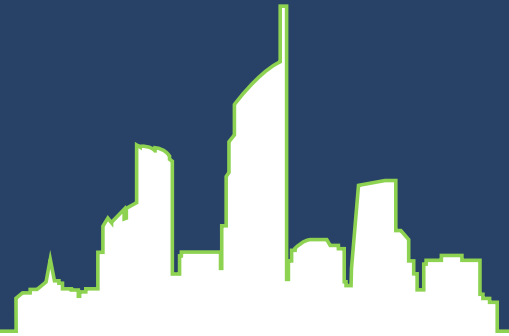


ATTACHMENT 7

Revised Engineering Report

Prepared by:

Pinnacle Engineering



ENGINEERING SERVICES REPORT

PROPOSED CENTRE DEVELOPMENT
Homestead Drive, Flagstone QLD

BLUEPOINT FLAGSTONE PTY LTD

OCTOBER 2025
REVISION 06

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In accordance with the requirements of the *Queensland Professional Engineers Act 2002*, this document was prepared under the supervision of, reviewed and approved by the following experienced Registered Professional Engineer of Queensland (RPEQ).



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Document Control

Rev	Date issued	Review	Approved	Approved on	Revision type
01	30-November-2021	A. Cresswell	B. Popa	30-November-2021	Issued for comment
02	17-April-2025	J. Hardman	B. Popa	17-April-2025	Issued for comment
03	26-May-2025	J. Hardman	B. Popa	26-May-2025	Issued for comment
04	16-June-2025	J. Hardman	B. Popa	16-June-2025	Issued for use
05	18-June-2025	J. Hardman	B. Popa	18-June-2025	Issued for use
06	8-October-2025	J. Hardman	B. Popa	8-October-2025	Issued for use

Distribution of Copies

Revision	Quantity	Distribution
01	1.pdf	Bluepoint Property Pty Ltd
02	1.pdf	Bluepoint Flagstone Pty Ltd
03	1.pdf	Bluepoint Flagstone Pty Ltd
04	1.pdf	Bluepoint Flagstone Pty Ltd
05	1.pdf	Bluepoint Flagstone Pty Ltd
06	1.pdf	Bluepoint Flagstone Pty Ltd

Printed:	08/10/2025
Last saved:	08/10/2025 11:27
File name:	P:\Projects\PEG0810_Flagstone Commercial Precinct\03 Reports\01 Engineering Report\251008_PEG0810_Flagstone Commercial Precinct_ESR_R006.docx
Author:	Jai Waters
Project manager:	Bogdan Popa
Name of organisation:	Pinnacle Engineering Group
Name of project:	Flagstone Commercial Precinct
Name of document:	251008_PEG0810_Flagstone Commercial Precinct_ESR_R006.docx
Document version:	REV 06
Project number:	PEG0810

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1 Introduction

Pinnacle Engineering Group (Pinnacle) was engaged by Bluepoint Flagstone Pty Ltd to undertake the preliminary engineering investigations to provide supporting documentation for the proposed development application for a commercial, retail and future residential development located at Homestead Drive, Flagstone QLD located in Logan City Council (LCC) under the authority of Economic Development Queensland (EDQ).

1.1 Scope of Investigation

This report covers the following civil engineering elements associated with the proposed development including:

- Roadworks;
- Water Supply;
- Sewerage Reticulation;
- Stormwater Drainage;
- Bulk Earthworks; and
- Gas, Electrical and Telecommunications.

1.2 Site Description

1.2.1 Site Location

Street Address	-	Homestead Drive, Flagstone QLD
RP Description	-	Lot 25007 and 25009 on SP303120
Total Site Area	-	6.5236 Hectares
Current Zoning	-	Priority Development Area
Proposed Use	-	Commercial, Retail, and Residential (Future) Development Precinct
Local Authority	-	Logan City Council (LCC)
Assessment Authority	-	Economic Development Queensland (EDQ)

Refer to Figure 1.1 for the site location.

1.2.2 Existing Site Conditions and Topography

The subject site is generally clear of significant structures and vegetation. As a result of previous earthworks operations, the site generally grades north, into an existing dam within the northeast corner of the site, and subsequently into the existing dam within the adjacent property to the northeast being Lot 905 on SP216472. The highest elevation of the site of RL50.50m AHD is reached at the southwest corner of the site while the lowest elevation of approximately RL36.25m AHD is reached along the northern property boundary adjacent to the future New Beith Road reserve. The site is currently burdened by an existing easement (EMT M on SP303120) which is aligned along the northern boundary of Lot 25007 on SP303120.

Refer to Figure 1.2 for the existing aerial view of the site with the topographic data of the site included in Appendix B.

1.2.1 Proposed Development

The proposed development will deliver commercial and retail tenancies across the two existing allotments, along with associated carparking and road infrastructure, and will be delivered in four stages. A residential development is planned for the site's northeastern corner, and is to be delivered as part of a future stage. Access to these developments will be facilitated via the proposed extensions of Hollows Road and New Beith Road.

A 'Reconfiguration of a Lot' (ROL) application is anticipated for Lot 25009 on SP303120 to subdivide the current parcel into eight lots. This subdivision will allocate individual lots to the commercial and retail tenancies T1-T5 and T10, the future residential development, and a road reserve lot for the proposed extension of Hollows Road which will be dedicated to Council. The remaining commercial and retail tenancies T6-9 will occupy a shared lot.

Stage 1 of the proposed development involves delivery of tenancies T4–T9, which includes three fast-food outlets, a car wash, a showroom, a retail store, and the Hollows Road extension. Stage 2 will deliver the remaining fast-food tenancy (T3). Stage 3 will encompass the construction of T1 and T2 showrooms and their associated carparking facilities, while Stage 4 will deliver tenancy T10 and the extension of New Beith Road. The residential development will be delivered separately as part of future works.

Plans detailing the proposed development are included within Appendix A.



Figure 1.1: Map View (Source: Google Maps)



Figure 1.2: Aerial View (Source: Queensland Globe)

2 Project History

2.1 Flagstone City Masterplan for Peet Limited

Ongoing consultation with Economic Development Queensland (EDQ) has confirmed that the subject site is part of a previously approved Masterplan Development by Peet Limited. A review of the relevant planning and engineering documentation indicates that EDQ has endorsed a Masterplan solution for managing stormwater quality, quantity, and flood mitigation across the broader Flagstone East area. A summary of previous reports and is provided below, with an objective discussion provided in Pinnacle's Site-Based Stormwater Management Plan which should be referred to for further details. These documents can be provided by Pinnacle, separate to this report.

2.1.1 Key Reference Reports

- *Flagstone City – Masterplan, Flooding Assessment*, by Cardno Pty Ltd (now Stantec) for Peet Flagstone City Pty Ltd (report reference: 721743/032/V6, 2014).
- *Flagstone City – Stage 7, Stormwater Management Report*, by Cardno Pty Ltd (now Stantec) for Peet Flagstone City Pty Ltd (report reference: 7217/43/R11/V1, 2015).
- *Stormwater Management Plan at Flagstone Stage 7 North*, by Bradlees Civil Consulting (now Meinhardt Australia) for Peet Flagstone City Pty Ltd (report reference: 15-891, Revision A, 2017).
- *Stormwater Infrastructure Master Plan*, by Meinhardt Australia (report reference: Stormwater IMP, version 1.4, 2018).
- *Flagstone Stage 7A-G – Stormwater Management Strategy* Technical Memorandum by Peak Urban (now Colliers) for Peet Flagstone City Pty Ltd (report reference: 20-0178.TM02.DC.DOCX, 2020)
- *Stormwater Management Plan, Flagstone – Stages 7C/D/G* by Peak Urban (now Colliers) for Peet Flagstone City Pty Ltd (report reference: 20-0178SMP01-V1, 2021).

3 Stormwater Drainage

The strategy and constraints associated with stormwater drainage were assessed as part of a separate investigation by Pinnacle and are not covered in detail within this report. We refer Council to the Site Based Stormwater Management Plan (SBSMP) for the subject site prepared by Pinnacle for an in-depth analysis of the prevailing stormwater conditions.

The stormwater management strategy described in the following sections of this report has been developed with reference to, and is generally consistent with, previous design documentation prepared by Peak Urban in 2020 and 2021. Refer to Pinnacle's SBSMP for further details.

A brief summary of the stormwater drainage elements is provided in the following sections of this report.

3.1 Existing Drainage System

Currently, stormwater generated within the subject site, and the external catchments to the south and east are conveyed north, into an existing dam within the site that is adjacent to the intersection of New Beith Road and Parkside Drive.

Adjacent to the site, a pit and pipe stormwater network beneath the Hollows Road and Allis Street Road reserves captures flows from surrounding developments, conveying them into an existing drainage channel within the site via a 750mm diameter pipe and culvert headwall. Similarly, flows generated within the adjacent Flagstone Early Learning Centre are discharged into the site's existing drainage channel via a 450mm diameter pipe and culvert headwall.

Additional stormwater pit and pipe systems are located beneath the Homestead Drive and the Wild Mint Drive road reserves to the south and east of the subject site, respectively.

3.2 Flood Assessment

A review of the Logan City Council (LCC) interactive flood mapping identifies that the subject site is partially affected by inundation from adjacent tributaries. The defined flood level (DFL) for the 1% Annual Exceedance Probability (AEP) event is RL 36.70m AHD, which extends into the northern corner of the site.

3.2.1 Pre Development Scenario

Using available survey and topographic data, Pinnacle developed a digital terrain model (DTM) of the site in 12d Model. The existing flood storage capacity was calculated as 502m³, defined as the volume between the existing ground surface and the 1% AEP DFL (RL 36.70m AHD).

3.2.2 Post Development Scenario and Mitigation Strategy

The proposed post-development earthworks will raise the northern corner of the site to approximately RL 40.00m AHD, resulting in the loss of the existing 502m³ flood storage. The proposed earthworks required in Lot 905 on SP216472 will restore this flood storage volume and mitigate hydraulic impacts internal and external of the subject site up to the 1% AEP flood event, in accordance with findings of the Hydraulic Impact Assessment (HIA) prepared by Biome Water and Environmental Consultants (report ref: BC-25128, version 1, 2025). Further details are provided in Appendices C, and E as well as the aforementioned HIA by Biome Water and Environmental Consultants (Biome).

3.2.3 Detailed Flood Modelling

Reference is made to the approved Masterplan flooding solution report, *Flagstone City – Masterplan, Flooding Assessment*, by Cardno Limited (now Stantec) for Peet Flagstone City Pty Ltd (report reference: 721743/032/V6, 2014). This report concludes that the implementation of catchment-wide culverts and detention basins results in negligible flood impact both upstream and downstream of the Flagstone City Masterplan development. Analysis of TUFLOW peak water surface levels in Figure B1 confirms that the northern corner of the pre-development site is subject to flooding from adjacent tributaries during the 1% AEP storm event. Conversely, Figures C1 and D1 indicate that post-development, the site remains flood-free under the 1% AEP storm condition, attributed to enhanced routing and storage provided by the proposed culvert and basin system networks within the wider catchment.

As the above reporting is now 10 years old, a subsequent Hydraulic Impact Assessment (report reference: BC-25128) has been undertaken by Biome which incorporates current terrain data and defined flood levels from LCC (1% AEP DFL of RL 36.70m AHD). This study confirmed that the proposed earthworks achieve flood immunity for the proposed building pads, roads and carparks without impacting flood levels external to the site. This report should be consulted for further technical detail.

The relevant LCC Planning Scheme maps are included within Appendix E.

3.3 External Catchments

Several upstream external catchments contribute runoff to the subject site. These include:

- **Southeast commercial/retail development and Flagstone Early Learning Centre** (east, corner of Allis Street and Wild Mint Drive):
Runoff from these catchments is conveyed into the site via both piped and overland flow. The existing stormwater network beneath Allis Street and Hollows Road discharges into the on-site drainage channel through a 750 mm diameter pipe and culvert, while flows from the childcare facility are discharged via a 450 mm diameter pipe and culvert.
- **Homestead Drive carriageway and adjacent verge** (south of the site):
While minor flows generated within the road pavement are intercepted by roadside drainage and directed away from the site, bypass flows and major storm overland flows are conveyed down Hollows Road and enter the site. Runoff from the adjacent verge discharges via overland flow either directly into the site or indirectly via the Hollows Road intersection.

These external catchments have been incorporated into the stormwater hydrologic and hydraulic analysis for the proposed development. Flow quantity and quality impacts from these catchments will be mitigated through the regional bioretention and detention basin. Refer to SBSMP by Pinnacle for details.

3.4 Lawful Point of Discharge

The Lawful Point of Discharge for the subject site is taken as Lot 905 on SP216472, and subsequently the existing adjacent Sandy Creek as documented in previous approved reporting.

3.5 Proposed Drainage Works

Stormwater runoff from the post-development site will be managed using the combination of an off-site regional dual-use bio-retention/detention basin, a dual-use treatment/detention tank, and a treatment tank. Refer to the SBSMP by Pinnacle for details.

The off-site basin is designed to will attenuate minor storm flows (from the 39.35% AEP up to and including the 10% AEP threshold) from the post development site (excluding Catchment B1); with major flows (such as

those from a 1% AEP storm) to be managed by regional infrastructure described in the *Stormwater Infrastructure Master Plan*, by Meinhardt Australia (report reference: Stormwater IMP, version 1.4, 2018). Additionally, this basin will treat runoff from the broader post-development area (Catchments A, Ext 1, and Ext 2), with the remaining site areas (Catchment B) managed locally through an on-site treatment train that utilises gross pollutant traps and proprietary filter cartridges within an underground tank.

All stormwater management systems are configured to discharge at the designated Lawful Point of Discharge, being Lot 905 on SP216472, and ultimately the adjacent Sandy Creek. In accordance with QUDM, the minor 39.35% AEP storm discharge (Q_2) will be conveyed to the Lawful Point of Discharge via a piped drainage network with the major 1% AEP storm discharge (Q_{100}) being conveyed by piped and overland flow.

For additional details on the prevailing stormwater drainage conditions, strategy and constraints please refer to the SBSMP for the site prepared by Pinnacle.

