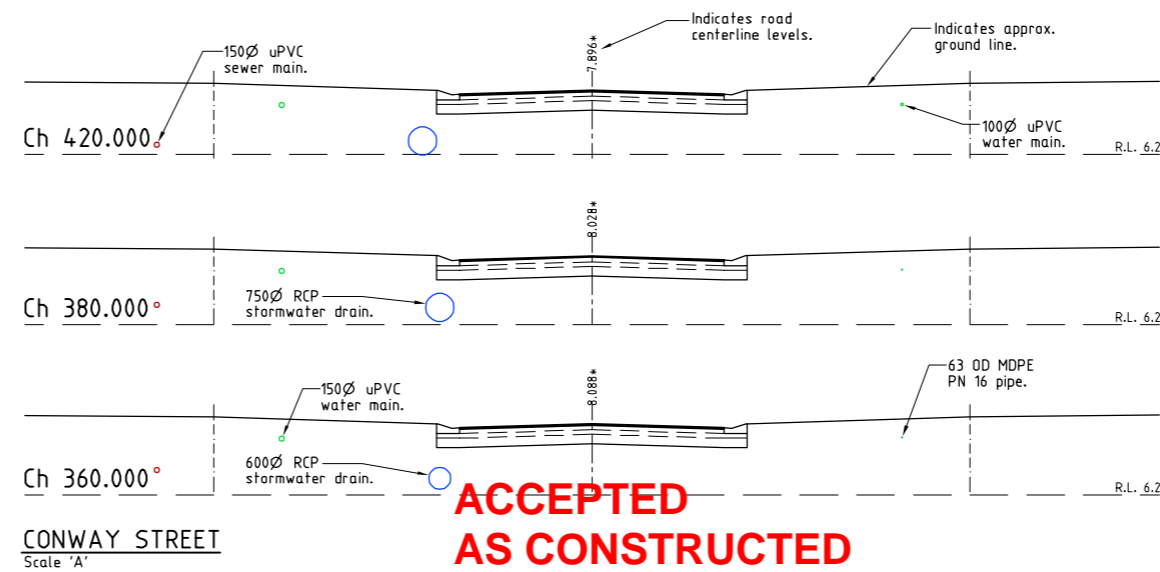
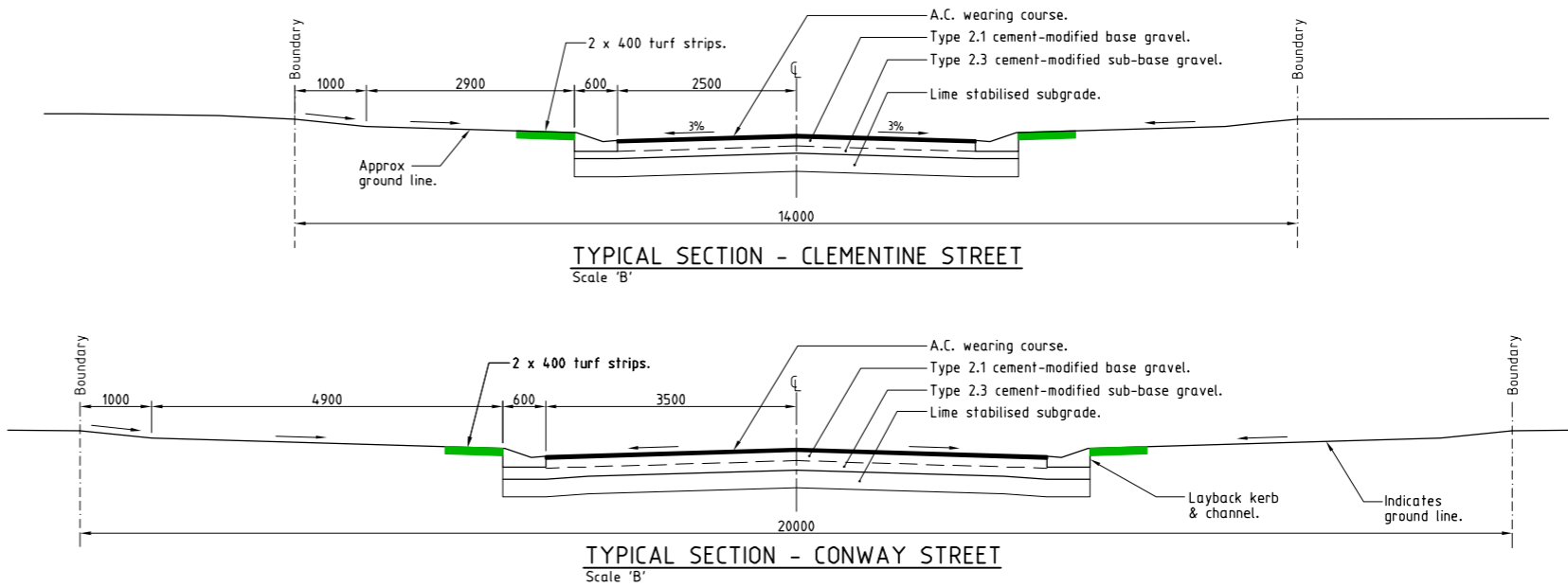
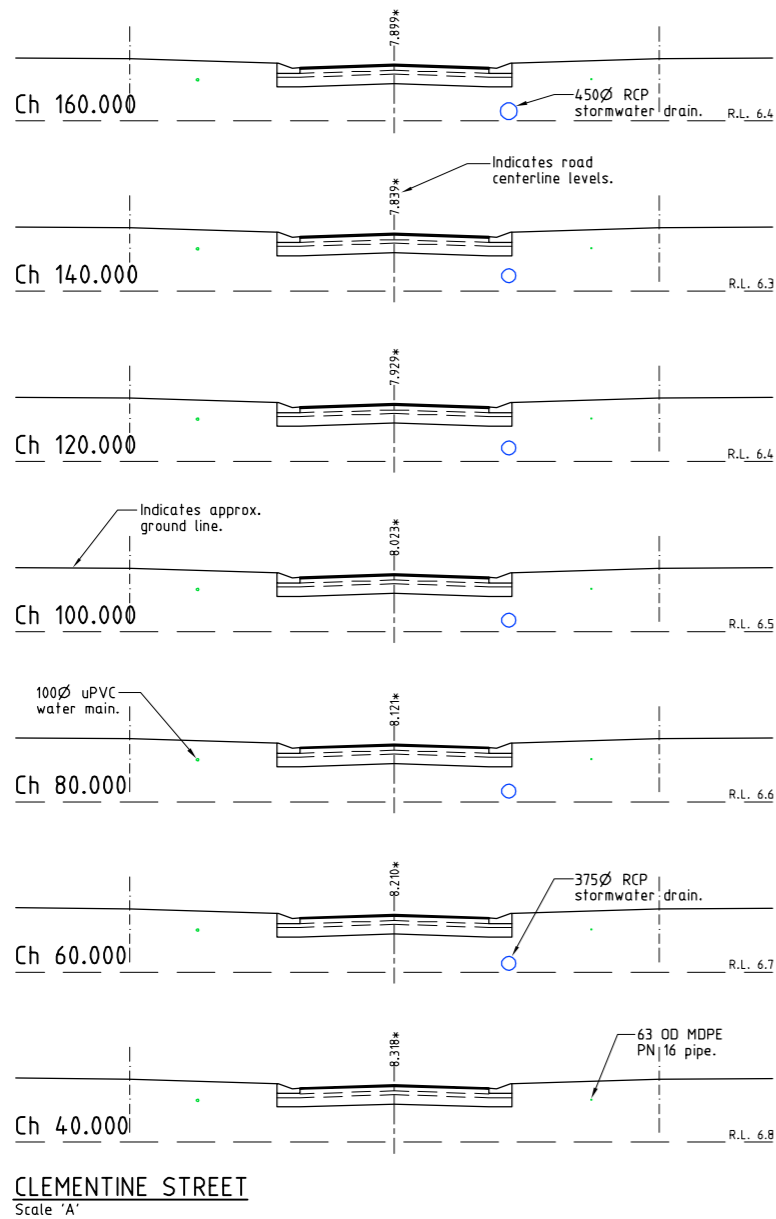
Scale 'A' 0 5 10 15 20m  
Scale 'B' 0 1 2 3 4m  
THE ORIGINAL OF THIS DOCUMENT IS COMPLETED TO THE SCALE NOTED.  
AS REPRODUCTION CAN DISTORT SIZE & SHAPE USE ONLY THE  
DIMENSIONS PROVIDED ON ARCHITECTURAL &/OR ENGINEERING DRAWINGS.  
VERIFY DIMENSIONS ON SITE BEFORE CONSTRUCTION.



