

ENGINEERING SERVICES REPORT

PROPOSED RESIDENTIAL DEVELOPMENT

197 – 201 TEVIOT ROAD
GREENBANK
(Lot 16 on SP343224)

12 December 2025

PLANS AND DOCUMENTS
referred to in the PDA
DEVELOPMENT APPROVAL

Approval no: DEV2025/1652

Date: 17/04/2026



Revision	Date	Prepared	Reviewed	Authorised
1	19.06.2025	TR	JM	JM
2	12.12.2025	TR	JM	JM

Report Issued and Approved by:
Jason Marshall for and on behalf of Elevate Consulting Engineers
Director / Principal Engineer RPEQ 06835

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1. EXECUTIVE SUMMARY

Elevate Consulting Engineers Pty Ltd (Elevate) were commissioned by Hatia Property Corporation to prepare an Engineering Services Report to support the Development Application for the residential subdivision at 197 – 201 Teviot Road, Greenbank known as Lot 16 on SP343224 (the “site”).

This revised engineering services report has been prepared to address the Further Issues letter from EDQ dated 05 August 2025.

The proposed subdivision includes the creation of roads, balance lot and 42 residential lots. Refer subdivision layout located within Appendix A.

The intention of this report is to demonstrate the proposed engineering design for the site will enable it to be satisfactorily serviced in relation to earthworks, roadworks, stormwater, water, sewer and electrical and telecommunications in accordance with EDQ's and Council's planning requirements.

The site is located within the Greater Flagstone PDA.

A Stormwater Management Plan has been prepared by Water Technologies to replace the previous report prepared by Elevate. separately to this report, detailing the proposed stormwater quantity and quality infrastructure required for the proposed development. The increase in stormwater quantity due to the development will be addressed using a detention basin located within Lot 900. Similarly, the stormwater quality for the site will use a separate bio-retention basin.

Stormwater legal point of discharge is the existing dam located within a waterway on the adjoining property, Lot 15 RP217719. Agreements have been undertaken with the adjoining property owner to allow stormwater flow to the existing dam located within the mapped waterway.

Road connection to the site will be obtained from Leanne Court via a new intersection. It is intended that no vehicle access is provided to the proposed lots from Teviot Road along the eastern frontage.

The proposed lots will be serviced by a gravity sewer reticulation network that will connect with the existing sewer infrastructure located within Lot 15 RP217719.

The proposed lots will be serviced by a water reticulation network that will connect with the existing water reticulation infrastructure located in Teviot Road via a Pressure Reducing Valve (PRV).

Connection to the existing electrical and telecommunications infrastructure located with Teviot Road will be designed by an Electrical Consultant in accordance with Council and Energex standards to service the proposed lots.

2. EXISTING SITE CHARECTERISTICS

The proposed subdivision is located at 197 – 201 Teviot Road, Greenbank.

It is located within the Greater Flagstone PDA.

It is bordered by a Teviot Road to the east and Leanne Court to the south and private properties to the north and west.

Trees are located across much of the site.

A single dwelling and ancillary structures currently exist on the site and will be demolished and removed as part of the development.

A small dam exists on the site west of the dwelling and will be filled with the site earthworks.

The natural surface levels across the site fall from the Teviot Road frontage down to the existing waterway located on the western side of the site. The waterway provides existing stormwater flow from the properties to the south, through an existing culvert located under Leanne Court and through the site and continues to 29 Leanne Court, Greenbank.

Site location is shown in the Figure 2-1 below.

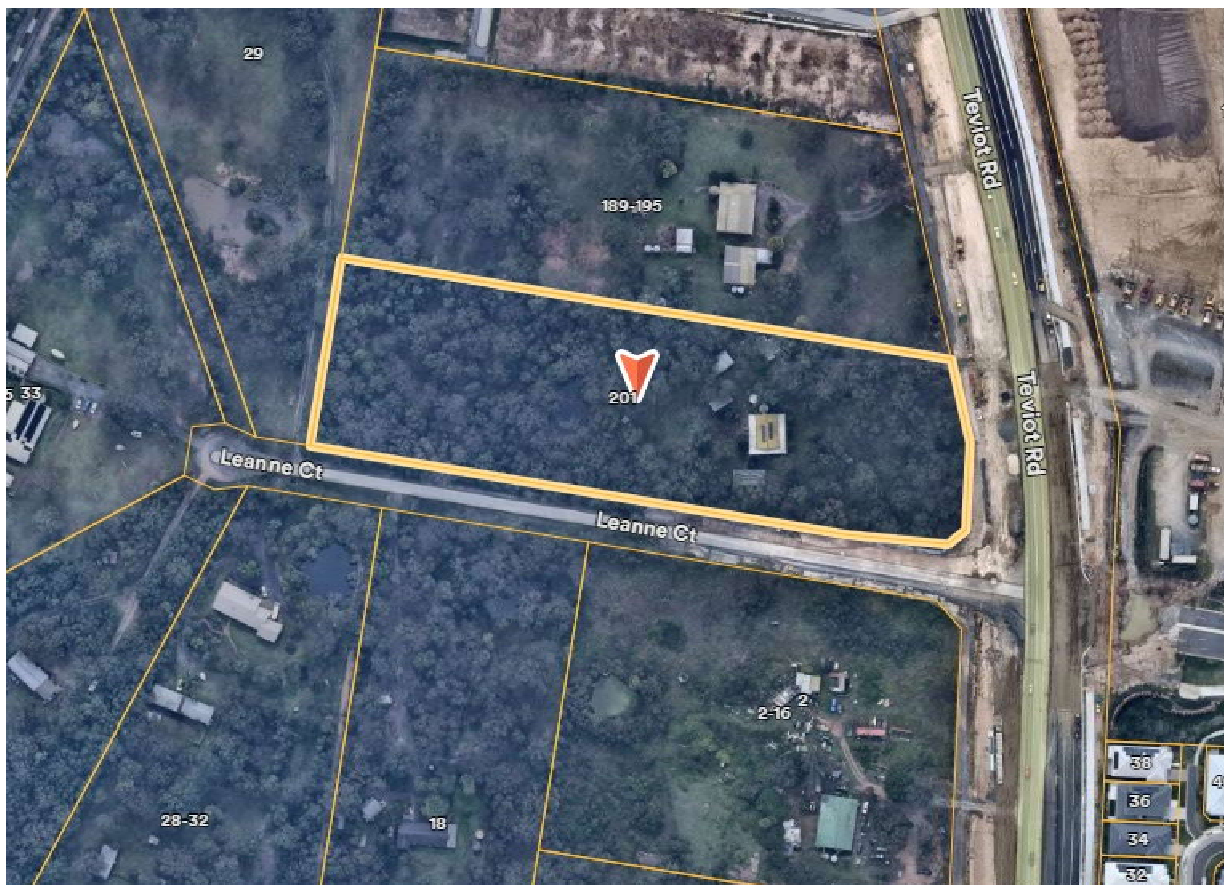


Figure 2-1 – Site Locality Plan

2.1 EXISTING FLOODING CONDITIONS

Logan City Council's Flood Portal provides the following existing flooding information in relation to the site.

It denotes the waterway location with minor flood existing outside of this area.

A Flood Risk Assessment has been prepared for the site by Water Technology.



3. PROPOSED DEVELOPMENT

The proposed development will consist of 42 residential lots and balance lot 900. It is intended to complete the development in two stages.

Figure 3-1 below shows the proposed development.

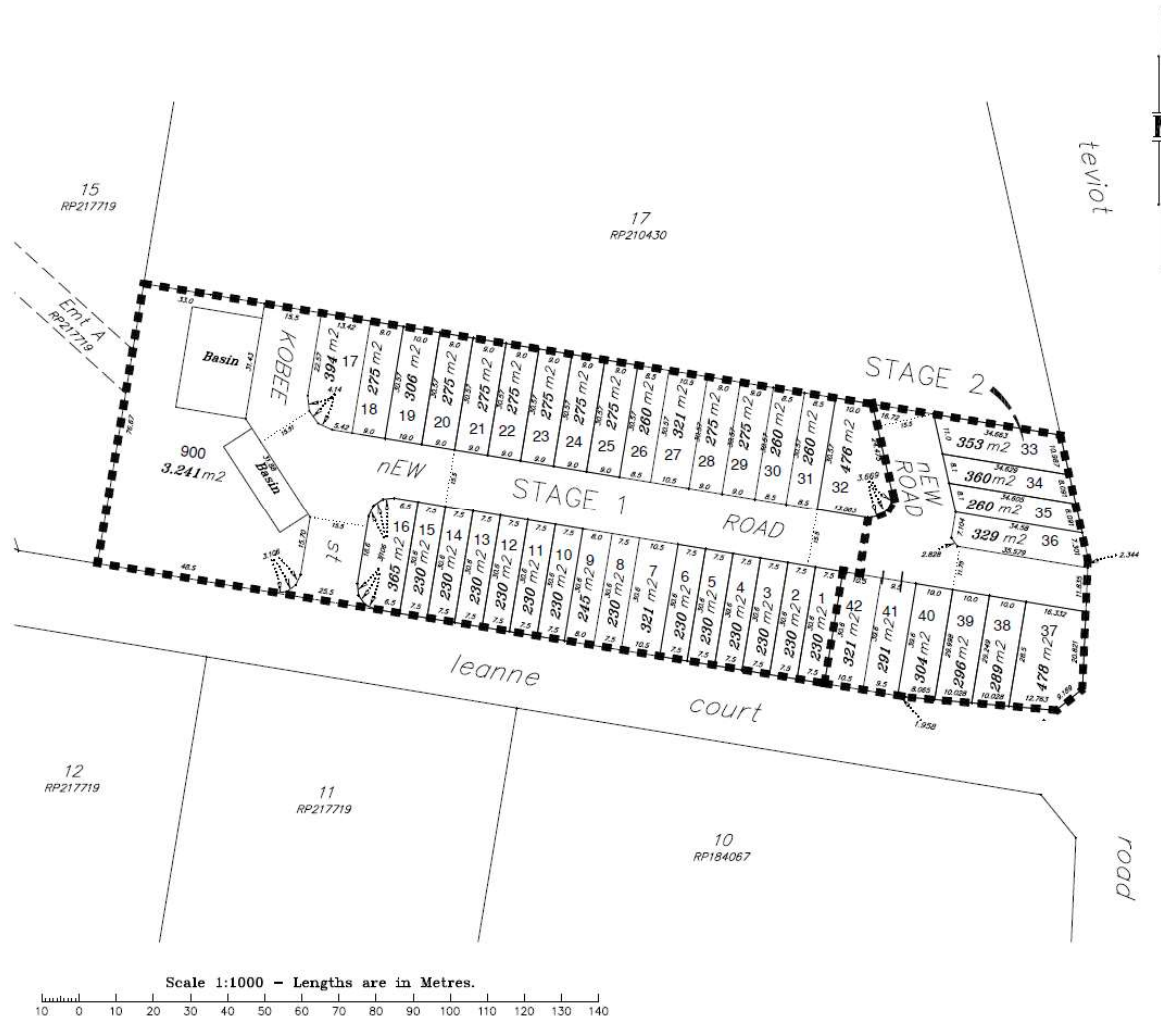


Figure 3-1 – Proposed Development

4. EARTHWORKS

The existing levels across the site fall from the southwest to the northwest at approximately 3 - 4%. It is proposed to provide benched and retained lots that fall to the internal road. This allows the services, particularly roof water and sewer to be located within the road reserve as opposed to within the rear of lots.

To achieve the levels on the lots concrete sleeper retaining walls will be required to be constructed as shown on the Drg. No. P100B within Appendix B. The walls will vary in height up to a maximum height of 1.5m and will be wholly located within the allotment and not within road reserve. Retaining walls are also proposed along Kobee Street to retain the fill from the road construction. These walls will be installed outside of the road reserve.

Earthwork levels will be completed through a cut to fill operation. A small quantity of fill (c1,500cu.m) will be required to achieve the proposed deign levels.

5. ROADWORKS

The permanent road access to the development site will be from Leanne Court through a new “T” intersection. The location of the “T” intersection has been chosen to allow sufficient area for stormwater treatment and detention, reduce tree removal and allow the existing two RCBC’s under Leanne Court to be extended and outlet stormwater directly into Lot 900 as it currently takes place.

Currently, road upgrades are being constructed within Teviot Road and Leanne Court as part of Council’s Teviot Road Upgrade Project. These works include a new signalised intersection within Leanne Court. A copy of the Logan City Council drawings prepared by Westera Partners for the Teviot Road Upgrade Project has been included within Appendix E

It is intended to connect to the upgraded road construction in Leanne Court and provide road widening along the full frontage of the site to provide opportunity for parking along the site’s frontage. No road widening is proposed on the southern side of Leanne Court.

The internal Roads will be 15.5m wide typical EDQ PDA Guideline No. 06 ‘Neighbourhood Access Street’ type, which consist of 6m carriage way width and 2.3m parking with a mixture of 4.25m and 2.95m verges. Refer Table 4 below for proposed road details and the concept engineering plans located within appendix B.

A 5.5m wide concrete access road is proposed for access to Lots 37 – 40.

Table 4 Neighbourhood access streets characteristics

Street type	Neighbourhood access street	
	7.5 m (Fig 7A)	6 m (Fig 7B)
Function	Provide direct residential property access. Also allow for vehicle, pedestrian and cyclist connectivity.	
Traffic volume	< 3000 vpd	< 3000 vpd
Reserve width	16 m ²	15.5 m
Carriageway width	7.5 m	6 m
Maximum block length	200 m	200 m
Median	No	No
Trafficable lanes	Varies, minimum one traffic lane with passing opportunities	Varies, minimum one traffic lanes with passing opportunities
Parking ³	kerbside	2.3 m minimum indented on one side
Footpath	1.5 m minimum on one side ⁴	1.5 m minimum on one side ⁴
Bus route	No	No
Cycle track	No	No
Property access	Direct	Direct except via indented parking bays
Traffic calming	Generally not supported	Generally not supported
Kerb type	Roll Over	Roll Over
Posted speed	Default 50 km/h	Default 50 km/h
Intersection spacing	na	na

6. STORMWATER

Stormwater within Leanne Court will connect to the recently constructed MH 10/50 as detailed on Westera Partners drawings located within Appendix E. Stormwater structures and pipes downstream of 10/50 will be removed as they are temporarily discharging to an open channel in the verge. From MH 10/50 stormwater will be piped down Leanne Court to Lot 900 where it will outlet overland. The existing 2 x RCBC under Leanne Court will be extended into Lot 900 where stormwater will outlet overland.

Internal stormwater will be piped to a MH in Kobee Street where the flows will be split to discharge into the Bio-retention basin for the 3-month flows and into the Detention Basin for larger flows as shown on the Preliminary Engineering Plans within Appendix B. Refer to the Stormwater Management Plan prepared by Water Technology for further details of water quality and quantity.

The external undeveloped flows from Lot 17 on RP210430 will be captured within proposed Lots 17-32 and convey major flow overland within a concrete open channel and minor flow within pit and pipe all within an easement between the retaining wall and common boundary ending with a pit within Lot 17. From here it will be piped into Lot 900 bypassing the detention basin and then through a proposed easement within Lot 15 on RP217719 as agreed through a Deed between the two property owners.

7. SEWER

An existing DN150mm diameter gravity reticulated sewer is located within the adjoining property (Lot 15 on RP217719) to the west of this site. Discussions and agreements with the adjoining landowner have resulted in a signed Deed to access and construct sewer on their property. An easement will be provided over the sewer located within the adjoining site.

Our proposed sewer design does not require sewer to be installed along Leanne Court to service the development. This design is efficient by allowing the sewer to be located on the low side of all proposed lots. Refer Drawing No. 2025039 – P700B in Appendix B.

We acknowledge the compliance approval DEV2020/1136/3 for sewerage reticulation within Leanne Court and related to Mixed Use Development located at 205 – 219 Teviot Road. A copy of these plans are located within Appendix F.

Our proposed sewer design for the site is separate to and does not impede the future construction of the sewer approved under DEV2020/1136/3.

8. WATER

Dial Before You Dig (DBYD) indicates that an existing 300 dia. water main is located along Teviot Road.

We acknowledge the Water Supply Network Layout Plan approved under DEV2019/1059 shown within Appendix F. The proposed water main for this site matches this approval providing 200 dia. water reticulation main from Kobee Street, along Leanne Court up to the Teviot Road. The 200 dia water main will be connected downstream of the DMA feed proposed to be constructed by Mirvac on the south-east corner of Leanne Court and Teviot Road.

A 150 dia. water reticulation main is proposed along Road No.1. in accordance with DEV2019/1059.

All proposed residential allotments will be provided with a potable water service connection.

The water reticulation will be designed and installed in accordance with the SEQ Design & Construction Code, and Logan Water requirements.

9. ELECTRICAL & TELECOMMUNICATIONS

Electrical and telecommunications infrastructure exists within Teviot Road and Leanne Court.

Extensions of these services into the development by an Electrical Consultant will provide appropriate street lighting to the road reserve and electrical and telecommunication services to the proposed lots.

10. LCC PLANNING SCHEME CODES

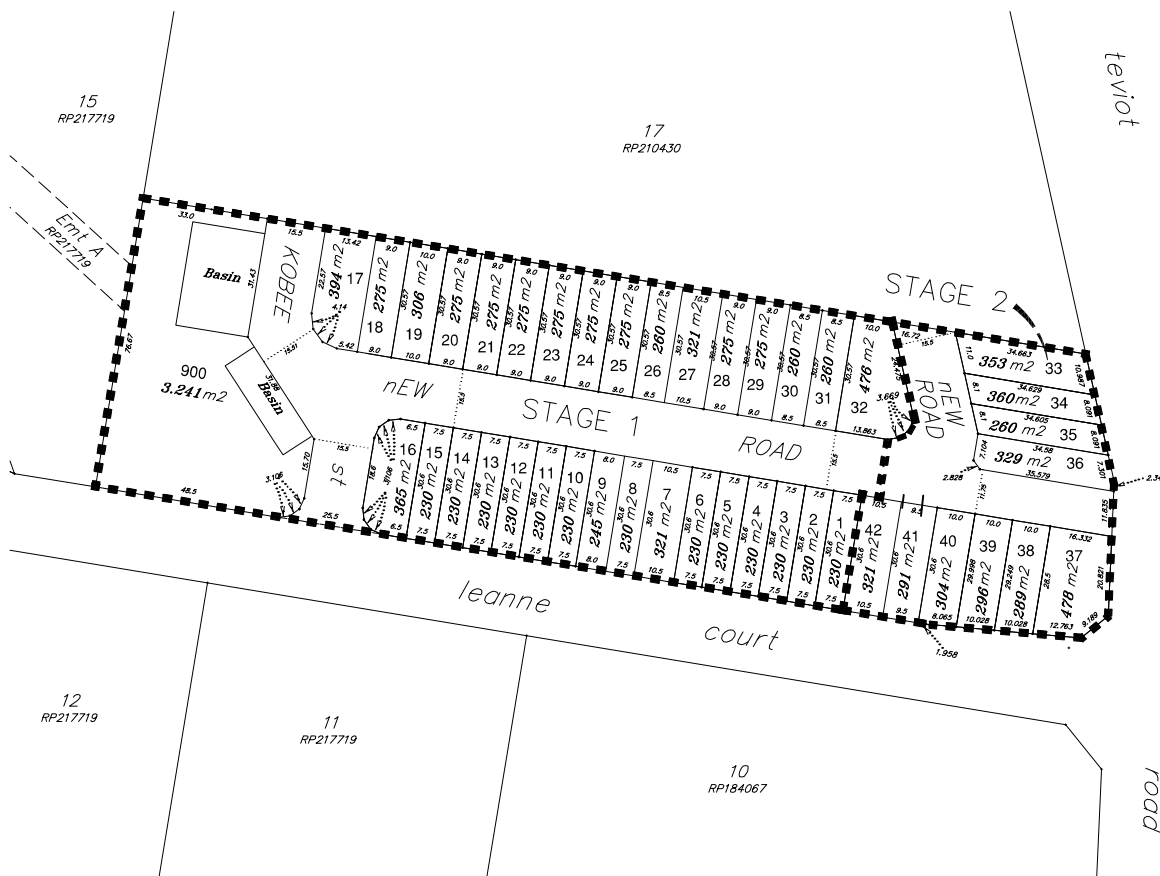
We have reviewed the LCC Planning Scheme for the relevant codes related to this development. We have completed these codes and provide acceptable solutions. The applicable codes are as follows and are located within Appendix C:

- Development Code 9.4.2 – Filling and excavation code
- Development Code 9.4.3 – Infrastructure code

11. CONCLUSION

This Engineering Services report demonstrates that the proposed development located at Lot 16 on SP343224 can be serviced to accommodate the proposed 42 residential lots in accordance with Logan City Council's Planning Scheme Policy and EDQ guidelines.

12. APPENDIX A – PROPOSED DEVELOPMENT



East Coast Surveys (Aust)

By 445 A/CN 111 434 025
Cadastral Surveyors Town Planners
&
Subdivision Consultants



P.O. BOX 168 Capalaba QLD 4157
Ph (07) 3823 1029 Fax (07) 3823 2691
Email info@eastcoastsurveys.com.au

The areas and dimensions on this plan are approximate only and are subject to Local Government Approval and final survey.

ROL PLAN

Lot 16 on SP343224
197-201 Teviot Road
Greenbank

LOCAL AUTHORITY: Logan City Council
LEVEL DATUM :
CONTOUR INTERVALS :

Client: RRR Projects Pty Ltd

Surveyed By: JM Drawn By: MJR
Date: Date: 11/12/2025
Checked By: Authorized By:
Date: Date:

Proposed Lots 1- 42, 900
Canceling lot 16 on SP343224

Our Ref.: 10369 ROL
Rev: A-1-J December 2025
Scale 1:1000 Original Size: A3

Scale 1:1000 - Lengths are in Metres.

10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140

13. APPENDIX B – PRELIMINARY ENGINEERING PLANS

DRAWING SCHEDULE		
SHEET NO.	REV	SHEET TITLE
P000	B	COVER SHEET
P100	B	BULK EARTHWORKS LAYOUT PLAN
P200	B	EARTHWORKS CROSS SECTIONS
P300	B	ROADWORKS AND STORMWATER DRAINAGE PLAN
P301	A	BASIN LAYOUT PLAN AND CROSS SECTIONS
P400	B	LONGITUDINAL SECTION - SHEET 1 OF 3
P401	B	LONGITUDINAL SECTION - SHEET 2 OF 3
P402	B	LONGITUDINAL SECTION - SHEET 3 OF 3
P500	B	STORMWATER CATCHMENT PLAN
P600	B	WATER RETENTION LAYOUT PLAN
P700	B	SEWER RETICULATION LAYOUT PLAN
P800	B	TYPICAL CROSS SECTIONS

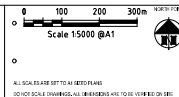
AMENDMENTS:					
REV.	DATE		REVISIONS	BY	CHECKED BY
0	08-09-2018	JASON MARSHALL		JM	

AUTHORIZATION: JRG
 JASON MARSHALL 08035
 DATE:

 SIGNATURE:

TO BE PRINTED IN COLOUR

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COVER SHEET

2025039 - P000

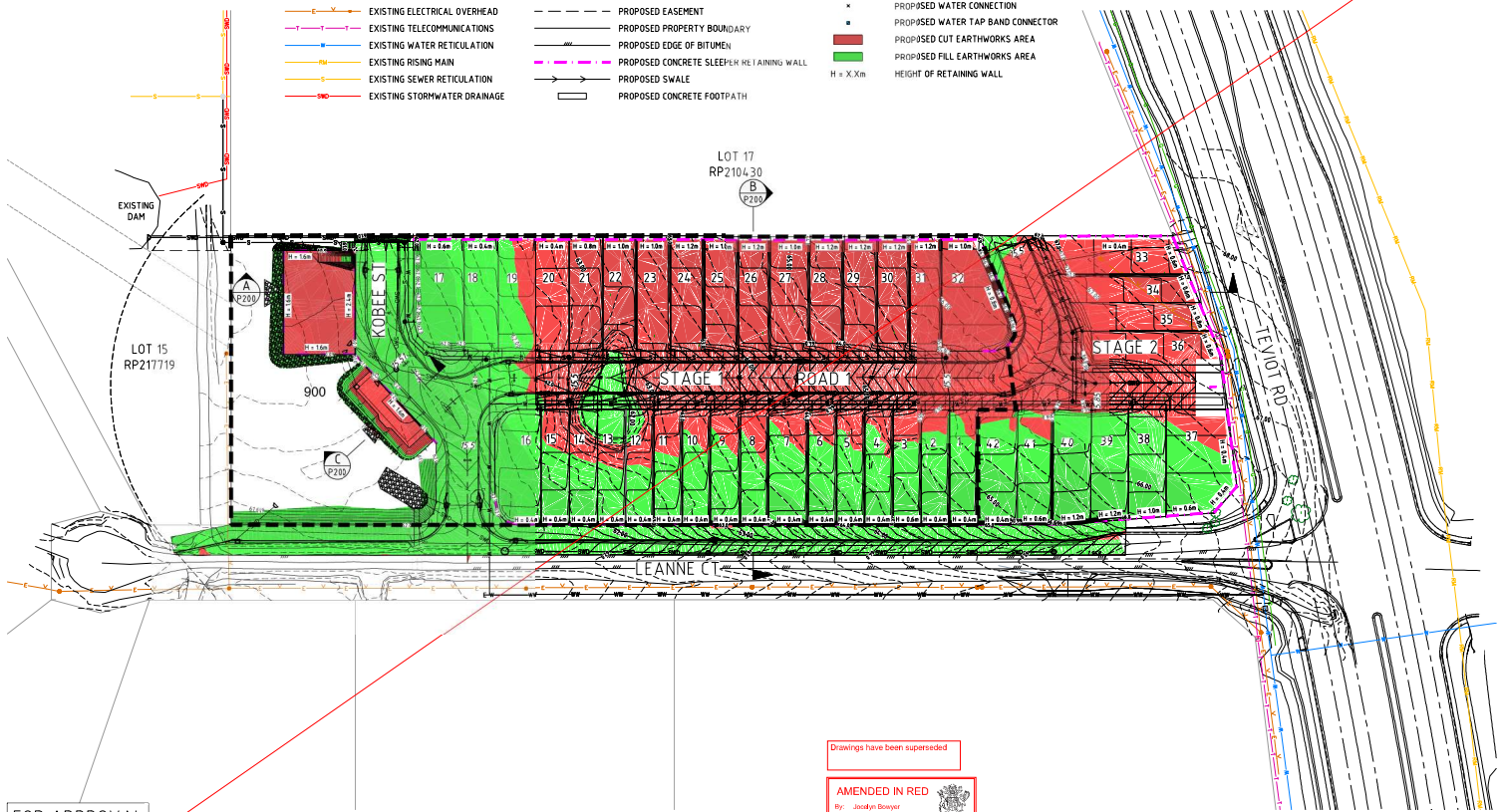
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- 63.0 MAJOR CONTOUR DESIGN
- 63.1 MINOR CONTOUR DESIGN
- 60.0 EXISTING MAJOR CONTOUR
- EXISTING PROPERTY BOUNDARY
- EXISTING GAS MAIN
- EXISTING ELECTRICAL OVERHEAD
- EXISTING TELECOMMUNICATIONS
- EXISTING WATER RETICULATION
- EXISTING RISING MAIN
- EXISTING SEWER RETICULATION
- EXISTING STORMWATER DRAINAGE

- PROPOSED RCP STORMWATER DRAINAGE
- PROPOSED RCBC STORMWATER DRAINAGE
- PROPOSED SEWER RETICULATION
- PROPOSED WATER RETICULATION
- PROPOSED KERB
- PROPOSED EASEMENT
- PROPOSED PROPERTY BOUNDARY
- PROPOSED EDGE OF BITUMEN
- PROPOSED CONCRETE SLEEPER RETAINING WALL
- PROPOSED SWALE
- PROPOSED CONCRETE FOOTPATH

- INDICATIVE DRIVEWAY LOCATION
- PROPOSED GULLY PIT
- PROPOSED FIELD INLET PIT
- PROPOSED MANHOLE
- PROPOSED STORMWATER HEADWALL
- PROPOSED WATER CONNECTION
- PROPOSED WATER TAP BAND CONNECTOR
- PROPOSED CUT EARTHWORKS AREA
- PROPOSED FILL EARTHWORKS AREA
- HEIGHT OF RETAINING WALL

H = X.Xm



Drawings have been superseded

AMENDED IN RED
By: Jocelyn Bouyer
Date: 30/03/2020



FOR APPROVAL

LAYOUT PLAN
SCALE 1:500

NO.	DATE	DESCRIPTION	BY	CHECKED
1	20/03/2020	ISSUED FOR TENDERS	JCB	JCB
2	30/03/2020	AMENDED IN RED	JCB	JCB
3	30/03/2020	FOR APPROVAL	JCB	JCB

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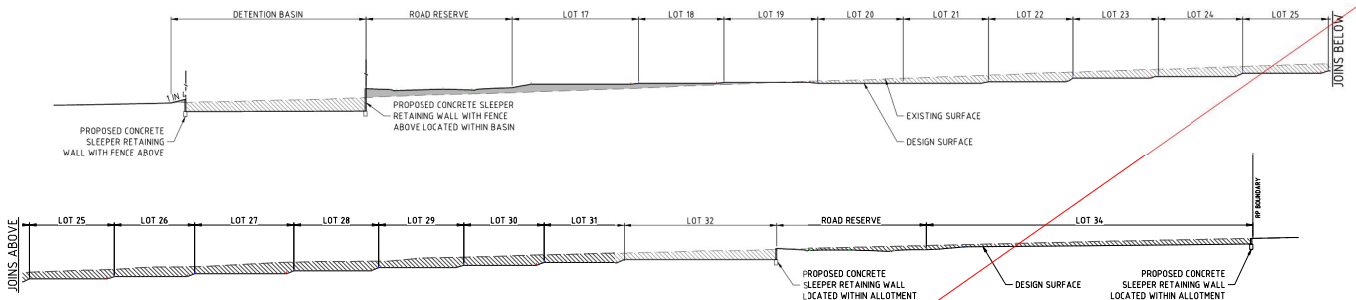
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LOCATION: 197-201 TEVOT ROAD, GREENBANK - QLD
OWNER: FB
DESIGNED: JCB
CHECKED: JCB
ELEVATE CONSULTING ENGINEERS
Brisbane 0418 872 271 Melbourne 0428 381 252
www.elevate-engineers.com.au

DRAWING TITLE: BULK EARTHWORKS LAYOUT PLAN
DRAWING NUMBER: 2025039 - P100
REVISION: B

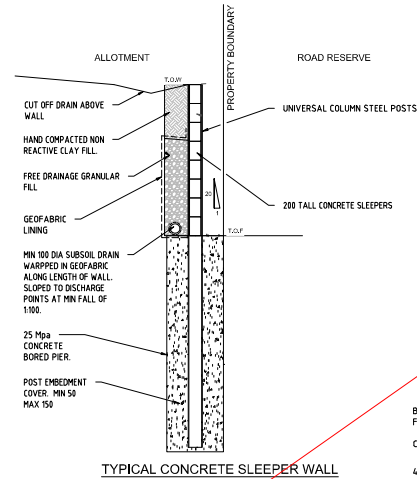
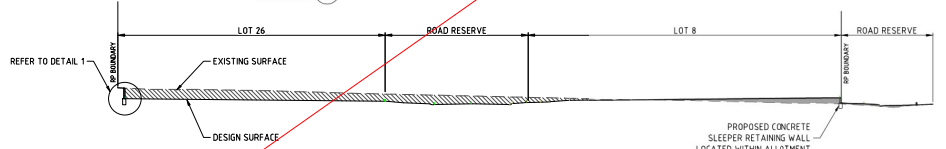
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LEGEND

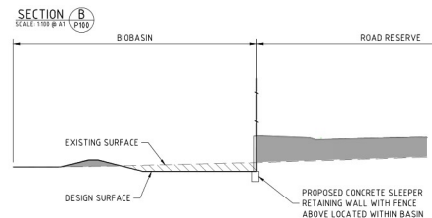
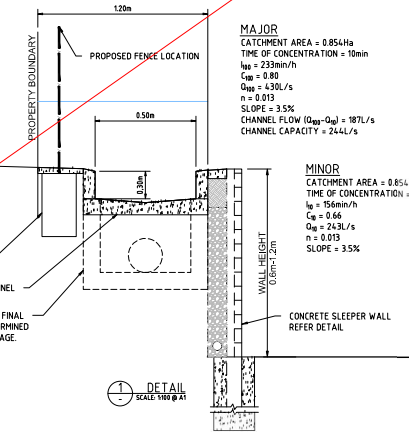
CUT
FILL



SECTION A
SCALE 1:100 @ A1



NOTE:
ALL ALLOTMENT RETAINING WALLS INCLUDING FOOTINGS ARE TO BE LOCATED WHOLLY WITHIN ALLOTMENTS.



SECTION C
SCALE 1:100 @ A1

Drawings have been superseded

AMENDED IN RED
By: Jocelyn Sawyer
Date: 30/03/2026

FOR APPROVAL

AMENDMENTS:	DATE	DESCRIPTION	BY	CHKD
1	20250310	ISSUED FOR TENDERS	JW	MS
2	20250310	ISSUED FOR TENDERS	JW	MS
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LOCATION:	197-201 TELVOT ROAD, GREENSBANK - QLD
OWNER:	MC
DESIGNED:	JW
CHECKED:	JW
DATE:	30/03/2026
ISSUED:	JW
DATE:	30/03/2026

WORKING TITLE:	EARTHWORKS CROSS SECTIONS
PROJECT NUMBER:	2025039 - P200
REVISION:	B

LEGEND

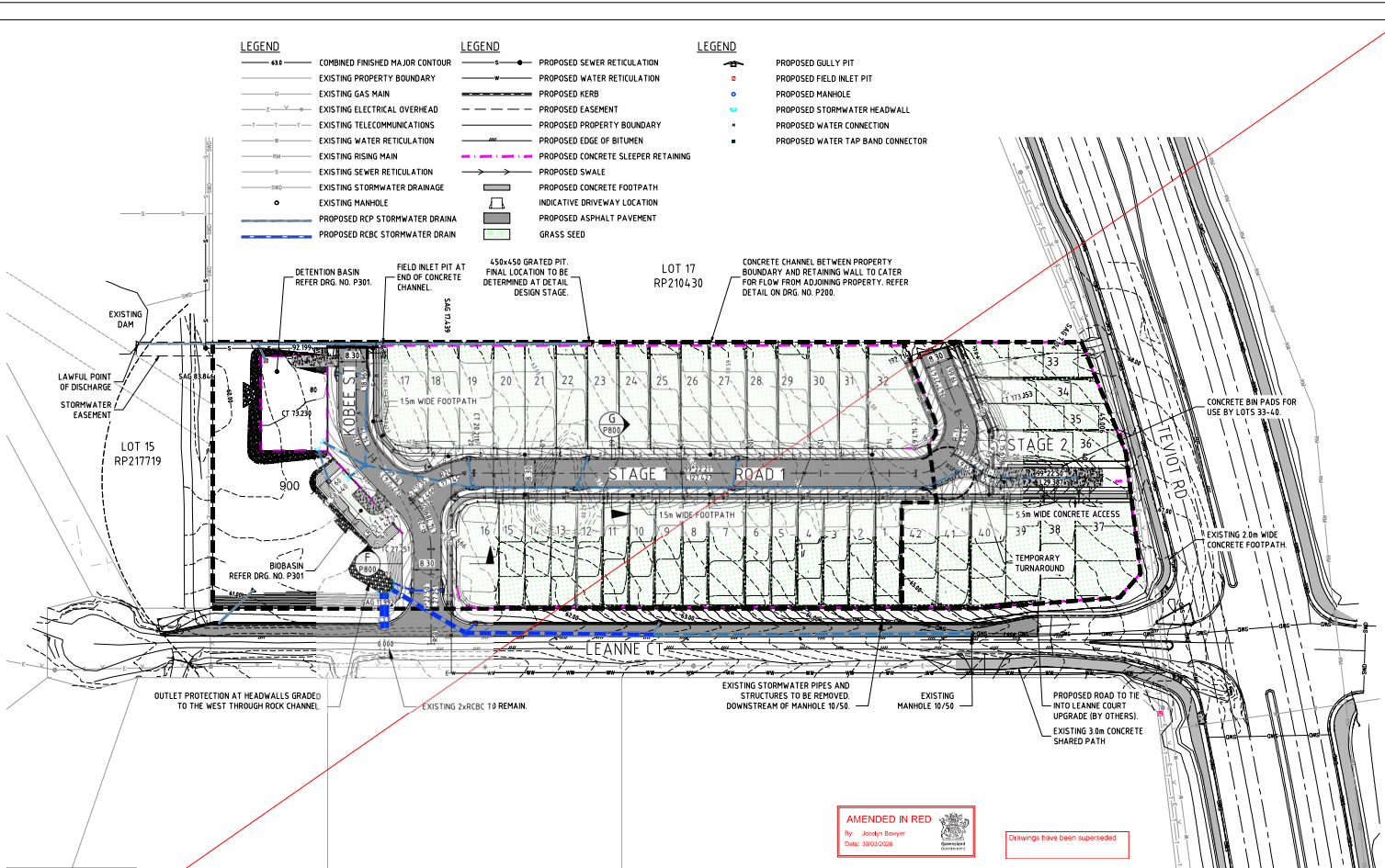
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- EXISTING GAS MAIN
- EXISTING ELECTRICAL OVERHEAD
- EXISTING TELECOMMUNICATIONS
- EXISTING WATER RETICULATION
- EXISTING RISING MAIN
- EXISTING SEWER RETICULATION
- EXISTING STORMWATER DRAINAGE
- EXISTING MANHOLE
- PROPOSED RCP STORMWATER DRAIN
- PROPOSED RCBC STORMWATER DRAIN

LEGEND

- PROPOSED SEWER RETICULATION
- PROPOSED WATER RETICULATION
- PROPOSED KERB
- PROPOSED EASEMENT
- PROPOSED PROPERTY BOUNDARY
- PROPOSED EDGE OF BITUMEN
- PROPOSED CONCRETE SLEEPER RETAINING
- PROPOSED SWALE
- PROPOSED CONCRETE FOOTPATH
- INDICATIVE DRIVEWAY LOCATION
- PROPOSED ASPHALT PAVEMENT
- GRASS SEED

LEGEND

- PROPOSED GULLY PIT
- PROPOSED FIELD INLET PIT
- PROPOSED MANHOLE
- PROPOSED STORMWATER HEADWALL
- PROPOSED WATER CONNECTION
- PROPOSED WATER TAP BAND CONNECTOR



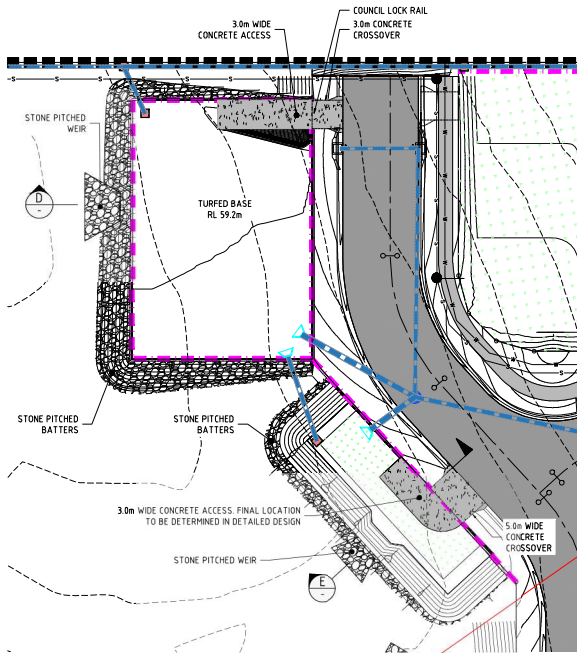
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By: Jordan Sawyer
Date: 30/03/2018