Engineering services layouts detailing the proposed services for the site is included in Appendix C.

4 Water Reticulation

4.1 Existing Infrastructure

A review of the BYDA data, the topographic survey as well as Council records has identified existing 100mm and 150mm modified polyvinylchloride (PVC-M) water mains to the south of the subject site. A 150mm diameter main runs north-south beneath Hollows Road, terminating at a temporary end on the southern boundary to allow for future extension. Existing developments along Allis Street are serviced by this 150mm main via a 100mm diameter PVC-M main which branches west. Additionally, a 375mm diameter ductile iron cement-lined (DICL) water main follows the alignment of Wild Mint Drive New Beith Road before diverging northwest adjacent to the boundary of the subject site.

The topographic survey is included in Appendix B with the BYDA data included in Appendix D and As Constructed data included within Appendix F.

4.2 Development Water Reticulation Demand

The proposed development's water reticulation demands on the existing potable water infrastructure were established using the methods described in the current Logan City Council Planning Scheme (2015). These demands were used to determine the consumption rates for the proposed development.

Potable water demand factors and flow parameters have been taken from Part 4.4.1 of the LCC Planning Scheme to determine the potable water consumption rates for the proposed development. The design parameters and results are presented in Table 4.1.

Table 4.1: Water Demand Factors and Consumption Rates (Proposed Development Only)

Design Parameter	Potable Water Factors and Demands						
Catchment Description / Type	T1 & T2 Commercial	T3 Commercial	T4 Commercial	T5 Commercial	T6-9 Commercial	T10 Commercial	Future Residential
Area of Land (Ha)	3.4162	0.2169	0.2284	0.2125	0.5684	0.5635	0.7768
EP/Ha	30						30
Equivalent Persons (EP)	102.49	6.51	6.85	6.38	17.05	16.91	23.30
Estimated Non-Revenue Water (NRW)	30L/EP/day						
Average Day Flow (AD)	230 L/EP/day + NRW (30L/EP/day)						
Mean Day Max Month (MDMM)	1.5 x AD						
Peak Day (PD)	2.0 x AD						
Peak Hour (PH)	2.8 x AD						4.0 x AD
AD	26,646L/day or 0.309L/s	1,692L/day or 0.020L/s	1,782L/day or 0.021L/s	1,658L/day or 0.020L/s	4,434L/day or 0.051L/s	4,395L/day or 0.051L/s	6,059L/day or 0.070L/s
MDMM	38,432L/day or 0.445L/s	2,440L/day or 0.029L/s	2,570L/day or 0.030L/s	2,391L/day or 0.028L/s	6,395L/day or 0.074L/s	6,339L/day or 0.074L/s	8,739L/day or 0.101L/s
PD	50,218L/day or 0.582L/s	3,189L/day or 0.037L/s	3,358L/day or 0.039L/s	3,124L/day or 0.037L/s	8,356L/day or 0.097L/s	8,284L/day or 0.096L/s	11,419L/day or 0.132L/s
PH (Maximum)	69,076L/day or 0.800L/s	4,386L/day or 0.051L/s	4,618L/day or 0.054L/s	4,297L/day or 0.050L/s	11,493L/day or 0.133L/s	11,394L/day or 0.132L/s	22,139L/day or 0.256L/s
Fire Flow	30L/s						15L/s
Maximum Demand	30.800L/s	30.051L/s	30.054L/s	30.050L/s	30.133L/s	30.132L/s	15.256L/s

Note: No peaking factors have been applied to NRW.

Based on the above assessment, the proposed development will place a maximum hour demand of 1.476L/s plus a fire flow demand of 30L/s for all commercial and retail areas and 15L/s for all residential areas.

The preliminary investigations above conclude that a 150mm diameter main will service the proposed development. Large water meters will be required for fire and domestic supply, subject to sizing during the detailed design phase of the project.

4.3 Proposed Water Reticulation Works

It is envisioned that the subject development will be serviced by extending the existing 100mm PVC main at the southern boundary north beneath the proposed Hollows Road Extension, and then diverting northwest adjacent to the property boundary within the verge of the proposed New Beith Extension. This strategy will involve the construction of a new 150mm diameter PVC main connecting to the temporary end arrangement at the southern site boundary.

The detailed design for the water reticulation and connection is anticipated to be completed by Pinnacle as part of a future Operational Works application to Council. Additionally, the internal water infrastructure's design will be undertaken during the project's detailed design phase by a hydraulic consultant and submitted through a future Plumbing and Drainage application to Council.

Engineering services layouts detailing the proposed services for the subject site are included in Appendix C.

5 Sewerage Reticulation

5.1 Existing Infrastructure

A review of the available data, the topographic survey and Council records has confirmed that existing an existing sewerage network consisting of 150mm PVC and ductile iron cement lined (DICTL) sewers bisecting the subject site. This reticulation network is aligned south to north, connecting infrastructure beneath Hollows Road to the infrastructure beneath New Beith Road and Parkside Drive. The topographic survey is included in Appendix B with the BYDA and sewer design data included within Appendix D. As Constructed data for the above infrastructure is included within Appendix F.

5.2 Proposed Demand

The demands on the existing sewer infrastructure were established using the methods described in SEQ WS&S D&C Code. These demands were used to determine the consumption rates for the proposed development. Potable sewer demand factors and flow parameters have been taken from Table 10 and Appendix A2 of the SEQ WS&S D&C Code, respectively, to determine the potable water consumption rates for the proposed development. The design parameters and results are presented in Table 5.1 below.

Table 5.1: Sewerage Demand Factors and Consumption Rates (Proposed Development Only)

Design Parameter	Potable Water Factors and Demands						
Catchment Description / Type	T1 & T2 Commercial	T3 Commercial	T4 Commercial	T5 Commercial	T6-9 Commercial	T10 Commercial	Future Residential
Area of Land (Ha)	3.4162	0.2169	0.2284	0.2125	0.5684	0.5635	0.7768
EP/Ha	50						50
Equivalent Persons (EP)	170.81	10.85	11.42	10.63	28.42	28.18	38.84
Average Dry Weather Flow (ADWF)	210L/EP/Day						
C2 (= 4.7 x EP-0.105)	2.74	3.66	3.64	3.67	3.31	3.31	3.20
ADWF	35.870kL/day or 0.415L/s	2.277kL/day or 0.026L/s	2.398kL/day or 0.028L/s	2.231kL/day or 0.026L/s	5.968kL/day or 0.069L/s	5.917kL/day or 0.068L/s	8.156kL/day or 0.094L/s
PDWF (C2 x ADWF)	98.269kL/day or 1.137L/s	8.334kL/day or 0.096L/s	8.728kL/day or 0.101L/s	8.182kL/day or 0.095L/s	19.738kL/day or 0.228L/s	19.586kL/day or 0.227L/s	26.105kL/day or 0.302L/s
PWWF (5 x ADWF)	179.351kL/day or 2.076L/s	11.387kL/day or 0.132L/s	11.991kL/day or 0.139L/s	11.156kL/day or 0.129L/s	29.841kL/day or 0.345L/s	29.584kL/day or 0.342L/s	40.782kL/day or 0.472L/s
Design Flow	2.076L/s	0.132L/s	0.139L/s	0.129L/s	0.345L/s	0.342L/s	0.472L/s

Based on the above assessment it is envisaged that the proposed development will place a total peak design flow demand of 3.635L/s based on the proposed commercial and retail tenancies as well as the future residential area. Engineering services layouts detailing the proposed sewerage infrastructure are included within Appendix C.

5.3 Proposed Works

The proposed development will connect to the existing sewerage infrastructure located within and adjacent to the site via multiple new 150mm PVC sewerage property connections and diversion mains. It is envisaged that the internal sewerage reticulation and connection detailed design will be undertaken as part of a future Operational Works application to Council. The internal sewerage infrastructure will be designed by a hydraulic consultant during the detailed design phase of the project is subject to a future Plumbing and Drainage application to Council. Engineering services layouts detailing the proposed services for the subject site are included within Appendix C.

6 Bulk Earthworks

6.1 Design Requirements

Earthworks for the site will be designed generally in accordance with the requirements of the LCC Planning Scheme and as appropriate to the regulatory control and the Australian Standard for Earthworks for Commercial and Residential Development (AS3798-2007).

6.2 General Site Earthworks

A soil assessment report was prepared by Pacific Geotech Consulting Geotechnical Engineers to provide guidance to the treatment of the site prior to and during the earthworks construction and suitability for building foundation construction. We refer Council to this report for further details on the underlying geotechnical conditions of the site. Furthermore, it is intended to accommodate any level differences with a series of maintainable batters and therefore mitigating the disturbance to the natural topography.

The site earthworks will aim to minimise any impacts on vegetation of concern. It is intended to utilise all of the suitable material won onsite in order to reduce the quantity of material spoil off site. The key variables associated with the site's earthworks are the depth and distribution of the existing materials and the strength and depth profile of the substrata material. It is advised that the soil report for the site investigates these key items in depth to ensure that suitable soil treatments, accurate cost estimation and building design can be facilitated.

6.3 Retaining Structures

Where retaining structures are required they will be designed such that the maximum height will be limited to 5.00m in accordance LCC Planning Scheme and AS4678-2007. Retaining structures will not encroach onto any adjoining property or road reserve. Where services pass below retaining structures, appropriate bridging will be provided in order to ensure the integrity of the services.

6.4 Acid Sulphate Soils

The site is not located within an area affected by Acid Sulphate Soils.

6.5 Erosion and Sediment Management

Due to the expected highly erosive soil onsite, erosion protection measures will be incorporated during the construction phase with these measures being designed and documented as a part of the detailed civil works for the site. Ultimately, during the operational phase of the project, the sediment management will be by the use of soft landscaping to ensure erosion is kept to a minimum. For a preliminary erosion and sediment control plan for the proposed development refer to the Stormwater Management Plan for the site prepared by Pinnacle.

6.6 Preliminary Site Grading

In accordance with the above requirements, Pinnacle has prepared a preliminary site grading for the site as well as preliminary road gradings of the Hollows Road extension. The preliminary site grading plan and cross sections and Hollows Road cross and longitudinal sections are included in Appendix C and should be referred to for further details. We note that the final bulk earthworks are subject to detailed design and an Operational Works application to Council prior to the commencement of construction works on site.

7 Roadworks

7.1 Hollows Road

Hollows Road is an urban collector road and currently comprises of a sealed median separated dual carriageway two lane standard along the site frontage.

The extension of Hollows Road will incorporate kerb and channel along the site frontage with line marking as required, as well as street lighting infrastructure. On-street car parking will be available from both northbound and southbound traffic lanes. The existing section of Hollows Road will be extended through to the existing intersection between New Beith Road and Parkside Drive to the north. Preliminary longitudinal and cross-sectional sketches are available in Appendix C.

7.2 Site Access

Connectivity and access for the proposed development will be provided through extensions to Hollows Road and New Beith Road. Heavy-duty vehicle crossings on the Hollows Road and New Beith Road extensions will accommodate the future residential development and commercial tenancy T10, respectively. A proposed roundabout along the Hollows Road extension will serve all other commercial tenancies, with a heavy-duty vehicle crossing on the New Beith Road extension providing a secondary access point for commercial tenancies T1 and T2. All vehicle cross-overs will be designed and constructed in accordance with IPWEA standard drawing RSD-102.

8 Gas, Electrical and Telecommunications

A BYDA investigation was undertaken to confirm the location of existing gas, electrical and telecommunications within the vicinity of the subject site.

The BYDA investigation confirmed the location of underground telecommunications infrastructure, owned and operated by NBN, within the southern verge of the Homestead Drive road reserve to the south of the subject site. Additional underground communications infrastructure is located within the existing residential subdivision to the north of the subject site, as well as within the Wild Mint Drive road reserve to the east.

Similarly, underground powerlines, owned and operated by Energex, are located within the Homestead Drive New Beith Road and Hollows Road reserves to the south, north and east of the subject site respectively.

A gas main owned and operated by APA Gas is located within the Homestead Drive and Hollows Road reserve to the south and east of the subject site respectively.

It is envisaged that the proposed development will connect to the existing gas, electrical and telecommunications services within the adjacent developments as outlined above. The connections to the gas, electrical and telecommunications networks will be undertaken by specialist consultants during the detailed design phase of the project.

The BYDA data is included in Appendix D with the location of the existing gas, telecommunications and electrical infrastructure shown on the engineering services layouts included in Appendix C.

9 Impacts on Local Infrastructure and Likely Upgrades

The proposed commercial and retail development will result in additional loads on the surrounding local infrastructure.

Additional discussions with the relevant authorities may be required during the subsequent phases of the project to ensure that there is sufficient capacity available within all existing systems to accept the additional demands from the proposed development.

The potential impacts on the local infrastructure and likely upgrades are summarised in Table 9.1 below.

Table 9.1: Local Infrastructure Impacts and Requirements

Infrastructure Type	Service Provider	Impacts	Connection and/or Upgrade Requirements
Water Reticulation	Logan Water	Additional water demand due to the proposed development	A new 150mm PVC main will be constructed, extending from the existing infrastructure within Hollows Road to the New Beith Road reserve. Multiple connections will be provided to the proposed development site, utilising the newly constructed PVC main and surrounding existing mains.
Sewerage Reticulation	Logan Water	Additional Sewer loadings due to the proposed development	Provide multiple 150mm PVC (SN8) sewerage property connections for the subject development via the existing 150mm PVC and DICL main beneath the Hollows Road extension.
Stormwater Drainage	LCC	Increase runoff and pollutant loading	Provide treatment and attenuation of stormwater prior to discharge from site to the Lawful Point of Discharge. This strategy involves the combination of an off-site regional dual-use bio-retention/detention basin, a dual-use treatment/detention tank, and a treatment tank as well as a stormwater reticulation network.
Telecommunications	Telstra	New connections	New connection to existing telecommunications infrastructure located within the adjacent road reserves as required.
Electrical	Energex	New Connections	New connection to existing electrical infrastructure located within the adjacent road reserves as required.
Gas	APA Gas	New Connections (If Required)	New connection to existing gas infrastructure located within the adjacent road reserves as required.