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

Issue	Description	Date
B	AMENDED TO AS CONSTRUCTED.	06/03/2018
A	ISSUED FOR CONSTRUCTION.	27/03/2017
P1	PRELIMINARY - NOT FOR CONSTRUCTION - ISSUED FOR OPERATIONAL WORKS APPROVAL.	14/12/2016

Drawn LJ Date 14/12/2016	In Association With <b>BUSHLAND GROVE PTY LTD</b>	<b>ROAD LONGITUDINAL SECTIONS</b>
Checked HAB Approved	<b>BUSHLAND GROVE ESTATE STAGE 14, 21 ALLOTMENT RESIDENTIAL SUBDIVISION, MOUNT LOW</b>	
COPYRIGHT ©		Drawing Number <b>TUR0814/6</b>
		Issue <b>B</b>



**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: 09/03/2018

**AS CONSTRUCTED**  
I, Andrew Ian Wallace of Northern Consulting Engineers hereby certify that the works as shown on the as constructed drawings reflect any changes that were made during the course of construction.

*Andrew Ian Wallace*  
Andrew Ian Wallace - (RPEQ No. 6743)  
Date: 26/03/18

**ACCEPTED  
AS CONSTRUCTED**



**REAL PROPERTY DESCRIPTION**  
Lot 900 on SP278572  
Parish of BOHLE  
County of ELPHINSTONE  
Conway Street - Mount Low

LEVEL DATUM A.H.D. (Der)  
Horizontal Datum GDA' 94 Zone 55  
Refer PM 19351B RL. 8.195  
Bolt and washer in kerb  
FREMONT STREET.

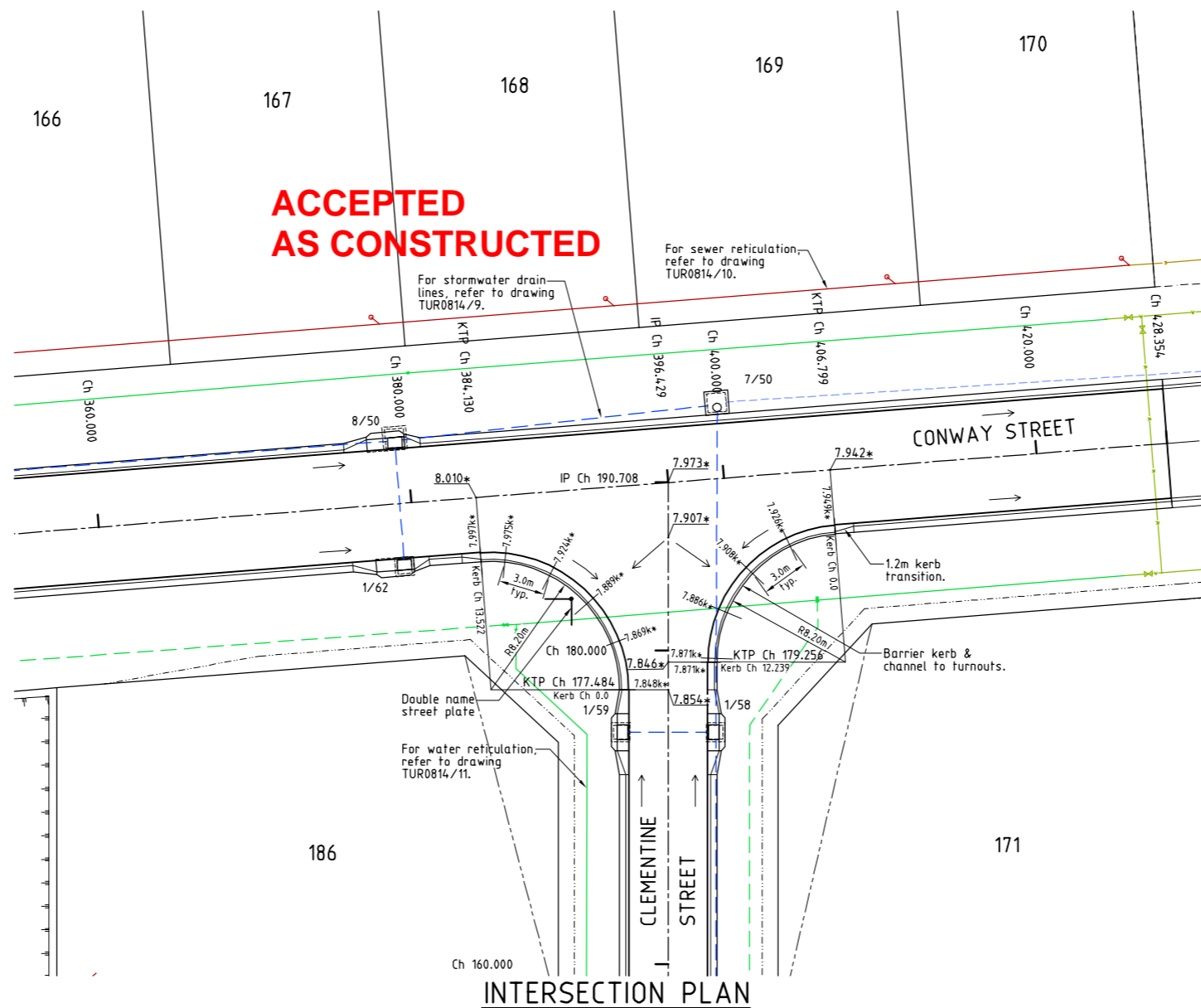
Scale 'A' 0 1 2 3 4m  
Scale 'B' 0 500 1000 1500 2000  
THE ORIGINAL OF THIS DOCUMENT IS COMPLETED TO THE SCALE NOTED.  
AS REPRODUCTION CAN DISTORT SIZE & SHAPE USE ONLY THE  
DIMENSIONS PROVIDED ON ARCHITECTURAL &/OR ENGINEERING DRAWINGS.  
VERIFY DIMENSIONS ON SITE BEFORE CONSTRUCTION.