Drawings have been superseded

FOR APPROVAL

LAYOUT PLAN
SCALE 1:500

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NO.	DATE	DESCRIPTION	APPROVED:	DATE:	FOR APPROVAL ONLY	NOTES:	ELEVATE CONSULTING ENGINEERS	PROJECT: 2025039 - PROPOSED SUBDIVISION	DRAWING TITLE: ROADWORKS AND STORMWATER DRAINAGE LAYOUT PLAN						



LAYOUT PLAN
SCALE 1:200

Drawings have been superseded

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By: Jocelyn Sawyer
Date: 30/03/2020



FOR APPROVAL

AMENDMENTS:		APPROVED BY:	DATE:
NO.	DATE	DESCRIPTION	

FOR APPROVAL
ONLY

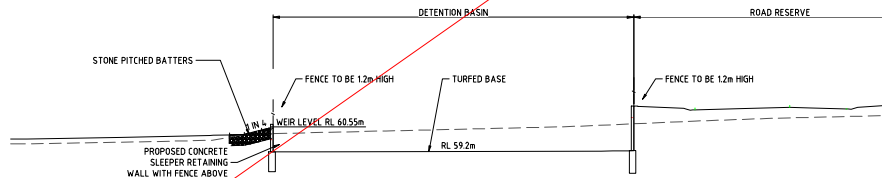
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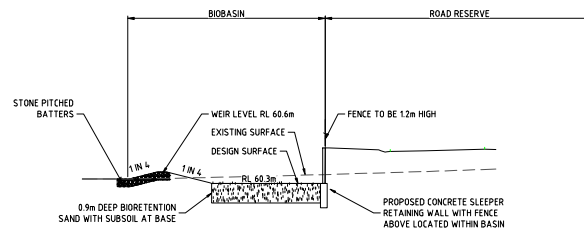
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 - EXISTING ELECTRICAL OVERHEAD
 - EXISTING TELECOMMUNICATIONS
 - EXISTING WATER RETICULATION
 - EXISTING RISING MAIN
 - EXISTING SEWER RETICULATION
 - EXISTING STORMWATER DRAINAGE
 - EXISTING MANHOLE
 - PROPOSED RCP STORMWATER DRAIN
 - PROPOSED RCB STORMWATER DRAIN

- LEGEND
- PROPOSED SEWER RETICULATION
 - PROPOSED WATER RETICULATION
 - PROPOSED KERB
 - PROPOSED EASEMENT
 - PROPOSED PROPERTY BOUNDARY
 - PROPOSED EDGE OF BITUMEN
 - PROPOSED CONCRETE SLEEPER RETAINING
 - PROPOSED SWALE
 - PROPOSED CONCRETE FOOTPATH
 - INDICATIVE DRIVEWAY LOCATION
 - PROPOSED ASPHALT PAVEMENT
 - GRASS SEED

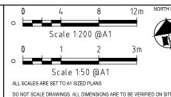
- LEGEND
- PROPOSED GULLY PIT
 - PROPOSED FIELD INLET PIT
 - PROPOSED MANHOLE
 - PROPOSED STORMWATER HEADWALL
 - PROPOSED WATER CONNECTION
 - PROPOSED WATER TAP BAND CONNECTOR



SECTION D
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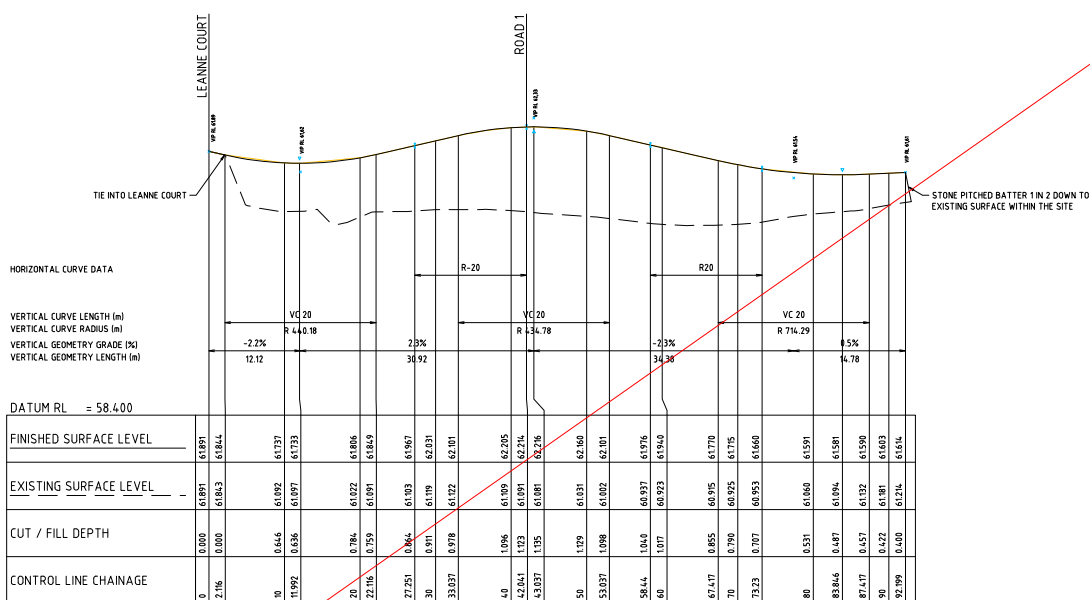


SECTION E
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PROJECT:
2025039 - PROPOSED SUBDIVISION
LOCATION:
197-201 TELVOT ROAD, GREENBANK - QLD
TOWN:
MC
ELEVATE CONSULTING ENGINEERS
Brisbane 0418 872 271 Melbourne 0428 381 252
www.elevate-engineers.com.au

DRAWING TITLE:
**BASIN LAYOUT PLAN AND
CROSS SECTIONS**
DRAWING NUMBER:
2025039 - P301
REVISION:
A



A1 SCALE: H 1:250, V 1:25
LONGITUDINAL SECTION RS01 - KOBEE STREET

Drawings have been superseded

AMENDED IN RED

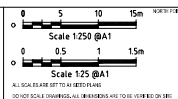
By: Jocelyn Bortner

Date: 30/03/2026



FOR APPROVAL

AMENDMENTS: DATE: _____ BY: _____ REVISION: _____		APPROVED BY: DATE: _____ BY: _____		PROJECT NO: 202503		CLIENT: JASON MARSHALL		SITE: _____ DATE: _____ BY: _____		FOR APPROVAL ONLY		NOTE: THESE DESIGNS AND DRAWINGS ARE COPYRIGHT AND ARE NOT TO BE USED OR REPRODUCED WITHOUT THE WRITTEN PERMISSION OF ELEVATE CONSULTING ENGINEERS PTY LTD.		CONSENT: ELEVATE CONSULTING ENGINEERS ACKNOWLEDGE THE TRADITIONAL OWNERS AND CUSTOMERS OF THE LANDS ON WHICH WE WORK AND PAY OUR RESPECTS TO INDIGENOUS ELDERS PAST, PRESENT AND FUTURE.		 ELEVATE CONSULTING ENGINEERS		 ALL SCALE PLANS SET TO A1 UNLESS STATED (0) SCALE PLANS SET TO A1 UNLESS STATED		PROJECT: 2025039 - PROPOSED SUBDIVISION LOCATION: 197-201 TENANT ROAD, GREENBANK, QLD DRAWN BY: MC CHECKED BY: FB DESIGNED BY: JMW APPROVED BY: JMW		LONGITUDINAL SECTION SHEET 1 OF 3		DRAWING NUMBER: 2025039 - P400		DATE: B	
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PROJECT: 2025039 - PROPOSED SUBDIVISION			
LOCATION: 197-201 TEVIOT ROAD, GREENBANK - QLD			
DRAWN: MC	DESIGNED: FB	CHECKED: JM	APPROVED: JM
ELEVATE CONSULTING ENGINEERS Brisbane 0418 873 271 Melbourne 0428 361 252 www.elevateengineers.com.au			

DRAWING TITLE:	
LONGITUDINAL SECTION SHEET 1 OF 3	
DRAWING NUMBER:	SECURITY:
2025039 - P400	B

HORIZONTAL CURVE DATA

VERTICAL CURVE LENGTH (m)
VERTICAL CURVE RADIUS (m)
VERTICAL GEOMETRY GRADE (%)
VERTICAL GEOMETRY LENGTH (m)

DATUM RL = 58.600

FINISHED SURFACE LEVEL	61.085	62.275	62.154	62.191	61.994	61.940	61.946	61.966	62.040	62.140	62.240	62.254	62.393	62.599	62.683	63.013	63.674	64.004	64.103	64.242	65.080	65.349	65.429	65.463	65.762
EXISTING SURFACE LEVEL	61.085	62.275	62.154	62.191	61.994	61.940	61.946	61.966	62.040	62.140	62.240	62.254	62.393	62.599	62.683	63.013	63.674	64.004	64.103	64.242	65.080	65.349	65.429	65.463	65.762
CUT / FILL DEPTH	0	0.190	0.121	0.097	0.054	0.040	0.046	0.060	0.060	0.060	0.060	0.060	0.060	0.060	0.060	0.060	0.060	0.060	0.060	0.060	0.060	0.060	0.060	0.060	0.060
CONTROL LINE CHAINAGE	0	131	246	492	592	694	795	898	994	1094	1145	1145	1293	1445	1483	1589	1674	1700	1707	1719	1800	1879	1911	1911	1911

A1 SCALE: H 1:250, V 1:25
LONGITUDINAL SECTION RS02 - ROAD 1

FOR APPROVAL

Drawings have been superseded

AMENDED IN RED

By: Jocelyn Bowyer
Date: 30/03/2020



AMENDMENTS:	DATE	DESCRIPTION	BY	CHKD
1	30/03/2020	REVISION	JOB	JOB
2	30/03/2020	REVISION	JOB	JOB
3	30/03/2020	REVISION	JOB	JOB
4	30/03/2020	REVISION	JOB	JOB
5	30/03/2020	REVISION	JOB	JOB
6	30/03/2020	REVISION	JOB	JOB
7	30/03/2020	REVISION	JOB	JOB
8	30/03/2020	REVISION	JOB	JOB
9	30/03/2020	REVISION	JOB	JOB
10	30/03/2020	REVISION	JOB	JOB

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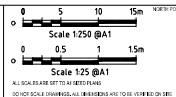
JOCYLN BOWYER

ELEVATE CONSULTING ENGINEERS

197-201 TELSTRA ROAD, GREENBANK - QLD

Brisbane 4161 872 2711 Melbourne 0428 381 252

www.elevate-engineers.com.au



PROJECT:	2025039 - PROPOSED SUBDIVISION
LOCATION:	197-201 TELSTRA ROAD, GREENBANK - QLD
CLIENT:	MC
DESIGNED BY:	FB
CHECKED BY:	JM
APPROVED BY:	JM

DRAWING TITLE:	LONGITUDINAL SECTION
SHEET NO.:	SHEET 2 OF 3
DRAWING NUMBER:	2025039 - P401
DATE:	30/03/2020

BY:	JOB
CHKD:	JOB
APPD:	JOB

HORIZONTAL CURVE DATA

VERTICAL CURVE LENGTH (m)
VERTICAL CURVE RADIUS (m)
VERTICAL GEOMETRY GRADE (%)
VERTICAL GEOMETRY LENGTH (m)

DATUM RL = 62.900

FINISHED SURFACE LEVEL	65.129	65.163	65.162	66.894	66.195	66.426	66.759	66.849
EXISTING SURFACE LEVEL	65.853	65.882	66.216	66.456	66.547	66.666	66.771	66.796
CUT / FILL DEPTH	-0.423	-0.420	-0.454	-0.402	-0.351	-0.240	-0.013	0.053
CONTROL LINE CHAINAGE	150	151	160	170	173.052	180	190	192.74

A1 SCALE: H 1:250, V 1:25
LONGITUDINAL SECTION RS02 - ROAD 1

HORIZONTAL CURVE DATA

VERTICAL CURVE LENGTH (m)
VERTICAL CURVE RADIUS (m)
VERTICAL GEOMETRY GRADE (%)
VERTICAL GEOMETRY LENGTH (m)

DATUM RL = 63.100

FINISHED SURFACE LEVEL	65.773	65.677	65.626	66.277	65.659	65.669	65.800	65.814	65.928	66.188	66.448	66.578
EXISTING SURFACE LEVEL	66.259	66.277	66.297	66.297	66.297	66.299	66.307	66.455	66.659	66.902	66.978	66.978
CUT / FILL DEPTH	-0.602	-0.651	-0.638	-0.637	-0.637	-0.631	-0.573	-0.527	-0.471	-0.454	-0.400	-0.400
CONTROL LINE CHAINAGE	0	4.648	7.104	9.648	12.192	14.736	17.280	20	30	40	45.006	

A1 SCALE: H 1:250, V 1:25
LONGITUDINAL SECTION RSP01 (DRIVEWAY)

FOR APPROVAL

AMENDED IN RED

By: Jackson Brown
Date: 30/03/2025

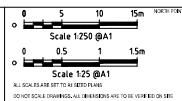
Drawings have been superseded

AMENDMENTS:	APPROVED:	DATE:
1. REVISED	JACKSON BROWN	30/03/2025
2. REVISED	JACKSON BROWN	30/03/2025
3. REVISED	JACKSON BROWN	30/03/2025
4. REVISED	JACKSON BROWN	30/03/2025
5. REVISED	JACKSON BROWN	30/03/2025
6. REVISED	JACKSON BROWN	30/03/2025
7. REVISED	JACKSON BROWN	30/03/2025
8. REVISED	JACKSON BROWN	30/03/2025
9. REVISED	JACKSON BROWN	30/03/2025
10. REVISED	JACKSON BROWN	30/03/2025

FOR APPROVAL
ONLY

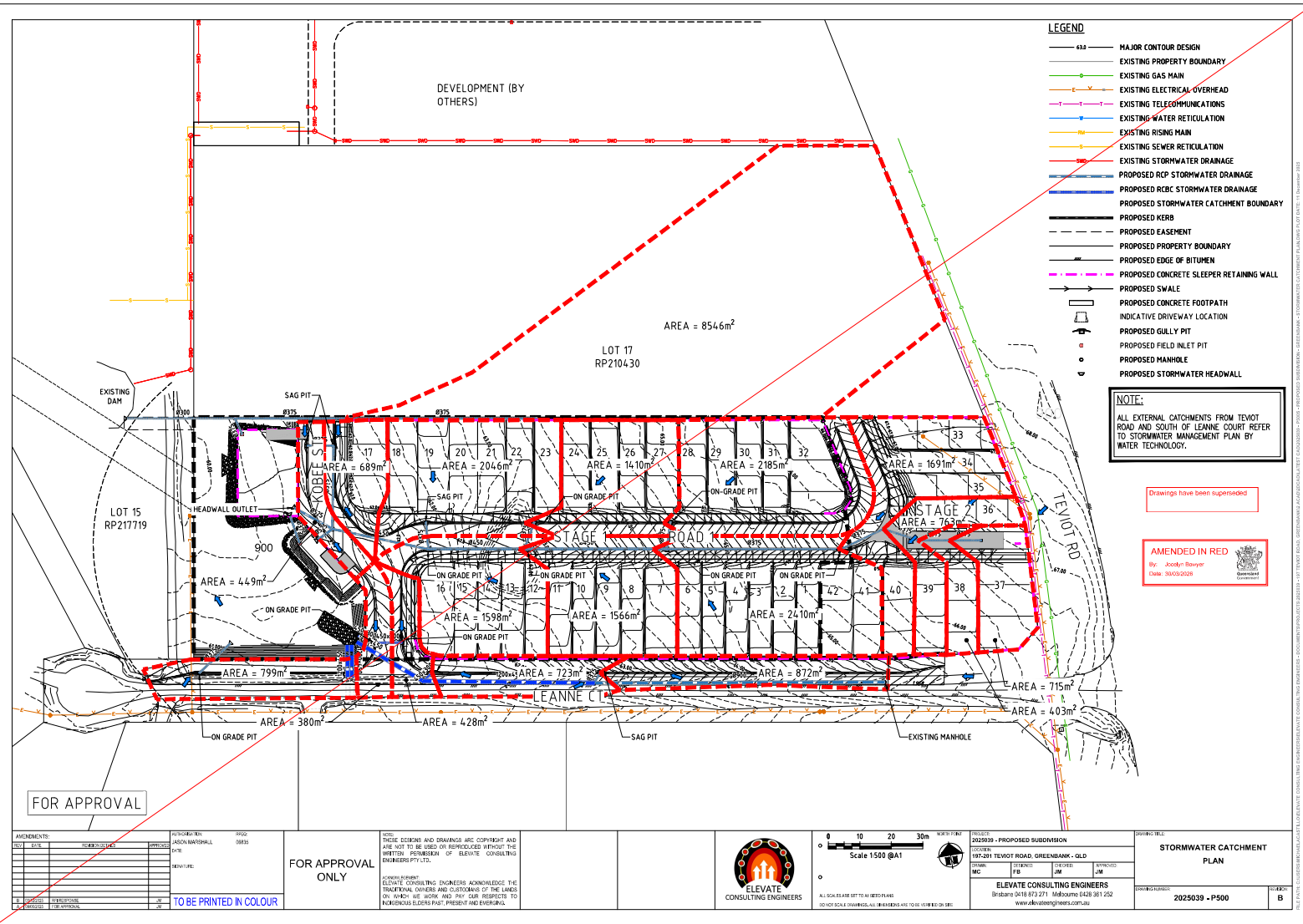
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PROJECT:	2025039 - PROPOSED SUBDIVISION
LOCATION:	197-201 TELVOT ROAD, GREENBANK - QLD
OWNER:	FB
DESIGNED BY:	JM
CHECKED BY:	JM
DATE:	30/03/2025
PROJECT NO:	2025039 - P402

DRAWING TITLE	
LONGITUDINAL SECTION	
SHEET 3 OF 3	
DRAWING NUMBER	
2025039 - P402	
REVISION	B



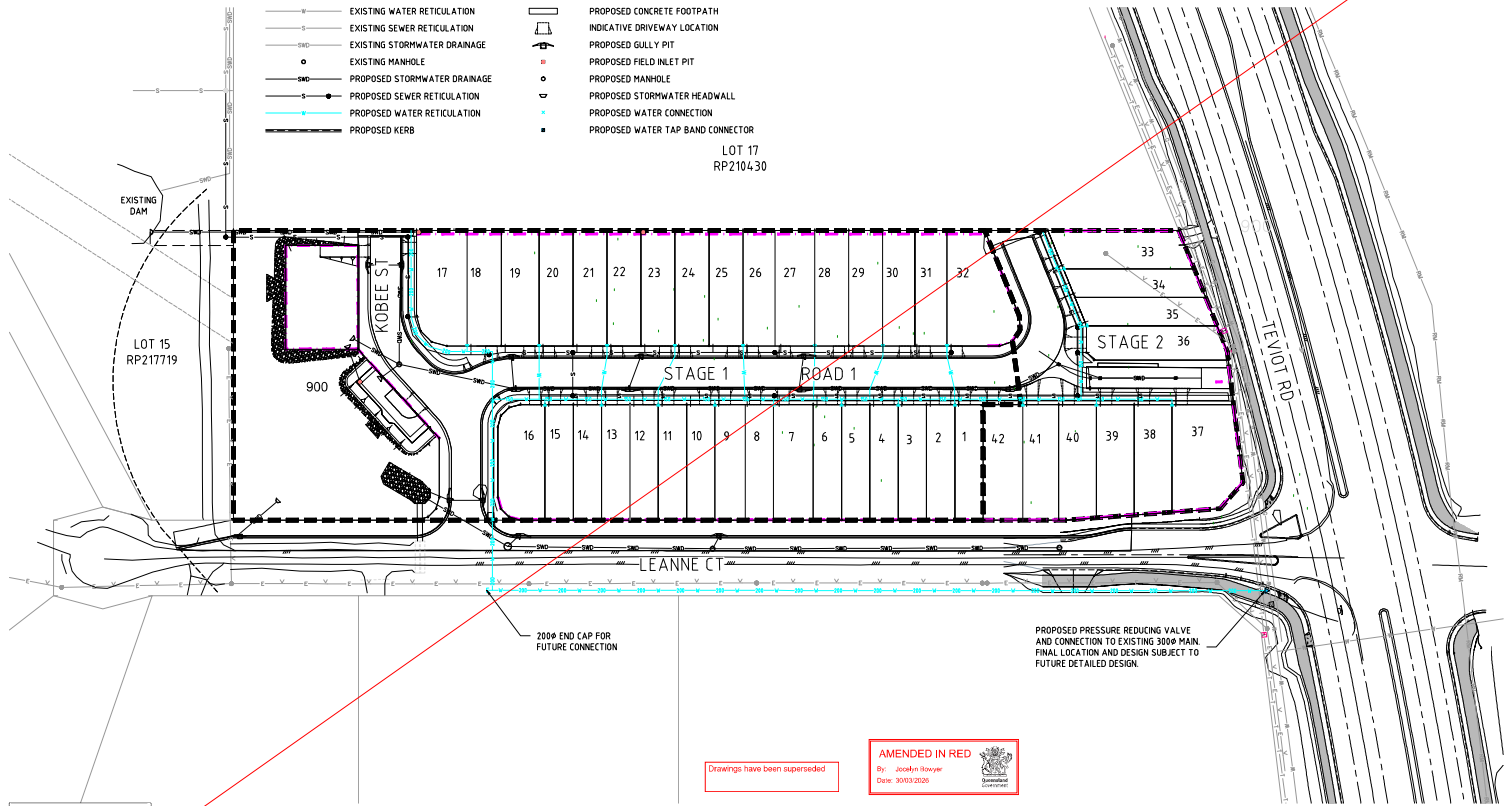
AMENDMENTS:		APPROVED:		DATE:		FOR APPROVAL ONLY		NOTES:		PROJECT:		DRAWING TITLE:	
NO.	DATE	DESCRIPTION	BY	DATE						2025039 - PROPOSED SUBDIVISION		STORMWATER CATCHMENT PLAN	
1	10/03/2028	INITIAL DESIGN	JASIN MARSHALL	08/03						197,291 TEVOT ROAD, GREENBANK - QLD			
2	10/03/2028	REVISION								OWNER: FB	DESIGNED: JM		
3	10/03/2028	REVISION								ELEVATE CONSULTING ENGINEERS	APPROVED: JM		
4	10/03/2028	REVISION								Brisbane 0418 872 271 Melbourne 0428 381 252			
5	10/03/2028	REVISION								www.elevate-engineers.com.au			
TO BE PRINTED IN COLOUR										DRAWING NUMBER: 2025039 - P500		REVISION: B	

LEGEND

- EXISTING PROPERTY BOUNDARY
- EXISTING GAS MAIN
- EXISTING ELECTRICAL OVERHEAD
- EXISTING TELECOMMUNICATIONS
- EXISTING RISING MAIN
- EXISTING WATER RETICULATION
- EXISTING SEWER RETICULATION
- EXISTING STORMWATER DRAINAGE
- EXISTING MANHOLE
- PROPOSED STORMWATER DRAINAGE
- PROPOSED SEWER RETICULATION
- PROPOSED WATER RETICULATION
- PROPOSED KERB

LEGEND

- PROPOSED EASEMENT
- PROPOSED PROPERTY BOUNDARY
- PROPOSED EDGE OF BITUMEN
- PROPOSED CONCRETE SLEEPER RETAINING WALL
- PROPOSED SWALE
- PROPOSED CONCRETE FOOTPATH
- INDICATIVE DRIVEWAY LOCATION
- PROPOSED GULLY PIT
- PROPOSED FIELD INLET PIT
- PROPOSED MANHOLE
- PROPOSED STORMWATER HEADWALL
- PROPOSED WATER CONNECTION
- PROPOSED WATER TAP BAND CONNECTOR



FOR APPROVAL

Drawings have been superseded

AMENDED IN RED
By: Joseph Sawyer
Date: 30/03/2020

LAYOUT PLAN
SCALE 1500

NO.	DATE	DESCRIPTION	BY	CHKD
1	20/03/2020	ISSUED FOR APPROVAL	J.S.	
2				
3				
4				
5				
6				
7				
8				
9				
10				

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PROJECT: 2020039 - PROPOSED SUBDIVISION			
LOCATION: 197-201 TEVOT ROAD, GREENBANK - QLD			
OWNER: MC	DESIGNED: TR	ENGINEER: J.S.	APPROVED: J.S.
ELEVATE CONSULTING ENGINEERS Brisbane 0418 872 271 Melbourne 0428 381 252 www.elevate-engineers.com.au			

DRAWING TITLE: WATER RETICULATION LAYOUT PLAN	
DRAWING NUMBER: 2025039 - P600	REVISION: B

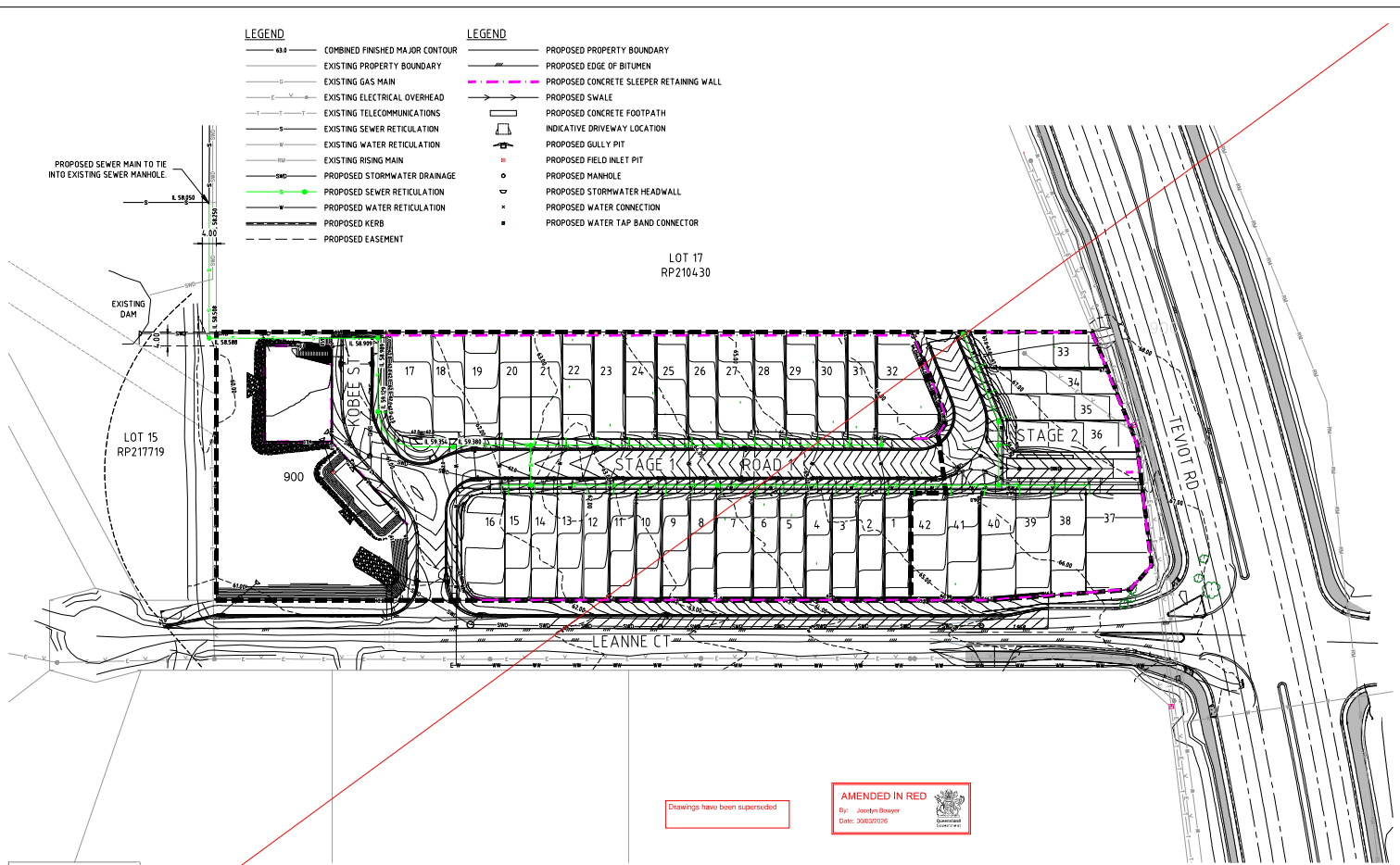
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LEGEND

- 63.0 COMBINED FINISHED MAJOR CONTOUR
- EXISTING PROPERTY BOUNDARY
- EXISTING GAS MAIN
- EXISTING ELECTRICAL OVERHEAD
- EXISTING TELECOMMUNICATIONS
- EXISTING SEWER RETICULATION
- EXISTING WATER RETICULATION
- EXISTING RISING MAIN
- PROPOSED STORMWATER DRAINAGE
- PROPOSED SEWER RETICULATION
- PROPOSED WATER RETICULATION
- PROPOSED KERB
- PROPOSED EASEMENT

LEGEND

- PROPOSED PROPERTY BOUNDARY
- PROPOSED EDGE OF BITUMEN
- PROPOSED CONCRETE SLEEPER RETAINING WALL
- PROPOSED SWALE
- PROPOSED CONCRETE FOOTPATH
- INDICATIVE DRIVEWAY LOCATION
- PROPOSED GULLY PIT
- PROPOSED FIELD INLET PIT
- PROPOSED MANHOLE
- PROPOSED STORMWATER HEADWALL
- PROPOSED WATER CONNECTION
- PROPOSED WATER TAP BAND CONNECTOR



LOT 17
RP210430

LOT 15
RP217719

900

STAGE 2

TEVOT RD

LEANNE CT

Drawings have been superseded

AMENDED IN RED
By: Jordan Rosser
Date: 30/03/2016



FOR APPROVAL

LAYOUT PLAN
SCALE 1500

NO.	DATE	DESCRIPTION	BY	CHECKED
1	01/04/2016	ISSUED FOR TENDERS	JR	MR
2	01/04/2016	REVISED FOR APPROVAL	JR	MR
3	01/04/2016	REVISED FOR APPROVAL	JR	MR
4	01/04/2016	REVISED FOR APPROVAL	JR	MR
5	01/04/2016	REVISED FOR APPROVAL	JR	MR
6	01/04/2016	REVISED FOR APPROVAL	JR	MR
7	01/04/2016	REVISED FOR APPROVAL	JR	MR
8	01/04/2016	REVISED FOR APPROVAL	JR	MR
9	01/04/2016	REVISED FOR APPROVAL	JR	MR
10	01/04/2016	REVISED FOR APPROVAL	JR	MR

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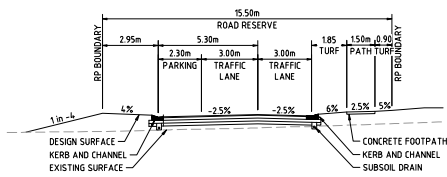
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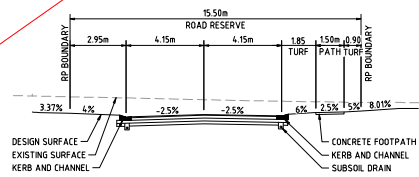
PROJECT: 2025039 - PROPOSED SUBMISSION			
LOCATION: 197-201 TEVOT ROAD, GREENBANK - QLD			
OWNER: MC	DESIGNED: JR	CHECKED: JR	APPROVED: JR
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DRAWING TITLE: SEWER RETICULATION LAYOUT PLAN	
DRAWING NUMBER: 2025039 - P700	REVISION: B

TO BE PRINTED IN COLOUR



F SECTION - KOBEE ST
SCALE 1:100 @ A1



G SECTION - ROAD 1
SCALE 1:100 @ A1

FOR APPROVAL

AMENDED IN RED
By: Joseph Drayer
Date: 20/03/2025

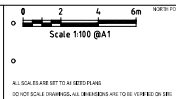
Drawings have been superseded

NO.	DATE	REVISION/DESCRIPTION	APPROVED
1	20/03/2025	AMENDED IN RED	J. DRAYER
2			
3			
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PROJECT:	2025039 - PROPOSED SUBDIVISION
LOCATION:	197-201 TELVOT ROAD, GREENBANK - QLD
OWNER:	MC
DESIGNER:	TR
DATE:	20/03/2025
REVISION:	AMENDED IN RED
DATE:	20/03/2025
DESIGNER:	J. DRAYER
DATE:	20/03/2025

DATE:	20/03/2025
DATE:	20/03/2025
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DATE:	20/03/2025
DATE:	20/03/2025
DATE:	20/03/2025
DATE:	20/03/2025

TYPICAL CROSS SECTIONS

2025039 - P800

B

14. APPENDIX C – LCC CODES

9.4.2 Filling and excavation code

9.4.2.1 Application

1. This code applies to:
 - a. material change of use:
 - i. that is accepted development (subject to requirements) or code assessable and for which the Filling and excavation code is identified in the 'assessment benchmarks for assessable development and requirements for accepted development' column in a table of assessment in section 5.5 - Categories of development and assessment - Material change of use in Part 5 - Tables of assessment;
 - ii. that is made impact assessment in a table of assessment in section 5.5 - Categories of development and assessment - Material change of use or section 5.9 - Categories of development and assessment - local plans in Part 5 - Tables of assessment;
 - b. reconfiguring a lot:
 - i. that is code assessable and for which the Filling and excavation code is identified in the 'assessment benchmarks for assessable development and requirements for accepted development' column in Table 5.6.1 - Reconfiguring a lot in Part 5 - Tables of assessment;
 - ii. that is impact assessable in Table 5.6.1 - Reconfiguring a lot in Part 5 - Tables of assessment;
 - c. operational work that is accepted development (subject to requirements) and code assessable operational work - filling or excavation for which the Filling and excavation code is identified in the 'assessment benchmarks for assessable development and requirements for accepted development' column in Table 5.8.1 - Operational work.
2. When using this code, reference should be made to section 5.3.2 - Determining the category of development and category of assessment and, where applicable, section 5.3.3 - Determining the 'assessment benchmarks for assessable development and requirements for accepted development' located in Part 5 - Tables of assessment.

9.4.2.2 Purpose

1. The purpose of the code is to protect premises, people and natural processes from adverse impacts associated with filling or excavation.
2. The purpose of the code will be achieved through the following overall outcomes:
 - a. development protects:
 - i. natural physical processes and ecosystems;
 - ii. existing and planned infrastructure;
 - iii. personal health and safety and premises;
 - iv. visual amenity.

9.4.2.3 Assessment benchmarks for assessable development and requirements for accepted development

Part A - Requirements for accepted development (subject to requirements) and assessment benchmarks for assessable development

Table 9.4.2.3.1 - Filling and excavation code: accepted development (subject to requirements) and assessable development

Performance outcomes	Acceptable outcomes	Comments
For accepted development (subject to requirements) and assessable development		
Protection of natural processes and ecosystems		
PO1 The discharge of sediments and pollutants from filling or excavation does not adversely affect a waterway or the stormwater network.	AO1 The discharge of sediments and pollutants to a waterway or stormwater network complies with part 3.3 - Filling and excavation standards in Planning scheme policy 5 - Infrastructure.	Complies The development will have appropriate Erosion and Sediment Control management designed and constructed and maintained to ensure it complies with Council's Planning Scheme Policy 5. This will be detailed within future preconstruction applications lodged with EDQ for acknowledgment. This application will include a Erosion and Sediment Hazard assessment (ESHA).
PO2 Topsoil and spoil stockpiled on the premises do not adversely affect natural processes and ecosystems.	AO2 Topsoil and spoil is stockpiled to comply with part 3.3 - Filling and excavation standards in Planning scheme policy 5 - Infrastructure.	Complies The site will be stripped of topsoil and stockpiled in selected areas around the site and protected from erosion and sediment control before being reused on the site after finalizing earthworks.

		This will be detailed within future preconstruction applications lodged with EDQ for acknowledgement.
PO3 Filling is carried out using stable, solid and clean earth, free of organic and putrescible waste, rubbish and refuse material.	AO3 Filling complies with part 3.3 - Filling and excavation standards in Planning scheme policy 5 - Infrastructure.	Complies All filling carried out on the site will use solid and clean earth. The majority of fill will be imported. All filling on the site will be undertaken under Level 1 Geotechnical supervision to ensure it complies with Council's Planning Scheme Policy 5.
Protection of existing and planned infrastructure		
PO4 Filling or excavation works do not adversely affect infrastructure, including any services.	AO4 Filling or excavation works comply with part 3.3 - Filling and excavation standards in Planning scheme policy 5 - Infrastructure.	Complies All filling or excavation undertaken on the site will be completed such that it does not adversely affect infrastructure or services in accordance with Planning Scheme Policy 5.
Protection and enhancement of personal health and safety and premises		
PO5 Filling or excavation works do not adversely affect personal health and safety.	AO5 Filling or excavation works comply with part 3.3 - Filling and excavation standards in Planning scheme policy 5 - Infrastructure.	Complies All filling or excavation undertaken on the site will be completed safely and in accordance with WH&S requirements managed by the Principal Contractor selected for the site.
Surface water flow		
PO6 Surface water drainage does not cause any of the following: a. ponding on any premises; or b. a hazard or adversely affect personal health and safety and premises; or	AO6 Surface water drainage complies with part 3.3 - Filling or excavation standards in Planning scheme policy 5 - Infrastructure.	Complies The drainage design proposed for the site ensures lots and roads are free draining. The stormwater is proposed to be directed to the proposed bio retention basin. Refer preliminary Roadworks and Drainage Plans in Appendix B for further details.

c. diversion or concentration of flow from or onto adjoining premises or infrastructure.		
Batters		
PO7 A batter: a. does not adversely affect the natural physical processes and ecosystems; b. protects existing and planned infrastructure; c. is safe, stable and easily maintained; d. is landscaped to enhance visual amenity.	AO7 A batter is designed and constructed to comply with the standards specified in 3.3.6 - Batters and retaining walls in Planning scheme policy 5 - Infrastructure.	Complies Batters will be designed and constructed in accordance with Planning Scheme Policy 5. This will be detailed within future preconstruction applications lodged with EDQ for acknowledgement.
Retaining walls		
PO8 A retaining wall: a. is not constructed of timber and is not located on existing or proposed lot boundaries, or movement networks; b. does not adversely affect the natural physical processes and ecosystems; c. is located to avoid conflict with adjoining premises; d. is located such that existing and planned infrastructure is not adversely affected; e. protects the visual amenity of adjoining premises or a public open space; f. is located within the premises that is being filled; g. is located within the premises that is cut and is designed to take any surcharge loading allowable on the uphill lot; h. is safe and stable;	AO8 A retaining wall is designed and constructed to comply with the standards specified in section 3.3.6.2 - Retaining walls in Planning scheme policy 5 - Infrastructure.	Retaining Walls proposed for the site will be concrete sleeper and designed and constructed in accordance with Planning Scheme Policy 5. Refer preliminary Earthworks Plans in Appendix B for further details.

i. enables easy access for maintenance.		
Filling of a dam		
PO9 The filling of a dam: a. does not adversely affect the natural physical processes and ecosystems; b. creates a safe and stable surface; c. is integrated into the landscape.	AO9 The filling of a dam complies with part 3.3 - Filling and excavation standards in Planning scheme policy 5 - Infrastructure.	N/A Filling of the existing dam on site will be undertaken in accordance with Planning Scheme Policy No.5. It will be detailed in accordance with future preconstruction application to EDQ for acknowledgement.

9.4.3 Infrastructure code

9.4.3.1 Application

1. This code applies to:
 - a. material change of use:
 - i. that is accepted development (subject to requirements) or code assessable and for which the Infrastructure code is identified in the 'assessment benchmarks for assessable development and requirements for accepted development' column in a table of assessment in section 5.5 - Categories of development and assessment - Material change of use in Part 5 - Tables of assessment;
 - ii. that is made impact assessment in a table of assessment in section 5.5 - Categories of development and assessment - Material change of use or section 5.9 - Categories of development and assessment - Local plans in Part 5 - Tables of assessment;
 - b. reconfiguring a lot:
 - i. that is code assessable and for which the Infrastructure code is identified in the 'assessment benchmarks for assessable development and requirements for accepted development' column in Table 5.6.1 - Reconfiguring a lot in Part 5 - Tables of assessment;
 - ii. made impact assessment in Table 5.6.1 - Reconfiguring a lot in Part 5 - Tables of assessment;
 - c. operational work that is infrastructure work:
 - i. that is accepted development (subject to requirements) or code assessable and for which the Infrastructure code is identified in the 'assessment benchmarks for assessable development and requirements for accepted development' column Table 5.8.1 - Operational work in Part 5 - Tables of assessment.
2. When using this code, reference should be made to section 5.3.2 - Determining the category of development and category of assessment and, where applicable, section 5.3.3 - Determining the 'assessment benchmarks for assessable development and requirements for accepted development' located in Part 5 - Tables of assessment.