10 Reference Documentation

Logan City Council Planning Scheme Policies Version 2.1 (LCC, 2015)

SEQ Water Supply and Sewerage Design & Construction Code – Version 2.0, Feb 2020

Water Services Association of Australia, 2014. “Sewerage Code of Australia. WSA 02-2014”, Second Edition, Version 3.1

Water Services Association of Australia, 2011. “Water Supply Code of Australia. WSA 03-2011”, Second Edition, Version 3.1

Flagstone City – Masterplan, Flooding Assessment, by Cardno Pty Ltd (now Stantec) for Peet Flagstone City Pty Ltd (report reference: 721743/032/V6, 2014)

Flagstone City – Stage 7, Stormwater Management Report, by Cardno Pty Ltd (now Stantec) for Peet Flagstone City Pty Ltd (report reference: 7217/43/R11/V1, 2015)

Stormwater Management Plan at Flagstone Stage 7 North, by Bradlees Civil Consulting (now Meinhardt Australia) for Peet Flagstone City Pty Ltd (report reference: 15-891, Revision A, 2017)

Stormwater Infrastructure Master Plan, by Meinhardt Australia (report reference: Stormwater IMP, version 1.4, 2018)

Flagstone Stage 7A-G – Stormwater Management Strategy Technical Memorandum by Peak Urban (now Colliers) for Peet Flagstone City Pty Ltd (report reference: 20-0178.TM02.DC.DOCX, 2020)

Stormwater Management Plan, Flagstone – Stages 7C/D/G by Peak Urban (now Colliers) for Peet Flagstone City Pty Ltd (report reference: 20-0178SMP01-V1, 2021)

Hydraulic Assessment, Flagstone Town Centre, by Biome Water and Environmental Consulting (report reference: BC-25128, version 1, 2025)

Appendix A

Proposed Development Plans

PROPERTY DESCRIPTION
LOTS 25007 & 25009 on SP303120
LOCALITY: FLAGSTONE
COUNCIL: LOGAN CITY COUNCIL

DEVELOPMENT ASSESSMENT

SITE AREA (APPROX) - 65,945m²
DEVELOPMENT AREA - 57,470m²
INCLUDES HOLLOWS ROAD EXTENSION WORKS
EXCLUDES NEW BEITH ROAD EXTENSION WORKS

BUILDING AREAS

- T1 - SHOWROOM - 9,066.5m²
- T2A - SHOWROOM - 3,111.5m²
EXCLUDES LIFT/STAIR LOBBY - 25m²
- T2B - SHOWROOM - 661.5m²
EXCLUDES LIFT/STAIR LOBBY - 25m²
- T3 - FOOD & DRINK - 278m²
INCLUDES REFUSE - 3m²
EXCLUDES ALFRESCO - 14m²
- T4 - FOOD & DRINK - 250m²
- T5 - FOOD & DRINK - 270m²
INCLUDES INTERNAL REFUSE - 15m²
- T6 - FOOD & DRINK - 150m²
INCLUDES INTERNAL REFUSE - 10m²
- T7 - CARWASH - 63.5m²
UNENCLOSED WASH BAYS - 248m²
- T8 - SHOWROOM - 928m²
- T9 - WORKSHOP - 308.5m²
- T10 - SELF STORAGE - 10,400m²
4 STOREY BUILDING - APPROX. NLA - 7,900m²
- TOTAL BUILDING GFA - 25,487.5m²

EXTERNAL STRUCTURES

- T3 REFUSE/SERVICES - 30m²
- T4 REFUSE/SERVICES - 42.5m²
- T6 REFUSE/SERVICES - 10m²
- T7 REFUSE/SERVICES - 18.5m²
- T8/9 REFUSE/SERVICES - 30m²

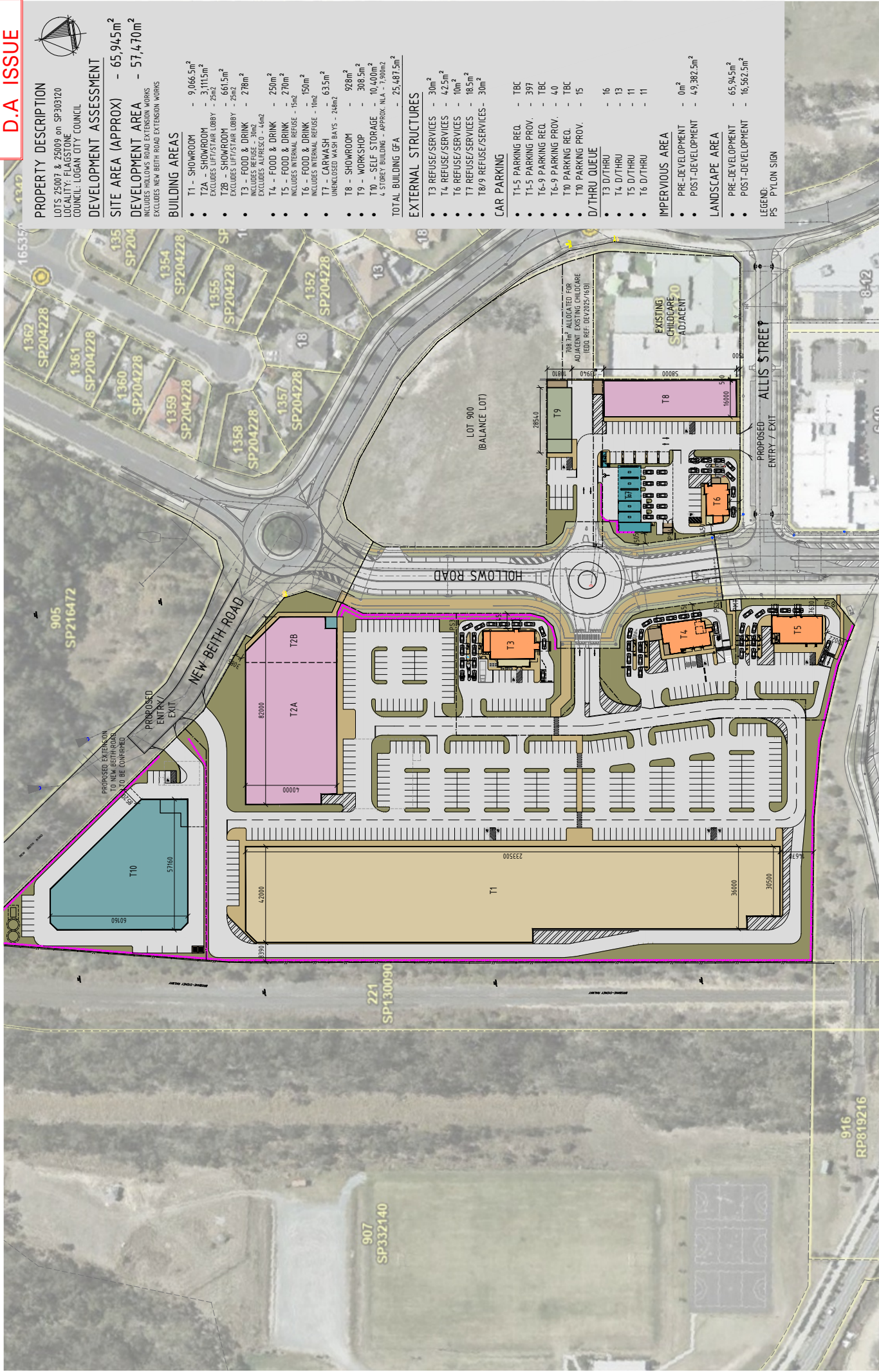
CAR PARKING

- T1-5 PARKING REQ. - TBC
- T1-5 PARKING PROV. - 397
- T6-9 PARKING REQ. - TBC
- T6-9 PARKING PROV. - 40
- T10 PARKING REQ. - TBC
- T10 PARKING PROV. - 15
- D/THRU QUEUE - 16
- T3 D/THRU - 13
- T4 D/THRU - 11
- T5 D/THRU - 11
- T6 D/THRU - 11

IMPERVIOUS AREA

- PRE-DEVELOPMENT - 0m²
- POST-DEVELOPMENT - 43,382.5m²
- LANDSCAPE AREA - 65,945m²
- PRE-DEVELOPMENT - 16,562.5m²
- POST-DEVELOPMENT - 16,562.5m²

LEGEND:
PS PYLON SIGN



Consulting Engineer



- Commercial / Industrial / retail
- Fast food restaurant design
- Travel centre / service stations
- Project concept to completion

VERVE DESIGN GROUP is a registered company in the state of Queensland, Australia. All designs are prepared and issued under the authority of a registered professional engineer. Design is not to be used or modified without consultation. Design is for information only. Design is not to be used for construction without consultation. Design is not to be used for construction without consultation.

Revised and approved	Drawn	Checked	Design	Engineer
1	25/01/2025	SS	DA ISSUE	DA ISSUE
2	25/01/2025	SS	PRELIMINARY ISSUE FOR CONCEPT	PRELIMINARY ISSUE FOR CONCEPT
3	25/01/2025	SS	DA ISSUE - RESPONSE TO CONSULT	DA ISSUE - RESPONSE TO CONSULT

Project Description	Project Location	Project Status
PROPOSED MIXED USE DEVELOPMENT	HOLLOWS ROAD, FLAGSTONE	DA ISSUE

Drawn By	Checked By	Design Number
24072-DA01	24072-DA01	24072-DA01

Project Title	Project Number
PROPOSED SITE PLAN	B

PROPERTY DESCRIPTION
LOTS 25007 & 25009 on SP303720
LOCALITY: FLAGSTONE
COUNCIL: LOGAN CITY COUNCIL

DEVELOPMENT ASSESSMENT
SITE AREA (APPROX) - 65,945m²
DEVELOPMENT AREA - 57,470m²
INCLUDES HOLLOWS ROAD EXTENSION WORKS
EXCLUDES NEW BEITH ROAD EXTENSION WORKS

- PROPOSED LOTS
- PROPOSED LOT 1 - 5,635m²
 - PROPOSED LOT 2 - 34,166m²
INCLUDES EASEMENT A
EASEMENT A BORDERS LOT 2 & BENEFITS LOT 3 / 4 / 5
 - PROPOSED LOT 3 - 2,167.5m²
 - PROPOSED LOT 4 - 2,284.5m²
 - PROPOSED LOT 5 - 2,223.5m²
 - PROPOSED LOT 6 - 5,714.5m²
 - HOLLOWS ROAD EXTENSION - 5,379m²



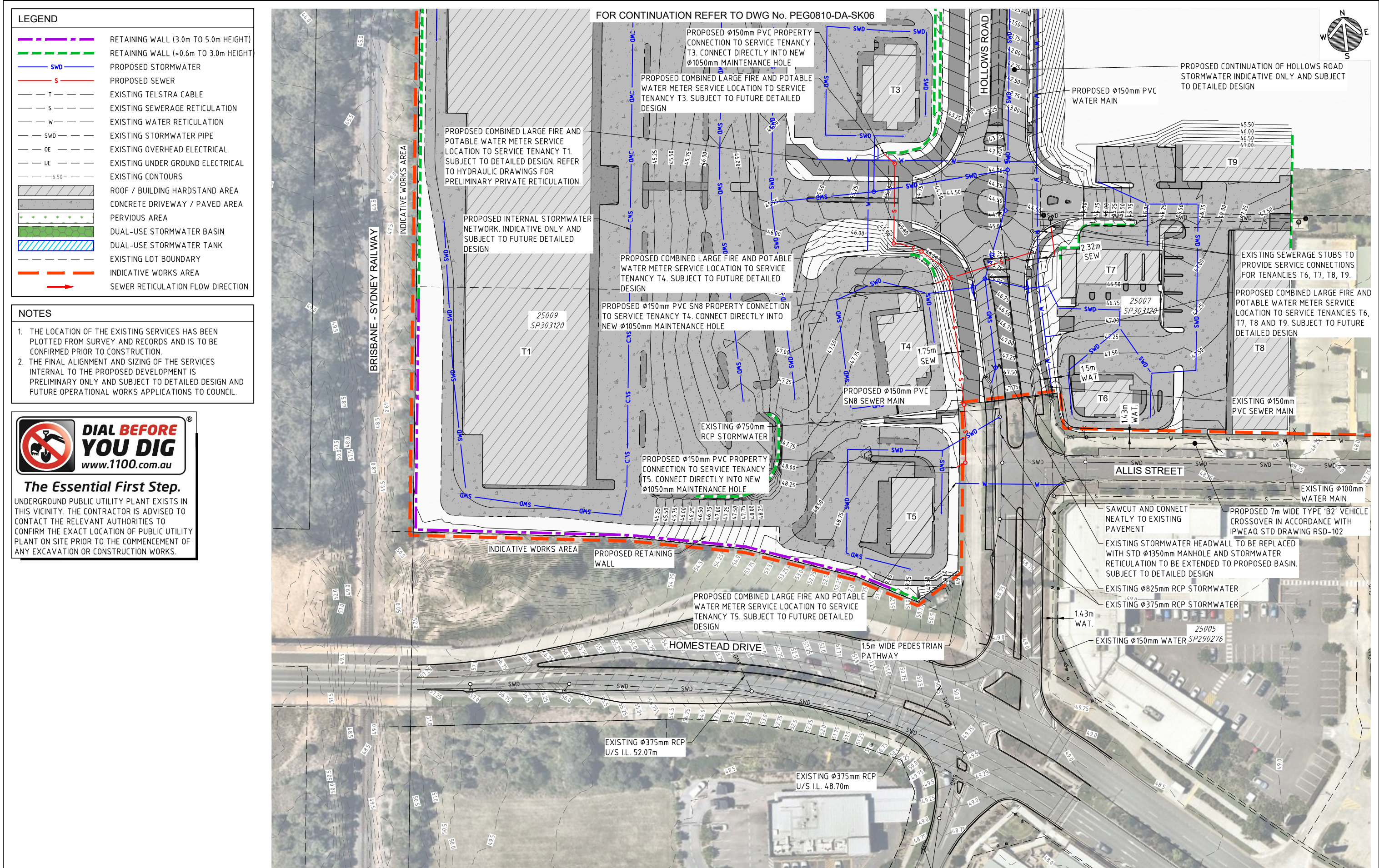
Consulting Engineer	 VERVE DESIGN GROUP 3410 KENNEDY ROAD, SUITE 100, WILLOWDALE, ONTARIO M2H 3L6 OFFICE: 416-491-1400 LUMINA@VERVEDESIGN.COM WWW.VERVEDESIGN.COM imagine • create • deliver		☐ commercial / industrial / retail ☐ fast food restaurant design ☐ travel centre / service stations ☐ project concept to completion		☒ 100% complete, ready to proceed This is a preliminary drawing and is the property of VERVE DESIGN GROUP and must not be used or duplicated without authorization. Do not scale this drawing. Circle all dimensions on this prior commencement of works.				Review and approval				Project description		Project Name		Proposed Mixed Use Development		Proposed Lot Plan			
									Date		Date		Description		Date		Date		Hollows Road, Flagstone		24072-DA03	
									P2		18.06.2025		35		PHELIANITY ISSUE FOR COMMENT		P1		18.05.2025		35	