All work 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

B	AMENDED TO AS CONSTRUCTED.	06/03/2018
A	ISSUED FOR CONSTRUCTION.	27/03/2017
P1	PRELIMINARY - NOT FOR CONSTRUCTION - ISSUED FOR OPERATIONAL WORKS APPROVAL.	14/12/2016
Issue	Description	Date
Drawn LJ	In Association With <b>BUSHLAND GROVE PTY LTD</b>	
Date 14/12/2016		
Checked HAB	<b>BUSHLAND GROVE ESTATE STAGE 14, 21 ALLOTMENT RESIDENTIAL SUBDIVISION, MOUNT LOW</b>	
Approved		
COPYRIGHT ©		
Drawing Number <b>TUR0814/7</b>		Issue <b>B</b>



**LEGEND**

	- As constructed back of kerb level.
	- As constructed pavement level.
	- Stormwater flow arrow.
	- RP boundary.
	- Top of batter.
	- Toe of batter.
	- uPVC water main.
	- Poly water main.
	- Stormwater drain line.
	- Sewer main.
	- Sewer manhole.
	- Water main.

**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: 09/03/2018

**AS CONSTRUCTED**  
 I, Andrew Ian Wallace of Northern Consulting Engineers hereby certify that the works as shown on the as constructed drawings reflect any changes that were made during the course of construction.

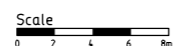
Andrew Ian Wallace - (RPEQ No. 6743)  
 Date: 26/03/18



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

**REAL PROPERTY DESCRIPTION**  
 Lot 900 on SP278572  
 Parish of BOHLE  
 County of ELPHINSTONE  
 Conway Street - Mount Low

LEVEL DATUM A.H.D. (Der)  
 Horizontal Datum GDA' 94 Zone 55  
 Refer PM 19351B 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.



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.	06/03/2018
A	ISSUED FOR CONSTRUCTION.	27/03/2017
P1	PRELIMINARY - NOT FOR CONSTRUCTION - ISSUED FOR OPERATIONAL WORKS APPROVAL.	14/12/2016
Issue	Description	Date
Drawn LJ Date 14/12/2016	In Association With <b>BUSHLAND GROVE PTY LTD</b>	INTERSECTION PLAN
Checked HAB Approved	<b>BUSHLAND GROVE ESTATE</b> STAGE 14, 21 ALLOTMENT RESIDENTIAL SUBDIVISION, MOUNT LOW	
COPYRIGHT ©		Drawing Number <b>TUR0814/8</b>
		Issue <b>B</b>