9.4.3.2 Purpose

1. The purpose of the code is to ensure that infrastructure is provided to service development.
2. The purpose of the code will be achieved through the following overall outcomes:
 - a. development protects the existing infrastructure and planned infrastructure networks being the:
 - i. movement network;
 - ii. park network;
 - iii. water network;

- iv. sewerage network;
- v. stormwater network;
- vi. other networks including electricity, gas and telecommunications;
- vii. land for community facilities network;
- b. development other than operational work provides infrastructure that is necessary to service the development, including elements of:
 - i. a safe, efficient and legible road network;
 - ii. a safe, efficient and legible public transport network;
 - iii. a safe, efficient and legible cycle network;
 - iv. a safe, efficient and legible pedestrian network;
 - v. a safe, efficient and legible parks network;
 - vi. a safe and efficient water network;
 - vii. a safe and efficient sewerage network;
 - viii. a safe and efficient stormwater network;
 - ix. safe and efficient other networks including electricity, gas and telecommunications;
 - x. a safe and efficient road lighting network;
 - xi. land for a community facilities network;
- c. development integrates with existing and planned infrastructure networks;
- d. infrastructure is designed and constructed to deliver a standard of service that is efficient and equitable;
- e. the cost to the community for the life of the infrastructure is minimised by providing for a suitable design life, ease of maintenance and ease of replacement;
- f. development appropriately manages refuse and recycling storage and collection;
- g. infrastructure protects personal health and safety and premises;
- h. infrastructure protects environmental values.

9.4.3.3 Assessment benchmarks for assessable development and requirements for accepted development

Part A - Requirements for accepted development (subject to requirements) and assessment benchmarks for assessable development

Table 9.4.3.3.1 - Infrastructure code: accepted development (subject to requirements) and assessable development

Performance outcomes	Acceptable outcomes	Comments
----------------------	---------------------	----------

For accepted development (subject to requirements) and assessable development		
Provision, design, construction and location of infrastructure		
PO1 Development is demonstrated to be capable of being serviced by necessary infrastructure.	AO1 Reports, plans and drawings are provided in accordance with part 2 of Planning scheme policy 5 - Infrastructure.	Complies An Engineering Services Report and Preliminary Engineering Plans have been completed by Elevate Consulting Engineers and demonstrate the development can be serviced by the necessary infrastructure.
PO2 Development: a. provides necessary infrastructure to service the development; b. provides that the design, construction and location of necessary infrastructure: i. protects existing and planned infrastructure networks; ii. services proposed development; iii. integrates with existing and planned infrastructure networks; iv. delivers a standard of service that is efficient and equitable; v. minimises the cost to the community for the life of the infrastructure by providing a suitable design life, ease of maintenance and ease of replacement; vi. protects personal health, safety and premises; vii. protects environmental values.	AO2 Development: a. in a water supply service area connects to the water network in accordance with the SEQ Water Supply and Sewerage Design and Construction Code; b. not in a water supply service area provides a tank with a minimum storage capacity of 45,000 litres; c. in a sewerage supply service area connects to the waste water network in accordance with the SEQ Water Supply and Sewerage Design and Construction Code; d. not in a sewerage supply service area complies with part 1 of the Queensland Plumbing and Wastewater Code; e. provides stormwater infrastructure in accordance with part 3.6 of Planning scheme policy 5 - Infrastructure; f. provides a movement network infrastructure in accordance with part 3.4 of Planning scheme policy 5 - Infrastructure;	Complies An Engineering Services Report and Preliminary Engineering Plans have been completed by Elevate Consulting Engineers and demonstrate the development can be serviced by the necessary infrastructure. In particular; a. Water servicing the lots can be connected to the existing water network located in Teviot Road. b. – c. Sewer servicing the lots can be connected to the existing sewer network located in Lot 15 on RP217719. d. – e. Stormwater infrastructure will be provided in accordance with Planning Scheme Policy 5. f. A Movement network is provided in accordance with Planning Scheme Policy 5. g. N/A Parks not provided. h. Road lighting will be provided in accordance with Planning Scheme Policy 5. The design of the lighting will

	g. provides parks in accordance with part 3.12 of Planning scheme policy 5 - Infrastructure; h. provides road lighting in accordance with part 3.5 of Planning scheme policy 5 - Infrastructure; i. provides electricity reticulation in accordance with part 3.8 of Planning scheme policy 5 - Infrastructure; j. provides gas and telecommunications reticulation in accordance with part 3.9 of Planning scheme policy 5 - Infrastructure. k. is consistent with the general planning layouts in part 7.2 of Planning scheme policy 5 - Infrastructure. Editor's note - The delivery of any part of a network identified in the plans for trunk infrastructure is governed by Part 4 - Local government infrastructure plan.	be by an Energex approved Electrical Consultant. i. Same as h. j. Same as h. k. Complies
Location of development		
PO3 Development is located to protect trunk infrastructure networks.	AO3 Development is located outside a network identified in Local government infrastructure plan map LGIP-03.00 to 08.00 Plans for trunk infrastructure in Schedule 3 - Local government infrastructure plan mapping and tables.	N/A No Trunk Infrastructure planned within site.
Fire fighting		
PO4 Development in a water service area accessed by common private title provides: a. fire hydrant infrastructure; b. unimpeded access for emergency services vehicles.	AO4 Development in a water service area involving a material change of use or reconfiguring a lot where, or to be, accessed by common private title ensures that fire hydrant placement and technical	N/A The development does not propose any common private titles.

Editor's note - The term common private title refers to areas such as access roads in community title developments or strata title unit access, which are private and under group or body corporate control.	requirements for streets and access ways are in accordance with: a. Australian Standard (AS) 2419.1 - 2005 <i>Fire hydrant installations</i>; b. QFES: <i>Fire Hydrant and vehicle access guidelines for residential, commercial and industrial lots</i>.	
PO5 Development not in a water service area provides sufficient water storage with adequate pressure, volume and flow to service development for fire fighting purposes.	AO5 Development: a. is connected to a reticulated water supply scheme that has sufficient flow and pressure characteristics for fire fighting purposes at all times with a minimum pressure and flow of 10 litres per second at 200kPa; or b. has on-site water storage in accordance with Table 9.4.3.3.2 - Water storage for fire fighting, dedicated or retained for fire fighting purposes that is made of fire resistant materials and is: i. a separate tank; or ii. a reserve section in the bottom part of the main water supply tankwater tank. Editor's note - The requirement in AO5 is: - in addition to the requirement for potable water supply/storage in AO2 in Table 9.4.3.3.1 - Infrastructure code: accepted development (subject to requirements) and assessable development; - reflected in AO5 in Table 8.2.3.3.1 - Bushfire hazard overlay code: accepted development (subject to requirements) and assessable development.	Complies The development will be connected to a reticulated water supply network which shall be designed to provide adequate levels of service for firefighting and property service demands.
Waste management		
PO6	AO6.1	Complies

Development provides refuse and recycling collection and storage facilities that are located and managed so that adverse impacts on building occupants, neighbouring properties and the public realm are minimised.	Development provides refuse and recycling collection and storage facilities in accordance with Planning scheme policy 9 - Waste management. AO6.2 Development ensures that the location and design of refuse and recycling collection and storage facilities does not have any adverse impact including odour, noise or visual impacts on the amenity of land uses within or adjoining the development. Note - Planning scheme policy 9 - Waste management provides guidance on how to achieve this outcome.	It is proposed refuse and recycling collection will be undertaken by Council's Contractor from each rate paying dwelling.
Disposal of trade waste		
PO7 The disposal of trade waste in a sewerage supply service area does not adversely affect the sewerage network.	AO7 The disposal of trade waste in a sewerage supply service area complies with the sewer admission standards in section 3.2.6 - Sewer admission standards in Planning scheme policy 3 - Environmental management.	N/A Trade waste is not proposed on this site.
Roof water drainage and surface water drainage		
PO8 Development provides stormwater infrastructure for the drainage of the premises so as not to cause any of the following: a. ponding of stormwater on the premises; b. a hazard to personal health and safety; c. damage to premises; d. an increased risk of flooding to premises within the catchment.	AO8 Development complies with the standards for stormwater infrastructure specified in part 3.6 of Planning scheme policy 5 - Infrastructure.	Complies The drainage design proposed for the site ensures lots and roads are free draining. The stormwater is proposed to be directed to a proposed bio retention basin. Refer preliminary Roadworks and Drainage Plans in Appendix B for further details.

Natural flow of surface water		
PO9 Development provides that the natural flow of surface water is: a. not altered so as to cause a risk to personal health and safety or damage to property; b. not increased in intensity, velocity or frequency; c. not concentrated onto adjoining premises.	AO9 Development complies with the standards for stormwater infrastructure specified in part 3.6 of Planning scheme policy 5 - Infrastructure.	Complies The development does not propose to significantly disturb the natural flow of surface water. The drainage design proposed for the site ensures lots and roads are free draining. The stormwater is proposed to be directed to a proposed bio retention basin. Refer preliminary Roadworks and Drainage Plans in Appendix B for further details.
Water sensitive urban design		
PO10 Development which provides stormwater infrastructure incorporates water sensitive urban design principles having regard to: a. protecting existing natural features and ecological processes; b. protecting the natural hydrologic behaviour of catchments; c. protecting the existing natural flow and water quality regimes of waterways; d. protecting water quality of surface and ground waters; e. minimising demand on the water network; f. minimising sewage discharges to the natural environment; g. integrating water into the landscape to enhance visual and ecological values.	AO10 Development complies with the standards for stormwater infrastructure specified in part 3.6 of Planning scheme policy 5 - Infrastructure.	Complies A bioretention basin will provide stormwater quality management for the site.
Movement network		

PO11 The projected traffic levels for a use do not adversely affect the planned standards of service for a road or intersection.	AO11 Development does not cause or contribute to projected traffic levels: a. exceeding the maximum vehicle trips per day in Table 3.4.1.4.2 in Planning scheme policy 5 - Infrastructure; or b. exceeding the maximum control delays through intersections in peak periods in Table 3.4.1.4.3 in Planning scheme policy 5 - Infrastructure.	Complies Leanne court is a cul-de-sac ending road and this development is adding an additional 42 lots to traffic levels for the new intersection connecting with Leanne Court. New road types match the development undertaken to properties to the north.
Integrated movement concept report		
PO12 Development which generates more than 3,000 vehicle trips per average weekday is designed to integrate the movement network to minimise the transportation costs required to service the use.	AO12 Development which generates more than 3,000 vehicle trips per average weekday provides an integrated movement concept report which integrates the planning of the movement network in accordance with part 2 and 3 of Planning scheme policy 5 - Infrastructure.	Complies The proposed development will incorporate a road network which is designed and constructed in accordance with Council and EDQ guidelines. The road network will be designed to facilitate efficient, safe and accessible travel routes to support pedestrian and vehicle movements.
For assessable development only		
Land use and transport integration		
PO13 Development within 400 metres of existing or future public passenger transport facilities where the total site area is 5,000m² or more: a. supports a road hierarchy which facilitates efficient, safe and accessible bus services connecting to existing and future public passenger transport facilities;	AO13 No acceptable outcome provided.	N/A

b. enhances connectivity between existing and future public passenger transport facilities and other transport modes; c. optimises the walkable catchment to existing and future public passenger transport facilities; d. provides for direct and safe access to and use of existing or future public passenger transport facilities. Note - SPP code: Land use and transport integration in Appendix 4 of the state planning policy provides guidance to achieve this outcome.		
--	--	--

Table 9.4.3.3.2 - Water storage for fire fighting

Column 1 Lot size / use type	Column 2 Water requirement
For each residential lot:	
a. less than 1,000m ²	5,000 litres
b. between 1,000m ² and less than 1 hectare	10,000 litres
c. greater than 1 hectare	20,000 litres
Multiple dwelling	5,000 litres per dwelling up to a maximum of 20,000 litres
A use other than Multiple dwelling	5,000 litres or the prevailing rural fire brigade standard

15. APPENDIX D – EXISTING PLANS - DBYD

Contact Details

Contact	Contact number	Company	Enquirer ID
Tyler Radics	0488 262 325	Elevate Consulting Engineers	3622220
Email		Address	
tyler.radics@elevateengineers.com.au		Level 3 240 Queen Street Brisbane City QLD 4000	

Job Site and Enquiry Details

WARNING: The map below only displays the location of the proposed job site and does not display any asset owners' pipe or cables. The area highlighted has been used only to identify the participating asset owners, who will send information to you directly.

Enquiry date	Start date	End date	On behalf of	Job purpose	Locations	Onsite activities
01/05/2025	01/05/2025	01/05/2025	Private	Design	Both Road, Nature Strip, Footpath	Planning & Design



Check that the location of the job site is correct. If not, you must submit a new enquiry.

If the scope of works change or plan validity dates expire, you must submit a new enquiry.

Do NOT dig without plans. Safe excavation is your responsibility. If you don't understand the plans or how to proceed safely, please contact the relevant asset owners.

User Reference	Address	Notes/description
197 Teviot Road, Greenbank, QLD, 4124	201 Teviot Road Greenbank QLD 4124	-

Your Responsibility and Duty of Care

- Lodging an enquiry does not authorise project commencement.** Before starting work, you must obtain all necessary information from all affected asset owners.
- If you don't receive plans within 2 business days, contact the asset owner & quote their sequence number.
- Always follow the 5Ps of Safe Excavation (page 2), and locate assets before commencing work.
- Ensure you comply with State legislative requirements for Duty of Care and safe digging.
- If you damage an underground asset, you MUST advise the asset owner immediately.
- By using the BYDA service, you agree to the [Privacy Policy](#) and [Term of Use](#).
- For more information on safe digging practices, visit www.byda.com.au

Asset Owner Details

Below is a list of asset owners with underground infrastructure in and around your job site. It is your responsibility to identify the presence of these assets. Plans issued by Members are indicative only unless specified otherwise. Note: not all asset owners are registered with BYDA. You must contact asset owners not listed here directly.

Referral ID (Seq. no)	Authority Name	Phone	Status
254362975	APA Group Gas Networks (90073)	1800 085 628	NOTIFIED
254362976	Energex QLD	13 12 53	NOTIFIED
254362974	Logan City Council	(07) 3412 3412	NOTIFIED
254362978	National Fire Ant Eradication Program	-	NOTIFIED
254362972	NBN Co Qld	1800 687 626	NOTIFIED
254362973	Optus and or Uecomm Qld	1800 505 777	NOTIFIED
254362977	Telstra QLD FA	1800 653 935	NOTIFIED

END OF UTILITIES LIST



Plan

Plan your job. Use the BYDA service at least one day before your job is due to begin, and ensure you have the correct plans and information required to carry out a safe project.



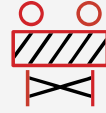
Prepare

Prepare by communicating with asset owners if you need assistance. Look for clues onsite. Engage a skilled Locator.



Pothole

Potholing is physically sighting the asset by hand digging or hydro vacuum extraction.



Protect

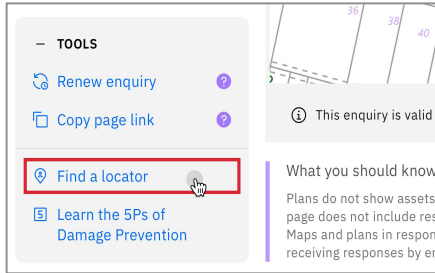
Protecting and supporting the exposed infrastructure is the responsibility of the excavator. Always erect safety barriers in areas of risk and enforce exclusion zones.



Proceed

Only proceed with your excavation work after planning, preparing, potholing (unless prohibited), and having protective measures in place.

Engage a skilled Locator



When you lodge an enquiry you will see skilled Locators to contact

Visit the Certified Locator website directly and search for a locator near you

certloc.com.au/locators

Get FREE Quotes for Contractors & Equipment Fast



GET QUOTE

Use isseekplant's FREE marketplace to get quotes for the equipment or services you need on your project. Compare quotes from trusted local contractors and get your project done on time and in budget.

1. Fill out your job details in our FREE quick quote form.
2. We send the request to trusted local contractors.
3. The local contractors will contact you directly with quotes

Use isseekplant to find trusted contractors near you today, visit:
blog.iseekplant.com.au/byda-isp-get-quotes

Book a FREE BYDA Session



BOOK NOW

BYDA offers free training sessions to suit you and your organisation's needs covering safe work practices when working near essential infrastructure assets. The free sessions are offered in two different formats - online and face-to-face.

To book a session, visit:
byda.com.au/contact/education-awareness-enquiry-form

To:

Phone:

Fax:

Email:

Tyler Radics

Not Supplied

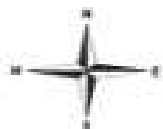
Not Supplied

tyler.radics@elevateengineers.com.au

Dial before you dig Job #:	50075691	
Sequence #	254362972	
Issue Date:	30/04/2025	
Location:	201 Teviot Road , Greenbank , QLD , 4124	

Indicative Plans are tiled below to demonstrate how to layout and read nbn asset plans

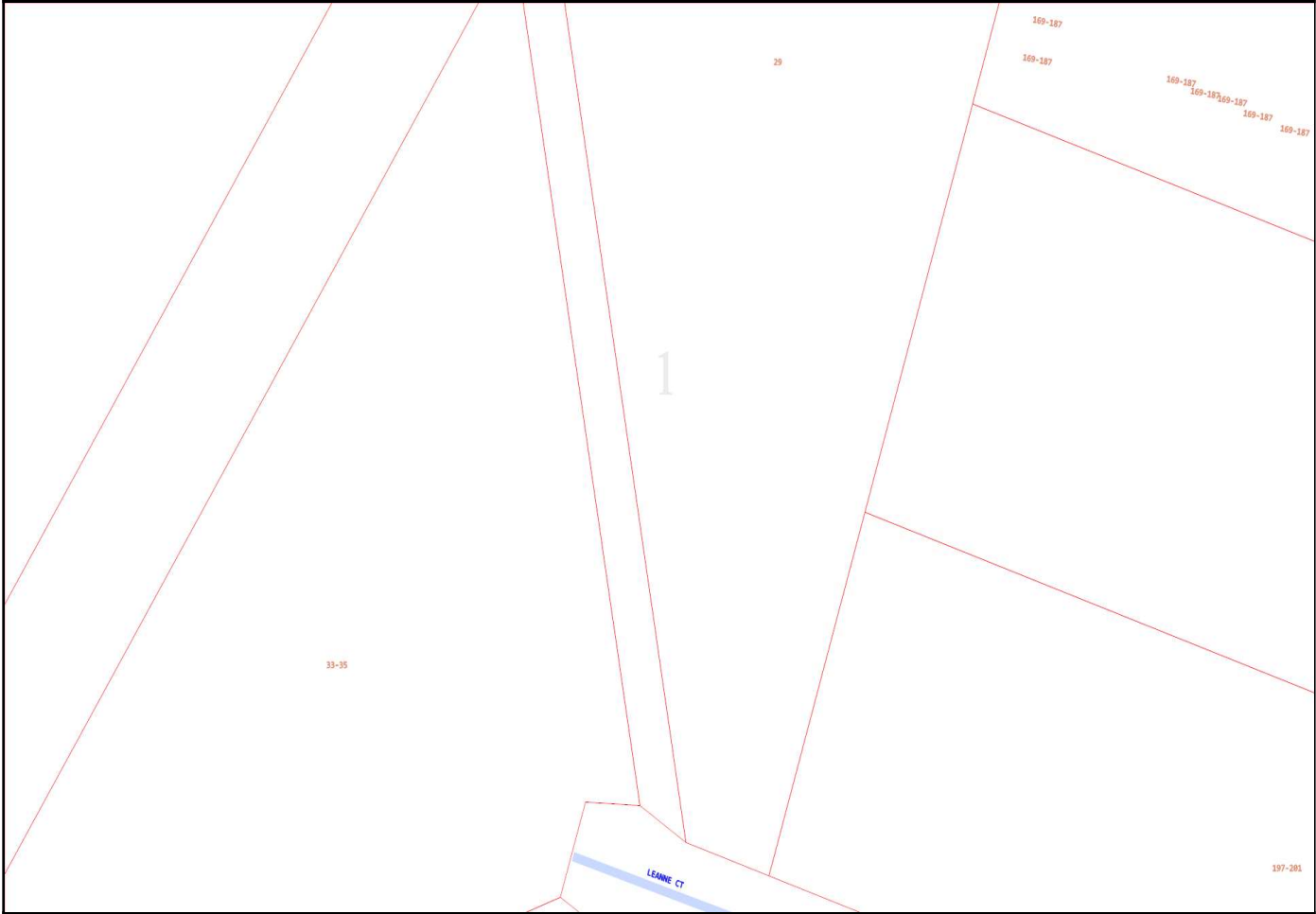
1	3
2	4

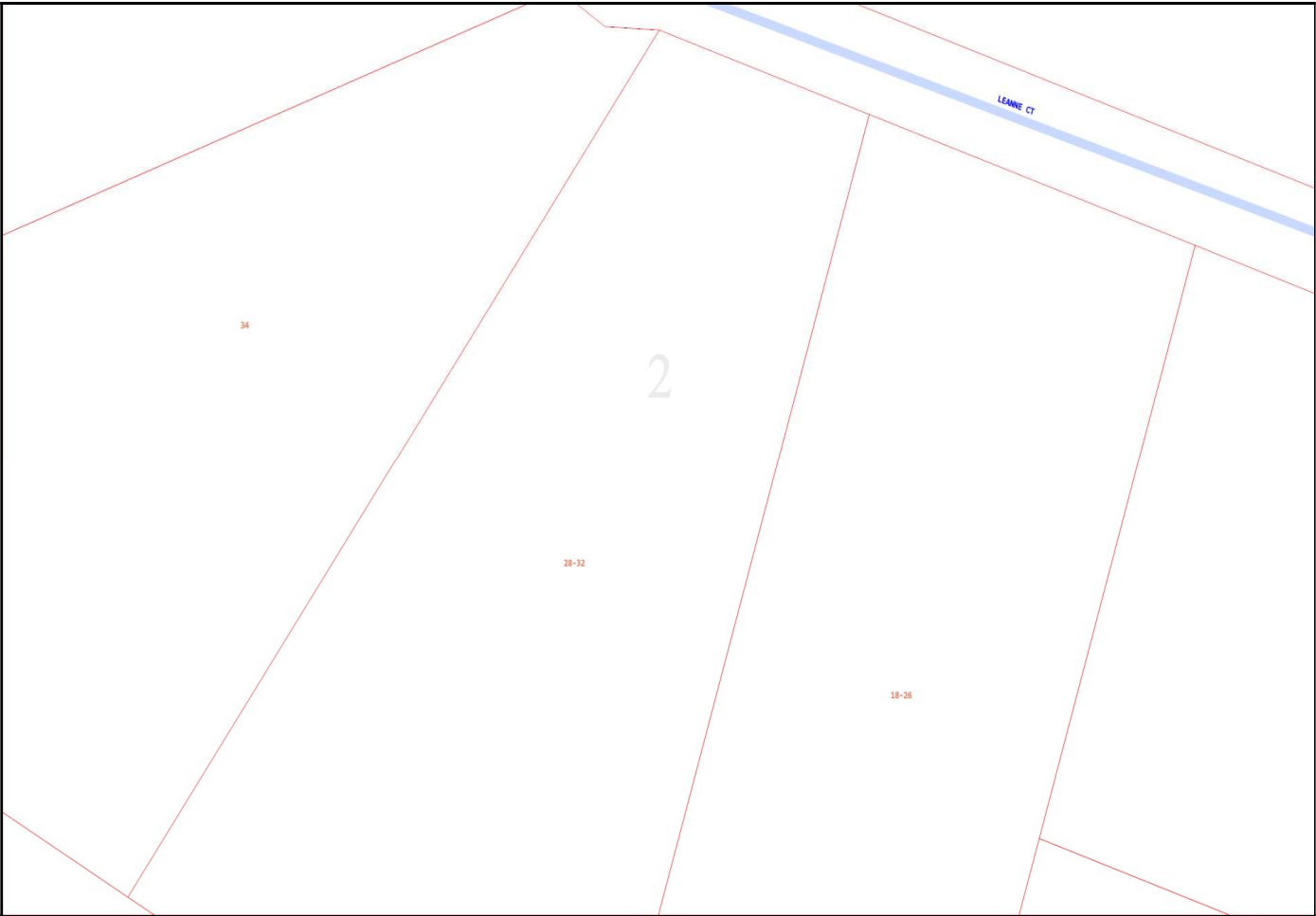


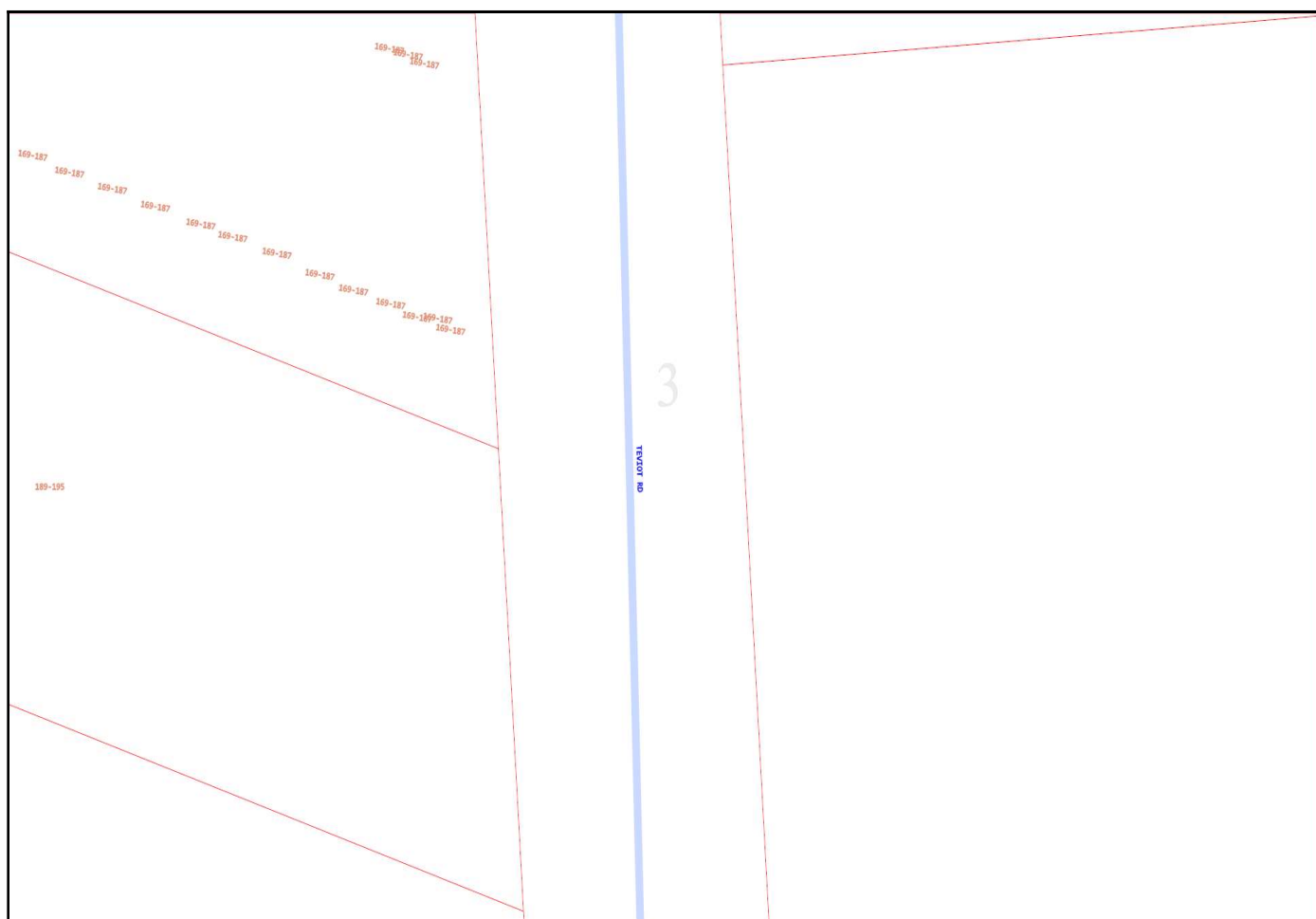
LEGEND

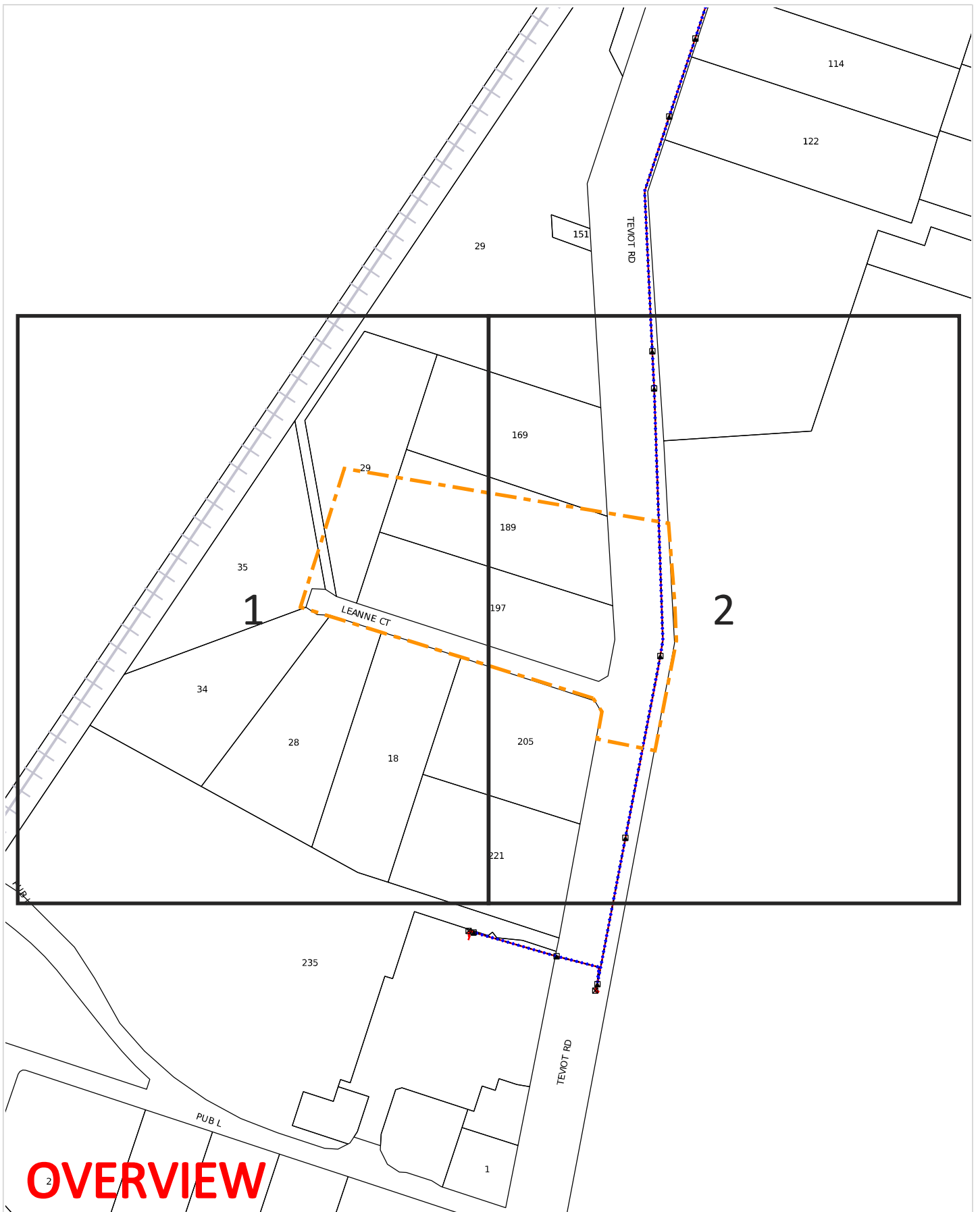


	Parcel and the location
	Pit with size "5"
	Power Pit with size "2E". Valid PIT Size: e.g. 2E, 5E, 6E, 8E, 9E, E, null.
	Manhole
	Pillar
	Cable count of trench is 2. One "Other size" PVC conduit (PO) owned by Telstra (-T-), between pits of sizes, "5" and "9" are 25.0m apart. One 40mm PVC conduit (P40) owned by NBN, between pits of sizes, "5" and "9" are 20.0m apart.
	2 Direct buried cables between pits of sizes, "5" and "9" are 10.0m apart.
	Trench containing any INSERVICE/CONSTRUCTED (Copper/RF/Fibre) cables.
	Trench containing only DESIGNED/PLANNED (Copper/RF/Fibre/Power) cables.
	Trench containing any INSERVICE/CONSTRUCTED (Power) cables.
	Road and the street name "Broadway ST"
Scale	0 20 40 60 Meters 1:2000 1 cm equals 20 m









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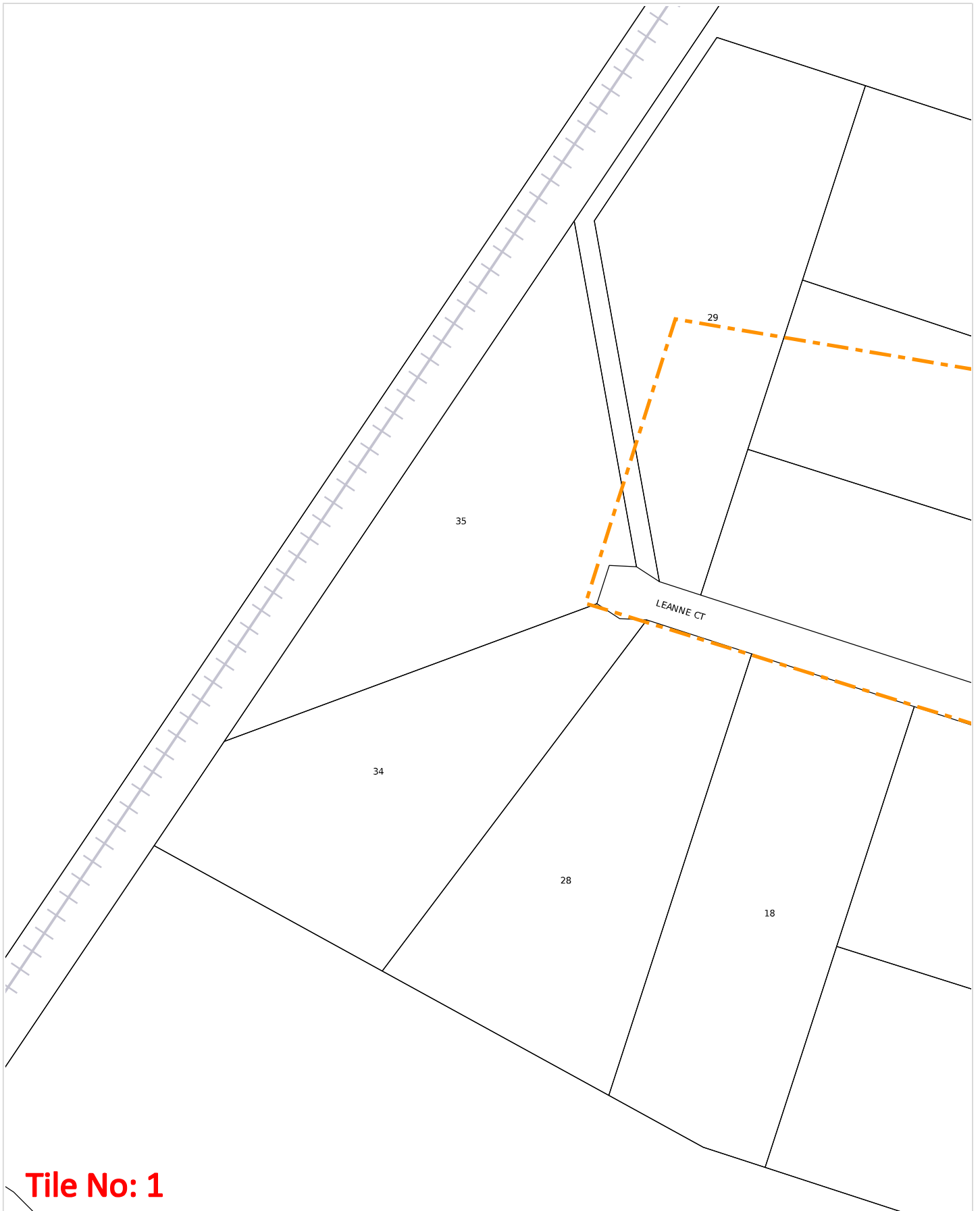
Sequence Number: 254362973

Date Generated: 01 May 2025



For all Optus DBYD plan enquiries –
Email: Fibre.Locations@optus.net.au
For urgent onsite assistance contact 1800 505 777
Optus Limited ACN 052 833 208





Tile No: 1

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Sequence Number: 254362973

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For urgent onsite assistance contact 1800 505 777
Optus Limited ACN 052 833 208



Before You Dig Australia (BYDA)

Asset Location Response



PO Box 3226 Logan City DC QLD 4114 • 150 Wembley Road, Logan Central
p (07) 3412 3412 • e council@logan.qld.gov.au • www.logan.qld.gov.au • ABN 21-627-796 435



Elevate Consulting Engineers - Tyler Radics
Level 3 240 Queen Street
Brisbane City QLD 4000
tyler.radics@elevateengineers.com.au

Logan City Council has been advised that you have placed an enquiry through the Before You Dig Australia service. Our records indicate the enquiry with the following details are affecting Logan City Council asset(s).