Appendix B

Topographic Survey

Appendix C

Engineering Layouts



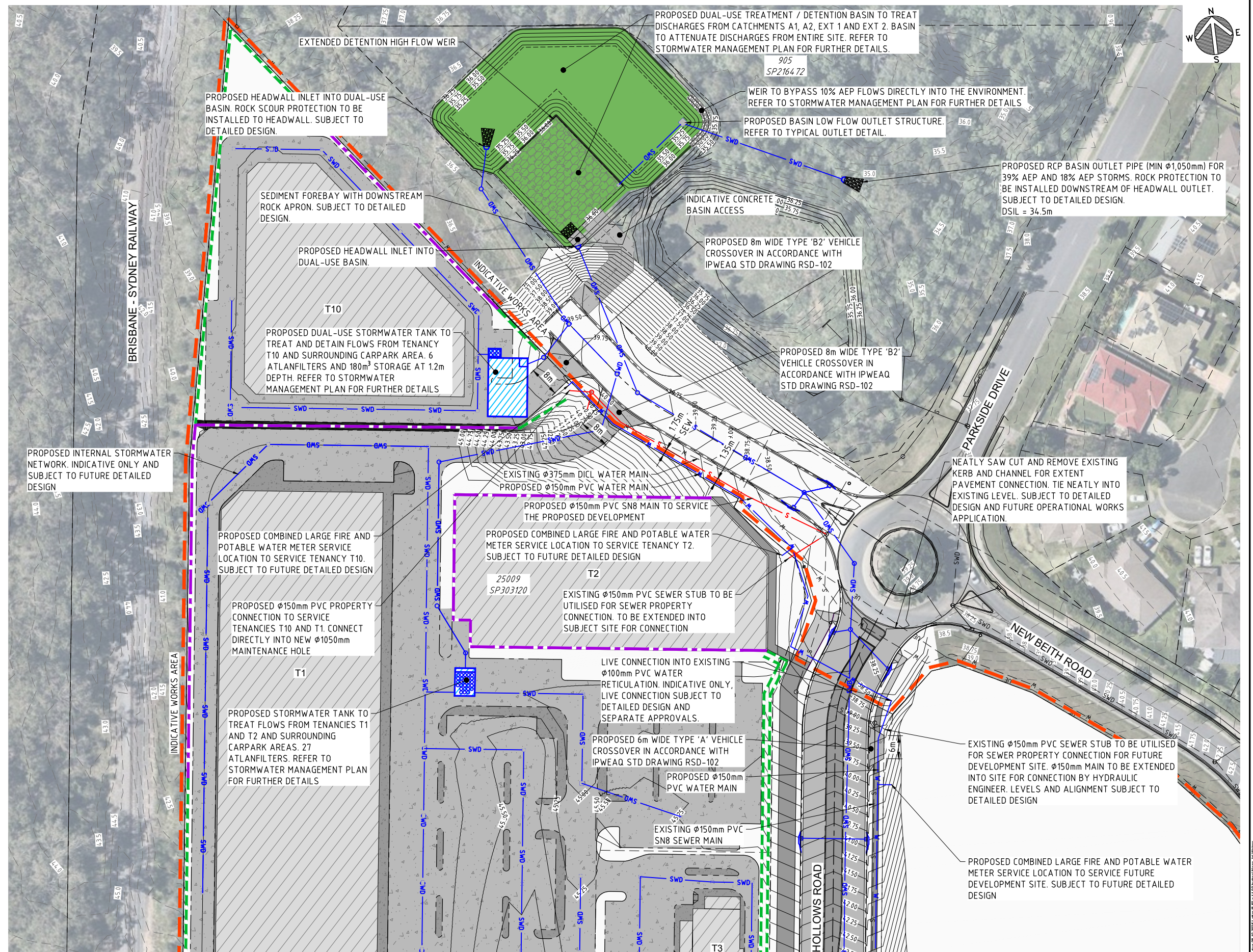
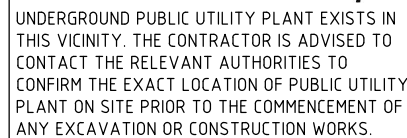
- LEGEND**
- RETAINING WALL (3.0m TO 5.0m HEIGHT)
 - RETAINING WALL (>0.6m TO 3.0m HEIGHT)
 - PROPOSED STORMWATER
 - PROPOSED SEWER
 - EXISTING TELSTRA CABLE
 - EXISTING SEWERAGE RETICULATION
 - EXISTING WATER RETICULATION
 - EXISTING STORMWATER PIPE
 - EXISTING OVERHEAD ELECTRICAL
 - EXISTING UNDER GROUND ELECTRICAL
 - EXISTING CONTOURS
 - ROOF / BUILDING HARDSTAND AREA
 - CONCRETE DRIVEWAY / PAVED AREA
 - PERVIOUS AREA
 - DUAL-USE STORMWATER BASIN
 - DUAL-USE STORMWATER TANK
 - EXISTING LOT BOUNDARY
 - INDICATIVE WORKS AREA
 - SEWER RETICULATION FLOW DIRECTION
- NOTES**
- THE LOCATION OF THE EXISTING SERVICES HAS BEEN PLOTTED FROM SURVEY AND RECORDS AND IS TO BE CONFIRMED PRIOR TO CONSTRUCTION.
 - THE FINAL ALIGNMENT AND SIZING OF THE SERVICES INTERNAL TO THE PROPOSED DEVELOPMENT IS PRELIMINARY ONLY AND SUBJECT TO DETAILED DESIGN AND FUTURE OPERATIONAL WORKS APPLICATIONS TO COUNCIL.

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The Essential First Step.

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THIS ENGINEERING LAYOUT WAS PRODUCED FOR THE EXCLUSIVE USE OF PINNACLE ENGINEERING GROUP'S CLIENT AS NOMINATED HEREIN. PINNACLE DOES NOT GRANT CONSENT TO ANY THIRD PARTY TO RELY ON THE INFORMATION PRODUCED WITHIN THIS ENGINEERING LAYOUT WITHOUT PRIOR WRITTEN CONSENT FROM PINNACLE ENGINEERING GROUP. PINNACLE ENGINEERING GROUP ADVISES THAT DIMENSIONS ON THIS ENGINEERING LAYOUT SHALL NOT BE SCALED.													
 PINNACLE ENGINEERING GROUP LEVEL 1 19 SHORT STREET, SOUTHPORT QLD 4215 (PO BOX 517, PARADISE POINT QLD 4216) WWW.PINNACLEENG.COM.AU	REV	DESCRIPTION	DRAWN	DATE	TASK	BY	INITIAL	DATE	CLIENT BLUEPOINT FLAGSTONE PTY LTD	PROJECT PROPOSED COMMERCIAL DEVELOPMENT 'FLAGSTONE' - PRECINCT 1 (LOT 25007 & 25009 ON SP303120)	DRAWING TITLE ENGINEERING SERVICES LAYOUT SHEET 1 OF 2		
	A	ORIGINAL ISSUE FOR COMMENT	J.H.	26.11.2021	REVIEW	B. POPA		16.04.2025					
	B	REVISED LAYOUT AND DESIGN	J.H.	16.04.2025	DESIGN	J. WATERS		16.04.2025					
	C	REVISED LAYOUT AND DESIGN	J.W.	26.05.2025	DRAWN	J. HARDMAN		16.04.2025					
	D	REVISED LAYOUT AND DESIGN	J.W.	13.06.2025	SCALE  (SCALE ABOVE DENOTES ORIGINAL SHEET SIZE - A1)								
	E	REVISED DESIGN	J.W.	07.10.2025									
										STATUS PRELIMINARY (NOT TO BE USED FOR CONSTRUCTION)		APPROVED RPEQ No	
										DRAWING NUMBER PEG0810-DA-SK05		REVISION E	



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REV	DESCRIPTION	DRAWN	DATE	TASK	BY	INITIAL	DATE
A	ORIGINAL ISSUE FOR COMMENT	J.H.	26.11.2021	REVIEW	B. POPA		16.04.2025
B	REVISED LAYOUT AND DESIGN	J.H.	16.04.2025	DESIGN	J. WATERS		16.04.2025
C	REVISED LAYOUT AND DESIGN	J.W.	26.05.2025	DRAWN	J. HARDMAN		16.04.2025
D	REVISED LAYOUT AND DESIGN	J.W.	13.06.2025	SCALE 10 0 10 20 SCALE  1:500 (SCALE ABOVE DENOTES ORIGINAL SHEET SIZE - A1)			
E	REVISED DESIGN	J.W.	07.10.2025				

BLUEPOINT FLAGSTONE
PTY LTD

PROJECT

**PROPOSED COMMERCIAL
DEVELOPMENT
'FLAGSTONE' - PRECINCT 1
(LOT 25007 & 25009 ON
SP303120)**

ENGINEERING SERVICES LAYOUT
SHEET 2 OF 2

STATUS

PRELIMINARY

(NOT TO BE USED FOR CONSTRUCTION)

APPROVED	RPEQ No
DRAWING NUMBER	
PEG0810-DA-SK06	

REG0810-DA-STUD ENGINEERING SERVICES LAYOUT SHEET 2 OF 2 DWG 08.10.2025 L0008 (0.50 X 11.00 INCHES) NO. 08 JAW WAHARS

	RETAINING WALL (3.0m TO 5.0m HEIGHT)
	RETAINING WALL (>0.6m TO 3.0m HEIGHT)
	DESIGN SURFACE SPOT LEVEL
	FINISHED SURFACE CONTOURS (0.5m)
	EXISTING SURFACE CONTOURS (0.5m)
	INDICATIVE WORKS AREA
	AREA IN FILL
	AREA IN CUT
	BOTTOM OF BATTER
	TOP OF BATTER
	EXISTING TELSTRA CABLE
	EXISTING SEWERAGE RETICULATION
	EXISTING WATER RETICULATION
	EXISTING STORMWATER PIPE
	EXISTING OVERHEAD ELECTRICAL
	EXISTING UNDER GROUND ELECTRICAL
	OVERLAND FLOW DIRECTION

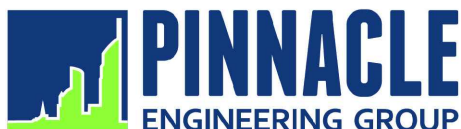
CUT TO FILL ON LEADS	= 45,559 m ³
IMPORT TO STRUCTURAL FILL	= 47,685 m ³

NOTES

1. THE LOCATION OF THE EXISTING SERVICES HAS BEEN PLOTTED FROM RECORDS AND IS TO BE CONFIRMED.
2. THE FINAL ALIGNMENT AND SIZING OF THE SERVICES IS PRELIMINARY ONLY AND SUBJECT TO DETAILED DESIGN AND FUTURE OPERATIONAL WORKS APPLICATIONS TO COUNCIL.
3. PRELIMINARY EARTHWORK VOLUMES ARE CALCULATED FROM EXISTING NATURAL SURFACE TO PRELIMINARY DESIGN SURFACE, AND DO NOT ACCOUNT FOR STRIPPING, BOXING OR BUILDING PAD THICKNESS.



UNDERGROUND PUBLIC UTILITY PLANT EXISTS IN THIS VICINITY. THE CONTRACTOR IS ADVISED TO CONTACT THE RELEVANT AUTHORITIES TO CONFIRM THE EXACT LOCATION OF PUBLIC UTILITY PLANT ON SITE PRIOR TO THE COMMENCEMENT OF ANY EXCAVATION OR CONSTRUCTION WORKS.



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REV	DESCRIPTION	DRAWN	DATE	TASK	BY	INITIAL	DATE
C	FOR COORDINATION	J.W.	18.11.2024	REVIEW	B. POPA		16.04.2025
D	FOR COORDINATION	H.W.	31.03.2025	DESIGN	J. WATERS		16.04.2025
E	REVISED LAYOUT AND DESIGN	J.H.	16.04.2025	DRAWN	J. WATERS		16.04.2025
F	REVISED LAYOUT AND DESIGN	J.W.	26.05.2025	SCALE 			
G	REVISED LAYOUT AND DESIGN	J.W.	13.06.2025				
H	REVISED DESIGN	J.W.	26.09.2025				
I	REVISED DESIGN	J.W.	07.10.2025				

(SCALE ABOVE DENOTES ORIGINAL SHEET SIZE - A1)

BLUEPOINT FLAGSTONE
PTY LTD

PROJECT

PROPOSED COMMERCIAL
DEVELOPMENT
'FLAGSTONE' - PRECINCT 1
(LOT 25007 & 25009 ON
SP303120)

DRAWING TITLE

PRELIMINARY BULK EARTHWORKS LAYOUT
SHEET 1 OF 2

STATUS

PRELIMINARY

(NOT TO BE USED FOR CONSTRUCTION)

APPROVED	RPEQ
DRAWING NUMBER	
PEG0810-DA-SK02	

REVISION 1



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NOTES

- FLOODING OCCURS ON ADJACENT PROPERTIES. REFER TO LCC MAPPING FOR PRE-DEVELOPMENT FLOOD MAPPING AND THE HYDRAULIC IMPACT ASSESSMENT BY BIOME CONSULTING FOR POST-DEVELOPMENT MAPPING.
- HABITABLE FINISHED FLOOR LEVELS TO BE 300mm ABOVE 1% AEP EVENT (Q₁₀₀) OF RL36.70m AHD.
- AERIAL IMAGERY COURTESY OF NEARMAP.COM.

FLOOD STORAGE - PRE AND POST DEVELOPMENT

PRE-DEVELOPMENT FLOOD STORAGE VOLUME

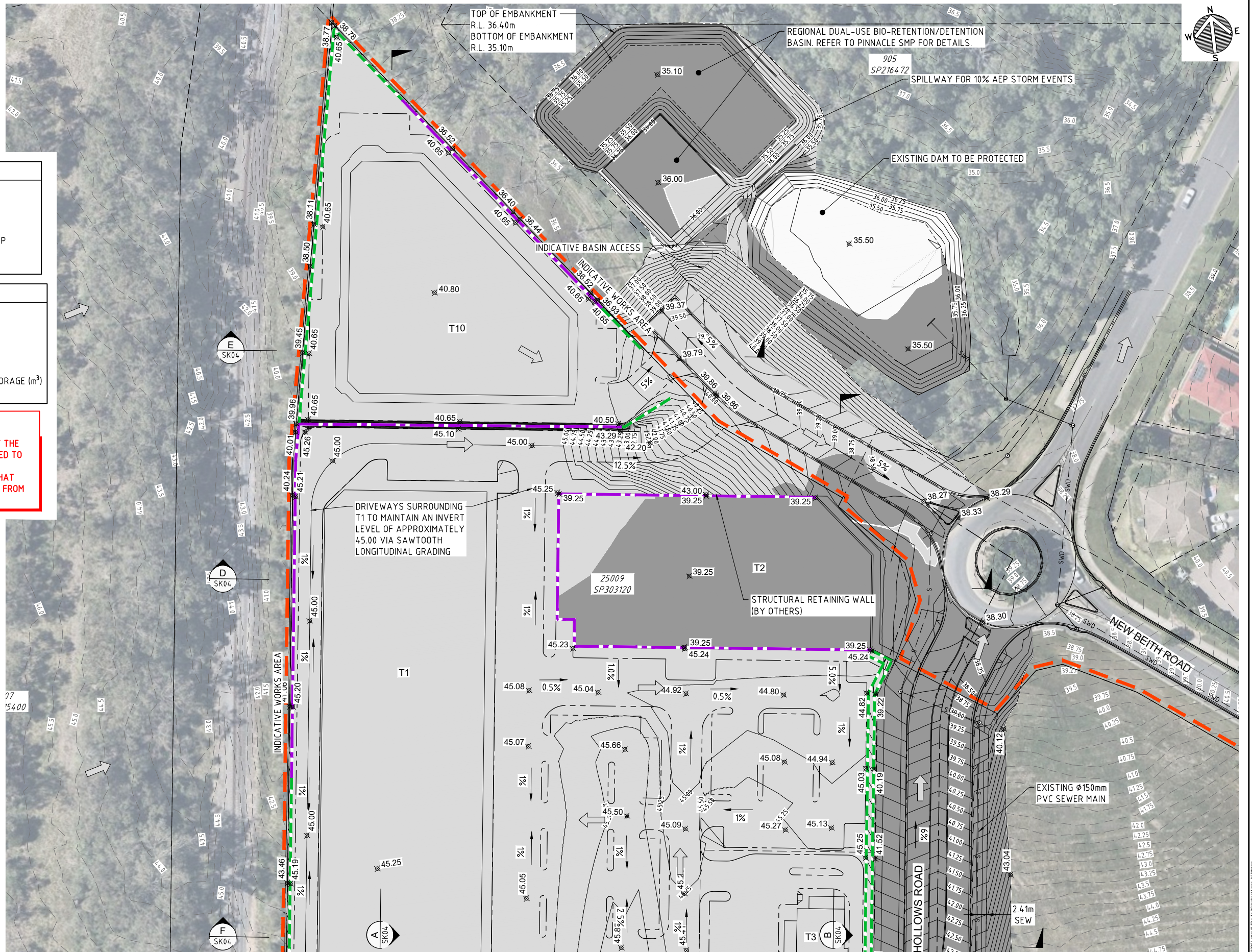
EVENT	DFL (m AHD)	FLOOD STORAGE TO DFL (m³)
1% AEP (Q ₁₀₀)	36.70m	502m³

POST-DEVELOPMENT FLOOD STORAGE VOLUME

EVENT	DFL (m AHD)	FFL MIN. (m AHD)	AVAILABLE FLOOD STORAGE (m³)
1% AEP (Q ₁₀₀)	36.70m	37.00m	502m³

FLOOD STORAGE LEVELS

IT IS THE PRINCIPAL CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT THE FINISHED SURFACE LEVELS NOMINATED ON THIS DRAWING ARE ACHIEVED TO ENSURE NO LOSS OF FLOODPLAIN STORAGE POST-DEVELOPMENT. FURTHERMORE IT IS THE PRINCIPAL CONTRACTOR'S RESPONSIBILITY THAT FALL TOWARDS THE WATERWAY IS ACHIEVED TO ENSURE THAT FLOW FROM HIGH FLOW EVENTS IS CONVEYED TO THE WATERWAY.



FOR CONTINUATION REFER TO DWG No. PEG0810-DA-SK02

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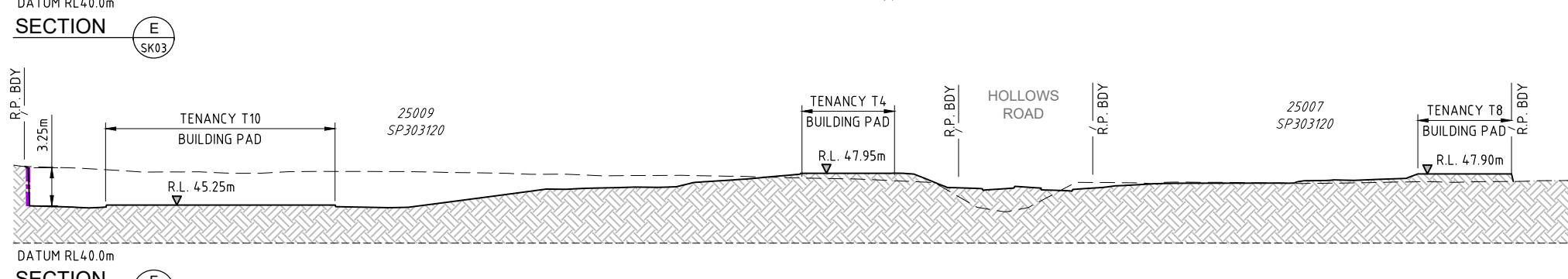
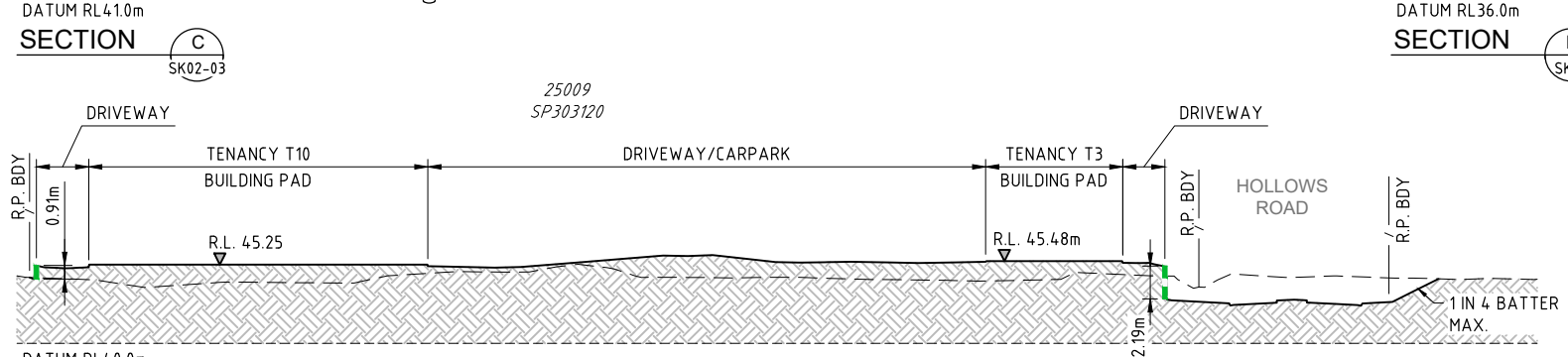
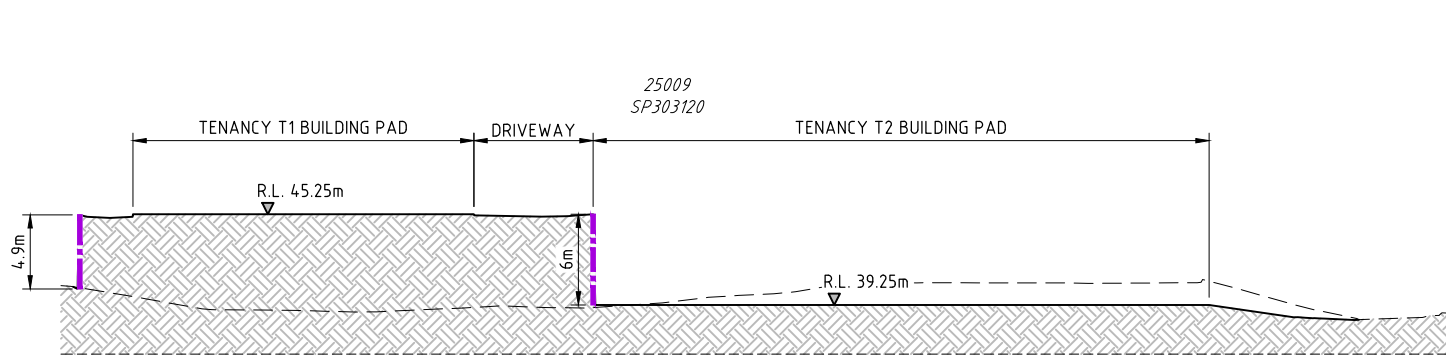
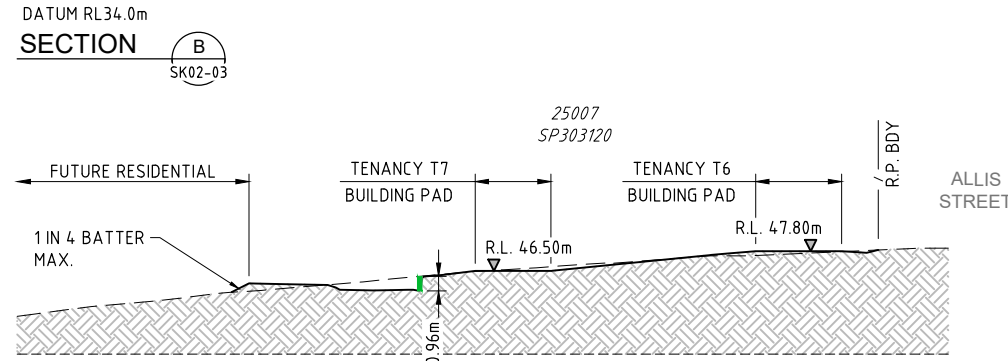
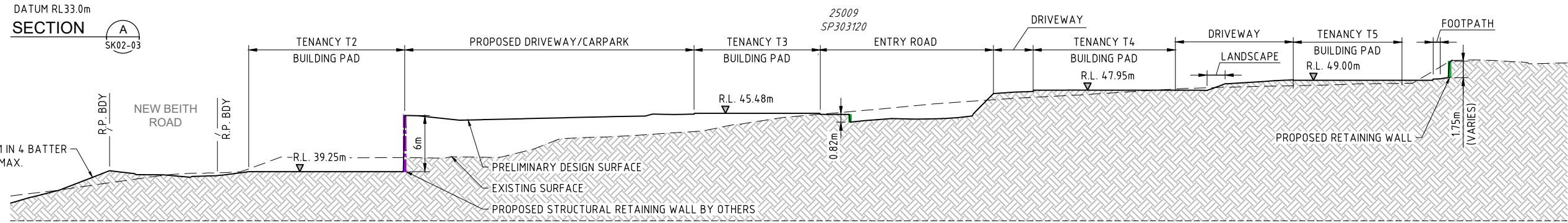
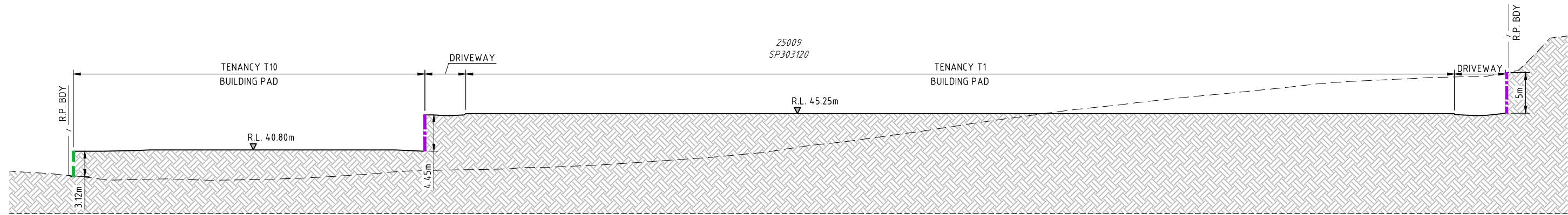
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D	FOR COORDINATION	H.W.	31.03.2025	DESIGN	J. WATERS		16.04.2025
E	REVISED LAYOUT AND DESIGN	J.H.	16.04.2025	DRAWN	J. HARDMAN		16.04.2025
F	REVISED LAYOUT AND DESIGN	J.W.	26.05.2025	SCALE			
G	REVISED LAYOUT AND DESIGN	J.W.	13.06.2025				
H	REVISED DESIGN	J.W.	26.09.2025				
I	REVISED DESIGN	J.W.	07.10.2025				