Enquiry Details	
Sequence Number	254362974
Enquiry Date	01/05/2025 08:59
Response	AFFECTED
Address	201 Teviot Road Greenbank
Location in Road	Road,Nature Strip,Footpath
Activity	Planning and Design

Please review plans attached and contact Logan City Council prior to commencing works:

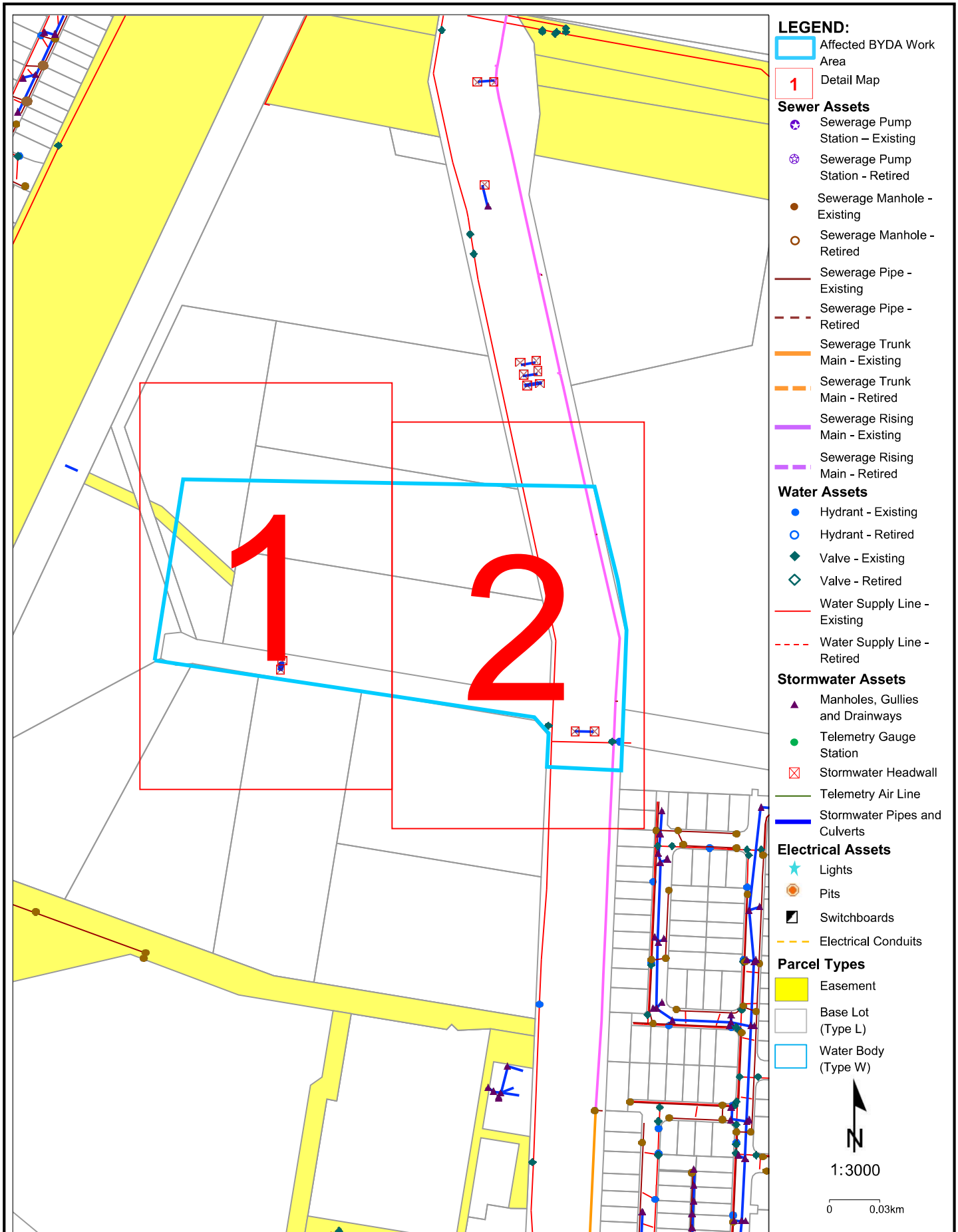
Logan City Council now provides a limited amount of As-Constructed and Drainage Plans on-line, click on the [Logan City As-Constructed Plans](#) link and type in the property address you are seeking. Unfortunately, not all properties will have plan records accessible on-line. The following options are available to customers should a record not be available:

- For **As Constructed Private Sewer/Roofwater (Inside Properties)**
Contact *Development Assessment, Building & Plumbing*
p: (07) 3412 5269
Alternatively visit our Website *Link to the relevant PS1 or PS2 forms:*
[Logan City As-Constructed Plans](#)
- For **As Constructed Private Sewer/Water/Stormwater (Outside Properties)**
Contact *Road Infrastructure Planning*
p: (07) 3412 5282
Alternatively visit our Website *Link for PS3 forms:*
[Logan City As-Constructed Plans](#)

If you need more assistance please call us on 07 3412 3412 or email us at council@logan.qld.gov.au.

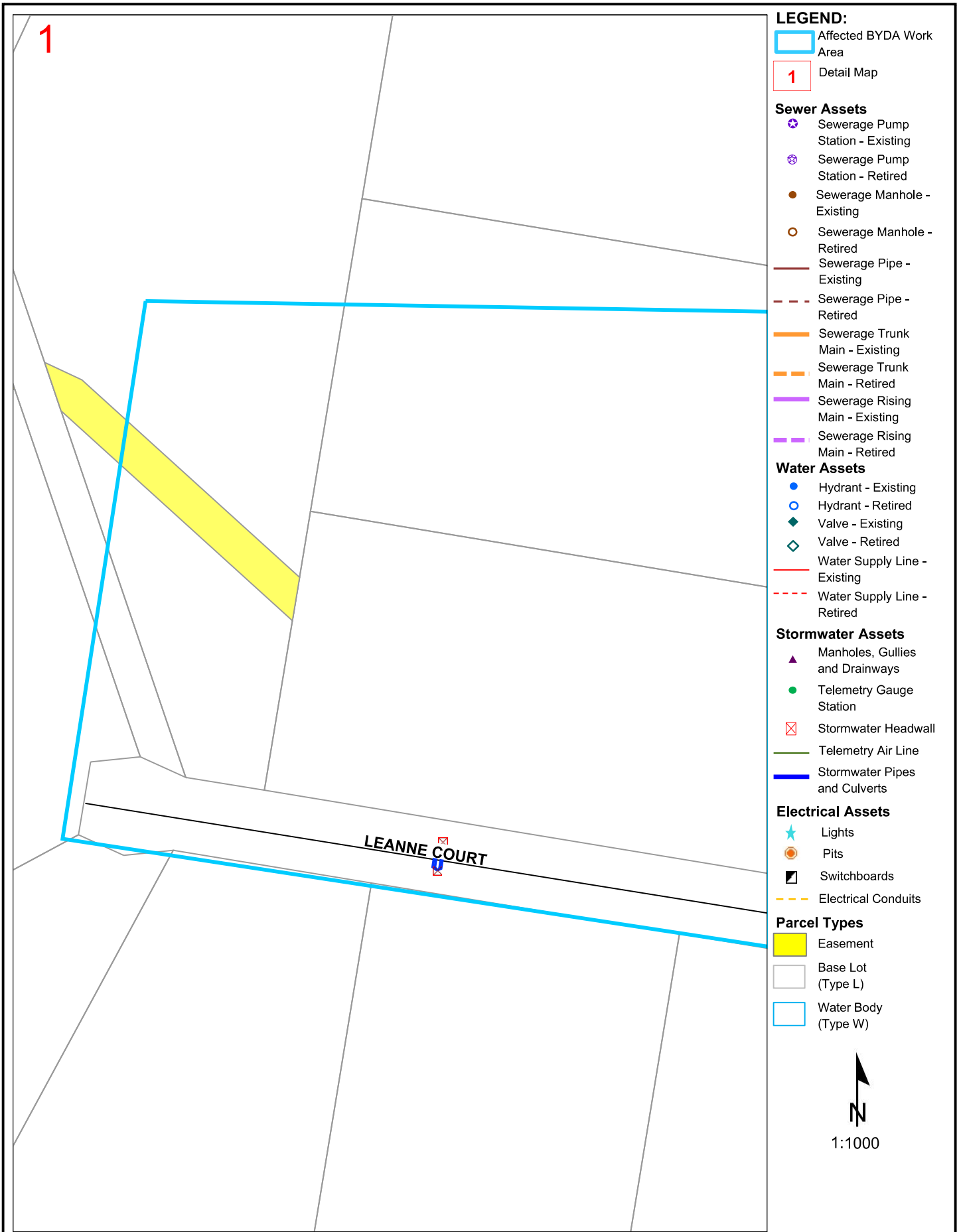
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Logan City Council's infrastructure dates back over many years and may include manufactured materials containing asbestos. You are solely responsible for ensuring that appropriate care is taken at all times and that you comply with all mandatory requirements relating to such matters, including but not limited to "workplace health and safety".



Disclaimer: The plans are indicative only and while all reasonable care has been taken in producing this information, Logan City Council does not warrant the accuracy, completeness or currency of this information and accepts no responsibility for, or in connection with any loss or damage suffered as a result of any inaccuracies, errors or omissions or your reliance on this information. Base material reproduced with permission of the Director-General, Department of Natural Resources and Mines. The State of Queensland (Department of Natural Resources and Mines).

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2



LEGEND:

 Affected BYDA Work Area

 Detail Map

Sewer Assets

-  Sewerage Pump Station - Existing
-  Sewerage Pump Station - Retired
-  Sewerage Manhole - Existing
-  Sewerage Manhole - Retired
-  Sewerage Pipe - Existing
-  Sewerage Pipe - Retired
-  Sewerage Trunk Main - Existing
-  Sewerage Trunk Main - Retired
-  Sewerage Rising Main - Existing
-  Sewerage Rising Main - Retired

Water Assets

-  Hydrant - Existing
-  Hydrant - Retired
-  Valve - Existing
-  Valve - Retired
-  Water Supply Line - Existing
-  Water Supply Line - Retired

Stormwater Assets

-  Manholes, Gullies and Drainways
-  Telemetry Gauge Station
-  Stormwater Headwall
-  Telemetry Air Line
-  Stormwater Pipes and Culverts

Electrical Assets

-  Lights
-  Pits
-  Switchboards
-  Electrical Conduits

Parcel Types

-  Easement
-  Base Lot (Type L)
-  Water Body (Type W)



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Before You Dig Australia

apa

Classification: Networks

Enquiry Date: 01/05/2025
Sequence Number: 254362975
Work Site Address: 201 Teviot Road
Greenbank
QLD 4124





**NO WORK TO PROCEED UNTIL
APPROVED BY APA**



**For your immediate information THERE IS A
CRITICAL GAS PIPELINE OR INFRASTRUCTURE
(Gas Assets) located in close vicinity to your works.**

Enquiry Date: 01/05/2025
Enquirer: Tyler Radics

Sequence Number: 254362975
Worksite Address: 201 Teviot Road
Greenbank
QLD 4124

Thank you for your Before You Dig enquiry regarding the location of gas assets.

We confirm there are CRITICAL Gas Assets located in close vicinity of the above location. Damage to gas assets may result in explosion, fire and personal injury.

Any work activity in vicinity of Critical Gas Assets operated by APA requires an assessment by APA and may require attendance by APA Site Watch whilst work is in progress. Please ensure you read and comply with all the relevant information contained in this response to your BYDA enquiry.

Complete the **Work In The Vicinity Of Critical Gas Assets request form** on the following page and forward this to APA as soon as practicable.

Wait for APA to provide written authorisation before proceeding with works. APA may require supervision of works, issuance of a permit, or conditional instructions to ensure the safety of the community and security of supply.

Work in the vicinity of critical gas assets request form

Work / Excavation Site Details	
Number:	Street:
Suburb:	State:
Sequence Number : 254362975	
Requestors Name:	
Company Name:	
Name of Authorised Company Site Representative:	
Email:	
Phone:	Mobile:

Request to work in the vicinity of critical gas assets conditions

It is the proponent's* responsibility to read these conditions and complete the request form

1. A minimum of three (3) business days is required to process and assess requests to work in vicinity of critical assets and provide a response.
2. This request form must be accompanied by a detailed schedule of works.
3. When an APA Authority to Work permit is issued, the permit will provide the applicable conditions whilst conducting excavation or work in vicinity of the gas assets.
4. Work must not commence until the requestor has received an APA Authority to Work Permit, or written approval from APA.

*Person or company requesting to undertake works in proximity to critical gas assets.

Work/Excavation Drawings Attached
☐ Yes ☐ No
Proposed Work Dates and Times

From		To	
Date	Time	Date	Time
/ /	am/pm	/ /	am/pm

***Requestor / Billing Details - Mandatory Information**

Company / Requestor Name:

Address:

Purchase Order (if applicable):

Phone:

Email:

Description of Work / Excavation

Activity/Excavation Details:

Tick Applicable

Excavation	Change to surface level
Service crossing	Boring
Proving / Pot-holing	Other (provide details)
Earthworks	
Excavator Size, Tooth Type & Tooth Size (provide details)	

Return this to: BYDA_APA@apa.com.au**Enquiries:** APA Before You Dig officer - 1800 085 628

Before You Dig Checklist



1. Plan

- Review maps provided with this BYDA response and confirm the location of your work site is correct.
- Complete the **Work in the Vicinity of Critical Gas Assets** request form and submit to APA.
- Have received contact from APA to confirm details of proposed work.
- Review the **APA Guidelines for Works Near Existing Gas Assets** and clearly understand requirements relating to my scope of work.
- Receive authority to proceed with work from APA.

2. Prepare



- Electronically locate gas assets and mark locations.
- Site Watch booking confirmed (if required by APA).
- Note: Enquirers should still look for visible evidence of gas assets at the worksite not shown on plans.

3. Pothole



- Physically confirm ('prove') the location of gas assets by potholing by hand excavation or non-destructive vacuum excavation methods in accordance with **APA Guidelines for Works Near Existing Gas Assets**.
- Road authorities, councils, utilities and their authorised contractors and agents are responsible to pothole or use other suitable methods to verify the location and depth of all gas assets, including gas (inlet) services, prior to commencing any works.

4. Protect



- Protect gas assets by maintaining clearances whilst excavating and following conditions provided by APA.
- Where required by APA, only conducting work in proximity to gas assets while Site Watch is on site.
- Where applicable, APA Authority To Work permit conditions are clearly understood and complied.
- Strap and support exposed mains and inlet services. Cover exposed mains to prevent damage until the excavation can be restored permanently.

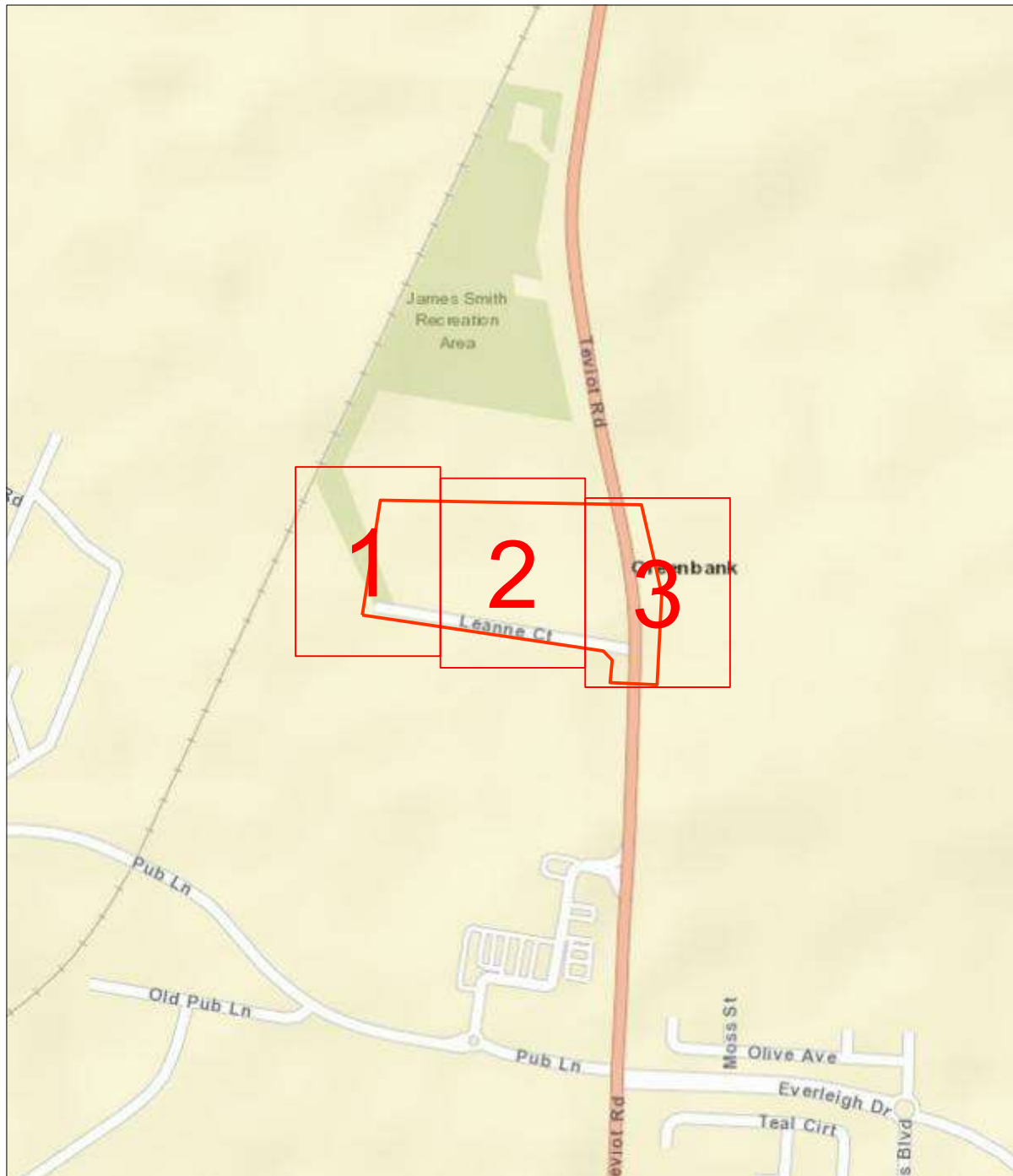
5. Proceed



- Only proceed with your work once you have completed all the planning, preparation, potholing and protection requirements.
- APA BYDA response (including maps) are on site for reference at all times, and less than 30 days old.

Site Address 201 Teviot Road
Greenbank
QLD 4124

Sequence No 254362975



Scale 1: 6000

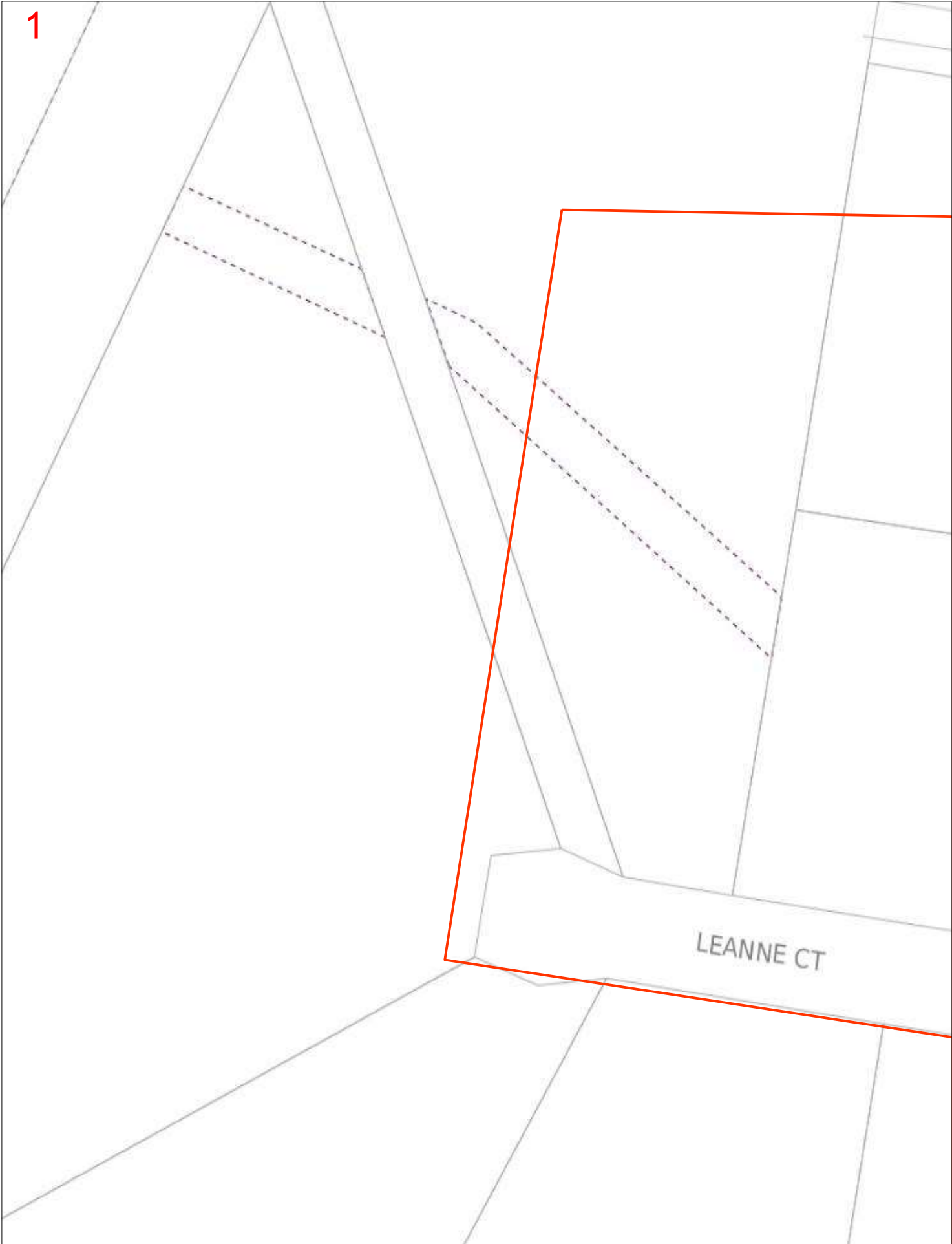
Map Sources: Esri, Garmin, HERE, FAO, NOAA, USGS,
© OpenStreetMap contributors, and the GIS User Community



Enquiry Area

Map Key Area





Scale 1: 700

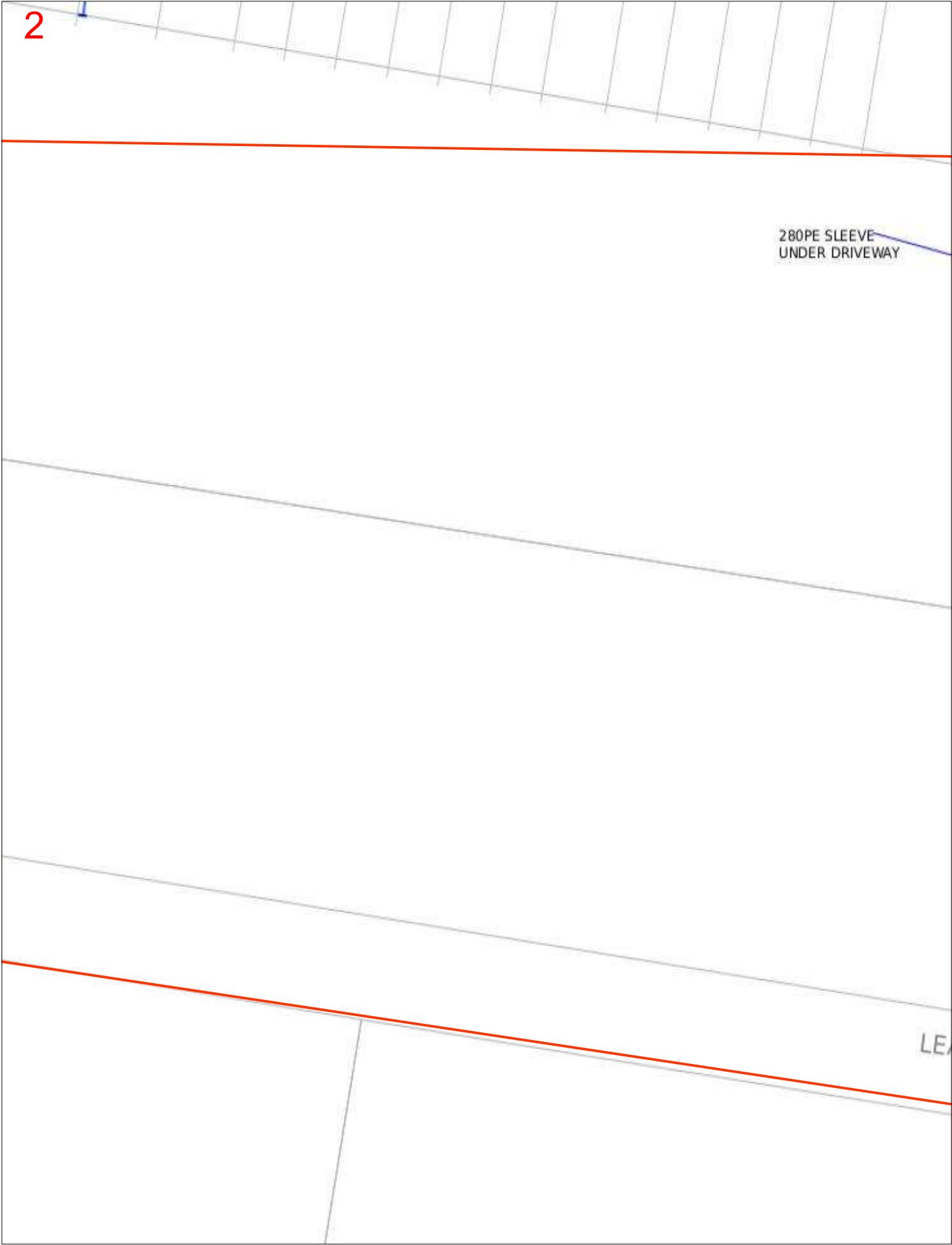
Map Sources: Esri, Garmin, HERE, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community



Enquiry Area

Map Key Area





Scale 1: 700

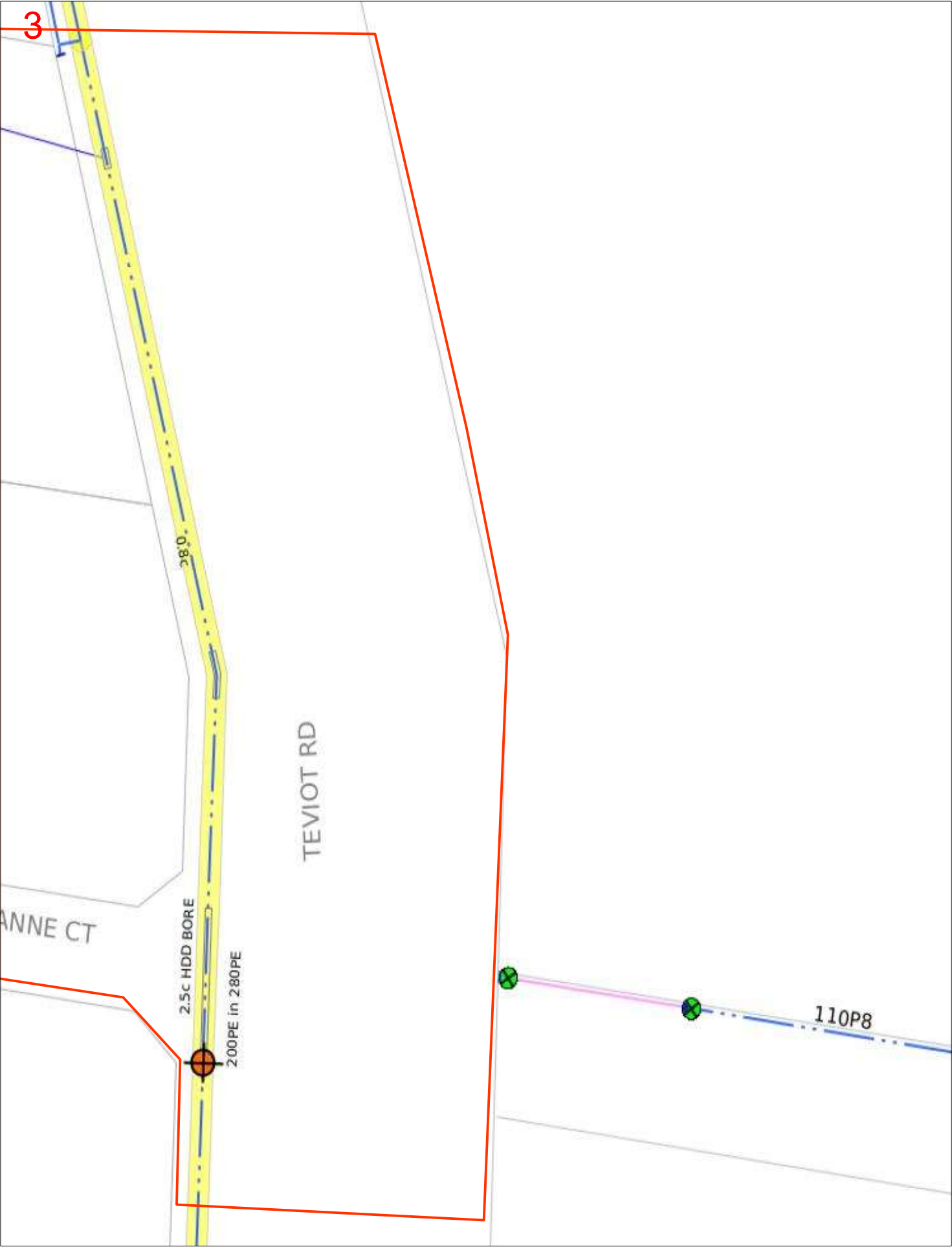
Map Sources: Esri, Garmin, HERE, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community



Enquiry Area

Map Key Area





Scale 1: 700

Map Sources: Esri, Garmin, HERE, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community



Enquiry Area

Map Key Area



Map Symbolology

Pipe

Low pressure	
Medium pressure	
High pressure	
Transmission pressure	
Critical main (behind pipe)	
Proposed (pressure by colour)	
LPG (pressure by colour)	
Abandoned	
Idle/inactive	
Sleeve	
Casing (behind pipe)	

Area

BYDA area of interest	
-----------------------	--

Pipe code and material

C* (for example, C2)	Cast iron
CU	Copper
N2	Nylon
P*	Polyethylene (PE)
P6, P7, P9-P12	Medium density PE
P2, P4, P8	High density PE
S*	Steel
W2	Wrought galv iron
W3	PE coat wrought galv iron

Object

Valve	
Buried valve	
Regulator	
Gas supplied = yes	
CP rectifier terminal	
CP test station	
CP anode	
CP bond wire	
Syphon	
Trace wire point	

Abbreviation

BoK	Back of kerb	FoK	Front of kerb
C	Depth of cover	Galv	Galvanized
CP	Cathodic protection	NTI	Not tied in

Example

Pipe	
40P6 in 80C2	40 mm high pressure medium density poly in an 80 mm cast iron casing
63S8	63 mm medium pressure steel

Pipe code
Pipe diameter in millimetres is shown before pipe code.
40P6 = 40 mm nominal diameter

This map was created in colour and should be printed in colour

Site Watch

Site Watch is where an APA field officer attends your work site to monitor and ensure controls are in place to protect critical gas assets from damage during work. The following rates apply for this service (1 hour minimum charge):

Item	Rate (excl. gst)
Site Watch - Business Hours	\$143.42 per hour
Site Watch - After Hours	\$175.06 per hour
Cancellation Fee Fee applies where cancellations received after 12pm (midday) 1 business day prior to the booking	\$286.84

- Contact APA - Before You Dig officer for state specific hours of business.

Contacts

Contacts APA Group	
Enquiry	Contact Numbers
General enquiries or feedback regarding this information or gas assets.	APA - Before You Dig Officer Phone: 1800 085 628 Email: BYDA_APA@apa.com.au
Gas Emergencies	Phone: 1800 GAS LEAK (1800 427 532)

Important Information

- Refer to requirements relating to construction, excavation and other work activities in the APA **Guidelines for Works Near Existing Gas Assets** document with this BYDA response.
- BYDA enquiries are valid for 30 days. If your works commence after 30 days from the date of this response a new enquiry is required to validate location information.
- For some BYDA enquiries, you may receive two (2) responses from APA. Please read both responses carefully as they relate to different assets.
- Gas (inlet) services connecting Gas Assets in the street to the gas meter on the property are not marked on the map. South Australia Only - if a meter box is installed on the property, a sketch of the gas service location may be found inside the gas meter box. APA does not guarantee the accuracy or completeness of these sketches.

Disclaimer and legal details

- This information is valid for 30 days from the date of this response.
- This information has been generated by an automated system based on the area highlighted in your BYDA request and has not been independently verified.
- Map location information is provided as AS5488-2022 Quality Level D, as such supplied location information is indicative only.
- Whilst APA has taken reasonable steps to ensure that the information supplied is accurate, the information is provided strictly on the condition that no assurance, representation, warranty or guarantee (express or implied) is given by APA in relation to the information (including without limitation quality, accuracy, reliability, completeness, currency, sustainability, or suitability for any particular purpose) except that the information has been disclosed in good faith.
- Any party who undertakes activities in the vicinity of APA operated assets has a legal duty of care that must be observed. This legal obligation requires all parties to adhere to a standard of reasonable care while performing any acts that could foreseeably harm these assets.

The background features a solid red upper half and a white lower half, separated by a jagged, geometric line. The white section contains several large, white, angular shapes that resemble stylized buildings or abstract architectural forms. The red section contains the 'apa' logo in white.

apa

All underground cables shall be treated as being energized. Where a cable is located that is not represented on the ENRGULX BYDA map, then ENRGULX shall be contacted immediately.

For Emergency Situations
Please Call 13 19 62



BYDA

Sequence: 254362976
Date: 01/05/2025

Scale: 1:1538
TAX No: OVERVIEW

LEGEND

- Substation
- Cable Marker
- Pole
- Pole
- LV Cable (up to 10kV)
- HiV Cable (10kV - <33kV)
- HiV Cable (33kV and over)
- PE Boundary
- Planned Work Area

A55400 Category 'D' Plan



DISCLAIMER: While reasonable measures have been taken to ensure the accuracy of the information contained in this plan, Energex, neither Energex nor Palstan Corp shall have any liability whatsoever for damage, loss, injury, cost or expense arising from the use of this plan or the information contained in it or the consequences or accuracy of such information. Use of such information is subject to and our Advertiser's acceptance of these terms.

This output provides details of the ENRGULX electrical network. No liability may arise or responsibility be incurred by ENRGULX for the accuracy or completeness of the information provided. Exact positions of cables and electrical connectivity should be confirmed in situ.

Plans generated 01 May 2025 by PalstanCorp TicketAccess Software | www.palstancorp.com

All underground cables shall be treated as being energized. Where a cable is located that is not represented on this (ENERGEX) BYDA map, then ENERGEN shall be contacted immediately.

For Emergency Situations
Please Call 13 19 62



BYDA

Sequence: 254362976
Date: 01/05/2025
Scale: 1:500
TAN No: 1

LEGEND

- Substation
- Cable Marker
- Pole
- Pole
- LV Cable (up to 10kV)
- HV Cable (10kV - <33kV)
- HV Cable (33kV and over)
- PT Boundary
- Planned Work Area

A55400 Category 'D' Plan



DISCLAIMER: While reasonable measures have been taken to ensure the accuracy of the information contained in this plan, no person, including Energen or Pelican Corp, shall have any liability whatsoever for any loss, damage, cost or expense arising from the use of this plan or the information contained in it or the completeness or accuracy of such information. Use of such information is subject to and constitutes acceptance of these terms.

This output provides details of the ENERGEN electrical network. As a disclaimer, no responsibility is incurred by ENERGEN for the accuracy or completeness of the information provided. Exact positions of cables and electrical connectivity should be confirmed in situ.

Plans generated 01/05/2025 by PelicanCorp TicketAccess Software | www.pelicancorp.com

All underground cables shall be treated as being energized. Where a cable is located that is not represented on the ENERGENZ ENGA map, then ENERGENZ shall be contacted immediately.

For Emergency Situations
Please Call 13 19 62



BYDA

Sequence: 254362976
Date: 01/05/2025

Scale: 1:500
TAB No: 2

LEGEND

- Substation
- Cable Marker
- Pole
- Pole
- Pole
- LV Cable (up to 11kV)
- HV Cable (11kV - <33kV)
- HV Cable (33kV and over)
- PE Boundary
- Planned Work Area

A35400 Category 'D' Plan



DISCLAIMER: While reasonable measures have been taken to ensure the accuracy of the information contained in this plan, no guarantee is made by ENERGENZ or Pelican Corp. shall have any liability whatsoever in relation to any loss, damage, cost or expenditure arising from the use of this plan or the information contained in it or the completeness or accuracy of such information. Use of such information is subject to and our Advertiser's acceptance of these terms.

This output provides details of the ENERGENZ electrical network. As a disclaimer, no responsibility is incurred by ENERGENZ for the accuracy or completeness of the information provided. Exact positions of cables and electrical connectivity should be confirmed on-site.

Plans generated 01/05/2025 by PelicanCorp TicketAccess Software | www.pelicancorp.com

For Emergency Situations
(Page 108)



LEGEND

-  Substation
-  Cable Marker
-  Re
-  Pole
-  Pillar
-  LV Cable (up to 110V)
-  MV Cable (110V < < 33kV)
-  HV Cable (33kV and over)
-  PT Boundary
-  Planned Work Area

ASS400 Category "D" Plan



DISCLAIMER: While reasonable measures have been taken to ensure the accuracy of the information contained in this plan response, neither Enagras nor Polaris Capital has any liability whatsoever in relation to any loss, damage, cost or expense arising from the use of this plan response or the information contained in it or the completeness or accuracy of such information. Use of such information is subject to and constitutes acceptance of these terms.

This output provides details of the ENERGEN electrical network. As variations may exist no responsibility is incurred by ENERGEN for the accuracy or completeness of the information provided. Exact positions of cables and electrical components should be confirmed on site.

Plans generated 01/05/2025 by PelicanCorp TicketAccess Software | www.pelicancorp.com

All underground cables shall be treated as being ungrounded. Where a cable is located that is not represented on the (S)MPSG22 BYDA map, then EMERGEX shall be contacted immediately.

For Emergency Situations
Please Call 13 19 62



BYDA

Sequence: 254362976
Date: 01/05/2025

Scale: 1:500
TAB No: 4

LEGEND

- Substation
- Cable Marker
- Pole
- Pole
- Pole
- LV Cable (up to 10kV)
- HiV Cable (10kV - <33kV)
- HiV Cable (33kV and over)
- PT Boundary
- Planned Work Area

A55400 Category 'D' Plan



DISCLAIMER: While reasonable measures have been taken to ensure the accuracy of the information contained in this plan, no person, including Energex or Pelican Corp, shall have any liability whatsoever for damage, loss, injury, cost or expense arising from the use of this plan or the information contained in it, or the consequences or accuracy of such information. Use of such information is subject to and constitutes acceptance of these terms.

This output provides details of the EMERGEX electrical network. As reliance may exist on responsibility is incurred by EMERGEX for the accuracy or completeness of the information provided. Exact positions of cables and electrical connectivity should be confirmed in situ.

Plans generated 01/05/2025 by PelicanCorp TicketAccess Software | www.pelicancorp.com

All underground cables shall be checked as being recognized. Where a cable is located that is not represented on the (S)MPSG22 BYDA map, then EMERGEX shall be contacted immediately.

For Emergency Situations
Please Call 13 19 62



BYDA

Sequence: 254362976
Date: 01/05/2025

Scale: 1:500
TAN No: 5

LEGEND

- Substation
- Cable Marker
- Pole
- Pole
- LV Cable (up to 10kV)
- HV Cable (10kV - <33kV)
- HV Cable (33kV and over)
- PE Boundary
- Planned Work Area

A55400 Category 'D' Plan



DISCLAIMER: While reasonable measures have been taken to ensure the accuracy of the information contained in this plan, no person, including Energex or Pelican Corp, shall have any liability whatsoever in relation to any loss, damage, cost or expense arising from the use of this plan or the information contained in it or the completeness or accuracy of such information. Use of such information is subject to and constitutes acceptance of these terms.

This output provides details of the EMERGEX electrical network. As reliance may exist no responsibility is incurred by EMERGEX for the accuracy or completeness of the information provided. Exact positions of cables and electrical connectivity should be confirmed in situ.

Plans generated 01/05/2025 by PelicanCorp TicketAccess Software | www.pelicancorp.com

All underground cables shall be treated as being energized. Where a cable is located that is not represented on the (S)MPS&L (S)MPS&L map, then EMERGEX shall be contacted immediately.

For Emergency Situations
Please Call 13 19 62



BYDA

Sequence: 254362976
Date: 01/05/2025

Scale: 1:500
TAX No: 6

LEGEND

- Substation
- Cable Marker
- Pole
- Pillar
- LV Cable (up to 10kV)
- HN Cable (10kV - <33kV)
- HN Cable (33kV and over)
- PE Boundary
- Planned Work Area

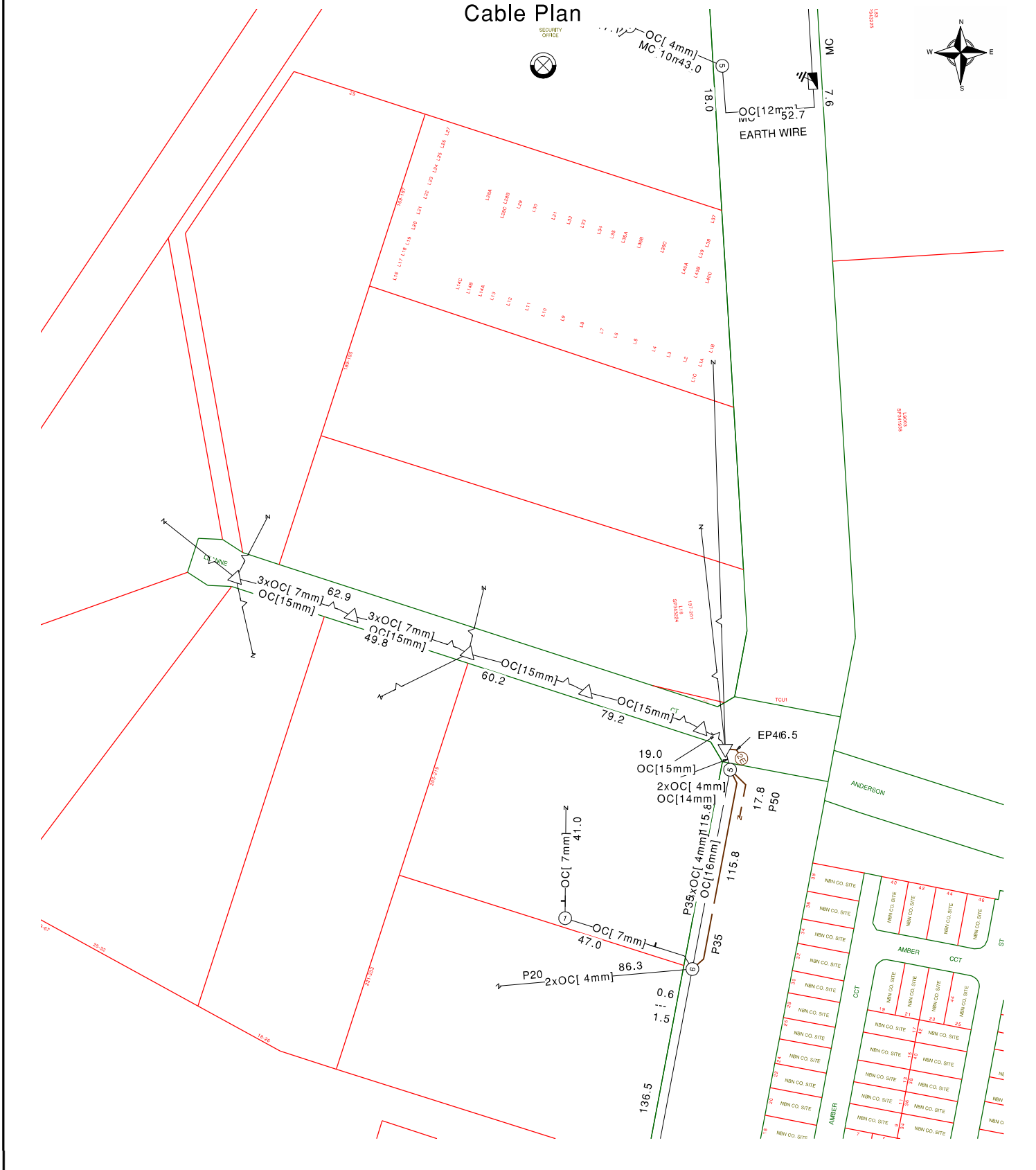
A35400 Category 'D' Plan



DISCLAIMER: While reasonable measures have been taken to ensure the accuracy of the information contained in this plan, no person, including Energex or Pelican Corp, shall have any liability whatsoever in relation to any loss, damage, cost or expenditure arising from the use of this plan or the information contained in it, or the consequences or accuracy of such information. Use of such information is subject to and constitutes acceptance of these terms.

This output provides details of the EMERGEX electrical network. No liability may exist or responsibility be incurred by EMERGEX for the accuracy or completeness of the information provided. Exact positions of cables and electrical connectivity should be confirmed in situ.

Plans generated 01/05/2025 by PelicanCorp TicketAccess Software | www.pelicancorp.com



TELSTRA LIMITED A.C.N. 086 174 781

Sequence Number: 254362977

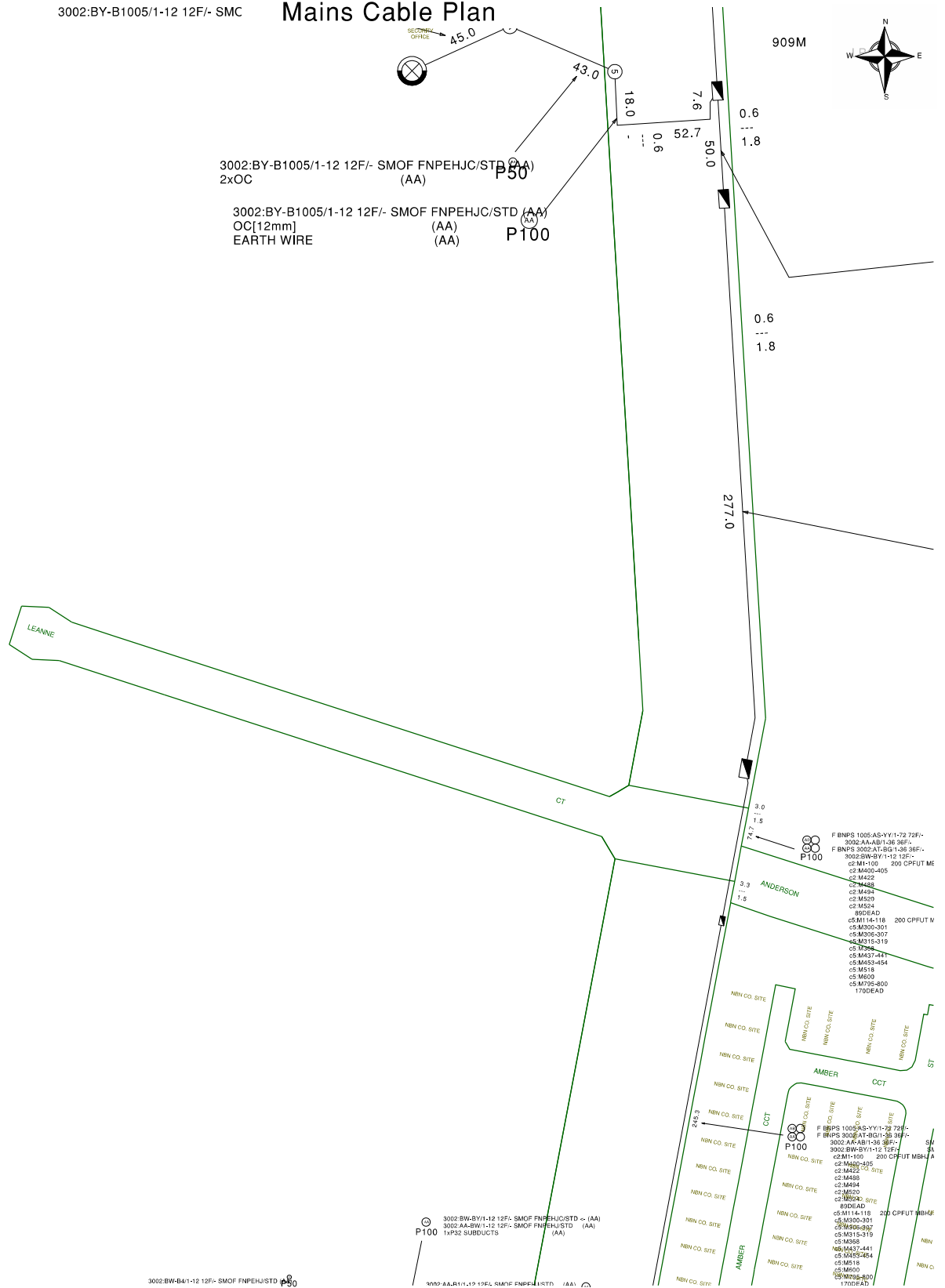
CAUTION: Fibre optic and/ or major network present in plot area. Please read the Duty of Care and contact Telstra Plan Services should you require any assistance.

The above plan must be viewed in conjunction with the Mains Cable Plan on the following page

Telstra plans and location information conform to Quality Level "D" of the Australian Standard AS 5488-Classification of Subsurface Utility Information. As such, Telstra supplied location information is indicative only. Spatial accuracy is not applicable to Quality Level D. Refer to AS 5488 for further details. The exact position of Telstra assets can only be validated by physically exposing it. Telstra does not warrant or hold out that its plans are accurate and accepts no responsibility for any inaccuracy. Further on site investigation is required to validate the exact location of Telstra plant prior to commencing construction work. A Certified Locating Organisation is an essential part of the process to validate the exact location of Telstra assets and to ensure the asset is protected during construction works.

See the Steps- Telstra Duty of Care that was provided in the email response.

Mains Cable Plan



Report Damage: <https://service.telstra.com.au/customer/general/forms/report-damage-to-telstra>
 Ph - 13 22 03
 Email - Telstra.Plans@team.telstra.com
 Planned Services - ph 1800 653 935 (AEST bus hrs only) General Enquiries

TELSTRA LIMITED A.C.N. 086 174 781

Generated On 01/05/2025 09:04:41

Sequence Number: 254362977

CAUTION: Fibre optic and/ or major network present in plot area. Please read the Duty of Care and contact Telstra Plan Services should you require any assistance.

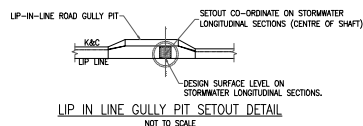
The above plan must be viewed in conjunction with the Mains Cable Plan on the following page

WARNING

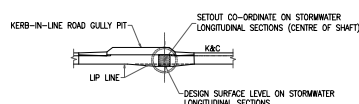
Telstra plans and location information conform to Quality Level "D" of the Australian Standard AS 5488-Classification of Subsurface Utility Information. As such, Telstra supplied location information is indicative only. Spatial accuracy is not applicable to Quality Level D. Refer to AS 5488 for further details. The exact position of Telstra assets can only be validated by physically exposing it. Telstra does not warrant or hold out that its plans are accurate and accepts no responsibility for any inaccuracy. Further on site investigation is required to validate the exact location of Telstra plant prior to commencing construction work. A Certified Locating Organisation is an essential part of the process to validate the exact location of Telstra assets and to ensure the asset is protected during construction works.

See the Steps- Telstra Duty of Care that was provided in the email response.

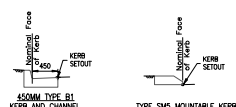
16. APPENDIX E – TEVIOT ROAD UPGRADE PROJECT DRAWINGS



LIP IN LINE GULLY PIT SETOUT DETAIL



KERB IN LINE GULLY PIT SETOUT DETAIL



KERB SETOUT DETAIL
N.T.S.

SURFACES | LEGEND

PAVEMENT CONSTRUCTION
- ASPHALTIC CONCRETE

DRIVEWAYS
REFER TO DRAWING SET "PA" FOR
DRIVEWAY PAVEMENT DETAILS

**CONCRETE FOOTPATH /
SHARED PATH**

CONCRETE CAPPING
- 100mm tk. 25MPa SL62 MESH

PAVEMENT NOTES:

1. REFER TO DRAWING SET "LS" FOR ROAD PAVEMENT DETAILS.
2. REFER TO DRAWING SET "PA" FOR DRIVEWAY PAVEMENT DETAILS.

LEGEND

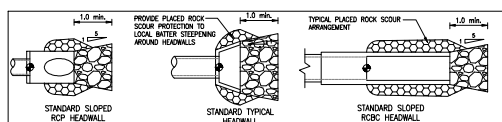
- EXISTING TREE TO REMAIN
-  EXIST. ELECTRICAL OVERHEAD
 EXIST. ELECTRICAL UNDERGROUND
 EXIST. UNDERGROUND GAS
 EXIST. TELECOMMUNICATIONS OVERHEAD
 EXIST. TELECOMMUNICATIONS UNDERGROUND
 EXIST. SEWER LINE
 EXIST. WATER MAIN
 EXIST. STORMWATER PIPE
 EXIST. INVERT
 EXIST. TOP OF BANK
 EXIST. BOTTOM OF BANK
 EXIST. POWER / PROPERTY / LIGHT / STAY POLE
 EXIST. TELECOMMUNICATIONS PIT
 EXIST. PROPERTY / BARRIER TYPE (B1)
 EXIST. KERB & CHANNEL - BARRIER TYPE (B1)
 EXIST. KERB - SEMI MOUNTABLE TYPE (SMS)
 EXIST. EDGE OF BRIMEN
 EXIST. FENCE TO REMAIN
-  PROPOSED ELECTRICAL OVERHEAD
 PROPOSED ELECTRICAL UNDERGROUND
 PROPOSED TRAFFIC SIGNALS CONDUIT
 PROPOSED UNDERGROUND GAS
 PROPOSED TELECOMMUNICATIONS OVERHEAD
 PROPOSED TELECOMMUNICATIONS UNDERGROUND
 PROPOSED SEWER LINE
 PROPOSED WATER MAIN
 PROPOSED STORMWATER PIPE
 PROPOSED INVERT
 PROPOSED TELECOMMUNICATIONS PIT
 PROPOSED PROPERTY / POWER / LIGHT POLE
 PROPOSED KERB & CHANNEL - PILLAR
 PROPOSED KERB & CHANNEL - BARRIER TYPE (B1)
 PROPOSED KERB - SEMI MOUNTABLE TYPE (SMS)
 PROPOSED EDGE OF BRIMEN
 PROPOSED BOUNDARY FENCE LINE
 PROPOSED PEDESTRIAN FENCE

WARNING!

BEWARE OF UNDERGROUND SERVICES. THE LOCATIONS OF UNDERGROUND SERVICES HAS BEEN INTERPOLATED FROM EASIMAP DATA OR KNOWN POSITIONS OF VALVES, MANHOLES ETC. OR INFORMATION SUPPLIED BY SERVICE AUTHORITIES. NO RESPONSIBILITY IS TAKEN FOR THE ACCURACY OF THE INTERPOLATED INFORMATION SUPPLIED. ENSURE ALL SERVICES ARE ACCURATELY LOCATED PRIOR TO COMMENCEMENT OF WORK.

NOTES

- [illegible]



SINGLE CULVERT TYPICAL SETOUT POINT DETAIL

AMENDMENTS		BY	CHKD	APP'D	DATE
A	STORMWATER PIT SETOUT COORDINATES UPDATED	R. J. B. B.	N. L. B.	B. C. A.	15.08.21



SURVEY CONTROL POINTS				
PT	EASTING	NORTHING	RL	DESCRIPTION
REFER TO DRAWING SET "CL" FOR DETAILS				
BAR SCALES (A1 UNREDUCED)				
NOT TO SCALE				

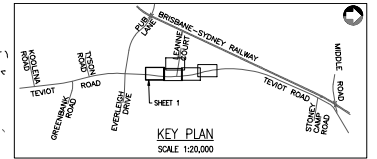
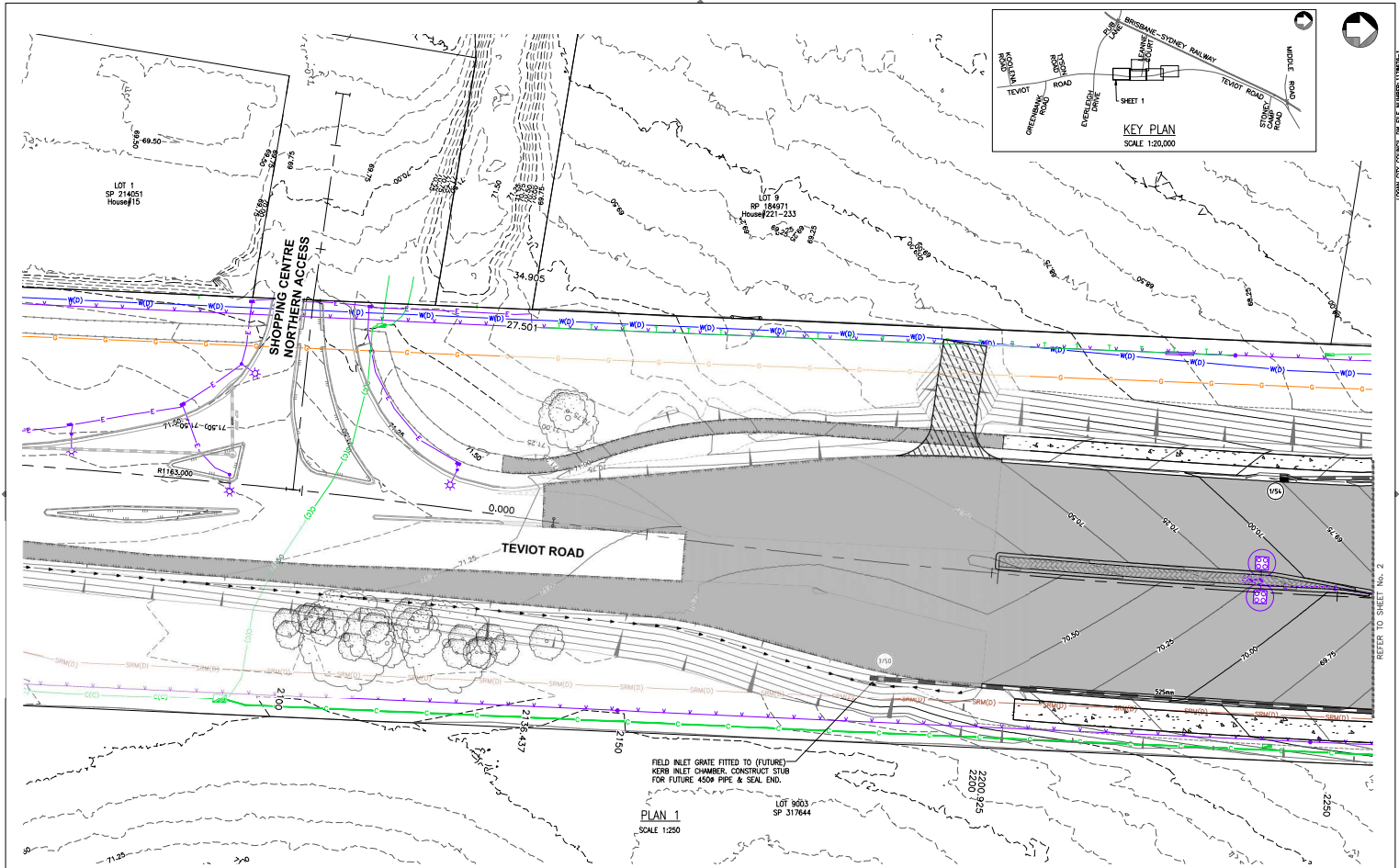


CITY ADMINISTRATION CENTRE
150 Wembley Road,
Logan Central, QLD 4114
Ph:(07)3412 3412
Fax:(07)3412 3444
SENIOR DESIGN ENGINEER
Ph:(07)3412 4279
Email:
Infrodelivery@logan.qld.gov.au

PROJECT NO.	CD84	
COMP. REF.	SWDLAY.dwg	
SURVEYOR	L.C.C.	26.06.20
SURVEY REF.	CD84	
DESIGNED	R.vdB	11.02.22
CHECKED	S.T.	11.02.22
DRAWN	M.J.P.	09.12.22
CHECKED	S.T.	09.12.22

CD84 TEVIOT ROAD UPGRADE PROJECT,
NORTH MACLEAN AND GREENBANK.
GREENBANK RD TO MIDDLE RD - STAGE 1A
DRAINAGE NOTES AND LEGEND,
CROSS DRAINAGE SETOUT TABLE
SHEET 1 OF 1

APPROVED		DATE	
S. AUTHORITY: 		DATE	
SHEET 1 OF 1		DRAWING NUMBER	
01 CD84-SW100		A	



PLAN 1
SCALE 1:250

AMENDMENTS	BY	CHKD	APP'D	DATE

WESTERA PARTNERS
STRUCTURAL-CIVIL-ENVIRONMENTAL ENGINEERS
www.westerapartners.com.au | ABN 52 097 417 975

SURVEY CONTROL POINTS			
PT	EASTING	NORTHING	RL
REFER TO DRAWING SET "CL" FOR DETAILS			
BAR SCALES (AT UNREDUCED)			
0 5 10 15 20m			
SCALE IN METRES (1:250 BEFORE REDUCTION)			



CITY ADMINISTRATION CENTRE
150 Wimblesley Road
Logan Central, QLD 4114
Ph: (07) 3412 3412
Fax: (07) 3412 3444
SENDOR DESIGN ENGINEER
Ph: (07) 3412 4279
Email: info@cityoflogan.qld.gov.au

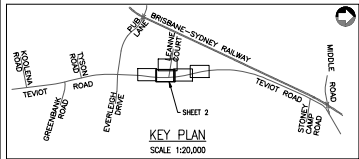
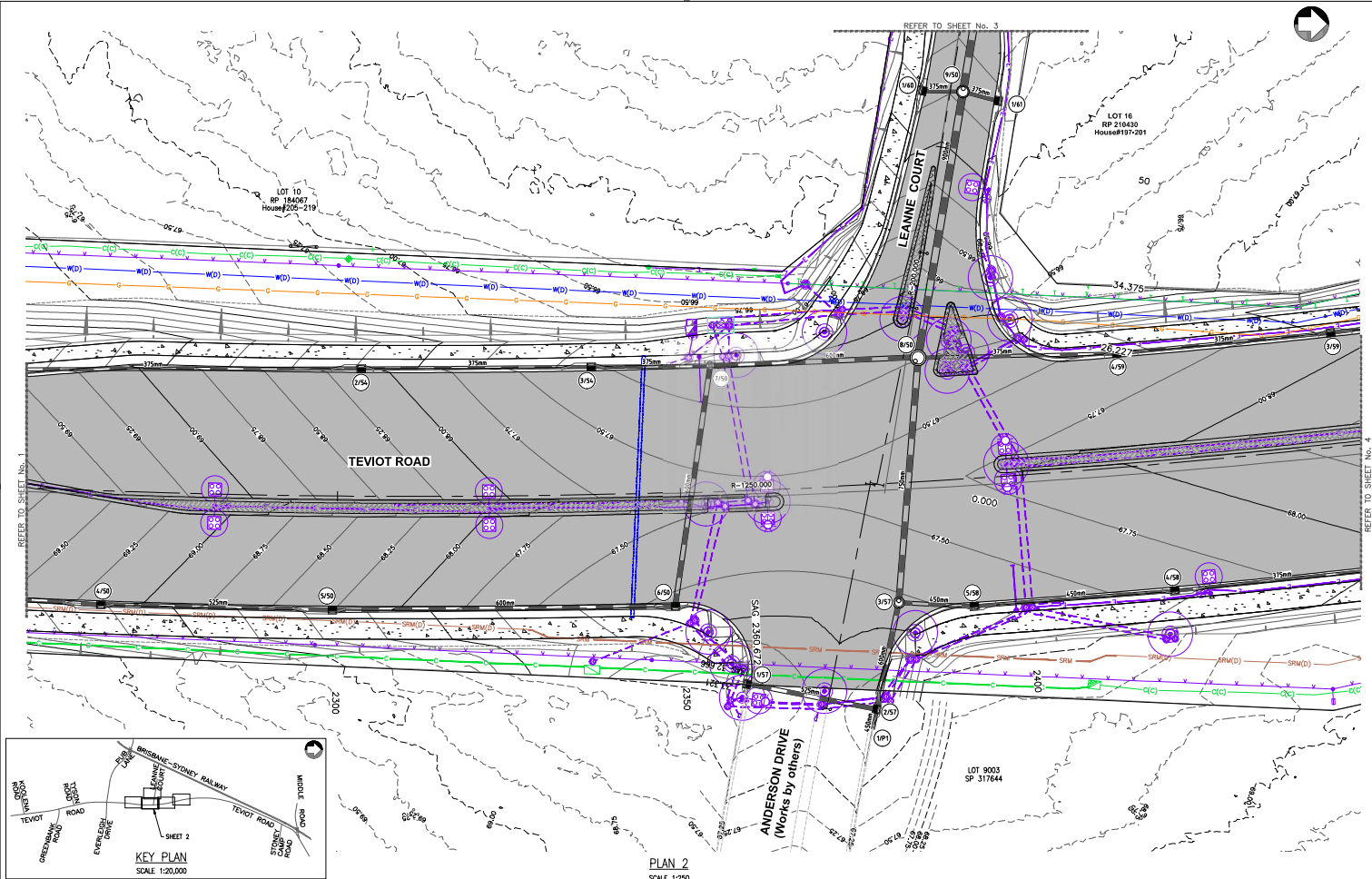
PROJECT NO.	CD84
COMP. REF.	SW0414.dwg
SURVEYOR	L.C.S. 26.08.20
SURVEY REP.	CD84
DESIGNED	R.vdB 11.02.22
CHECKED	S.T. 11.02.22
DRAWN	M.J.P. 09.12.22
CHECKED	S.T. 09.12.22

**CD84 TEVIOT ROAD UPGRADE PROJECT,
NORTH MACLEAN AND GREENBANK.
GREENBANK RD TO MIDDLE RD - STAGE 1A**

ROAD DRAINAGE LAYOUT
SHEET 1 OF 5

APPROVED	
DESIGN ENGINEER	
SHEET	1 OF 5
DRAWING NUMBER	01 CD84-SW101 A

A STORMWATER PIT SETOUT COORDINATES UPDATED R.vdB N.L.P. B.C.A. 15.08.23



AMENDMENTS	BY	CHKD	APP'D	DATE
C SERVICES RE-PLOTTED	R.vdB	N.L.P.	B.C.A.	09.10.24
B WATER MAIN REVISION	R.vdB	N.L.P.	B.C.A.	02.09.24
A STORMWATER PIT SETOUT COORDINATES UPDATED	R.vdB	N.L.P.	B.C.A.	15.08.23

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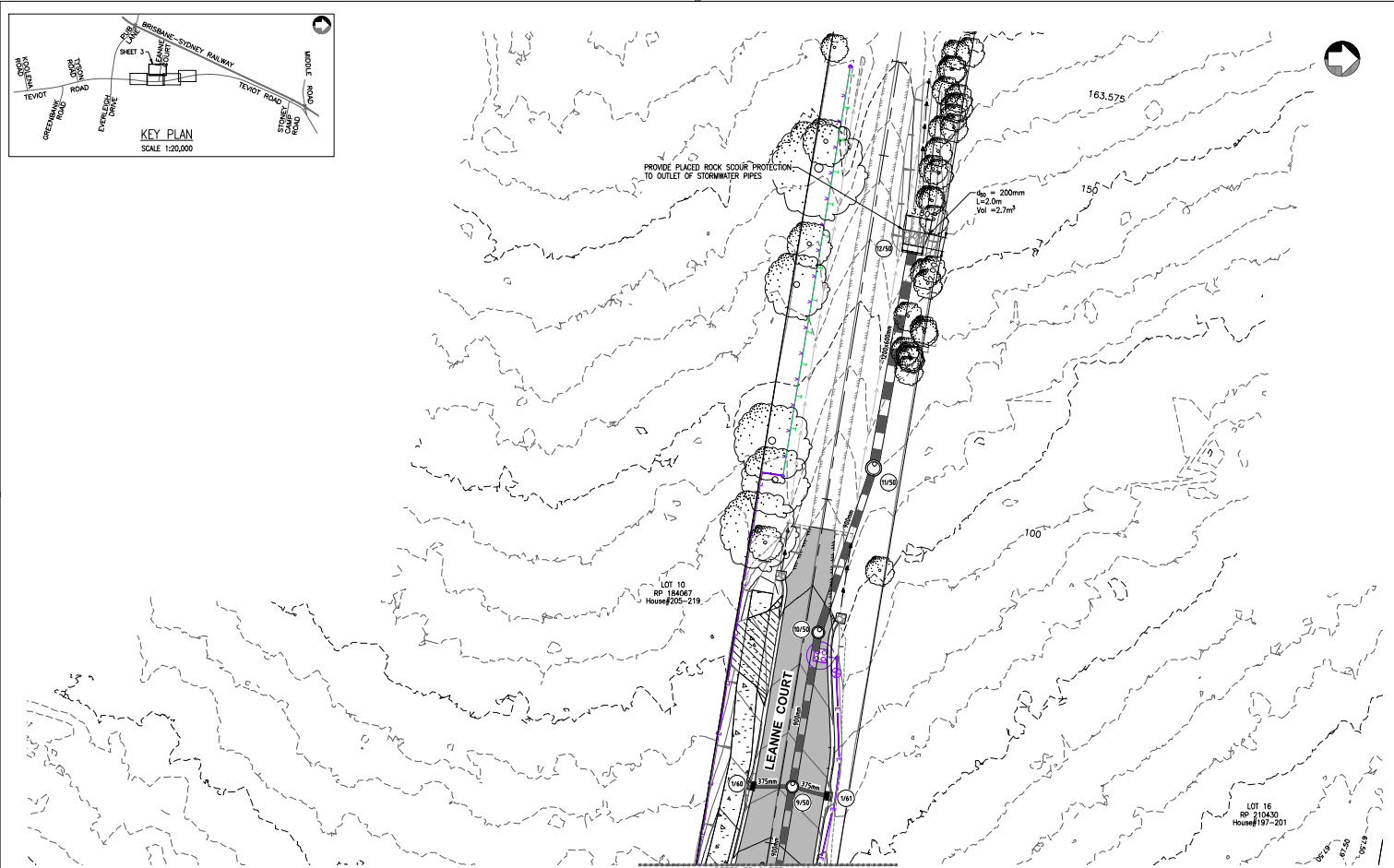
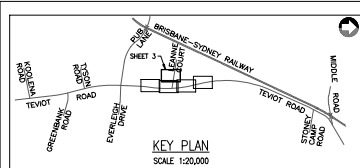
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PROJECT NO.	CD84
COMP. REF.	SW0414.dwg
SURVEYOR	L.C.S. 26.08.20
SURVEY REF.	CD84
DESIGNED	R.vdB 11.02.22
CHECKED	S.T. 11.02.22
DRAWN	M.J.P. 09.12.22
CHECKED	S.T. 09.12.22

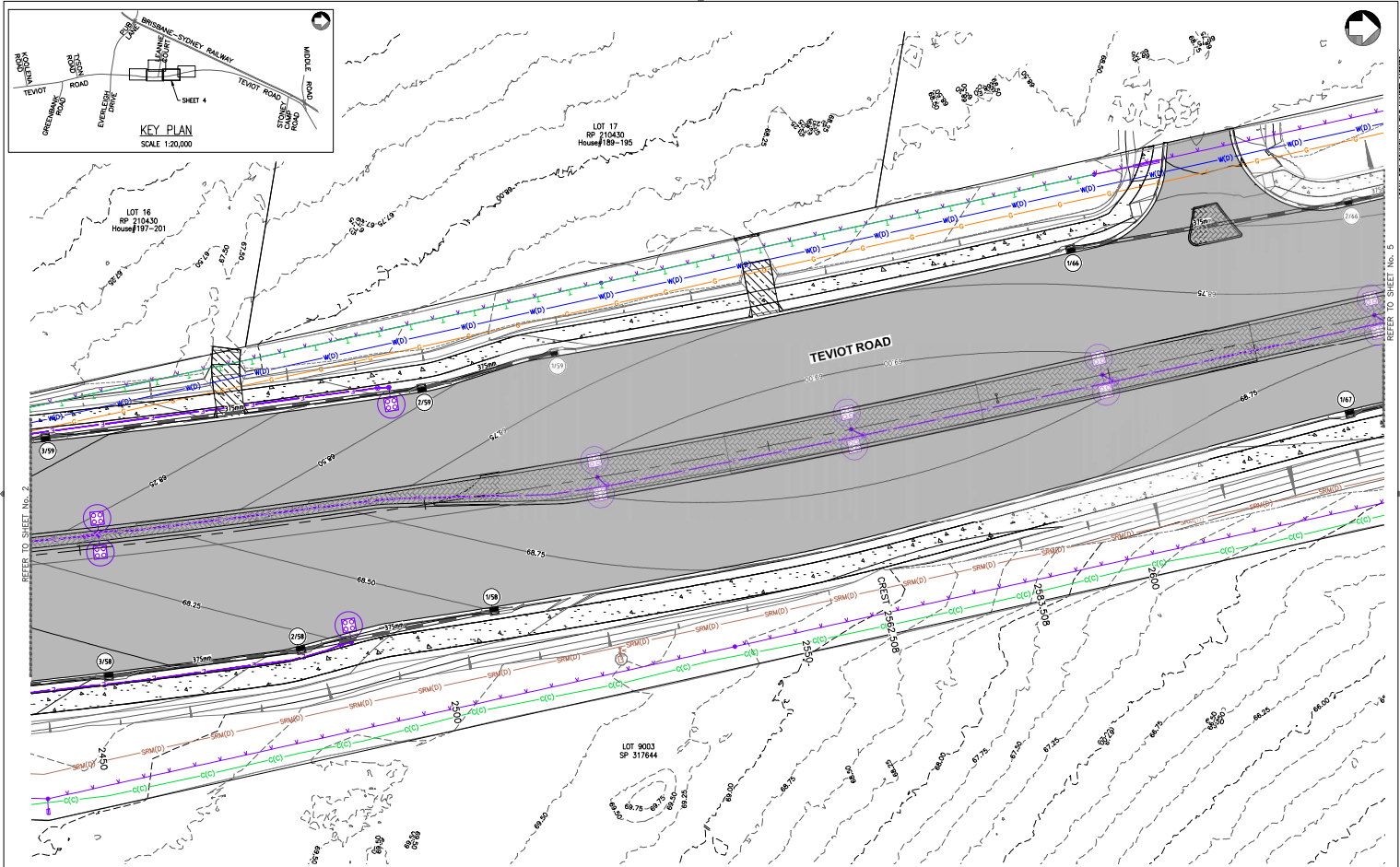
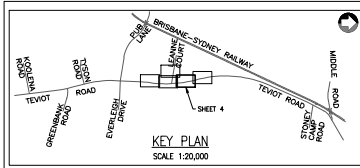
CD84 TEVIOT ROAD UPGRADE PROJECT, NORTH MACLEAN AND GREENBANK, GREENBANK RD TO MIDDLE RD - STAGE 1A

ROAD DRAINAGE LAYOUT
SHEET 2 OF 5

01 CD84-SW102 B



AMENDMENTS				BY	CHKD	APP'D	DATE	WESTERA PARTNERS STRUCTURAL/CIVIL/ENVIRONMENTAL ENGINEERS www.westerapartners.com.au ABN 52 097 417 975 CITY OF LOGAN CITY ADMINISTRATION CENTRE 150 Winstley Road Logan Central, QLD 4114 Ph: (07) 3412 3412 Fax: (07) 3412 3444 SENDIN DESIGN ENGINEER Ph: (07) 3412 4279 Email: infocentre@logan.qld.gov.au				PROJECT NO. CD84				CD84 TEVIOT ROAD UPGRADE PROJECT, NORTH MACLEAN AND GREENBANK. GREENBANK RD TO MIDDLE RD - STAGE 1A				SHEET 3 OF 5		DRAWING NUMBER		01 CD84-SW103 C			
C STORMWATER REVISION				R.vdB	N.L.P.	B.C.A.	22.10.24	SURVEY CONTROL POINTS				PT	EASTING	NORTHING	RL	DESCRIPTION	COMP. REF. SW104.dwg				CD84						
B STORMWATER OUTLET REVISION				R.vdB	N.L.P.	B.C.A.	02.09.24	REFER TO DRAWING SET "CL" FOR DETAILS				SURVEYOR L.C.C. 26.08.20				SURVEY REF. CD84				DESIGNED R.vdB 11.02.22				CHECKED S.T. 11.02.22			
A STORMWATER PIT SETOUT COORDINATES UPDATED				R.vdB	N.L.P.	B.C.A.	15.08.23	BAR SCALES (AT UNREDUCED)				DRAWN M.J.P. 09.12.22				CHECKED S.T. 09.12.22											
								SCALE IN METRES (1:250 BEFORE REDUCTION)																			



PLAN 4
SCALE 1:250

AMENDMENTS	BY	CHKD	APP'D	DATE
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0 10 20m				
SCALE IN METRES (1:250 BEFORE REDUCTION)				

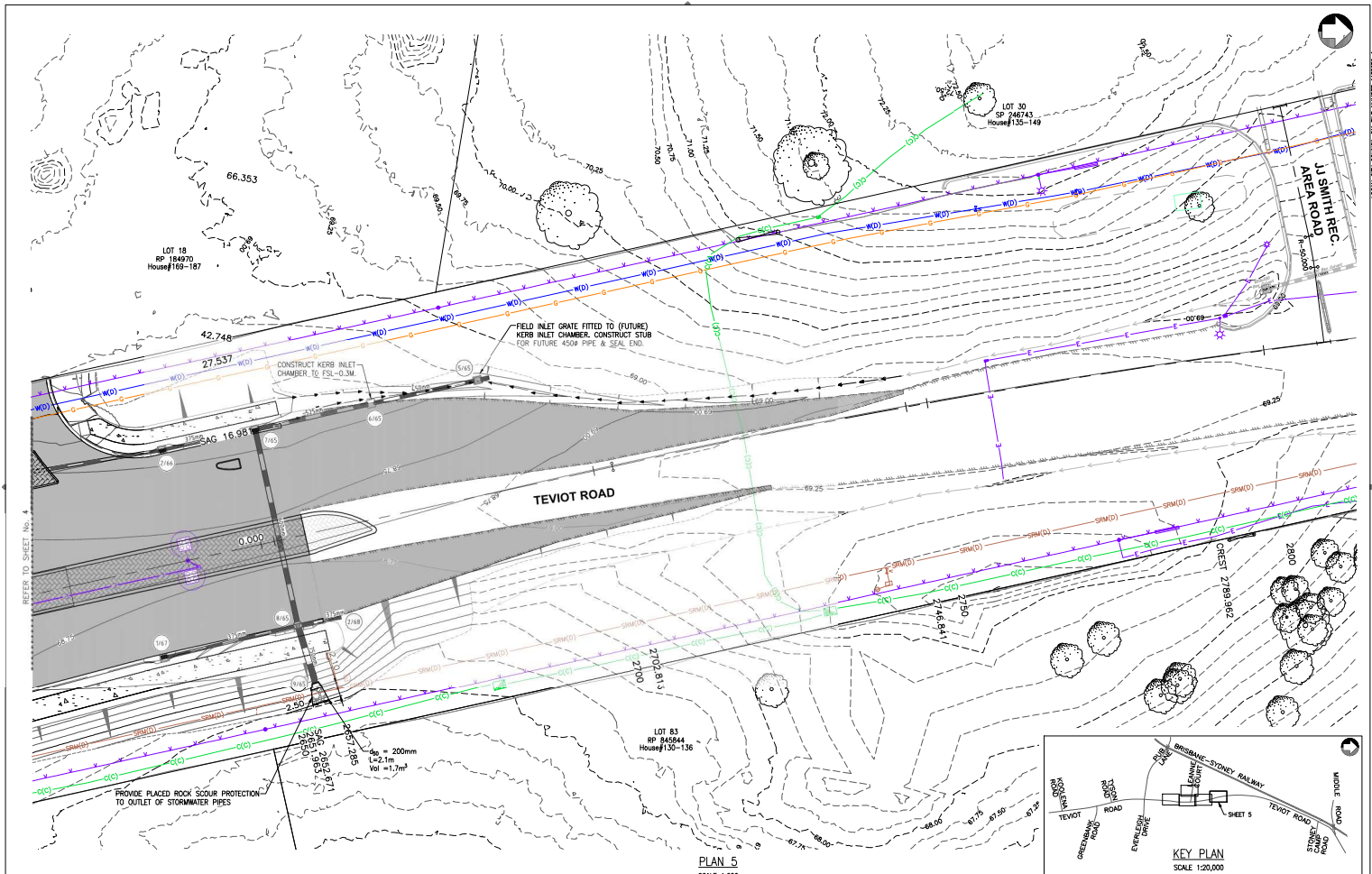
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**CD84 TEVIOT ROAD UPGRADE PROJECT,
NORTH MACLEAN AND GREENBANK.
GREENBANK RD TO MIDDLE RD - STAGE 1A**

ROAD DRAINAGE LAYOUT
SHEET 4 OF 5

01 CD84-SW104 A



PLAN 5
SCALE 1:250

AMENDMENTS	BY	CHKD	APP'D	DATE
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**CD84 TEVIOT ROAD UPGRADE PROJECT,
NORTH MACLEAN AND GREENBANK.
GREENBANK RD TO MIDDLE RD - STAGE 1A**

ROAD DRAINAGE LAYOUT
SHEET 5 OF 5

APPROVED	DATE	SHEET
	09.12.22	5 OF 5
DRAWING NUMBER	01	CD84-SW105 A

LEGEND	
	EXISTING TREE TO REMAIN
	EXIST. ELECTRICAL OVERHEAD
	EXIST. ELECTRICAL UNDERGROUND
	EXIST. UNDERGROUND GAS
	EXIST. TELECOMMUNICATIONS OVERHEAD
	EXIST. TELECOMMUNICATIONS UNDERGROUND
	EXIST. SEWER LINE
	EXIST. WATER MAIN
	EXIST. STORMWATER PIPE
	EXIST. INVERT
	EXIST. TOP OF BANK
	EXIST. BOTTOM OF BANK
	EXIST. POWER / PROPERTY / LIGHT / STAY POLE
	EXIST. TELECOMMUNICATIONS PIT
	EXIST. PROPERTY BOUNDARY
	EXIST. KERB & CHANNEL - BARRIER TYPE (B1)
	EXIST. KERB - SEMI MOUNTABLE TYPE (SMS)
	EXIST. EDGE OF BITUMEN
	EXIST. FENCE TO REMAIN
	PROPOSED ELECTRICAL OVERHEAD
	PROPOSED ELECTRICAL UNDERGROUND
	PROPOSED TRAFFIC SIGNALS CONDUIT
	PROPOSED UNDERGROUND GAS
	PROPOSED TELECOMMUNICATIONS OVERHEAD
	PROPOSED TELECOMMUNICATIONS UNDERGROUND
	PROPOSED SEWER LINE
	PROPOSED WATER MAIN
	PROPOSED STORMWATER PIPE
	PROPOSED INVERT
	PROPOSED TELECOMMUNICATIONS PIT
	PROPOSED PROPERTY / POWER / LIGHT POLE
	PROPOSED ELECTRICAL PITS / PILLAR
	PROPOSED KERB & CHANNEL - BARRIER TYPE (B1)
	PROPOSED KERB - SEMI MOUNTABLE TYPE (SMS)
	PROPOSED EDGE OF BITUMEN
	PROPOSED BOUNDARY FENCE LINE
	PROPOSED PEDESTRIAN FENCE

NOTES	
1.	REFER TO DRAWING SET "GP" FOR GENERAL NOTES.
2.	REFER TO DRAWING SET "GM" FOR ROAD LAYOUT PLANS.
3.	REFER TO DRAWING SET "CL" FOR CONTROL LINE SETUP PLANS.
4.	REFER TO DRAWING SET "SL" FOR UNENHANCED & SIGNAGE PLANS.
5.	REFER TO DRAWING SET "ST" FOR SERVICES PLANS.
6.	REFER TO DRAWING SET "TM" FOR TRAFFIC SIGNALS PLANS.
7.	REFER TO STD DWG DS-045 FOR FENCING DETAILS.
8.	REFER TO DRAWING SET "DT" FOR CROSS CULVERT DETAILS.
9.	REFER TO DRAWING SET "DT" FOR STORMWATER PIPE CLASSES, INVERT LEVELS AND MANHOLE SIZES.
10.	CONTOURS SHOWN ON THE PLAN ARE FINISHED SURFACE CONTOURS.
11.	ROAD SLOPE PROTECTION DEPTH & SIZE AS PER TABLE THIS SHEET, WITH BOM A34 GEOTEXTILE SO MATERIAL OR APPROVED ALTERNATIVE UNLS.
12.	EXISTING SHALE DRAINS BEYOND THE LIMITS OF CONSTRUCTION ARE TO REMAIN UNDISTURBED DURING CONSTRUCTION. IF DISTURBED, DRAINS ARE TO BE REINSTATED TO PREVIOUS CONDITION AS PER IPWEA STD. DNG. RS-056. REFER TO "TYPICAL DRAINAGE SECTION - ROAD IN CUT" AND "TYPICAL DRAINAGE SECTION - ROAD IN FILL".
13.	ALL REINFORCED CONCRETE PIPE (RCP) CULVERTS ARE TO BE MINIMUM CLASS 3 UNLS.
14.	ALL INSTALLATION, BEDDING AND BACKFILLING OF PROPOSED STORMWATER PIPES, REFER IPWEA STD DNG DS-030 & DS-031.
15.	ALL ROAD CROSSING CULVERTS WITH PRECAST HEADWALLS ARE TO BE FITTED WITH CAST IRON HEADWALL EXTENSIONS AND CUTOFF WALLS IN ACCORDANCE WITH COWI STANDARD DRAWING 1245.
16.	DESIGN BASED ON MANUFACTURER HANDBOOKS. ALTERNATE SHOULD BE CHECKED AGAINST THIS DESIGN.
17.	SUBSOL DRAWS TO BE CONSTRUCTED IN ACCORDANCE WITH IPWEA STD. DNG. RS-140, RS-142.
18.	STANDARD DAILY PIT CHAMBERS 800 x 830 REFER TO IPWEA STD DNG DS-060 & DS-063.
19.	FOR ELONGATED MANHOLE STRUCTURES REFER TO LCC STD DNG 16108-007-01 TO 16108-007-04.
20.	STORMWATER PIPE TRENCH DEWATERING TO BE PROVIDED, PERFORMED POLYETHYLENE PIPES TO BE INSTALLED ON UPSTREAM FACE OF ALL MANHOLES AS PER IPWEA STD DNG DS-010 & DS-030.