SCALE 10 0 10 20 1:500
(SCALE ABOVE DENOTES ORIGINAL SHEET SIZE - A1)

BLUEPOINT FLAGSTONE
PTY LTD

PROPOSED COMMERCIAL
DEVELOPMENT
'FLAGSTONE' - PRECINCT 1
(LOT 25007 & 25009 ON
SP303120)

DRAWING TITLE	PRELIMINARY BULK EARTHWORKS LAYOUT SHEET 2 OF 2		
STATUS PRELIMINARY (NOT TO BE USED FOR CONSTRUCTION)	APPROVED		RPEQ No
	DRAWING NUMBER PEG0810-DA-SK03		REVISION I





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REV	DESCRIPTION	DRAWN	DATE	TASK	BY	INITIAL	DATE
A	FOR COORDINATION	MGB	11.05.2021	REVIEW	B. POPA		16.04.2025
B	ISSUE FOR COMMENT	J.H.	29.11.2021	DESIGN	J. WATERS		16.04.2025
C	REVISED LAYOUT AND DESIGN	J.H.	16.04.2025	DRAWN	J. HARDMAN		16.04.2025
D	REVISED LAYOUT AND DESIGN	J.W.	26.05.2025	SCALE HORZ  1:500 VERT  1:250 (SCALE ABOVE DENOTES ORIGINAL SHEET SIZE - A1)			
E	REVISED LAYOUT AND DESIGN	J.W.	13.06.2025				
F	REVISED LAYOUT AND DESIGN	J.W.	07.10.2025				

CLIENT

BLUEPOINT FLAGSTONE PTY LTD

PROJECT

PROPOSED COMMERCIAL DEVELOPMENT
'FLAGSTONE' - PRECINCT 1
(LOT 25007 & 25009 ON SP303120)

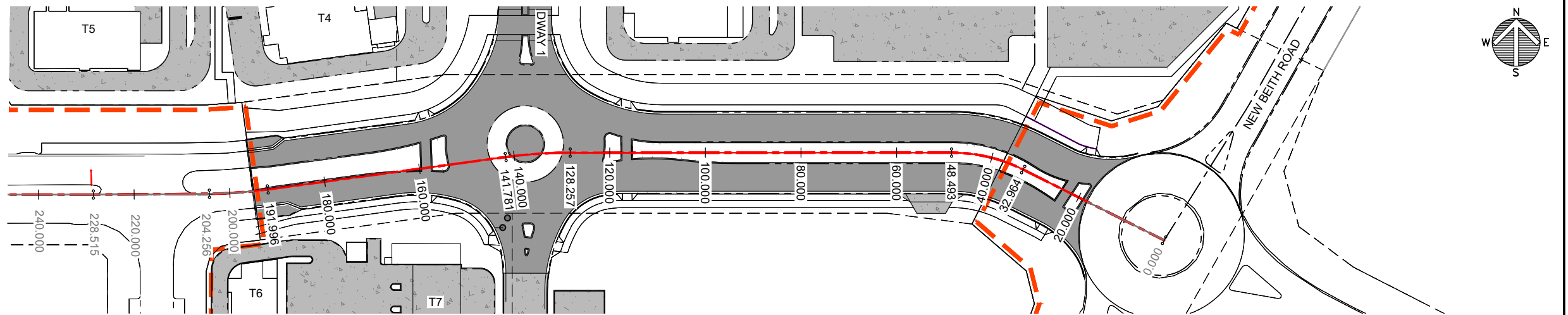
DRAWING TITLE	
PRELIMINARY BULK EARTHWORKS SECTIONS	
STATUS PRELIMINARY (NOT TO BE USED FOR CONSTRUCTION)	APPROVED RPEQ No
	DRAWING NUMBER PEG0810-DA-SK04
REVISION F	

- LEGEND
- NOMINAL KERB LINE
 - ROAD CENTRE LINE
 - PROPOSED LOT BOUNDARY
 - EXISTING NOMINAL KERB LINE
 - EXISTING ROAD CENTRE LINE
 - EXISTING LOT BOUNDARY
 - FUTURE NOMINAL KERB LINE
 - FUTURE ROAD CENTRE LINE
 - FUTURE LOT BOUNDARY
 - CONTROL LINE
 - INDICATIVE WORKS AREA

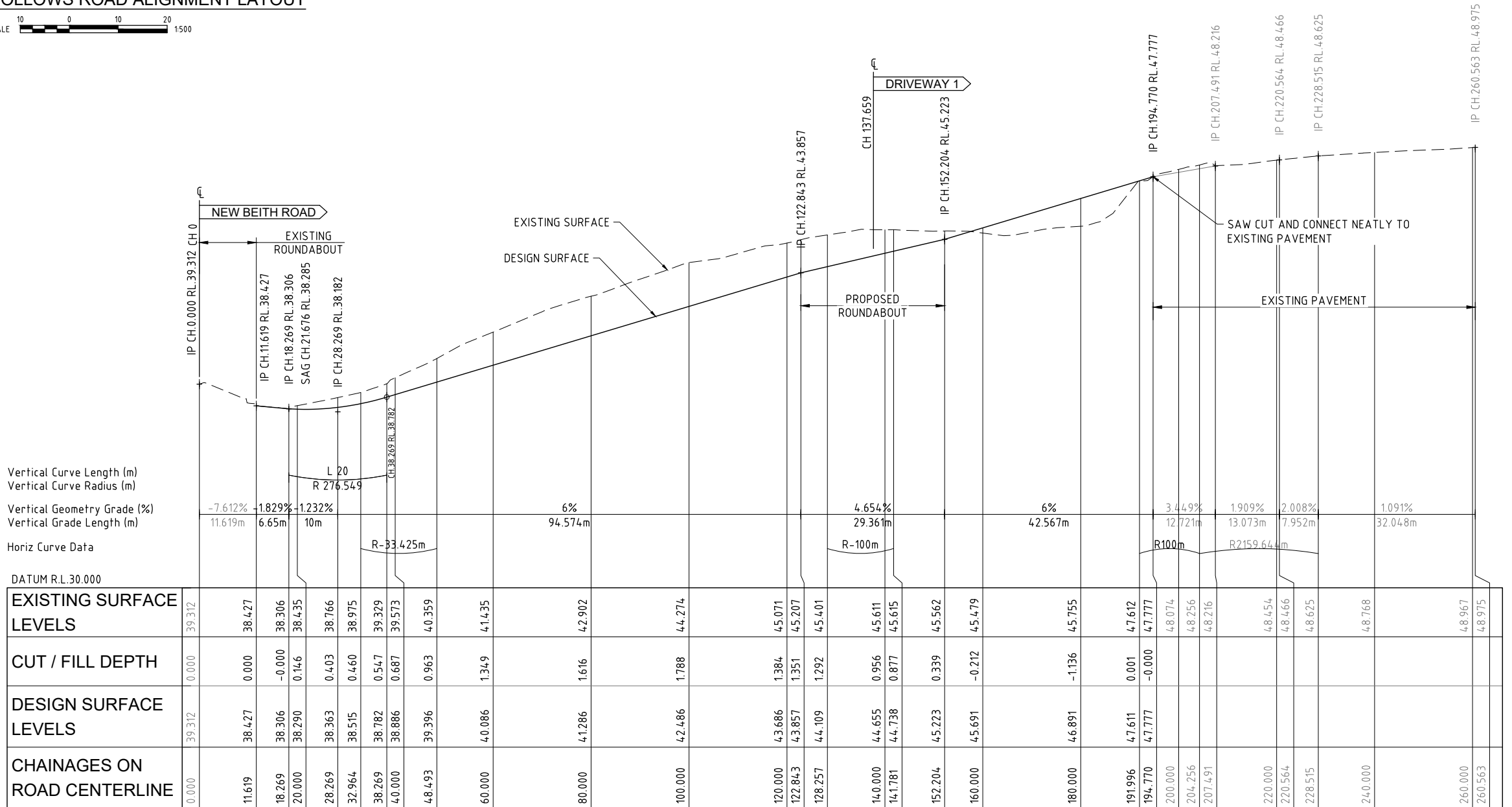


The Essential First Step.

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HOLLOWS ROAD ALIGNMENT LAYOUT



HOLLOWS ROAD LONGITUDINAL SECTION



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PINNACLE
ENGINEERING GROUP

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(PO BOX 517, PARADISE POINT QLD 4216)
WWW.PINNACLEENG.COM.AU

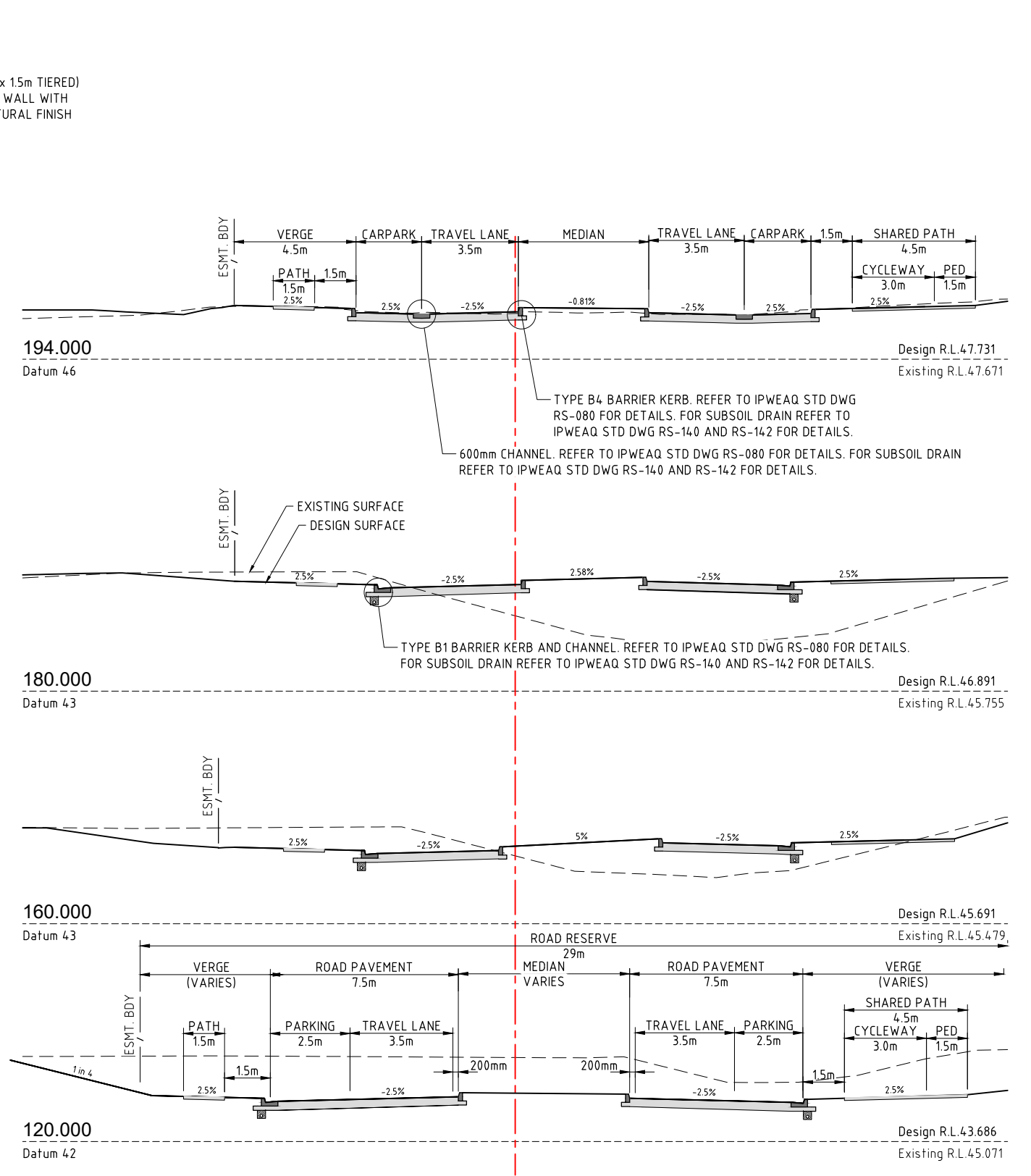
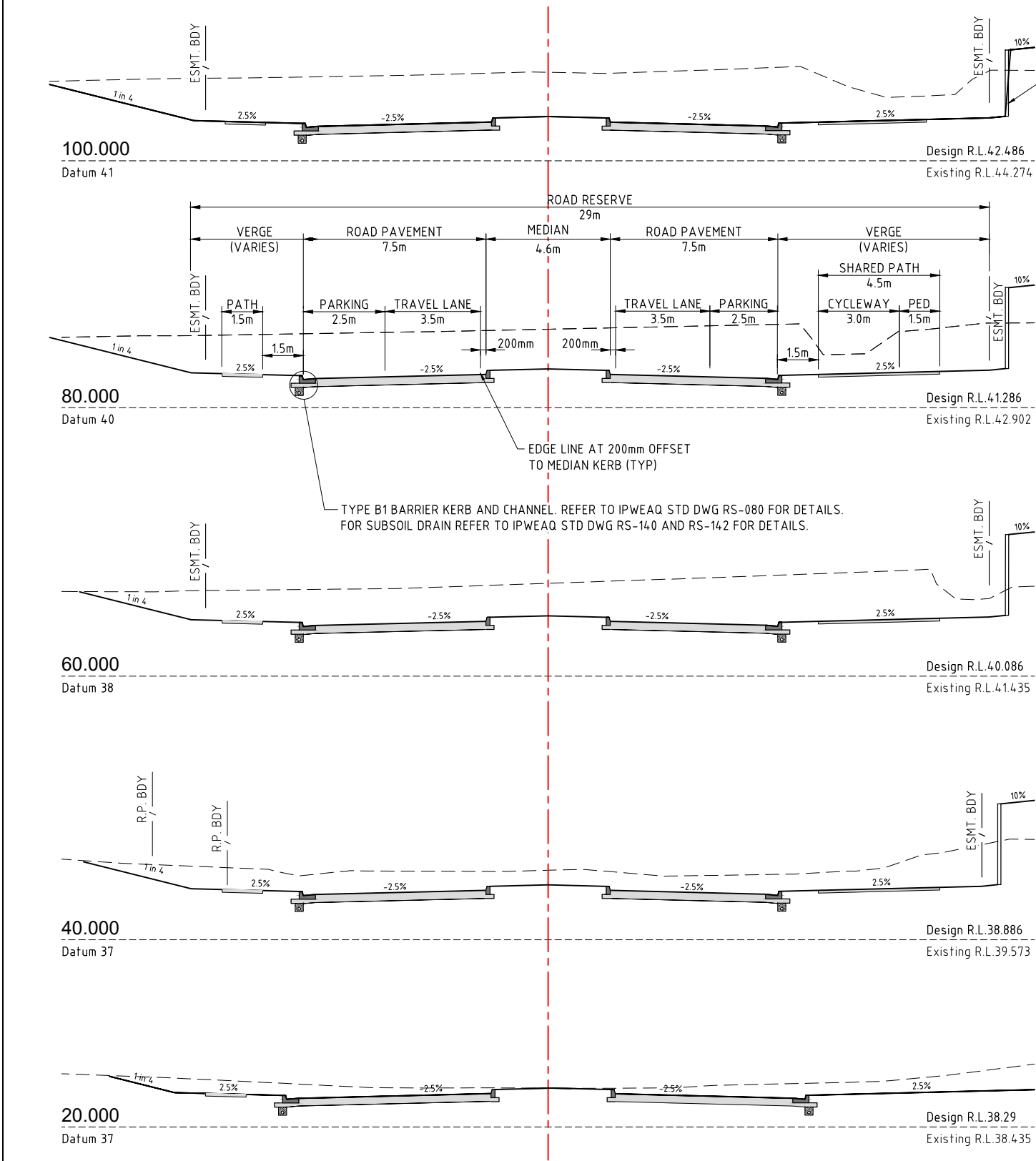
REV	DESCRIPTION	DRAWN	DATE
A	ORIGINAL ISSUE FOR COMMENT	J.H.	26.11.2021
B	REVISED LAYOUT	H.W.	16.04.2025
C	REVISED LAYOUT	J.W.	26.05.2025
D	REVISED LAYOUT	J.W.	13.06.2025
E	REVISED LAYOUT	H.W.	01.09.2025