STORMWATER CATCHMENT TABLE

PIT NUMBER	CONTRIBUTING CATCHMENTS	AREA (ha)
1/50	1.50	0.226
2/50	2.50	0.152
3/50	3.50	0.139
4/50	4.50	0.205
5/50	5.50	0.082
6/50	6.50	0.125
7/50	7.50	0.085
1/54	1.54	0.207
2/54	2.54	0.173
3/54	3.54	0.099
1/57	1.57	0.373
2/57	2.57	0.2
1/58	1.58	0.146
2/58	2.58	0.084
3/58	3.58	0.087
4/58	4.58	0.118
5/58	5.58	0.111
1/59	1.59	0.09
2/59	2.59	0.082
3/59	3.59	0.104
4/59	4.59	0.059
1/60	1.60	0.087
1/61	1.61	0.086
1/65	1.65	0.18
2/65	2.65	0.087
3/65	3.65	0.045
4/65	4.65	0.146
5/65	5.65	0.171
6/65	6.65	0.054
7/65	7.65	0.058
8/65	8.65	0.054
1/66	1.66	0.072
2/66	2.66	0.107
1/67	1.67	0.117
1/68	1.68	0.153
2/68	2.68	0.052

AMENDMENTS	BY	CHKD	APP'D	DATE



SURVEY CONTROL POINTS			
PT	EASTING	NORTHING	RL
REFER TO DRAWING SET "CL" FOR DETAILS			
BAR SCALES (AT UNREPRODUCED)			
NOT TO SCALE			

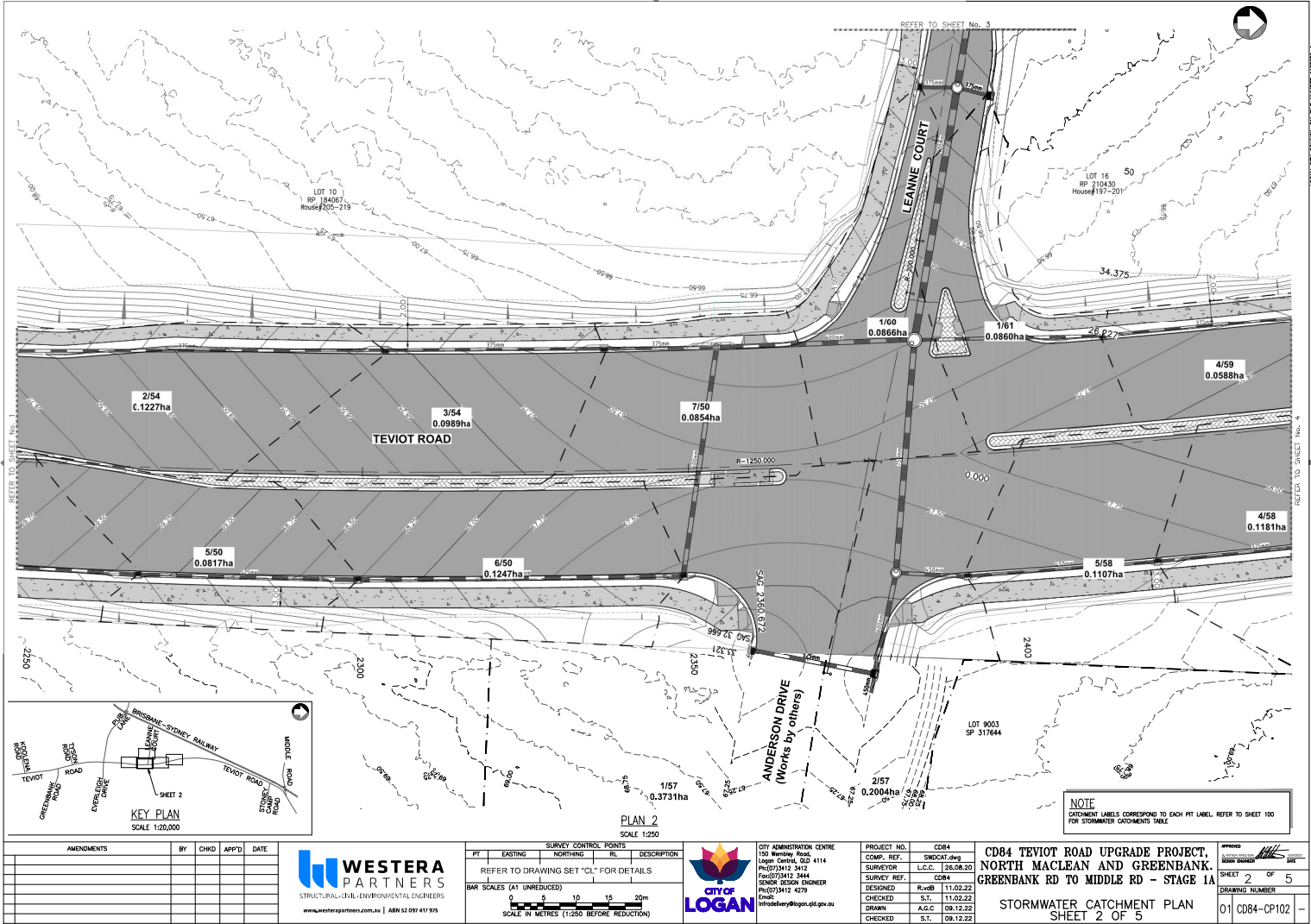


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PROJECT NO.	CD84
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CD84 TEVIOT ROAD UPGRADE PROJECT,
NORTH MACLEAN AND GREENBANK.
GREENBANK RD TO MIDDLE RD - STAGE 1A
STORMWATER CATCHMENT PLAN
LEGEND AND NOTES
SHEET 1 OF 1

APPROVED	
SENIOR DESIGNER	
SHEET	1 OF 1
DRAWING NUMBER	
01	CD84-CP100



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BAR SCALES (AT UNREDUCED)			
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SCALE IN METRES (1:250 BEFORE REDUCTION)			

CITY OF LOGAN

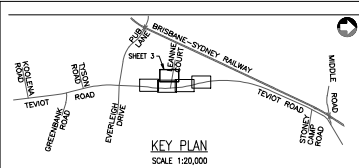
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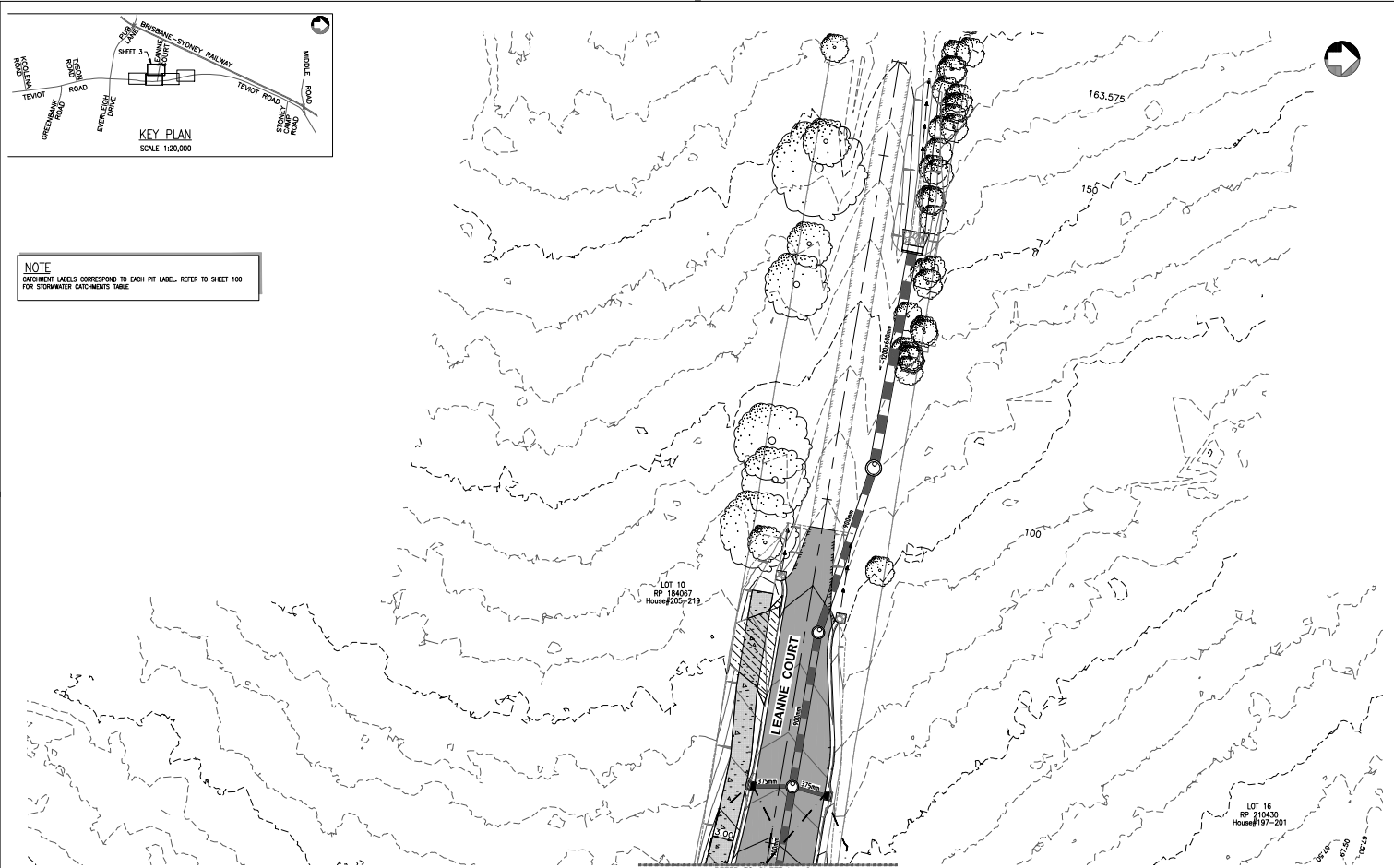
**CD84 TEVIOT ROAD UPGRADE PROJECT,
NORTH MACLEAN AND GREENBANK.
GREENBANK RD TO MIDDLE RD - STAGE 1A**

STORMWATER CATCHMENT PLAN
SHEET 2 OF 5

APPROVED	DATE	BY
SHEET 2 OF 5		
DRAWING NUMBER		
01	CD84-CP102	-



NOTE
CATCHMENT LABELS CORRESPOND TO EACH PIT LABEL. REFER TO SHEET 100 FOR STORMWATER CATCHMENTS TABLE.



AMENDMENTS

BY

CHKD

APP'D

DATE

B

STORMWATER REVISION

R.vdB

N.L.P

B.C.A

22.10.24

A

STORMWATER OUTLET REVISION

R.vdB

N.L.P

B.C.A

02.09.24

PLAN 3

SCALE 1:250

PT

EASTING

NORTHING

RL

DESCRIPTION

REFER TO DRAWING SET "CL" FOR DETAILS

BAR SCALES (AT UNREDUCED)

0

5

10

15

20m

SCALE IN METRES (1:250 BEFORE REDUCTION)

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PROJECT NO.

CD84

COMP. REF.

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SURVEYOR

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CD84 TEVIOT ROAD UPGRADE PROJECT,
NORTH MACLEAN AND GREENBANK.
GREENBANK RD TO MIDDLE RD - STAGE 1A

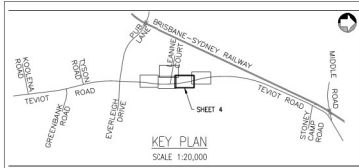
STORMWATER CATCHMENT PLAN
SHEET 3 OF 5

APPROVED

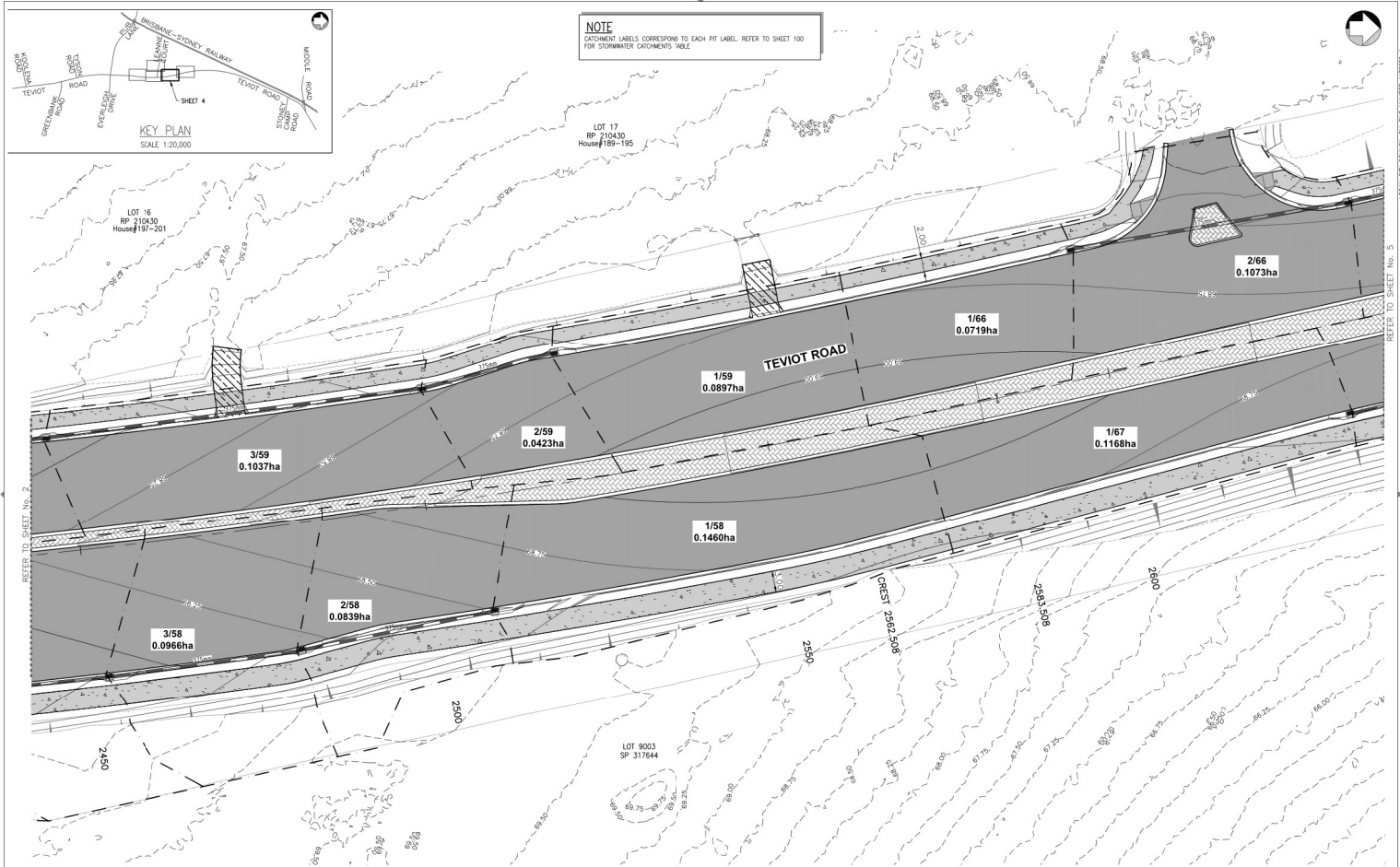
SHEET 3 OF 5

DRAWING NUMBER

01 CD84-CP103 B



NOTE
CATCHMENT LABELS CORRESPOND TO EACH PIT LABEL. REFER TO SHEET 100 FOR STORMWATER CATCHMENTS RULE.



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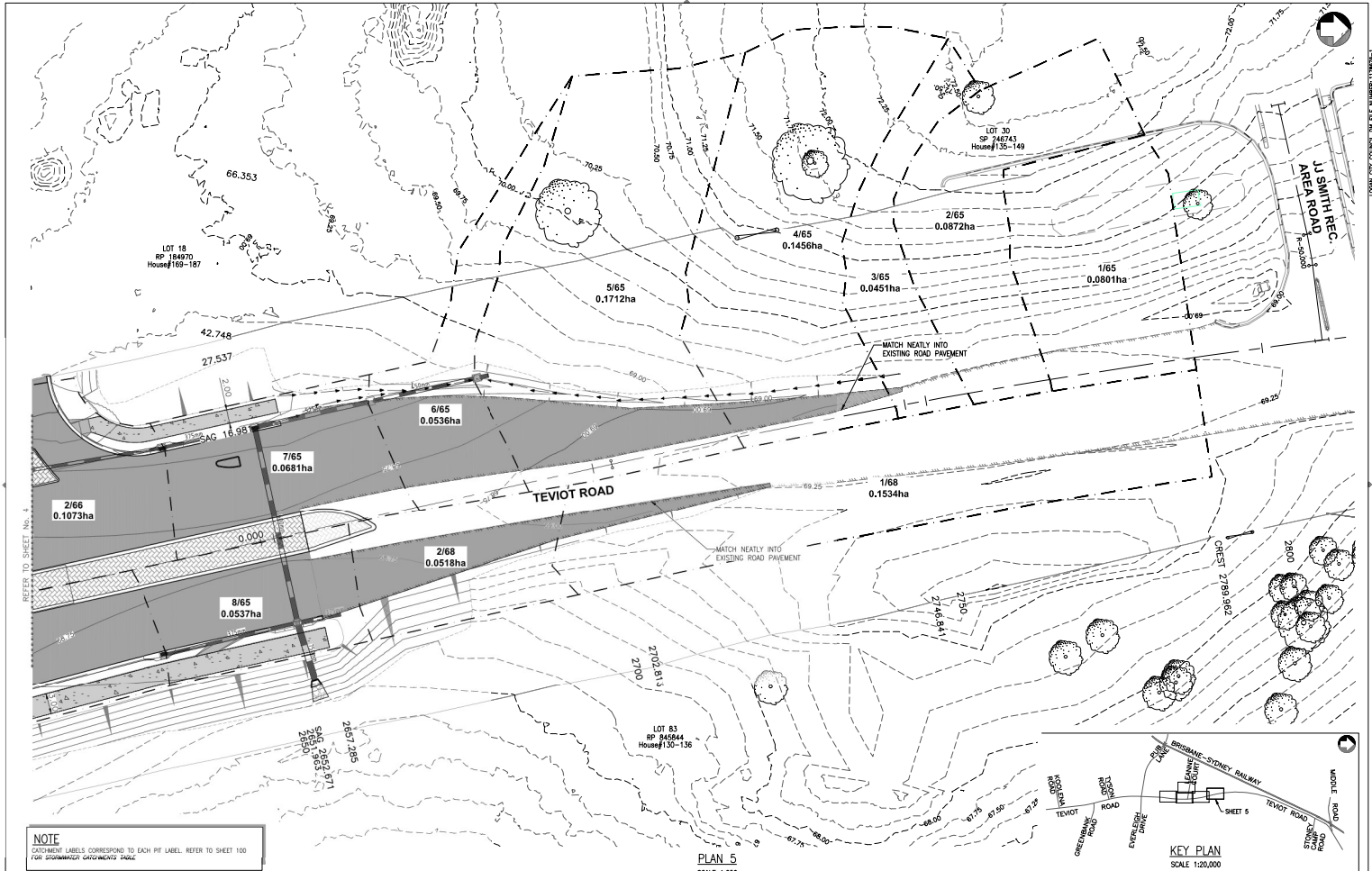
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**CD84 TEVIOT ROAD UPGRADE PROJECT,
NORTH MACLEAN AND GREENBANK.
GREENBANK RD TO MIDDLE RD - STAGE 1A**

**STORMWATER CATCHMENT PLAN
SHEET 4 OF 5**

APPROVED	DATE

SHEET	4	OF	5
DRAWING NUMBER	01	CD84-CP104	-



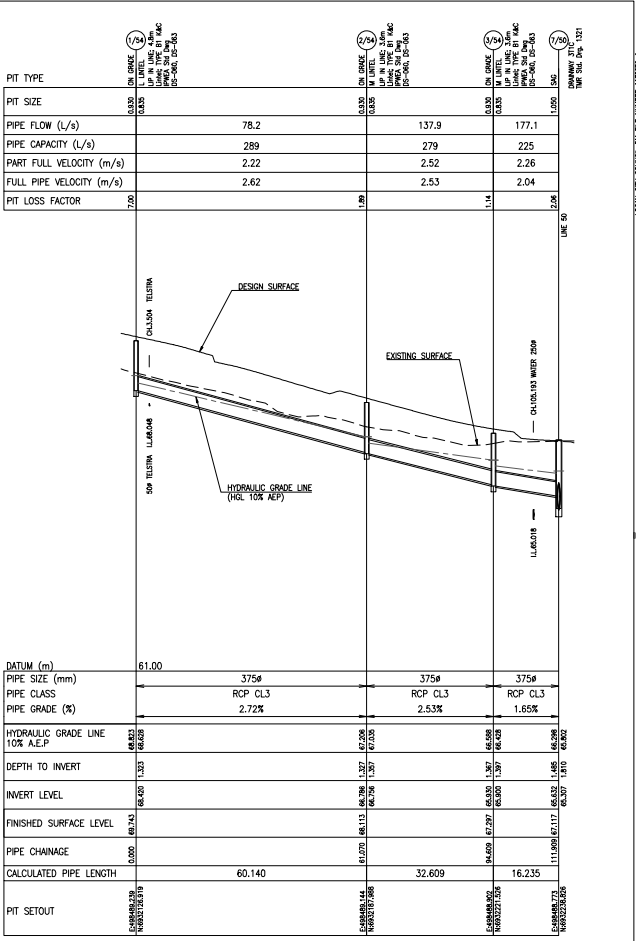
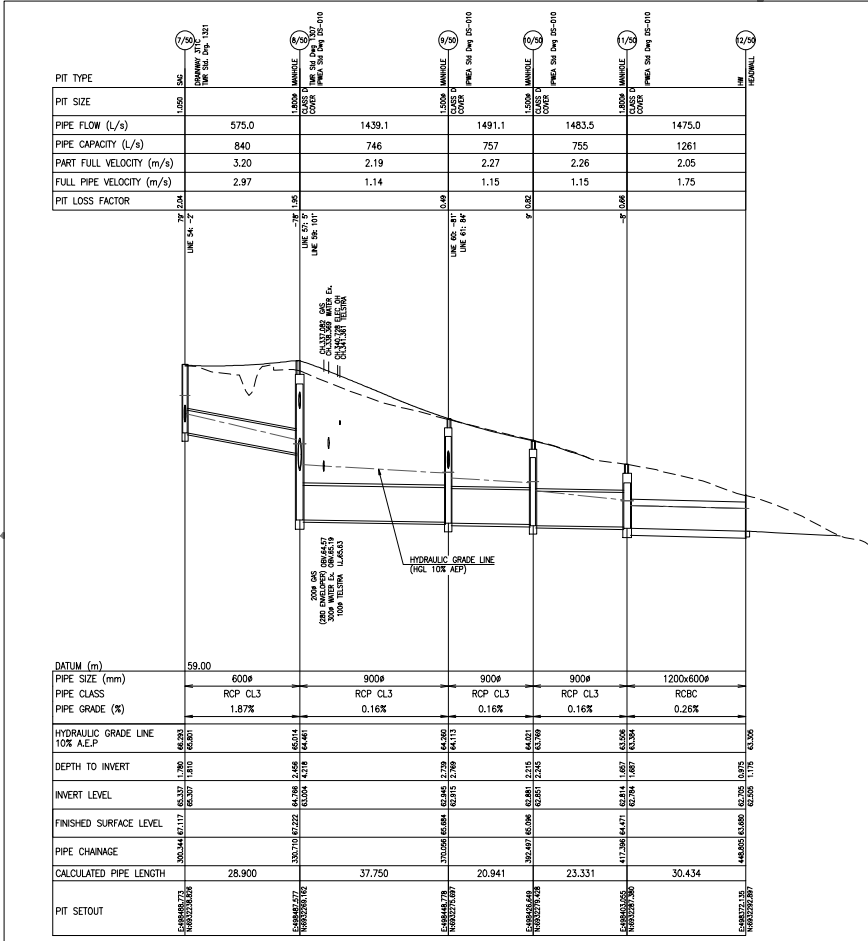
AMENDMENTS				BY	CHKD	APP'D	DATE

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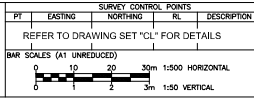
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STORMWATER CATCHMENT PLAN SHEET 5 OF 5	
APPROVED	
DESIGNER	
SHEET	5 OF 5
DRAWING NUMBER	01 CD84-CP105

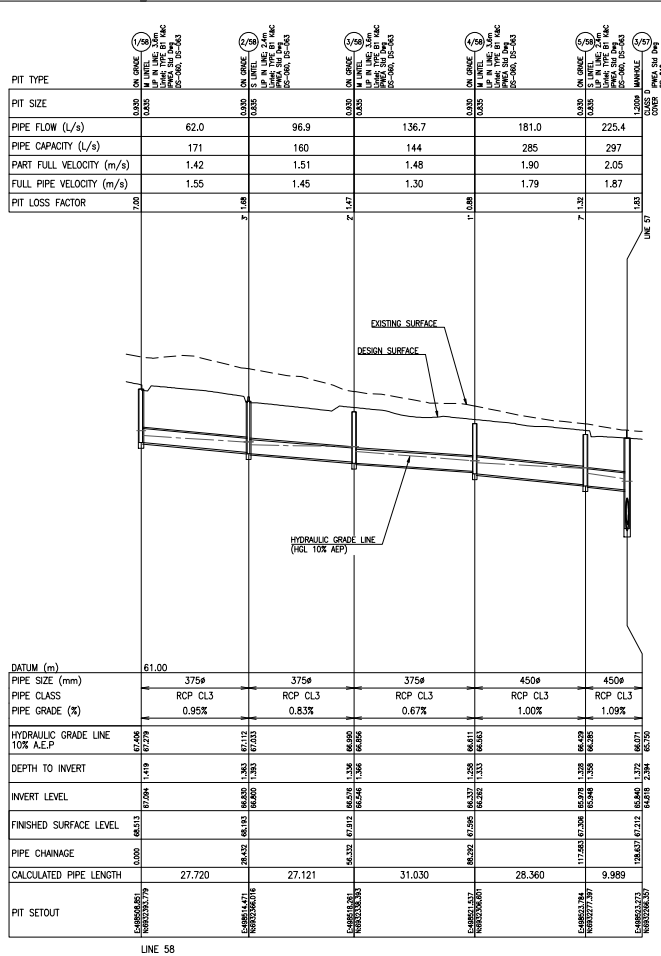
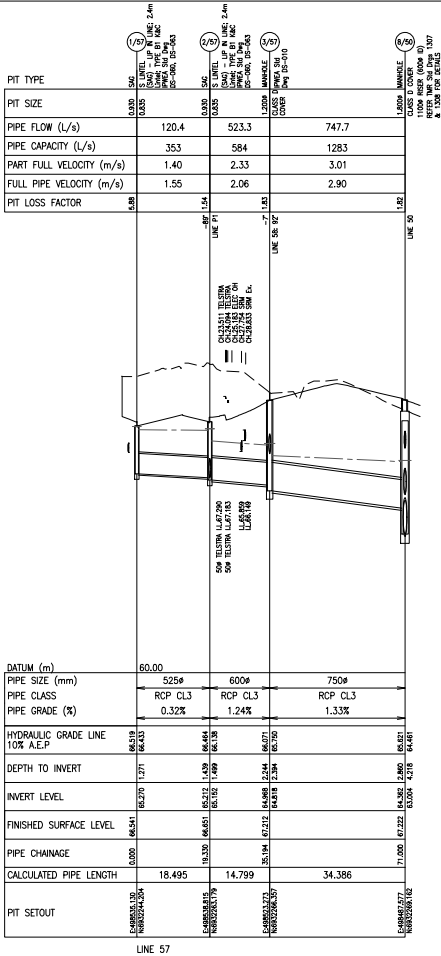


AMENDMENTS	BY	CHKD	APP'D	DATE
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B STORMWATER OUTLET REVISION	R.vdB	N.L.P.	B.C.A.	02.09.24
A STORMWATER PIT SETOUT COORDINATES UPDATED	R.vdB	N.L.P.	B.C.A.	15.08.23



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CD84 TEVIOT ROAD UPGRADE PROJECT, NORTH MACLEAN AND GREENBANK. GREENBANK RD TO MIDDLE RD - STAGE 1A STORMWATER DRAINAGE LONG SECTIONS LINE 50 - LINE 54	APP'D DESIGN ENGINEER SHEET 2 OF 6 DRAWING NUMBER 01 CD84-DL102 C
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AMENDMENTS	BY	CHKD	APP'D	DATE
B STORMWATER REVISION	R.vdB	N.L.P.	B.C.A.	22.10.24
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SURVEY CONTROL POINTS

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1	1000000.00	1000000.00	1000.00	REFER TO DRAWING SET "CL" FOR DETAILS

BAR SCALES (AT UNREDUCED)

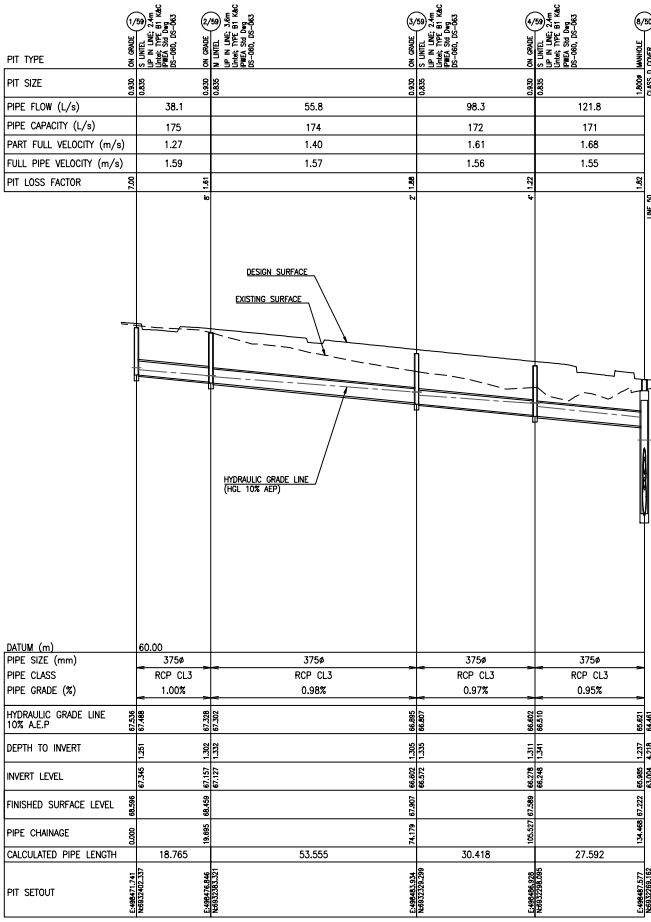
0 10 20 30m 1:500 HORIZONTAL
0 1 2 3m 1:50 VERTICAL

CITY OF LOGAN
CITY ADMINISTRATION CENTRE
150 Wembley Road
Logan Central, QLD 4114
Ph: (07) 3412 3412
Fax: (07) 3412 3444
Senior Design Engineer
Ph: (07) 3412 4278
Email: info@cityoflogan.qld.gov.au

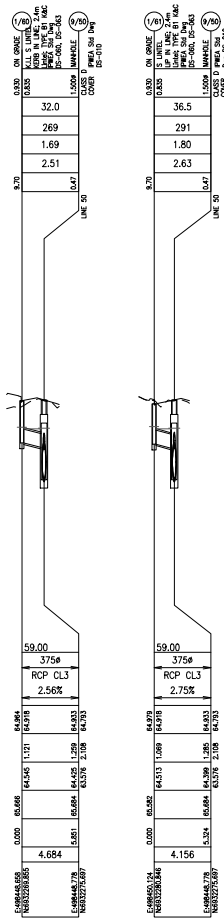
PROJECT NO.	CD84
COMP. REF.	SWD/SEC.dwg
SURVEYOR	L.C.G. 28.08.20
SURVEY REF.	CD84
DESIGNED	R.vdB 11.02.22
CHECKED	S.T. 11.02.22
DRAWN	M.J.P. 09.12.22
CHECKED	S.T. 09.12.22

CD84 TEVIOT ROAD UPGRADE PROJECT, NORTH MACLEAN AND GREENBANK. GREENBANK RD TO MIDDLE RD - STAGE 1A STORMWATER DRAINAGE LONG SECTIONS LINE 57 - LINE 58

APP'D: [Signature]
SHEET 3 OF 6
DRAWING NUMBER: 01 CD84-DL103 B



DATUM (m)	60.00				
PIPE SIZE (mm)	375ø	375ø	375ø	375ø	
PIPE CLASS	RCP CL3	RCP CL3	RCP CL3	RCP CL3	
PIPE GRADE (%)	1.00%	0.98%	0.97%	0.95%	
HYDRAULIC GRADE LINE 10% AEP	67.536 67.488	67.528 67.521	66.695 66.671	66.652 66.610	66.621 64.461
DEPTH TO INVERT	1.251	1.305	1.311	1.341	
INVERT LEVEL	67.346	67.157	66.624	66.278	65.285
FINISHED SURFACE LEVEL	68.596	68.459	67.907	67.596	67.222
PIPE CHAINAGE	0.000	18.865	24.179	30.577	34.486
CALCULATED PIPE LENGTH	18.765	53.555	30.418	27.592	
PIT SETOUT	E:488451.741 N:633262.537	E:488450.846 N:633263.021	E:488450.336 N:633263.019	E:488449.005 N:633263.005	E:488445.577 N:633262.582



DATUM (m)	59.00	59.00
PIPE SIZE (mm)	375ø	375ø
PIPE CLASS	RCP CL3	RCP CL3
PIPE GRADE (%)	2.56%	2.75%
HYDRAULIC GRADE LINE 10% AEP	64.964 64.978	64.978 64.973
DEPTH TO INVERT	1.131	1.269
INVERT LEVEL	64.545	64.399
FINISHED SURFACE LEVEL	65.676	65.664
PIPE CHAINAGE	0.000	4.156
CALCULATED PIPE LENGTH	4.684	
PIT SETOUT	E:488445.605 N:633262.605	E:488444.778 N:633262.607

AMENDMENTS

BY	CHKD	APP'D	DATE		
B	STORMWATER REVISION	R.vdB	N.L.P.	B.C.A.	22.10.24
A	STORMWATER PIT SETOUT COORDINATES UPDATED	R.vdB	N.L.P.	B.C.A.	15.08.23

WESTERA

PARTNERS

STRUCTURAL-CIVIL-ENVIRONMENTAL ENGINEERS

www.westerapartners.com.au | ABN 52 097 417 975

PT

EASTING

NORTHING

RL

DESCRIPTION

REFER TO DRAWING SET "CL" FOR DETAILS

0 10 20 30m

1:500 HORIZONTAL

0 1 2 3m

1:50 VERTICAL

CITY OF LOGAN

CITY ADMINISTRATION CENTRE

150 Wembley Road

Logan Centre, QLD 4114

Ph: (07) 3412 3412

Fax: (07) 3412 3444

SENIOR DESIGN ENGINEER

Ph: (07) 3412 4270

Email: infodesign@logan.qld.gov.au

PROJECT NO.

CD84

COMP. REF.

SWD/SEC.dwg

SURVEYOR

L.C.C. 28.08.20

SURVEY REF.

CD84

DESIGNED

R.vdB

11.02.22

CHECKED

S.T.

11.02.22

DRAWN

M.J.P.

09.12.22

CHECKED

S.T.

09.12.22

CD84 TEVIOT ROAD UPGRADE PROJECT,

NORTH MACLEAN AND GREENBANK.

GREENBANK RD TO MIDDLE RD - STAGE 1A

STORMWATER DRAINAGE

LONG SECTIONS

LINE 59 - LINE 61

APPROVED

DESIGN ENGINEER

SHEET 4 OF 6

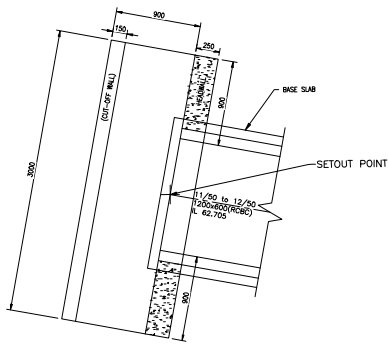
DRAWING NUMBER

01 CD84-DL104 B

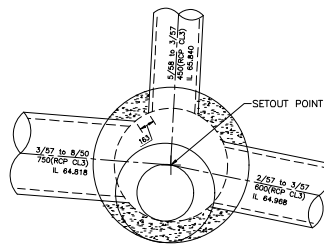
AMENDMENTS				BY	CHKD	APP'D	DATE	 WESTERA PARTNERS STRUCTURAL-CIVIL-ENVIRONMENTAL ENGINEERS www.westerapartners.com.au AIN 52 097 437 935		PT EASTING SURVEY CONTROL POINTS NORTHING RL DESCRIPTION REFER TO DRAWING SET "CL" FOR DETAILS  CITY OF LOGAN CITY ADMINISTRATION CENTRE 150 Bensley Road Logan Centre, QLD 4114 Ph:073412 3412 Fax:073412 3444 SENIOR DESIGN ENGINEER Ph:073412 4278 Email: infocentre@logan.qld.gov.au		PROJECT NO. CD84 COMP. REF. SW/SEC/CD84 SURVEYOR L.C.C. 26.08.20 SURVEY REF. CD84 DESIGNED R.vdB 11.02.22 CHECKED S.T. 11.02.22 DRAWN M.J.P. 09.12.22 CHECKED S.T. 09.12.22		CD84 TEVIOT ROAD UPGRADE PROJECT, NORTH MACLEAN AND GREENBANK. GREENBANK RD TO MIDDLE RD - STAGE 1A STORMWATER DRAINAGE LONG SECTIONS LINE 65		APPROVED  DESIGN ENGINEER SHEET 5 OF 6 DRAWING NUMBER 01 CD84-DL105 A	
A STORMWATER PIT SETOUT COORDINATES UPDATED								R.vdB	N.L.P.	B.C.A.	15.08.23	BAR SCALES (AT UNREDUCE)D  0 10 20 30m 1:500 HORIZONTAL 0 1 2 3m 1:50 VERTICAL					

AMENDMENTS				BY	CHKD	APP'D	DATE	WESTERA PARTNERS STRUCTURAL · CIVIL · ENVIRONMENTAL ENGINEERS www.westerapartners.com.au AIN 52 009 437 935				<table><tr><td>PT</td><td>EASTING</td><td colspan="2">SURVEY CONTROL POINTS</td><td>NORTHING</td><td>RL</td><td>DESCRIPTION</td></tr><tr><td colspan="7">REFER TO DRAWING SET "CL" FOR DETAILS</td></tr><tr><td colspan="7">BAR SCALES (AT UNREDUCED):</td></tr><tr><td colspan="3"></td><td colspan="4">1:500 HORIZONTAL</td></tr><tr><td colspan="3"></td><td colspan="4">1:50 VERTICAL</td></tr></table> CITY OF LOGAN				PT	EASTING	SURVEY CONTROL POINTS		NORTHING	RL	DESCRIPTION	REFER TO DRAWING SET "CL" FOR DETAILS							BAR SCALES (AT UNREDUCED):										1:500 HORIZONTAL							1:50 VERTICAL				CITY ADMINISTRATION CENTRE 150 Bensley Road Logan Centre, QLD 4114 PH: (07) 3412 3412 FAX: (07) 3412 3444 SENIOR DESIGN ENGINEER PH: (07) 3412 4278 Email: infocentre@logan.qld.gov.au <table><tr><td>PROJECT NO.</td><td>CD84</td></tr><tr><td>COMP. REF.</td><td>SW/SEC/CD84</td></tr><tr><td>SURVEYOR</td><td>L.C.C. 26.06.20</td></tr><tr><td>SURVEY REF.</td><td>CD84</td></tr><tr><td>DESIGNED</td><td>R.vdB 11.02.22</td></tr><tr><td>CHECKED</td><td>S.T. 11.02.22</td></tr><tr><td>DRAWN</td><td>M.J.P. 09.12.22</td></tr><tr><td>CHECKED</td><td>S.T. 09.12.22</td></tr></table>				PROJECT NO.	CD84	COMP. REF.	SW/SEC/CD84	SURVEYOR	L.C.C. 26.06.20	SURVEY REF.	CD84	DESIGNED	R.vdB 11.02.22	CHECKED	S.T. 11.02.22	DRAWN	M.J.P. 09.12.22	CHECKED	S.T. 09.12.22	CD84 TEVIOT ROAD UPGRADE PROJECT, NORTH MACLEAN AND GREENBANK. GREENBANK RD TO MIDDLE RD - STAGE 1A STORMWATER DRAINAGE LONG SECTIONS LINE 66 - LINE 68, LINE P1				APPROVED  DATE _____ DESIGN OFFICE _____ SHEET 6 OF 6 DRAWING NUMBER 01 CD84-DL106 A			
PT	EASTING	SURVEY CONTROL POINTS		NORTHING	RL	DESCRIPTION																																																																								
REFER TO DRAWING SET "CL" FOR DETAILS																																																																														
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			1:50 VERTICAL																																																																											
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CHECKED	S.T. 09.12.22																																																																													
A STORMWATER PIT SETOUT COORDINATES UPDATED				R.vdB	N.L.P.	B.C.A.	15.08.23																																																																							

APPROVED			CHECKED
S. K. ADHIKARI			
DESIGN ENGINEER			DATE
SHEET		OF	
1		4	
DRAWING NUMBER			
1	CD84-DD101	A	

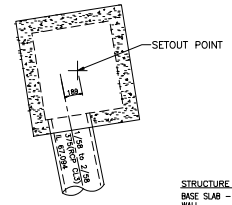


12/50 - HEADWALL AND APRON
REFER TMR STD. DRG. 1260



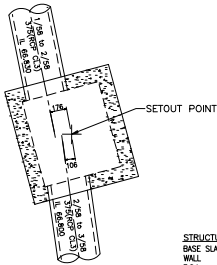
3/57 - 1200Ø

STRUCTURE DETAILS
BASE SLAB - 250mm tk.
WALL - 225mm tk.
F.S.L. - 67.213



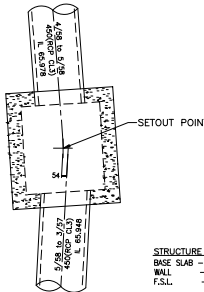
1/58 - 930 x 835

STRUCTURE DETAILS
BASE SLAB - 150mm tk.
WALL - 150mm tk.
F.S.L. - 68.624



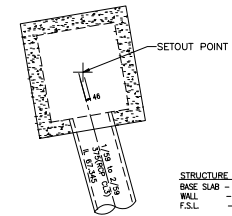
2/58 - 930 x 835

STRUCTURE DETAILS
BASE SLAB - 150mm tk.
WALL - 150mm tk.
F.S.L. - 68.304



5/58 - 930 x 835

STRUCTURE DETAILS
BASE SLAB - 150mm tk.
WALL - 150mm tk.
F.S.L. - 67.416



1/59 - 930 x 835

STRUCTURE DETAILS
BASE SLAB - 150mm tk.
WALL - 150mm tk.
F.S.L. - 68.707

AMENDMENTS	BY	CHKD	APP'D	DATE
A STORMWATER REVISION	R.vdB	N.L.P	B.C.A	22.10.24

WESTERA PARTNERS
STRUCTURAL-CIVIL-ENVIRONMENTAL ENGINEERS
www.westerapartners.com.au | ABN 52 097 417 975

SURVEY CONTROL POINTS			
PT	EASTING	NORTHING	RL
REFER TO DRAWING SET "OL" FOR DETAILS			
BAR SCALES (AT UNREDUCED)			
0 0.2 0.4 0.6 0.8 1.0 1.2 1.4 1.6m			
SCALE IN METRES 1:50 BEFORE REDUCTION			

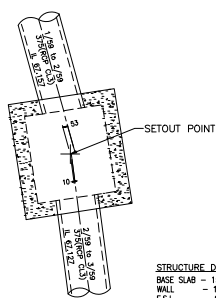


CITY ADMINISTRATION CENTRE
150 Bursley Road
Logan Central, QLD 4114
Ph: (07) 3412 3412
Fax: (07) 3412 3444
SENIOR DESIGN ENGINEER
Ph: (07) 3412 4270
Email: info@cityoflogan.qld.gov.au

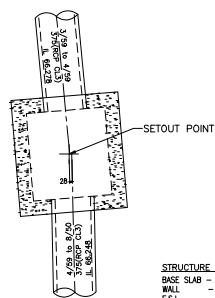
PROJECT NO.	CD84
COMP. REF.	SWN0005.dwg
SURVEYOR	L.C.C. 28.08.20
SURVEY REF.	CD84
DESIGNED	R.vdB 11.02.22
CHECKED	S.T. 11.02.22
DRAWN	A.G.C. 09.12.22
CHECKED	S.T. 09.12.22

**CD84 TEVIOT ROAD UPGRADE PROJECT,
NORTH MACLEAN AND GREENBANK.
GREENBANK RD TO MIDDLE RD - STAGE 1A**
STORMWATER DRAINAGE
NODES SETOUT DETAILS
SHEET 2 OF 4

APPROVED	DESIGN ENGINEER	SHEET 2 OF 4
DRAWING NUMBER	1	CD84-DD102 A

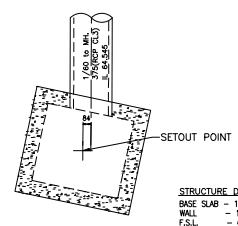


STRUCTURE DETAILS
BASE SLAB - 150mm
WALL - 150mm
F.S.L. - 68.570

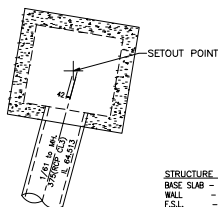
$$2/59 - 930 \times 835$$


STRUCTURE DETAILS
 BASE SLAB - 150mm
 WALL - 150mm
 F.S.L. - 67.700

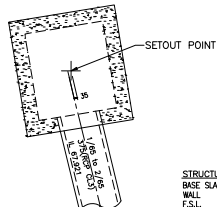
4/59 - 930 x 835



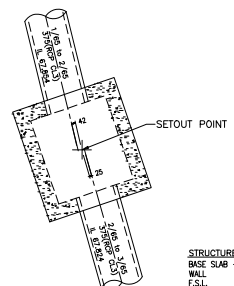
STRUCTURE DETAILS
 BASE SLAB - 150mm tk.
 WALL - 150mm tk.
 F.S.L. - 65.640

$$1/60 - 930 \times 835$$


STRUCTURE DETAILS
 BASE SLAB - 150mm tk.
 WALL - 150mm tk.
 F.S.L. - 65.693

$$1/61 = 930 \times 835$$


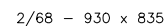
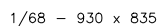
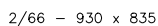
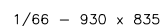
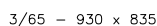
STRUCTURE DETAILS
 BASE SLAB - 150mm thick
 WALL - 150mm thick
 F.S.L. - 69.165

$$1/65 = 930 \times 835$$


STRUCTURE DETAILS
 BASE SLAB - 150mm tk.
 WALL - 150mm tk.
 F.S.L. - 69.119

$$2/65 = 930 \times 835$$

AMENDMENTS				BY	CHKD	APP'D	DATE	WESTERA PARTNERS STRUCTURAL-CIVIL-ENVIRONMENTAL ENGINEERS www.westerapartners.com.au ABN 52 097 417 975				<table><tr><th>PT</th><th>EASTING</th><th>NORTHING</th><th>RS</th><th>DESCRIPTION</th></tr><tr><td colspan="5">REFER TO DRAWING SET "CL" FOR DETAILS</td></tr><tr><td colspan="5">BAR SCALES (AT UNIMUCCED)</td></tr><tr><td colspan="5"></td></tr><tr><td colspan="5">SCALE IN METRES (1:50 BEFORE REDUCTION)</td></tr></table> CITY OF LOGAN CITY ADMINISTRATION CENTRE 50 MERRILL ROAD, LOGAN, QUEENSLAND 4114 Ph: (07) 3412 3412 Fax: (07) 3412 3444 SENIOR DESIGN ENGINEER Ph: (07) 3412 4279 Email: infrastructure@logan.qld.gov.au				PT	EASTING	NORTHING	RS	DESCRIPTION	REFER TO DRAWING SET "CL" FOR DETAILS					BAR SCALES (AT UNIMUCCED)										SCALE IN METRES (1:50 BEFORE REDUCTION)					<table><tr><th>PROJECT NO.</th><th>CD84</th></tr><tr><td>COMP. REF.</td><td>SWIN000582.dwg</td></tr><tr><td>SURVEYOR</td><td>L.C.G. 124/058</td></tr><tr><th>SURVEY REF.</th><th>CD84</th></tr><tr><td>DESIGNED</td><td>R.W.B. 11.02.22</td></tr><tr><td>CHECKED</td><td>S.T. 11.02.22</td></tr><tr><td>DRAWN</td><td>A.G.C. 09.12.22</td></tr><tr><td>CHECKED</td><td>S.T. 09.12.22</td></tr></table>				PROJECT NO.	CD84	COMP. REF.	SWIN000582.dwg	SURVEYOR	L.C.G. 124/058	SURVEY REF.	CD84	DESIGNED	R.W.B. 11.02.22	CHECKED	S.T. 11.02.22	DRAWN	A.G.C. 09.12.22	CHECKED	S.T. 09.12.22	CD84 TEVIOT ROAD UPGRADE PROJECT, NORTH MACLEAN AND GREENBANK. GREENBANK RD TO MIDDLE RD - STAGE 1A STORMWATER DRAINAGE NODES SETOUT DETAILS SHEET 3 OF 4				 SHEET 3 OF 4 DRAWING NUMBER 1 CD84-00103			
PT	EASTING	NORTHING	RS	DESCRIPTION																																																																
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AMENDMENTS				BY	CHKD	APP'D	DATE																																																																																											
WESTERA PARTNERS STRUCTURAL-CIVIL-ENVIRONMENTAL ENGINEERS www.westerapartners.com.au ABN 52 097 417 975								<table><tr><th>PT</th><th>EASTING</th><th>NORTHING</th><th>RS</th><th>DESCRIPTION</th></tr><tr><td colspan="5">REFER TO DRAWING SET "CL" FOR DETAILS</td></tr><tr><td colspan="5">BAR SCALES (AT UNIMUCED)</td></tr><tr><td colspan="5"></td></tr><tr><td colspan="5">SCALE IN METRES (1:50 BEFORE REDUCTION)</td></tr></table>										PT	EASTING	NORTHING	RS	DESCRIPTION	REFER TO DRAWING SET "CL" FOR DETAILS					BAR SCALES (AT UNIMUCED)										SCALE IN METRES (1:50 BEFORE REDUCTION)					CITY OF LOGAN CITY ADMINISTRATION CENTRE 50 MERRILL ROAD, LOGAN, QUEENSLAND 4114 Ph: (07) 3412 3412 Fax: (07) 3412 3444 SENIOR DESIGN ENGINEER Ph: (07) 3412 4279 Email: infrastructure@logan.qld.gov.au										<table><tr><th>PROJECT NO.</th><th>CD84</th></tr><tr><td>COMP. REF.</td><td>SWIN0005820</td></tr><tr><td>SURVEYOR</td><td>L.C.G. 134/08.dwg</td></tr><tr><th>SURVEY REF.</th><th>CD84</th></tr><tr><td>DESIGNED</td><td>RWB 11.02.22</td></tr><tr><td>CHECKED</td><td>S.T. 11.02.22</td></tr><tr><td>DRAWN</td><td>A.G.C. 09.12.22</td></tr><tr><td>CHECKED</td><td>S.T. 09.12.22</td></tr></table>										PROJECT NO.	CD84	COMP. REF.	SWIN0005820	SURVEYOR	L.C.G. 134/08.dwg	SURVEY REF.	CD84	DESIGNED	RWB 11.02.22	CHECKED	S.T. 11.02.22	DRAWN	A.G.C. 09.12.22	CHECKED	S.T. 09.12.22	CD84 TEVIOT ROAD UPGRADE PROJECT, NORTH MACLEAN AND GREENBANK. GREENBANK RD TO MIDDLE RD - STAGE 1A STORMWATER DRAINAGE NODES SETOUT DETAILS SHEET 4 OF 4										 APPROVED DATE SHEET 4 OF 4 DRAWING NUMBER 1 CD84-D0104 -									
PT	EASTING	NORTHING	RS	DESCRIPTION																																																																																														
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CHECKED	S.T. 09.12.22																																																																																																	

AEP 10% HYDROLOGY

Node Name	Node Type	Setoid	Setoid	Setoid	Setoid	Catch	Catch	Catch	Time	Intensity	Runoff	Area	Full	Full	Full	Partial	Partial	Partial	Catchment	Approach	Road	Flooded	Flooded	Flooded	Road	Max Pond	Inlet	Inlet	Swamp	Bypass			
[-]	[-]	[-]	[-]	[-]	[-]	Length	Slope	Retention	Time	[-]	[-]	[-]	[-]	[-]	[-]	[-]	[-]	[-]	[-]	[-]	[-]	[-]	[-]	[-]	[-]	[-]	[-]	[-]	[-]	[-]			
[-]	[-]	[-]	[-]	[-]	[-]	[-]	[-]	[-]	[-]	[-]	[-]	[-]	[-]	[-]	[-]	[-]	[-]	[-]	[-]	[-]	[-]	[-]	[-]	[-]	[-]	[-]	[-]	[-]	[-]	[-]			
1/50	AL2E	498508.15	6931908.64	71.38	71.38	71.38	1P	Refined Equation	50.00	4.0	0.035	152.88	0.66	0.0120	0.0071	0.1054	44.8	0.0008	0.1053	52.6	52.6	78.1	2188.9	0.106	3.12	0.06	0.6	2.5		0.562.5M	78.1	3/50	
2/50	AL2E	498513.52	6932030.36	71.08	71.08	71.08	1P	Refined Equation	50.00	4.0	0.035	152.88	0.66	0.0152	0.0090	0.1382	56.6	0.0048	0.1380	66.5	66.5	66.5	1889.3	0.104	3.06	0.06	0.5	2.5		0.562.5M	66.5	3/50	
3/50	AL2E	498518.11	6932068.83	70.09	70.09	70.09	1P	Refined Equation	50.00	4.0	0.035	152.88	0.66	0.0139	0.0095	0.1217	51.7	0.0044	0.1169	60.7	60.7	60.7	2002.9	0.000	2.45	0.07	1.2	2.5		162.5M	56.7	4.1 4/50	
4/50	AL2E	498523.57	6932100.01	69.16	69.16	69.16	1P	Refined Equation	50.00	4.0	0.035	152.88	0.66	0.0142	0.0097	0.1156	74.6	0.0030	0.1041	63.8	63.8	63.8	4371.7	0.000	2.44	0.80	2.5	2.5		262.5M	78.1	9.8 5/50	
5/50	AL2E	498524.85	6932183.79	68.38	68.37	68.37	1P	Refined Equation	50.00	4.0	0.035	152.88	0.66	0.0163	0.0098	0.0996	29.6	0.0052	0.0640	83.2	83.2	83.2	4505.1	0.075	1.77	0.07	2.7	2.5		262.5M	43.0	6/50	
6/50	AL2E	498523.84	6932232.82	67.32	67.21	67.21	1P	Refined Equation	50.00	4.0	0.035	152.88	0.66	0.0149	0.0090	0.1300	45.1	0.0079	0.0977	50.7	50.7	50.7	2423.3	0.089	2.45	0.06	0.9	0.8		162.5M	50.5	0.3 1/57	
7/50	RAINWAY STP/7 SAG	498468.77	6932258.83	67.30	67.12	67.12	1P	Refined Equation	50.00	4.0	0.035	152.88	0.66	0.0085	0.0084	0.0748	31.8	0.0027	0.0719	37.3	37.3	37.3	346.0	0.031					0.180	SAG	87.3	1/60	
8/50	MHI300	498467.96	6932265.15	67.32	67.22	67.22	1P	Refined Equation	50.00	4.0	0.035	152.88	0.66	0.0087	0.0087	0.1815	77.1	0.0005	0.1743	90.6	90.6	90.6	2020.6	0.039	2.55	0.09	2.2	2.5		262.5M	75.9	10.7 3/54	
9/50	MHI300	498468.78	6932275.70	65.98	65.68	65.68	1P	Refined Equation	50.00	4.0	0.035	152.88	0.66	0.0173	0.0081	0.1035	45.7	0.0039	0.1033	53.7	53.7	53.7	2914.4	0.082	2.11	0.08	2.7	2.5		262.5M	64.3	3/54	
10/50	MHI300	498476.65	6932279.43	65.30	65.30	65.30	1P	Refined Equation	50.00	4.0	0.035	152.88	0.66	0.0155	0.0099																262.5M	64.3	3/54
11/50	MHI300	498483.46	6932287.86	64.47	64.47	64.47	1P	Refined Equation	50.00	4.0	0.035	152.88	0.66	0.0099	0.0090	0.0906	36.8	0.0031	0.0832	43.2	43.2	43.2	2229.0	0.078	1.99	0.06	1.6	2.5		262.5M	43.2	7/50	
12/50	MHI300	498483.46	6932287.86	64.47	64.47	64.47	1P	Refined Equation	50.00	4.0	0.035	152.88	0.66	0.0180	0.1333	0.2383	123.6	0.0049	0.2268	123.6	123.6	123.6	3740.0	0.058					0.277	SAG	123.6	2/57	
13/50	MHI300	498483.46	6932287.86	64.47	64.47	64.47	1P	Refined Equation	50.00	4.0	0.035	152.88	0.66	0.0180	0.1333	0.2383	123.6	0.0049	0.2268	123.6	123.6	123.6	3740.0	0.058					0.277	SAG	123.6	2/57	
14/50	MHI300	498483.46	6932287.86	64.47	64.47	64.47	1P	Refined Equation	50.00	4.0	0.035	152.88	0.66	0.0180	0.1333	0.2383	123.6	0.0049	0.2268	123.6	123.6	123.6	3740.0	0.058					0.277	SAG	123.6	2/57	
15/50	MHI300	498483.46	6932287.86	64.47	64.47	64.47	1P	Refined Equation	50.00	4.0	0.035	152.88	0.66	0.0180	0.1333	0.2383	123.6	0.0049	0.2268	123.6	123.6	123.6	3740.0	0.058					0.277	SAG	123.6	2/57	
16/50	MHI300	498483.46	6932287.86	64.47	64.47	64.47	1P	Refined Equation	50.00	4.0	0.035	152.88	0.66	0.0180	0.1333	0.2383	123.6	0.0049	0.2268	123.6	123.6	123.6	3740.0	0.058					0.277	SAG	123.6	2/57	
17/50	MHI300	498483.46	6932287.86	64.47	64.47	64.47	1P	Refined Equation	50.00	4.0	0.035	152.88	0.66	0.0180	0.1333	0.2383	123.6	0.0049	0.2268	123.6	123.6	123.6	3740.0	0.058					0.277	SAG	123.6	2/57	
18/50	MHI300	498483.46	6932287.86	64.47	64.47	64.47	1P	Refined Equation	50.00	4.0	0.035	152.88	0.66	0.0180	0.1333	0.2383	123.6	0.0049	0.2268	123.6	123.6	123.6	3740.0	0.058					0.277	SAG	123.6	2/57	
19/50	MHI300	498483.46	6932287.86	64.47	64.47	64.47	1P	Refined Equation	50.00	4.0	0.035	152.88	0.66	0.0180	0.1333	0.2383	123.6	0.0049	0.2268	123.6	123.6	123.6	3740.0	0.058					0.277	SAG	123.6	2/57	
20/50	MHI300	498483.46	6932287.86	64.47	64.47	64.47	1P	Refined Equation	50.00	4.0	0.035	152.88	0.66	0.0180	0.1333	0.2383	123.6	0.0049	0.2268	123.6	123.6	123.6	3740.0	0.058					0.277	SAG	123.6	2/57	
21/50	MHI300	498483.46	6932287.86	64.47	64.47	64.47	1P	Refined Equation	50.00	4.0	0.035	152.88	0.66	0.0180	0.1333	0.2383	123.6	0.0049	0.2268	123.6	123.6	123.6	3740.0	0.058					0.277	SAG	123.6	2/57	
22/50	MHI300	498483.46	6932287.86	64.47	64.47	64.47	1P	Refined Equation	50.00	4.0	0.035	152.88	0.66	0.0180	0.1333	0.2383	123.6	0.0049	0.2268	123.6	123.6	123.6	3740.0	0.058					0.277	SAG	123.6	2/57	
23/50	MHI300	498483.46	6932287.86	64.47	64.47	64.47	1P	Refined Equation	50.00	4.0	0.035	152.88	0.66	0.0180	0.1333	0.2383	123.6	0.0049	0.2268	123.6	123.6	123.6	3740.0	0.058					0.277	SAG	123.6	2/57	
24/50	MHI300	498483.46	6932287.86	64.47	64.47	64.47	1P	Refined Equation	50.00	4.0	0.035	152.88	0.66	0.0180	0.1333	0.2383	123.6	0.0049	0.2268	123.6	123.6	123.6	3740.0	0.058					0.277	SAG	123.6	2/57	
25/50	MHI300	498483.46	6932287.86	64.47	64.47	64.47	1P	Refined Equation	50.00	4.0	0.035	152.88	0.66	0.0180	0.1333	0.2383	123.6	0.0049	0.2268	123.6	123.6	123.6	3740.0	0.058					0.277	SAG	123.6	2/57	
26/50	MHI300	498483.46	6932287.86	64.47	64.47	64.47	1P	Refined Equation	50.00	4.0	0.035	152.88	0.66	0.0180	0.1333	0.2383	123.6	0.0049	0.2268	123.6	123.6	123.6	3740.0	0.058					0.277	SAG	123.6	2/57	
27/50	MHI300	498483.46	6932287.86	64.47	64.47	64.47	1P	Refined Equation	50.00	4.0	0.035	152.88	0.66	0.0180	0.1333	0.2383	123.6	0.0049	0.2268	123.6	123.6	123.6	3740.0	0.058					0.277	SAG	123.6	2/57	
28/50	MHI300	498483.46	6932287.86	64.47	64.47	64.47	1P	Refined Equation	50.00	4.0	0.035	152.88	0.66	0.0180	0.1333	0.2383	123.6	0.0049	0.2268	123.6	123.6	123.6	3740.0	0.058					0.277	SAG	123.6	2/57	
29/50	MHI300	498483.46	6932287.86	64.47	64.47	64.47	1P	Refined Equation	50.00	4.0	0.035	152.88	0.66	0.0180	0.1333	0.2383	123.6	0.0049	0.2268	123.6	123.6	123.6	3740.0	0.058					0.277	SAG	123.6	2/57	
30/50	MHI300	498483.46	6932287.86	64.47	64.47	64.47	1P	Refined Equation	50.00	4.0	0.035	152.88	0.66	0.0180	0.1333	0.2383	123.6	0.0049	0.2268	123.6	123.6	123.6	3740.0	0.058					0.277	SAG	123.6	2/57	
31/50	MHI300	498483.46	6932287.86	64.47	64.47	64.47	1P	Refined Equation	50.00	4.0	0.035	152.88	0.66	0.0180	0.1333	0.2383	123.6	0.0049	0.2268	123.6	123.6	123.6	3740.0	0.058					0.277	SAG	123.6	2/57	
32/50	MHI300	498483.46	6932287.86	64.47	64.47	64.47	1P	Refined Equation	50.00	4.0	0.035	152.88	0.66	0.0180	0.1333	0.2383	123.6	0.0049	0.2268	123.6	123.6	123.6	3740.0	0.058					0.277	SAG	123.6	2/57	
33/50	MHI300	498483.46	6932287.86	64.47	64.47	64.47	1P	Refined Equation	50.00	4.0	0.035	152.88	0.66	0.0180	0.1333	0.2383	123.6	0.0049	0.2268	123.6	123.6	123.6	3740.0	0.058					0.277	SAG	123.6	2/57	
34/50	MHI300	498483.46	6932287.86	64.47	64.47	64.47	1P	Refined Equation	50.00	4.0	0.035	152.88	0.66	0.0180	0.1333	0.2383	123.6	0.0049	0.2268	123.6	123.6	123.6	3740.0	0.058					0.277	SAG	123.6	2/57	
35/50	MHI300	498483.46	6932287.86	64.47	64.47	64.47	1P	Refined Equation	50.00	4.0	0.035	152.88	0.66	0.0180	0.1333	0.2383	123.6	0.0049	0.2268	123.6	123.6	123.6	3740.0	0.058					0.277	SAG	123.6	2/57	
36/50	MHI300	498483.46	6932287.86	64.47	64.47	64.47	1P	Refined Equation	50.00	4.0	0.035	152.88	0.66	0.0180	0.1333	0.2383	123.6	0.0049	0.2268	123.6	123.6	123.6	3740.0	0.058					0.277	SAG	123.6	2/57	
37/50	MHI300	498483.46	6932287.86	64.47	64.47	64.47	1P	Refined Equation	50.00	4.0	0.035	152.88	0.66	0.0180	0.1333	0.2383	123.6	0.0049	0.2268	123.6	123.6	123.6	3740.0	0.058					0.277	SAG	123.6	2/57	
38/50	MHI300	498483.46	69322																														

AEP 1% HYDROLOGY

Node Name	Node Type	Setout Easting	Setout Northing	Setout RL	Grate RL	Cover Catch RL	IC	IC Method	Catch Length	Catch Slope	Catch Retardance	Time To	Intensity I	Runoff C	Full Sum CA	Full Area A	Full Q=CA	Partial Sum CA	Partial Q=CA	Catchment Flow Qc	Direct Flow Qd	Approach Flow Qa	Road Grade	Road Xfall	Max Pond Depth	Choke Factor	Inlet Flow Qg	Bypass Flow Qb	Bypass Node	Inlet Flow Qh	Bypass Flow Qi	Bypass Node	
[1]	[2]	[m]	[m]	[m]	[m]	[m]	[1]	[1]	[m]	[%]	[1]	[min]	[mm/hr]	[1]	[ha]	[ha]	[L/s]	[ha]	[L/s]	[L/s]	[L/s]	[L/s]	[%]	[m]	[m]	[1]	[1]	[L/s]	[L/s]	[1]	[L/s]	[L/s]	[1]
1A/50	Kerbside outlet	498504.01	693306.30	71.59	71.59	71.34	1P	Friend Equation	50.00	4.0	0.035	10.44	227.90	0.79	0.0315	0.001	0.1130	71.5	0.0004	0.1083	86.0	86.0				0.80	20.0	66.0	1/50	114.1	60.2	3/50	
1/50	AL3E	498505.10	693346.64	71.38	71.38	71.38	1P	Friend Equation	50.00	4.0	0.035	10.44	227.90	0.79	0.0320	0.005	0.1131	71.6	0.0004	0.1129	88.7	88.7				0.80	56.2	106.4	48.3	2/50	90.1	73.6	4/50
2/50	AL3E	498513.12	693300.35	71.08	71.08	71.08	1P	Friend Equation	50.00	4.0	0.035	10.44	227.90	0.79	0.0320	0.010	0.1149	54.3	0.0002	0.1045	113.3	113.3				0.80	56.2	109.3	53.4	3/50	120.4	96.6	5/50
3/50	AL2E	498518.11	693306.83	70.69	70.69	70.69	1P	Friend Equation	50.00	4.0	0.035	10.44	227.90	0.79	0.0319	0.010	0.1130	86.1	0.0003	0.1103	103.5	103.5				0.80	18.2	87.7	69.2	4/50	93.5	98.9	6/50
4/50	AL4E	498523.57	693320.04	69.16	69.16	69.16	1P	Friend Equation	50.00	4.0	0.035	10.44	227.90	0.79	0.0412	0.026	0.1204	125.0	0.0156	0.1804	143.3	143.3				0.80	18.2	118.6	99.9	5/50	84.0	62.7	1/57
5/50	AL4E	498524.35	693328.79	68.38	68.27	68.27	1P	Friend Equation	50.00	4.0	0.035	10.44	227.90	0.79	0.0353	0.029	0.1262	49.5	0.0002	0.0735	56.8	56.8				0.80	18.2	92.3	58.6	6/50	112.5	149.0	
6/50	AL2E	498523.84	693323.82	67.32	67.21	67.21	1P	Friend Equation	50.00	4.0	0.035	10.44	227.90	0.79	0.0289	0.0397	0.1195	75.4	0.0004	0.1082	86.8	86.8				0.80	18.2	85.5	61.7	1/57	-	-	-
7/50	DRAINWAY STP/FY SAG	498488.77	693273.85	67.10	67.12	67.12	1P	Friend Equation	50.00	4.0	0.035	10.44	227.90	0.79	0.0308	0.0007	0.0888	52.9	0.0002	0.0801	63.6	63.6				0.80	0.50	54.6	112.5	1/60	-	-	-
8/50	MH1000	498487.58	693269.35	67.22	67.22	67.22	1P	Friend Equation	50.00	4.0	0.035	10.44	227.90	0.79	0.0307	0.0104	0.0908	128.4	0.0078	0.1963	154.3	154.3				0.80	18.2	91.9	60.5	2/54	84.9	48.9	7/50
9/50	MH1000	498484.26	693275.70	65.68	65.68	65.68	1P	Friend Equation	50.00	4.0	0.035	10.44	227.90	0.79	0.0323	0.0007	0.1001	76.1	0.0004	0.1151	91.6	91.6				0.80	18.2	91.8	60.1	3/54	186.7	87.3	2/57
10/50	MH1000	498483.45	693279.41	65.10	65.10	65.10	1P	Friend Equation	50.00	4.0	0.035	10.44	227.90	0.79	0.0320	0.0105	0.1135	135.0	0.0078	0.1963	154.3	154.3				0.80	18.2	91.8	60.1	3/54	186.7	87.3	2/57
11/50	MH1000	498483.45	693279.41	65.10	65.10	65.10	1P	Friend Equation	50.00	4.0	0.035	10.44	227.90	0.79	0.0320	0.0105	0.1135	135.0	0.0078	0.1963	154.3	154.3				0.80	18.2	91.8	60.1	3/54	186.7	87.3	2/57
12/50	MH1000	498483.45	693279.41	65.10	65.10	65.10	1P	Friend Equation	50.00	4.0	0.035	10.44	227.90	0.79	0.0320	0.0105	0.1135	135.0	0.0078	0.1963	154.3	154.3				0.80	18.2	91.8	60.1	3/54	186.7	87.3	2/57
13/50	AL4E	498483.45	693279.41	65.10	65.10	65.10	1P	Friend Equation	50.00	4.0	0.035	10.44	227.90	0.79	0.0320	0.0105	0.1135	135.0	0.0078	0.1963	154.3	154.3				0.80	18.2	91.8	60.1	3/54	186.7	87.3	2/57
14/50	AL4E	498483.45	693279.41	65.10	65.10	65.10	1P	Friend Equation	50.00	4.0	0.035	10.44	227.90	0.79	0.0320	0.0105	0.1135	135.0	0.0078	0.1963	154.3	154.3				0.80	18.2	91.8	60.1	3/54	186.7	87.3	2/57
15/50	AL4E	498483.45	693279.41	65.10	65.10	65.10	1P	Friend Equation	50.00	4.0	0.035	10.44	227.90	0.79	0.0320	0.0105	0.1135	135.0	0.0078	0.1963	154.3	154.3				0.80	18.2	91.8	60.1	3/54	186.7	87.3	2/57
16/50	AL4E	498483.45	693279.41	65.10	65.10	65.10	1P	Friend Equation	50.00	4.0	0.035	10.44	227.90	0.79	0.0320	0.0105	0.1135	135.0	0.0078	0.1963	154.3	154.3				0.80	18.2	91.8	60.1	3/54	186.7	87.3	2/57
17/50	AL4E	498483.45	693279.41	65.10	65.10	65.10	1P	Friend Equation	50.00	4.0	0.035	10.44	227.90	0.79	0.0320	0.0105	0.1135	135.0	0.0078	0.1963	154.3	154.3				0.80	18.2	91.8	60.1	3/54	186.7	87.3	2/57
18/50	AL4E	498483.45	693279.41	65.10	65.10	65.10	1P	Friend Equation	50.00	4.0	0.035	10.44	227.90	0.79	0.0320	0.0105	0.1135	135.0	0.0078	0.1963	154.3	154.3				0.80	18.2	91.8	60.1	3/54	186.7	87.3	2/57
19/50	AL4E	498483.45	693279.41	65.10	65.10	65.10	1P	Friend Equation	50.00	4.0	0.035	10.44	227.90	0.79	0.0320	0.0105	0.1135	135.0	0.0078	0.1963	154.3	154.3				0.80	18.2	91.8	60.1	3/54	186.7	87.3	2/57
20/50	AL4E	498483.45	693279.41	65.10	65.10	65.10	1P	Friend Equation	50.00	4.0	0.035	10.44	227.90	0.79	0.0320	0.0105	0.1135	135.0	0.0078	0.1963	154.3	154.3				0.80	18.2	91.8	60.1	3/54	186.7	87.3	2/57
21/50	AL4E	498483.45	693279.41	65.10	65.10	65.10	1P	Friend Equation	50.00	4.0	0.035	10.44	227.90	0.79	0.0320	0.0105	0.1135	135.0	0.0078	0.1963	154.3	154.3				0.80	18.2	91.8	60.1	3/54	186.7	87.3	2/57
22/50	AL4E	498483.45	693279.41	65.10	65.10	65.10	1P	Friend Equation	50.00	4.0	0.035	10.44	227.90	0.79	0.0320	0.0105	0.1135	135.0	0.0078	0.1963	154.3	154.3				0.80	18.2	91.8	60.1	3/54	186.7	87.3	2/57
23/50	AL4E	498483.45	693279.41	65.10	65.10	65.10	1P	Friend Equation	50.00	4.0	0.035	10.44	227.90	0.79	0.0320	0.0105	0.1135	135.0	0.0078	0.1963	154.3	154.3				0.80	18.2	91.8	60.1	3/54	186.7	87.3	2/57
24/50	AL4E	498483.45	693279.41	65.10	65.10	65.10	1P	Friend Equation	50.00	4.0	0.035	10.44	227.90	0.79	0.0320	0.0105	0.1135	135.0	0.0078	0.1963	154.3	154.3				0.80	18.2	91.8	60.1	3/54	186.7	87.3	2/57
25/50	AL4E	498483.45	693279.41	65.10	65.10	65.10	1P	Friend Equation	50.00	4.0	0.035	10.44	227.90	0.79	0.0320	0.0105	0.1135	135.0	0.0078	0.1963	154.3	154.3				0.80	18.2	91.8	60.1	3/54	186.7	87.3	2/57
26/50	AL4E	498483.45	693279.41	65.10	65.10	65.10	1P	Friend Equation	50.00	4.0	0.035	10.44	227.90	0.79	0.0320	0.0105	0.1135	135.0	0.0078	0.1963	154.3	154.3				0.80	18.2	91.8	60.1	3/54	186.7	87.3	2/57
27/50	AL4E	498483.45	693279.41	65.10	65.10	65.10	1P	Friend Equation	50.00	4.0	0.035	10.44	227.90	0.79	0.0320	0.0105	0.1135	135.0	0.0078	0.1963	154.3	154.3				0.80	18.2	91.8	60.1	3/54	186.7	87.3	2/57
28/50	AL4E	498483.45	693279.41	65.10	65.10	65.10	1P	Friend Equation	50.00	4.0	0.035	10.44	227.90	0.79	0.0320	0.0105	0.1135	135.0	0.0078	0.1963	154.3	154.3				0.80	18.2	91.8	60.1	3/54	186.7	87.3	2/57
29/50	AL4E	498483.45	693279.41	65.10	65.10	65.10	1P	Friend Equation	50.00	4.0	0.035	10.44	227.90	0.79	0.0320	0.0105	0.1135	135.0	0.0078	0.1963	154.3	154.3				0.80	18.2	91.8	60.1	3/54	186.7	87.3	2/57
30/50	AL4E	498483.45	693279.41	65.10	65.10	65.10	1P	Friend Equation	50.00	4.0	0.035	10.44	227.90	0.79	0.0320	0.0105	0.1135	135.0	0.0078	0.1963	154.3	154.3				0.80	18.2	91.8	60.1	3/54	186.7	87.3	2/57
31/50	AL4E	498483.45	693279.41	65.10	65.10	65.10	1P	Friend Equation	50.00	4.0	0.035	10.44	227.90	0.79	0.0320	0.0105	0.1135	135.0	0.0078	0.1963	154.3	154.3				0.80	18.2	91.8	60.1	3/54	186.7	87.3	2/57
32/50	AL4E	498483.45	693279.41	65.10	65.10	65.10	1P	Friend Equation	50.00	4.0	0.035	10.44	227.90	0.79	0.0320	0.0105	0.1135	135.0	0.0078	0.1963	154.3	154.3				0.80	18.2	91.8	60.1	3/54	186.7	87.3	2/57
33/50	AL4E	498483.45	693279.41	65.10	65.10	65.10	1P	Friend Equation	50.00	4.0	0.035	10.44	227.90	0.79	0.0320	0.0105	0.1135	135.0	0.0078	0.1963	154.3	154.3				0.80	18.2	91.8	60.1	3/54	186.7	87.3	2/57
34/50	AL4E	498483.45	693279.41	65.10	65.10	65.10	1P	Friend Equation	50.00	4.0	0.035	10.44	227.90	0.79	0.0320	0.0105	0.1135	135.0	0.0078	0.1963	154.3	154.3				0.80	18.2	91.8	60.1	3/54	186.7	87.3	2/57
35/50	AL4E	498483.45	693279.41	65.10	65.10	65.10	1P	Friend Equation	50.00	4.0	0.035	10.44	227.90	0.79	0.0320	0.0105	0.1135	135.0	0.0078	0.1963	154.3	154.3				0.80	18.2	91.8	60.1	3/54	186.7	87.3	2/57
36/50	AL4E	498483.45	693279.41	65.10	65.10	65.10	1P	Friend Equation	50.00	4.0	0.035	10.44	227.90	0.79	0.0320	0.0105	0.1135	135.0	0.0078	0.19													

[illegible]

AMENDMENTS				BY	CHKD	APPD	DATE
WESTERN PARTNERS STRUCTURAL-CIVIL-ENVIRONMENTAL-ENGINEERS www.westernpartners.com.au ABN 52 00 487 955 CITY OF LOGAN CITY ADMINISTRATION CENTRE 150 WILLOWBERRY ROAD LOGAN CENTRAL, QLD 4114 Tel: (07)3412 3472 Fax: (07)3412 3444 SENIOR DESIGN ENGINEER Ph: (07)3412 4279 cproffey@logan.qld.gov.au							
SURVEY CONTROL POINTS							
BY	LASTING	NORTHING	EAST	DESCRIPTION			
REFER TO DRAWING SET "CL" FOR DETAILS							
(BAR SCALE: ALL UNREMOVED)							
NOT TO SCALE							

CD84 TEVIOT ROAD UPGRADE PROJECT, NORTH MACLEAN AND GREENBANK, GREENBANK RD TO MIDDLE RD - STAGE 1A				PROJECT NO. CD84	DATE 15/02/20
STORMWATER CALCULATIONS				PROJECT NO. CD84	DATE 15/02/20
MAJOR STORM 1% A.E.P.				PROJECT NO. CD84	DATE 15/02/20
SHEET 4 OF 4				PROJECT NO. CD84	DATE 15/02/20

A STORMWATER REVISION		R.v.b	N.L.P	B.C.A	22.10.24
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01		CD84-DC104		A	
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17. APPENDIX F – DEV2020/1136/3 – SEWERAGE COMPLIANCE APPROVAL

NAME OF ESTATE	205-219 TEVIOT ROAD GREENBANK QLD 4124
SUBDIVIDER	TFG PROPERTIES TIER 7 PTY. LTD.
APPLICATION NUMBER	-
SP DELEGATE	-
APPROVAL DATE	-
DRAWING/PLAN No.	P20-074-C05.01,C05.02,C05.03,C05.04
No. of ALLOTMENTS.	-
AREA IN ha.	0.6368ha.
LENGTH	407.889m
OF SEWERS	

ALL ENVIRONMENT PROTECTION MEASURES SHOULD BE IMPLEMENTED PRIOR TO COMMENCING CONSTRUCTION WORK, INCLUDING CLEANING.