TASK	BY	INITIAL	DATE
REVIEW	B. POPA		16.04.2025
DESIGN	H. WEBBER		16.04.2025
DRAWN	H. WEBBER		16.04.2025
SCALE			
AS SHOWN			
(SCALE ABOVE DENOTES ORIGINAL SHEET SIZE - A1)			

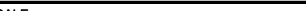
CLIENT
BLUEPOINT FLAGSTONE PTY LTD

PROJECT
PROPOSED COMMERCIAL DEVELOPMENT 'FLAGSTONE' - PRECINCT 1 (LOT 25007 & 25009 ON SP303120)

DRAWING TITLE		
HOLLOWS ROAD LONGITUDINAL SECTION		
STATUS PRELIMINARY (NOT TO BE USED FOR CONSTRUCTION)	APPROVED	
	RPEQ No	
	DRAWING NUMBER	REVISION
	PEG0810-DA-SK11	E



THIS ENGINEERING LAYOUT WAS PRODUCED FOR THE EXCLUSIVE USE OF PINNACLE ENGINEERING GROUP'S CLIENT AS NOMINATED HEREIN. PINNACLE DOES NOT GRANT CONSENT TO ANY THIRD PARTY TO RELY ON THE INFORMATION PRODUCED WITHIN THIS ENGINEERING LAYOUT WITHOUT PRIOR WRITTEN CONSENT FROM PINNACLE ENGINEERING GROUP. PINNACLE ENGINEERING GROUP ADVISES THAT DIMENSIONS ON THIS ENGINEERING LAYOUT SHALL NOT BE SCALED.

 LEVEL 119 SHORT STREET, SOUTHPORT QLD 4215 (PO BOX 517, PARADISE POINT QLD 4216) WWW.PINNACLEENG.COM.AU	REV		DESCRIPTION	DRAWN	DATE	TASK	BY	INITIAL	DATE	CLIENT	PROJECT	DRAWING TITLE				
	A		ORIGINAL ISSUE FOR COMMENT	J.H.	26.11.2021	REVIEW	B. POPA		16.04.2025			PROPOSED COMMERCIAL DEVELOPMENT 'FLAGSTONE' - PRECINCT 1 (LOT 25007 & 25009 ON SP303120)				
	B		REVISED LAYOUT	H.W.	16.04.2025	DESIGN	H. WEBBER		16.04.2025							
	C		REVISED LAYOUT	J.W.	26.05.2025	DRAWN	H. WEBBER		16.04.2025							
	D		REVISED LAYOUT	H.W.	01.09.2025	SCALE			 (SCALE ABOVE DENOTES ORIGINAL SHEET SIZE - A1)							
										BLUEPOINT FLAGSTONE PTY LTD		STATUS		APPROVED		RPEQ No
												PRELIMINARY (NOT TO BE USED FOR CONSTRUCTION)		DRAWING NUMBER		REVISION
														PEG0810-DA-SK12		D

Appendix D

BYDA Data

[Review responses online](#) ↗

Received 8 of 8 responses

All responses received

14 Wild Mint Drive, Flagstone QLD 4280

Job dates

15/04/2025 → 15/04/2025

These plans expire on

13 May 2025

Lodged by

Jai Waters

Authority	Status	Page
✉ BYDA Confirmation		2
🏠 APA Group Gas Networks (70710)	Received	4
🏠 APA Group Gas Networks (90073)	Received	63
🏠 Australian Rail & Track Corporation (ARTC)	Received	122
🏠 Energex QLD	Received	125
🏠 Logan City Council	Received	174
🏠 National Fire Ant Eradication Program	Received	182
🏠 NBN Co Qld	Received	185
🏠 Telstra QLD FA	Received	203

Contact Details

Contact	Contact number	Company	Enquirer ID
Jai Waters	0455 996 516	Pinnacle Engineering Group	3309841
Email		Address	
jai@pinnacleeng.com.au		19 Short Street Southport QLD 4215	

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
15/04/2025	15/04/2025	15/04/2025	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
PEG0810 Flagstone BYDA	14 Wild Mint Drive Flagstone QLD 4280	-

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
253790915	APA Group Gas Networks (70710)	1800 085 628	NOTIFIED
253790910	APA Group Gas Networks (90073)	1800 085 628	NOTIFIED
253790911	Australian Rail & Track Corporation (ARTC)	(08) 8217 4366	NOTIFIED
253790913	Energex QLD	13 12 53	NOTIFIED
253790907	Logan City Council	(07) 3412 3412	NOTIFIED
253790919	National Fire Ant Eradication Program	-	NOTIFIED
253790906	NBN Co Qld	1800 687 626	NOTIFIED
253790917	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.



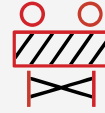
Prepare

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

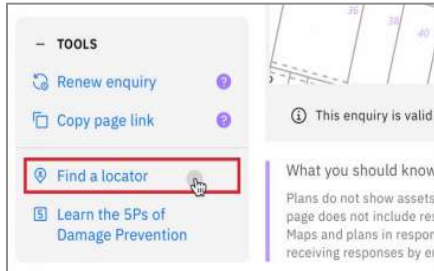
Protecting and supporting the exposed infrastructure is the responsibility of the excavator. Always erect safety barriers in areas of risk and enforce exclusion zones.



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.isseekplant.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

APA Group Gas Networks (70710)

Referral

253790915

Member Phone

1800 085 628

Responses from this member

Response received Tue 15 Apr 2025 7.01pm

File name	Page
Response Body	5
253790915.pdf	6
400-STD-AM-0001_2 Guidelines for Works Near Existing Gas Assets.pdf	22

PLEASE NOTE: This is an automated response. Please **DO NOT REPLY to this email**. If you require further information in relation to this Before You Dig response, please contact
BYDA_APA@apa.com.au

Enquiry Details:

Impact	affected
Sequence Number	253790915
Enquirer Id	3309841
Activity	Planning and Design
Job Number	39116646
User Reference	PEG0810 Flagstone BYDA
Message	

Site Details:

Address	14 Wild Mint Drive Flagstone QLD 4280
---------	---

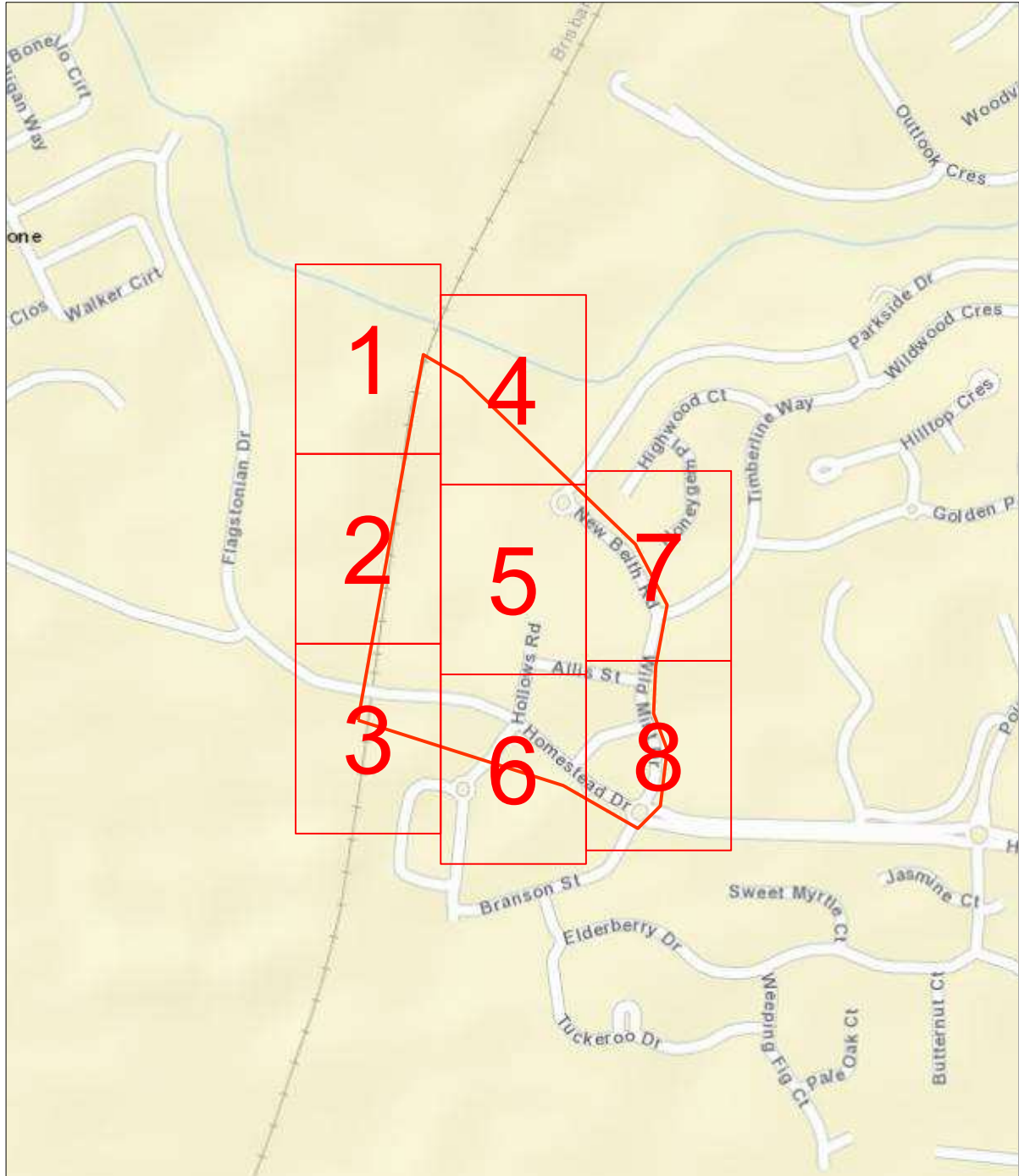
Enquirers Details:

Contact	Jai Waters
Company	Pinnacle Engineering Group
Email	jai@pinnacleeng.com.au
Phone	+61455996516
Address	19 Short Street Southport QLD 4215