ALL WATER AND SEWER CONSTRUCTION WORK UNDERTAKEN BY THE CONTRACTOR IS TO COMPLY WITH THE REQUIREMENTS OF THE QUEENSLAND WORK HEALTH AND SAFETY ACT 2011. CONTACT THE DIVISION OF WORKPLACE HEALTH AND SAFETY FOR INFORMATION. PH 1300 362 128

PROPERTY CONNECTIONS HAVE BEEN DESIGNED TO CONTROL ALL OF THE LOT AT A GRADE OF 140 AT A MAXIMUM DEPTH OF PROPERTY CONNECTION OF 1500m UNLESS OTHERWISE STATED. FOR JUNCTION DETAILS REFER SEQ-SEW-104-1 TO SEQ-SEW-105-1.

NOTE WELL:
NO SUBSTITUTIONS WITHOUT CONSENT OF THE AEPG.

ENVIRONMENTAL CONDITIONS

VEGETATION PROTECTION

- TREES LOCATED ALONG THE FOOTPATH SHALL BE, WHERE POSSIBLE, TRANSPLANTED PRIOR TO CONSTRUCTION, OR REPLACED IF DESTROYED.
- WHEN WORKING WITHIN 4m OF TREES, RUBBER OR HARDWOOD GROLLS SHALL BE CONSTRUCTED WITH 15m BATTENS CLOSELY SPACED AND ARRANGED VERTICALLY FROM GROUND LEVEL. GROLLES MUST BE STRAPPED TO TREES PRIOR TO CONSTRUCTION AND REMAIN UNTIL COMPLETION.
- WHERE POSSIBLE, TREE ROOTS SHALL BE TUNNELLED UNDER, RATHER THAN SEVERED. IF ROOTS ARE SEVERED THE DAMAGED AREA SHALL BE TREATED WITH A SUITABLE FUNGICIDE. CONTACT COUNCIL ARBORIST FOR FURTHER ADVICE.
- ANY TREE LOPPING REQUIRED SHALL BE UNDERTAKEN BY AN APPROVED ARBORIST.

SOIL

- TOPSOIL AND SUBSOIL SHALL BE STOCKPILED SEPARATELY.
- CARE SHALL BE TAKEN TO PREVENT SEDIMENT FROM ENTERING THE STORMWATER SYSTEM. THIS MAY INVOLVE PLACING APPROPRIATE SEDIMENT CONTROLS AROUND STOCKPILES.

CREEK CROSSING

- SILTATION CONTROL MEASURES SHALL BE PLACED DOWNSTREAM OF ANY EXCAVATION WORK.
- APPROPRIATE SEDIMENT CONTROLS SHALL BE USED TO PREVENT SEDIMENT FROM ENTERING THE CREEK.
- NO SOIL SHALL BE STOCKPILED WITHIN 5m OF THE CREEK.

REHABILITATION

- PREDISTURBANCE SOIL PROFILES AND COMPACTION LEVELS SHALL BE REINSTATED.
- PREDISTURBANCE VEGETATION PATTERNS SHALL BE RESTORED.

SAFETY

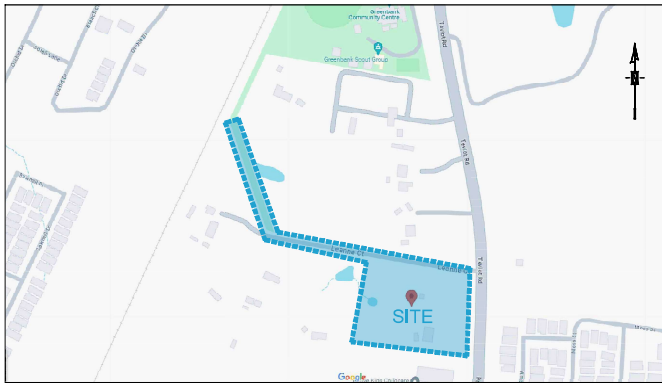
- THE DESIGN AND CONSTRUCTION OF THE WORKS SHALL COMPLY WITH ALL QUEENSLAND LEGISLATION.

NOTE:
THIS DESIGN HAS BEEN PREPARED BASED ON SERVICE AUTHORITY AS CONSTRUCTED INFORMATION & A POT HOLE SURVEY (AVAILABLE AT REQUEST). IT IS THE CONTRACTORS RESPONSIBILITY TO UNDERTAKE ADDITIONAL POT HOLE SURVEY TO VERIFY ALL EXISTING SERVICE LOCATIONS AND DEPTHS.
THE CONTRACTOR SHALL, PRIOR TO COMMENCEMENT OF CONSTRUCTION, NOTIFY THE SUPERINTENDENT OF ANY DISCREPANCIES OF SERVICE LOCATIONS AND DEPTHS.

LOGAN WATER LIVE SEWER WORKS									
Nr.	DESCRIPTION	DIA. SEWER	EXISTING ASSESS @ AT CONNECTION	Nr/Ms TYPE	COVER TYPE	LOT & PLAN No.	F.S.L.	E.S.L.	CONNECTION
1a	LOGAN WATER TO TEMPORARY PLUG EXISTING Ø150 INLET INTO EXISTING MAINTENANCE HOLE 2/1 PRIOR TO START OF CONSTRUCTION.	Ø150	2/1	MH	(S)	LOT 30	66.621	66.621	57.004 (66.974)
1b	CONTRACTOR TO LAY NEW LINE 1, AFTER CLEANSING, TESTING AND INSPECTING, NOTIFY LOGAN WATER.								3.617 (3.647)
1c	LOGAN WATER TO REMOVE TEMPORARY PLUG AND MAKE LIVE THE CONNECTION AFTER SUCCESSFUL ON MAINTENANCE INSPECTION.								N

LIVE SEWER WORKS NOTES

- EXCAVATION WORKS AT DEPTHS OF 150m OR GREATER MUST PROVIDE A 'SAFE WORK PLAN' AS PER WORKPLACE HEALTH AND SAFETY LEGISLATION PRIOR TO COMMENCEMENT OF ANY WORKS.
- IT IS THE DEVELOPERS RESPONSIBILITY TO ENSURE ALL LIVE SEWER WORKS ARE COMPLETED BEFORE ALLOWING PRIVATE DRAINAGE TO BE CONNECTED.



LOCALITY PLAN
SCALE 1:2000

SERVICES LEGEND

	NEW	EXISTING
GRAVITY SEWER	— S —	— S —
DRINKING WATER MAIN	— W —	— W —
STORMWATER DRAINAGE	— SW —	— SW —
GAS MAIN	— G —	— G —
ELECTRICAL U/G	— E —	— E —
ELECTRICAL O/H	— O/H —	— O/H —
TELECOMMUNICATION	— T —	— T —
LIGHT POLE	— E — ^{LP}	— E — ^{LP}
ELECTRICITY / POWER POLE	— O/P — ^{OP}	— O/P — ^{OP}
PIT (TELECOM/ELEC)	— T — ^{PIT}	— T — ^{PIT}
CONTROL LEVEL	CL.4.750 ±	
CONTOUR LABEL	— 4.8 —	— 4.8 —

NOTES:

- ALL WORK AND MATERIALS SHALL BE IN ACCORDANCE WITH CURRENT SOUTHEAST QUEENSLAND SEWERAGE CODE SPECIFICATIONS AND STANDARDS.
- UNLESS SPECIFIED OTHERWISE ALL MATERIALS AND WORK SHALL COMPLY WITH THE RELEVANT AUSTRALIAN STANDARDS.
- THE CONSTRUCTION OF THE SEWERAGE WORK SHOWN ON THIS DRAWING SHALL BE SUPERVISED BY AN ENGINEER WHO HAS RECD REGISTRATION. SEWERAGE WORKS NOT COMPLYING WITH THIS REQUIREMENT WILL NOT BE PERMITTED TO CONNECT INTO COUNCIL'S SEWERAGE SYSTEM.
- ALL WORK ASSOCIATED WITH LIVE SEWERS OR MAINTENANCE HOLES SHALL BE CARRIED OUT BY LOGAN WATER AT THE DEVELOPERS COST.
- UPVC SEWERS SHALL BE SMO TO A.S.D.M. EXCEPT FOR DN100 - WHICH SHALL BE SMO TO A.S.260.
- DIOL SEWERS SHALL BE CLASS K12 TO A.S. 2280 AND POLYETHYLENE SLEEVES.
- EACH ALLOTMENT SHALL BE SERVED BY A DN100 PVC PROPERTY CONNECTION. FOR ALLOTMENTS OTHER THAN SINGLE RESIDENTIAL, A DN100 PVC PROPERTY CONNECTION SHALL BE PROVIDED.
- 80'S SHALL BE LOCATED 12m FROM THE DOWNSTREAM ALIGNMENT. IF THIS IS NOT POSSIBLE, 100'S SHALL NOT BE GREATER THAN 3.5m FROM THE DOWNSTREAM ALIGNMENT UNLESS NOTED OTHERWISE.
- PROPERTY CONNECTION BRANCHES SHALL EXTEND INTO THE PROPERTY A MINIMUM OF 300mm AND A MAXIMUM OF 750mm (R.N.O.D).
- WHERE PIPES ARE LAD IN FILL, THE FILLING SHALL BE CARRIED OUT IN LAYERS NOT EXCEEDING 300mm LOOSELY IN DEPTH AND SHALL BE COMPACTED UNTIL THE COMPACTION IS NOT LESS THAN 95% OF THE MATERIAL'S MAXIMUM COMPACTION WHEN TESTED IN ACCORDANCE WITH A.S. 1289 (PRODRED COMPACTION). TESTING SHALL BE CARRIED OUT AFTER EACH ALTERNATE LAYER. IN ALL SUCH CASES APPROVAL OF CONSTRUCTED SEWERS WILL NOT BE ISSUED BY OLD URBAN UTILITIES UNLESS CERTIFICATES ARE PRODUCED CERTIFYING THAT THE REQUIRED COMPACTION HAS BEEN ACHIEVED.
- WHERE SEWERS ARE PLACED ON GRADES OF 1 IN 20 OR STEEPER, TRENCHSTOPS OR BULKHEADS SHALL BE CONSTRUCTED IN ACCORDANCE WITH TABLE 8.1 GRAVITY SEWERAGE CODE OF AUSTRALIA (SOUTH EAST QUEENSLAND SERVICE PROVIDERS EDITION V2.1) AMENDED SEPTEMBER 2021 & DN100 SEQ-SEW-103-1, SEQ-SEW-104-1 & SEQ-SEW-107-1.
- THE CONTRACTOR SHALL VERIFY THE LOCATION AND DEPTH OF EXISTING SERVICES WITH RELEVANT AUTHORITIES BEFORE COMMENCING WORKS. SEWERS SHALL BE ABANDONED IN ACCORDANCE WITH PROCEDURES SET OUT IN THE SOUTH EAST QUEENSLAND SEWER CODE.
- BENCH MARK LEVELS ARE TO AHD.
- ALL MAINTENANCE SHAFTS SHALL BE INSPECTED BY CCTV AFTER ALL BACKFILLING OPERATIONS HAVE BEEN SATISFACTORILY COMPLETED. CCTV OPERATORS MUST BE CERTIFIED BY AN APPROVED AUTHORITY.
- FINISHED SURFACE LEVELS SHOWN ON SEWER LONG SECTIONS ARE FINISHED EARTHWORKS LEVELS. ALL MANHOLE TOPS SHALL BE COMPLETED AFTER FINAL TRIMMING OF SURROUNDING EARTHWORKS AND SHALL BE 50mm ABOVE THE FINISHED SURFACE LEVEL OF THE GROUND ADJACENT TO THE MANHOLE EXCEPT THE MANHOLES LOCATED IN THE FOOTPATH, WHICH ARE TO BE FINISHED FLUSH.
- FOR TRENCH & BEDDING DETAILS REFER TO SEQ CODE STANDARD DRAWINGS SEQ-SEW-100-2 & 103-1 TYPE 3 SUPPORT UNLESS GEOTECHNICAL DATA CERTIFIED BY A NATA-REGISTERED LABORATORY INDICATE THAT ANOTHER TYPE IS NEEDED OR ADEQUATE.

COMPLIANCE APPROVAL
referred to in the POA
DEVELOPMENT APPROVAL
Approval no: DEV2020/1136/3
Condition no: 17a
Date: 6-Mar-25



0 20 60 100m
SCALE 1:2000 AT PRINTING DATE

ISSUED FOR APPROVAL

REV	BY	CHKD	DATE	DESCRIPTION
D	PRK	KLW	07.08.24	UPDATED TO SENIOR AS CONSTRUCTED LEVELS
C	PRK	KLW	31.05.24	UPDATED TO NEW LAYOUT
B	PRK	KLW	29.05.24	SEW ALIGNMENT AND TO NORTH SIDE OF LEANNE CRT.
A	PRK	KLW	19.12.23	ISSUED FOR EDC COMPLIANCE ASSESSMENT



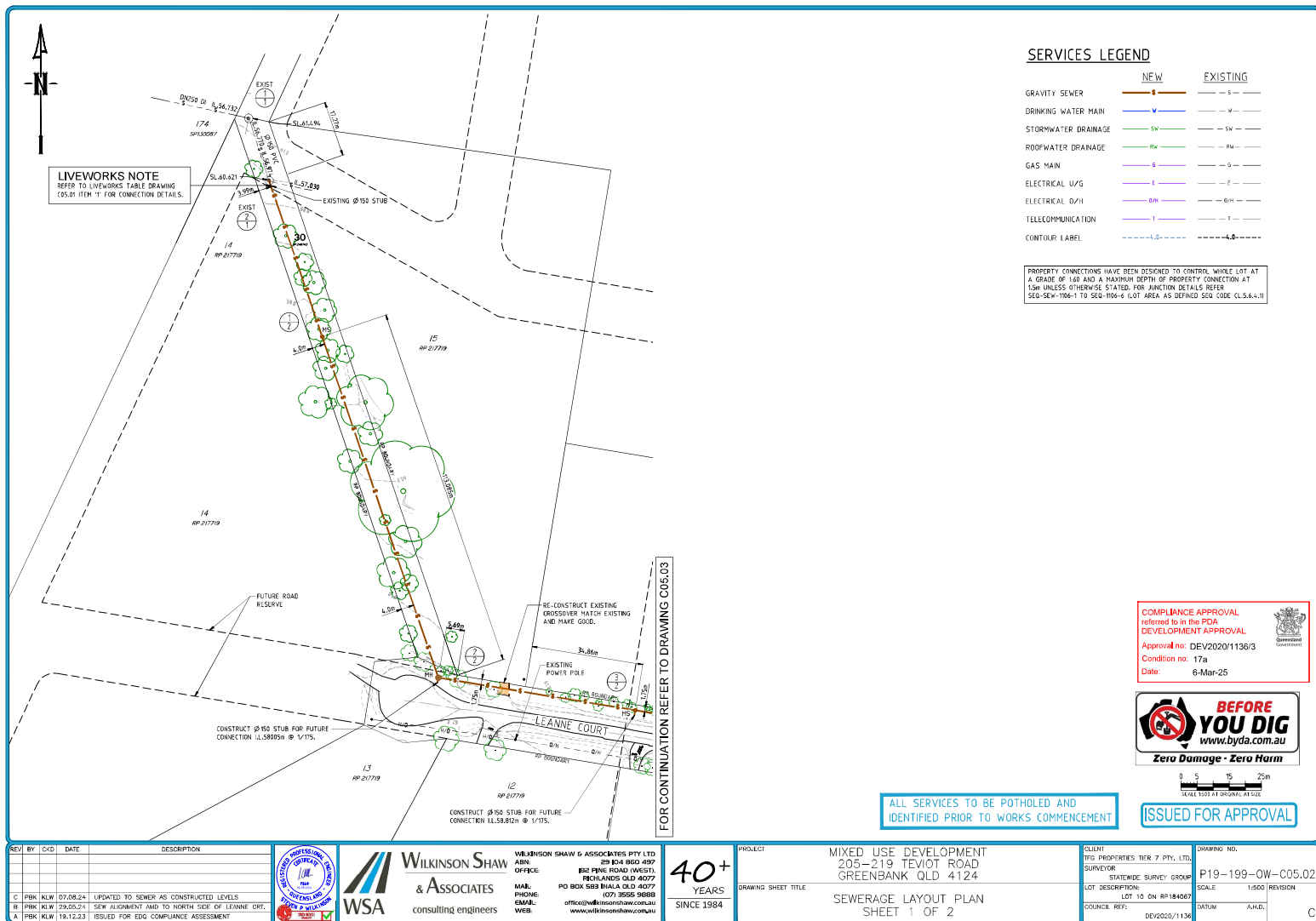
WILKINSON SHAW & ASSOCIATES PTY LTD
MAIN OFFICE:
102 PINE ROAD (WEST),
MICHLANDS QLD 4077
PO BOX 5181 BIALA QLD 4077
077 3555 9888
office@wilkinsonshaw.com.au
www.wilkinsonshaw.com.au

40+
YEARS
SINCE 1984

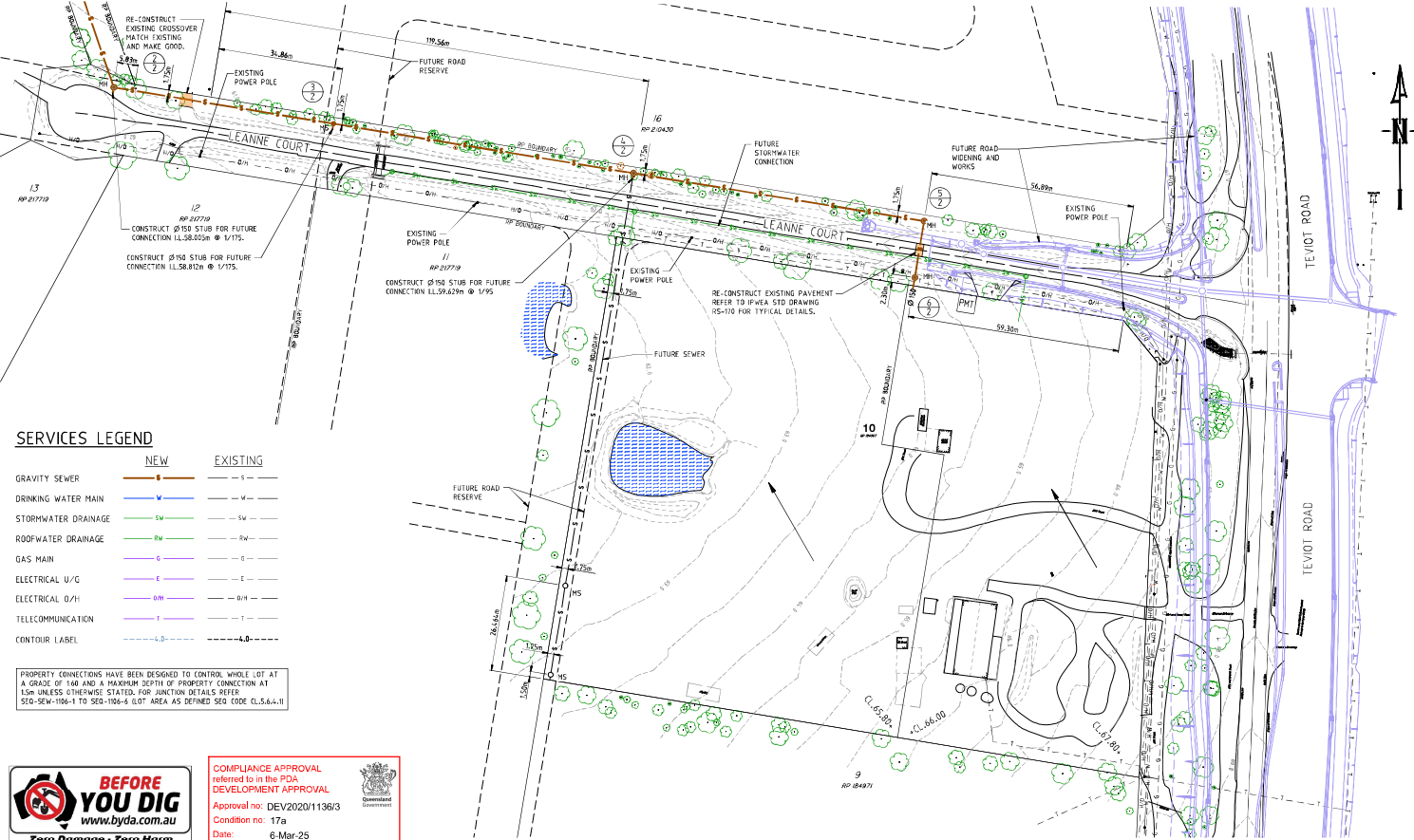
PROJECT
MIXED USE DEVELOPMENT
205-219 TEVIOT ROAD
GREENBANK QLD 4124
DRAWING SHEET TITLE
SEWER RETICULATION NOTES, LEGENDS,
LOCALITY PLAN

CLIENT
TFG PROPERTIES TIER 7 PTY. LTD.
SURVEYOR
STATEWIDE SURVEY GROUP
LOT DESCRIPTION
LOT 10 ON RP184067
COUNCIL REF:
DEV2020/1136

DRAWING NO.
P19-199-OW-C05.01
SCALE
1:2000
REVISION
DATE: A.H.D.
D



FOR CONTINUATION REFER TO DRAWING C05.02



ALL SERVICES TO BE POTHOLED AND IDENTIFIED PRIOR TO WORKS COMMENCEMENT

ISSUED FOR APPROVAL

REV	BY	CHKD	DATE	DESCRIPTION	PROJECT	DRAWING SHEET TITLE	CLIENT	DRAWING NO.
F	PBK	KLM	07.08.24	UPDATED TO SEWER AS CONSTRUCTED LEVELS	MIXED USE DEVELOPMENT 205-219 TEVIOT ROAD GREENBANK QLD 4124	SEWERAGE LAYOUT PLAN SHEET 2 OF 2	ITP PROPERTIES TIER 7 PTY. LTD. SURVEYOR STATEWIDE SURVEY GROUP	P19-199-OW-C05.03
D	PBK	KLM	31.05.24	UPDATED TO NEW LAYOUT			LOT 10 ON RP184067	SCALE: 1:500 REVISION
C	PBK	KLM	29.05.24	SEW ALIGNMENT AND TO NORTH SIDE OF LEANNE CRT.			COUNCIL REF: DEV2020/1136	DATUM A.H.D. F
B	PBK	KLM	26.02.24	AMENDED TO EDO CONDITIONS				
A	PBK	KLM	19.12.23	ISSUED FOR EDQ COMPLIANCE ASSESSMENT				

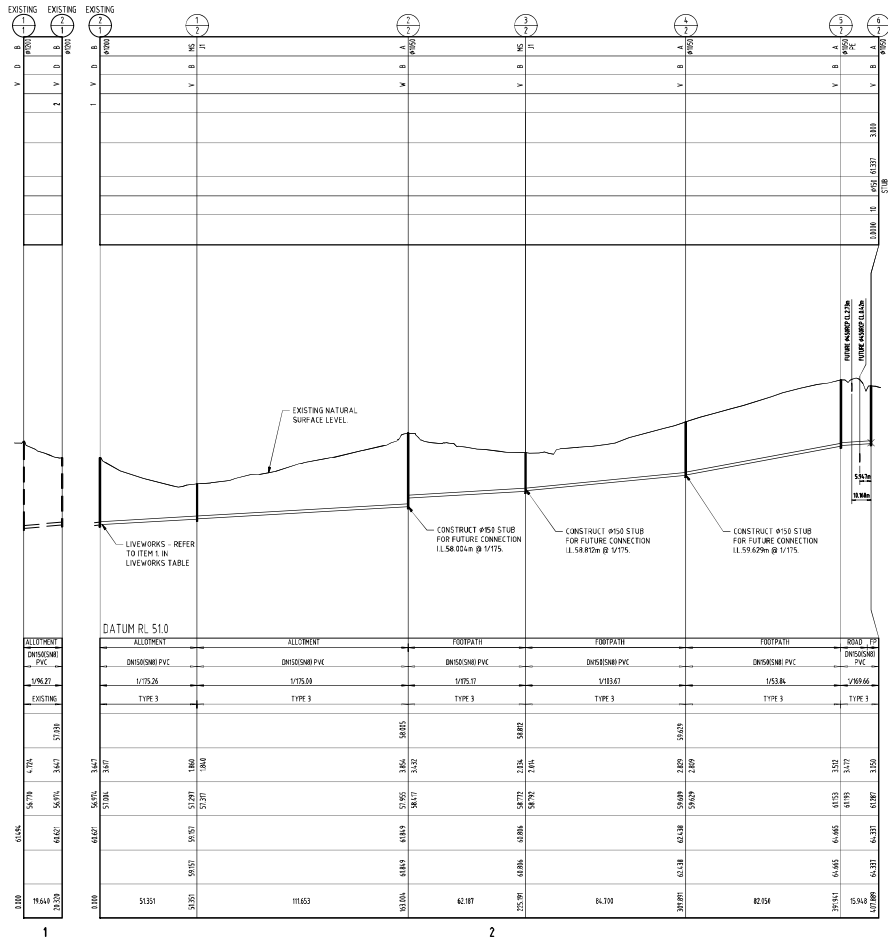


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PEELANDS QLD 4077
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office@wilkinsonshaw.com.au
www.wilkinsonshaw.com.au

40+
YEARS
SINCE 1984

MH / MS / END NO.
MH/MS. TYPE
MH/MS. COVER TYPE
MH/MS. DROP TYPE
BRANCH LINE NO.
DEPTH TO PC
PROPERTY CONNECTION
INVERT LEVEL
PC TYPE
PC LOT No.
Ch. FROM D/S MH/MS.

DATUM RL 51.00
PROPERTY DESCRIPTION
DIA. (DN), TYPE, CLASS
GRADE (1 in x)
EMBEDMENT TYPE
JUNCTION INVERT LEVEL
DEPTH TO INVERT
BELOW FSL
INVERT LEVEL
OF SEWER (IL)
FINISHED
SURFACE LEVEL (FSL)
EXISTING
SURFACE LEVEL (ESL)
CHAINAGE (CH)



- LEGEND:**
- PE = PE LINED
 - FP = VERGE
 - PP = PRIVATE PROPERTY
 - R = BEND RADIUS (HOR. VERT. COMP)
 - SRB = SHORT BEND RADIUS-0.75 RADIUS
 - L = BEND LENGTH
- MAINTENANCE HOLE TYPES:**
- P1-P3 = PRE-CAST CONCRETE
 - A = CAST IN-SITU CONCRETE Ø1050
 - B = CAST IN-SITU CONCRETE Ø1200
 - C = CAST IN-SITU CONCRETE Ø1500
- FOR MAINTENANCE SHAFT TYPES REFER TO SEQ-SEW-1301 SET FOR MANHOLE COVER TYPES REFER TO SEQ-SEW-1308 SET
- Ⓢ = CLASS B NON-TRAFFICABLE
 - Ⓣ = CLASS D TRAFFICABLE
- NOTES:**
- ALL LEVELS CHAINAGES & DISTANCES IN METRES.
 - REFER SEQ-SEW-100 SERIES FOR BEDDING & BACKFILL REQUIREMENTS.
 - REFER SEQ-SEW-100 SERIES FOR MAINTENANCE STRUCTURE TYPES & DROPS AND FOR RIGGS COMPLIANT APPEARANCES.
 - PIPE MATERIAL TO BE SPECIFIED AS REQUIRED BY RIGGS (PVC).
 - REFER SEQ-SEW-100 AND SEQ-SEW-105 SERIES FOR PROPERTY CONNECTION TYPES.
 - DETAILS IN STANDARD DWD LONG RADIUS BENDS ARE SHOWN AT SEQ-SEW-104-3.
 - REFER TO SEQ-SEW-106-1 FOR BULKHEADS AND TRENCHSTOP DETAILS. FOR SPACING REQUIREMENTS REFER TO TABLE 14 OF THE SEWERAGE CODE.
 - FOR TRENCH AND BEDDING DETAILS REFER TO SEQ CODE STANDARD DRAWINGS SEQ-510-100-2 & SEQ-510-100-1 (TYPE 4 SUPPORT).
 - TYPE 4 SUPPORT UNLESS GEOTECHNICAL DATA CERTIFIED BY A NATA-REGISTERED LABORATORY INDICATE THAT ANOTHER TYPE IS NEEDED OR ADEQUATE.
 - ALL SEWER MANHOLES > 4m DEEP ARE TO BE PE LINED REFER DRAWINGS SEQ-510-100-2 & SEQ-510-100-3.
- NOTE WELL:**
NO SUBSTITUTIONS WITHOUT CONSENT OF THE RPOA.

COMPLIANCE APPROVAL
referred to in the PDA
DEVELOPMENT APPROVAL
Approval no: DEV2020/1136/3
Condition no: 17a
Date: 6-Mar-25



REV	BY	CHKD	DATE	DESCRIPTION
1	PRK	KLW	07.08.24	UPDATED TO SEWER AS CONSTRUCTED
2	PRK	KLW	17.05.24	UPDATED TO NEW LAYOUT
3	PRK	KLW	29.05.24	SEW ALIGNMENT AMD TO NORTH SIDE OF LEANNE CRT.
4	PRK	KLW	26.02.24	AMENDED TO EDL CONDITIONS
5	PRK	KLW	19.12.23	ISSUED FOR EDL COMPLIANCE ASSESSMENT



WILKINSON SHAW & ASSOCIATES
consulting engineers

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www.wilkinsonshaw.com.au

40+
YEARS
SINCE 1984

PROJECT
MIXED USE DEVELOPMENT
205-219 TEVIOT ROAD
GREENBANK QLD 4124

DRAWING SHEET TITLE
SEWERAGE LONGITUDINAL SECTION

CLIENT
IFS PROPERTIES TIER 7 PTY. LTD.

SURVEYOR
STATEWIDE SURVEY GROUP

LOT DESCRIPTION
LOT 10 ON RP184067

COUNCIL REF:
DEV2020/1136

DRAWING NO.
P19-199-OW-C05.04

SCALE
SCALE 1:11000/1:1100

REVISION
DATE: A.H.D.

DATE
E

18. APPENDIX G – DEV2019/1059 - WATER SUPPLY NETWORK LAYOUT PLAN



PLANS AND DOCUMENTS
referred to in the PDA
DEVELOPMENT APPROVAL

Approval no: DEV2019/1059
Date: 27 April 2020

DISCLAIMER
THE INFORMATION SHOWN ON THIS
DRAWING IS PRELIMINARY IN NATURE
AND SUBJECT TO DETAIL DESIGN

LEGEND

- Existing 8300 Water Main
- Proposed 8200 Water Main
- Proposed 8150 Water Main
- Proposed 8100 Water Main
- Proposed Site Boundary
- Proposed Allotments

WATER MAIN SIZING NOTE
PROPOSED WATER MAIN SIZES SHOWN
ARE PRELIMINARY ONLY AND SUBJECT
TO FINAL DEVELOPMENT LAYOUT AND
DETAILED HYDRAULIC ANALYSIS

PROPOSED WATER CONNECTION
TO EXISTING 8300 IN TEVIOT RD.

PROPOSED WATER CONNECTION
TO EXISTING 8300 IN TEVIOT RD.

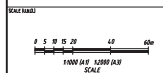
INDICATIVE 8200 WATER CONNECTION
TO MIVAC DEVELOPMENT

169-187
Teviot Rd,
Greenbank

Client
Ainat Group Pty Ltd

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PROPOSED DEVELOPMENT



ABN 66 103 196 327
Postal:
Level 10, 51 Pines Rd
Upper Mt Cresswell,
QLD 4122
Brisbane:
Tel: 3422 2020

Civil Dimensions
Consulting Engineers

EPFL Certification provided for and on behalf of Civil Dimensions
provides evidence, after site inspection, testing, design, calculation, engineering
and construction, that the design, construction, and operation of the
proposed development will comply with the relevant standards and
regulations and the relevant technical, operational and
safety requirements.

Y/N

FOR AND ON BEHALF OF CIVIL DIMENSIONS CONSULTING ENGINEERS

Signature: [Signature]

Date: 05/05/20

Signature: [Signature]

Date: 05/05/20

Signature: [Signature]

Date: 05/05/20

Signature: [Signature]

Date: 05/05/20

Signature: [Signature]

Date: 05/05/20

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Date: 05/05/20

Signature: [Signature]

Date: 05/05/20

Overall Structure Plan
Concept
Water Supply Network
Layout Plan

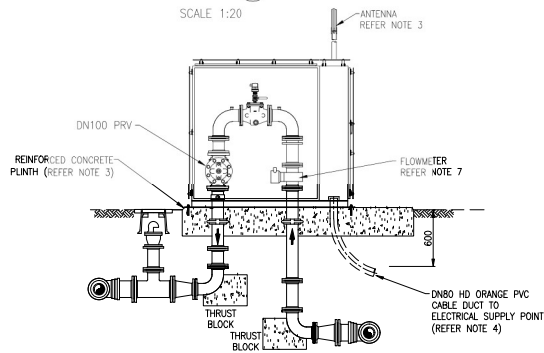
Project Name

CD18-012 DA12 C

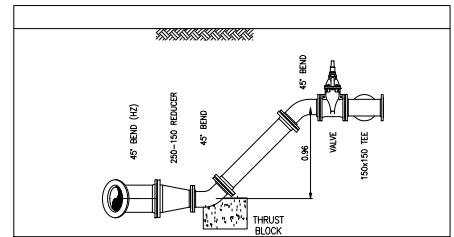
[illegible]

PRELIMINARY DESIGN
NOT FOR CONSTRUCTION
31 January 2023

DETAIL 
SCALE 1:20



SECTION
Scale - 1:20



SECTION
Scale - 1:20

[illegible]

SURVEY CONTROL POINTS				
PT	EASTING	NORTHING	RL	DESCRIPTION

BAR SCALES (AT UNREDUCED)

0 0.2 0.4 0.6 0.8 1.0 1.2 1.4 1.6m

SCALE IN METRES (1:20 BEFORE REDUCTION)



CITY ADMINISTRATION CENTRE
150 Wembley Road,
Logan Central, QLD 4114
Ph:(07)3412 3412
Fax:(07)3412 3444
SENIOR DESIGN ENGINEER
Ph:(07)3412 4279
Email:
infodelivery@logan.qld.gov.au

PROJECT NO.	B20127	
COMP. REF.	WATLAY_1a1b.dwg	
SURVEYOR	T.J.K.	D
SURVEY REF.	CD84	
DESIGNED	R.vdB	30.01.23
CHECKED		
DRAWN	R.vdB	30.01.23
CHECKED		

TEVIOT ROAD - UPGRADE & EXTENSION
STAGE 1A - LEANNE COURT
WATER MAIN CONSTRUCTION
DMA INSTALLATION, LEANNE COURT
PIPEWORK DETAIL
SHEET 1 OF 1

APPROVED			
DESIGN ENGINEER		DATE	
SHEET 8		OF 8	
DRAWING NUMBER			
04	CD84-MD108	-	