APA Group

Site Address 14 Wild Mint Drive
Flagstone
QLD 4280

Sequence No 253790915



Scale 1: 6000

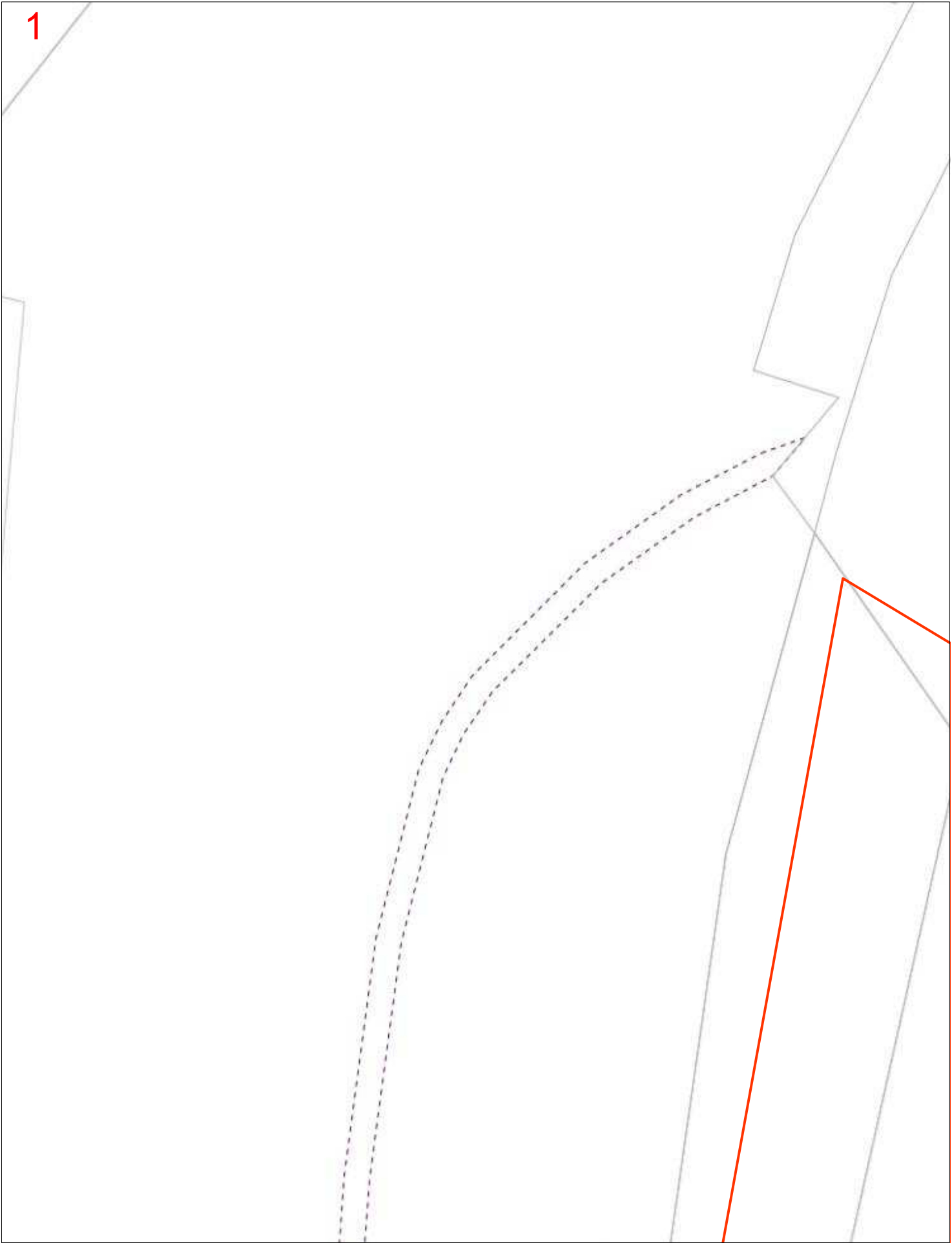
Map Sources: Esri, Garmin, HERE, FAO, NOAA, USGS,
© OpenStreetMap contributors, and the GIS User Community



Enquiry Area

Map Key Area





Scale 1: 700 map

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



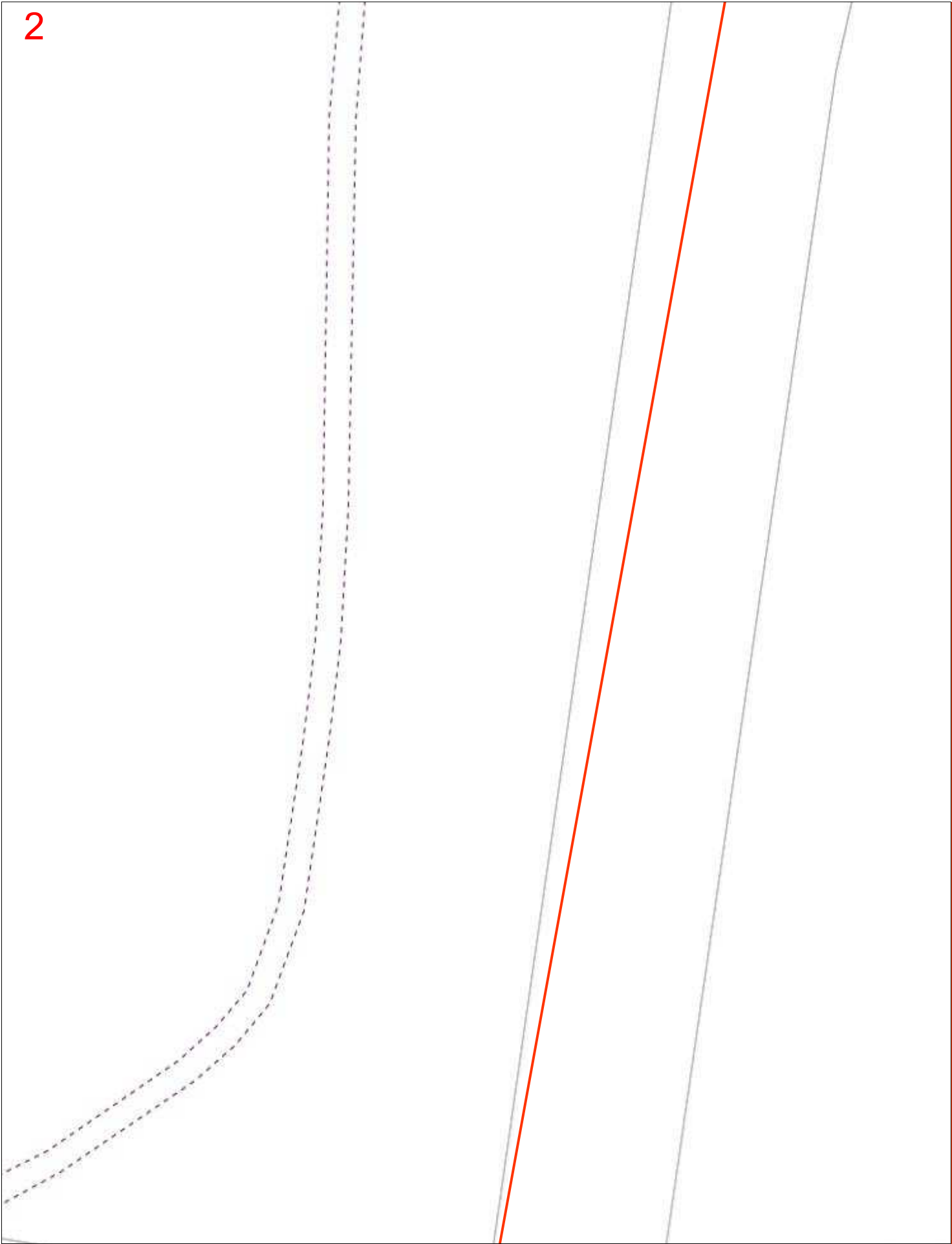
Enquiry Area

Map Key Area





2



Scale 1: 700 map

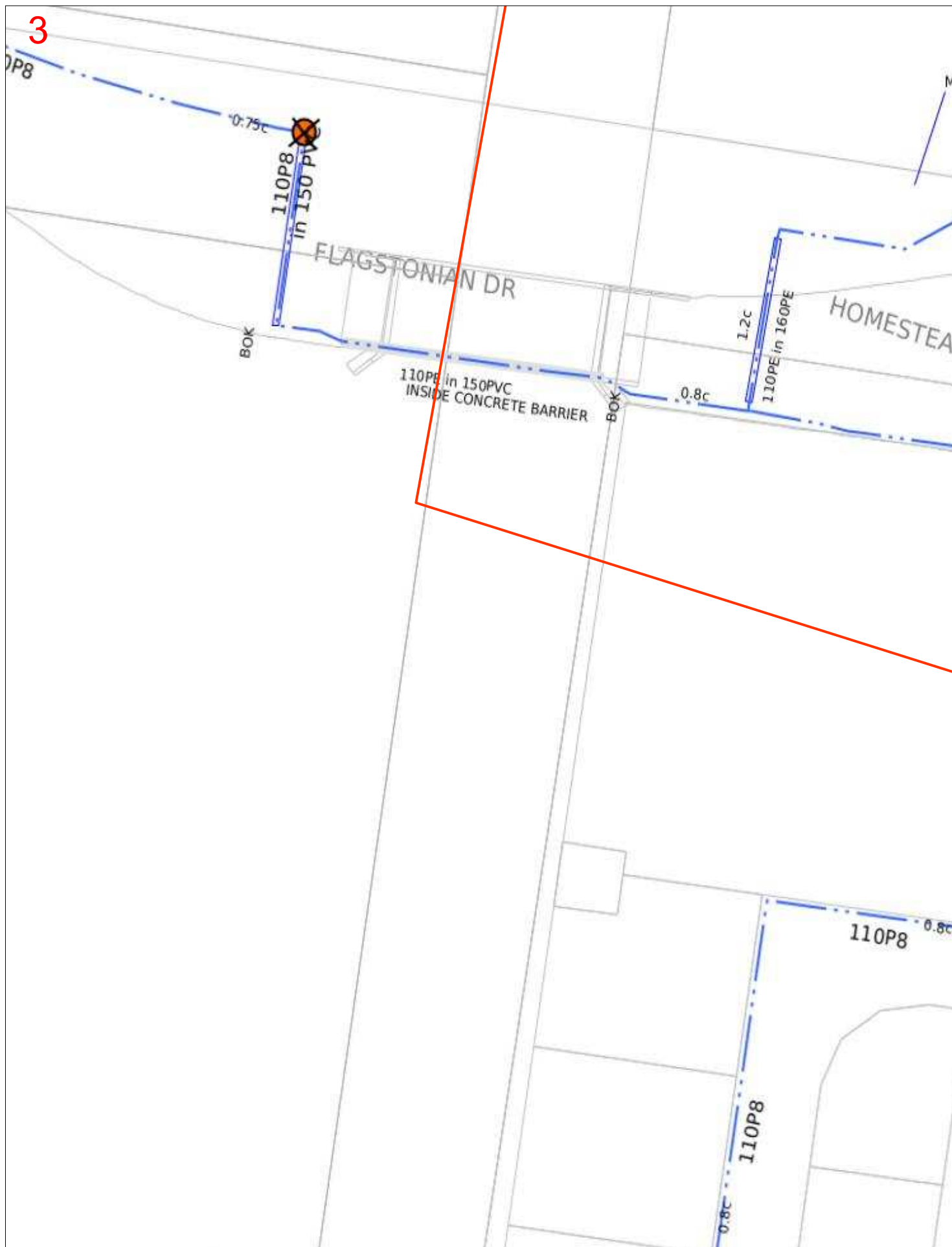
Map Sources: Esri, Garmin, HERE, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community



Enquiry Area

Map Key Area





Scale 1: 700 map

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



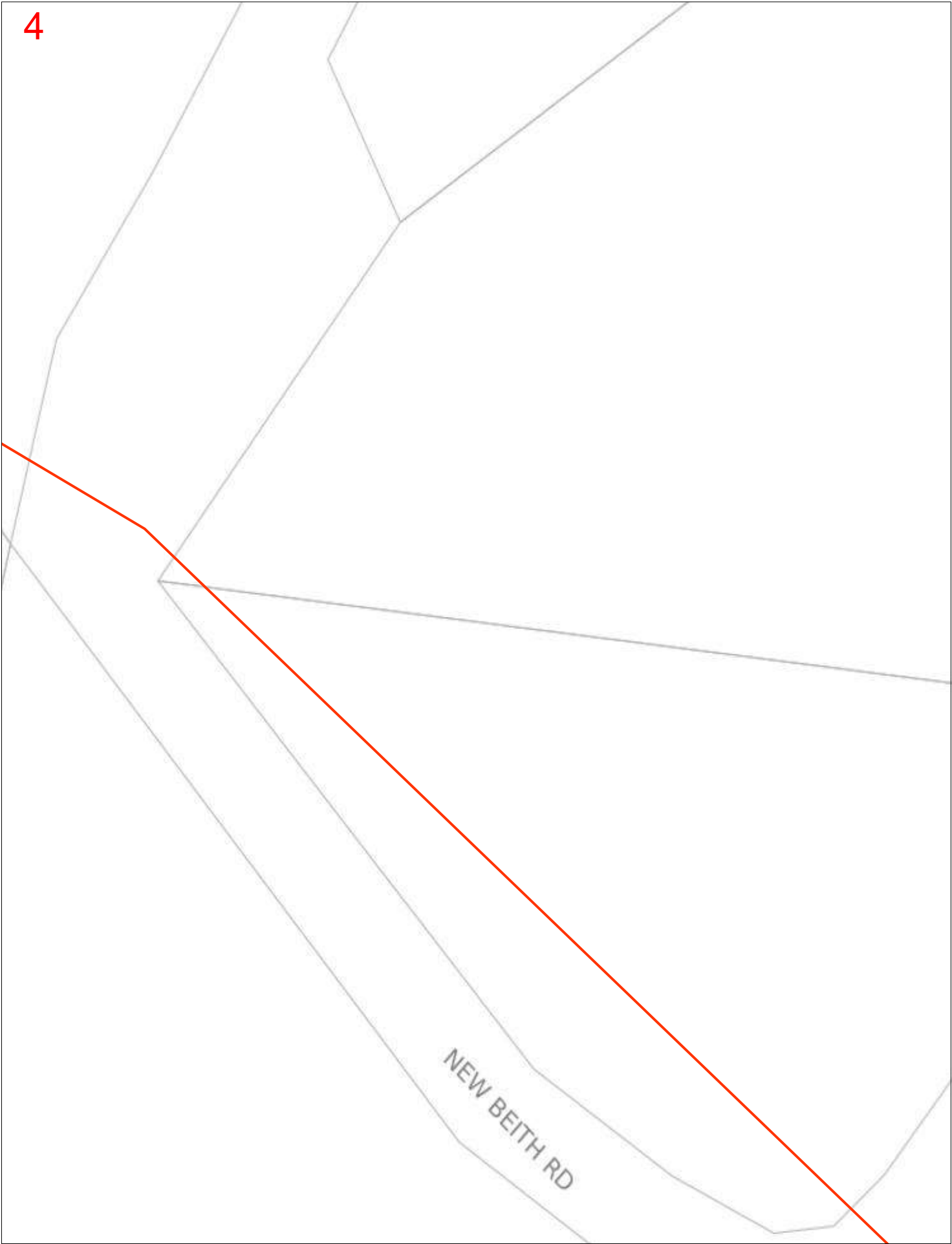
Enquiry Area

Map Key Area





4



Scale 1: 700 map

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



Enquiry Area

Map Key Area



5



Scale 1:700 map

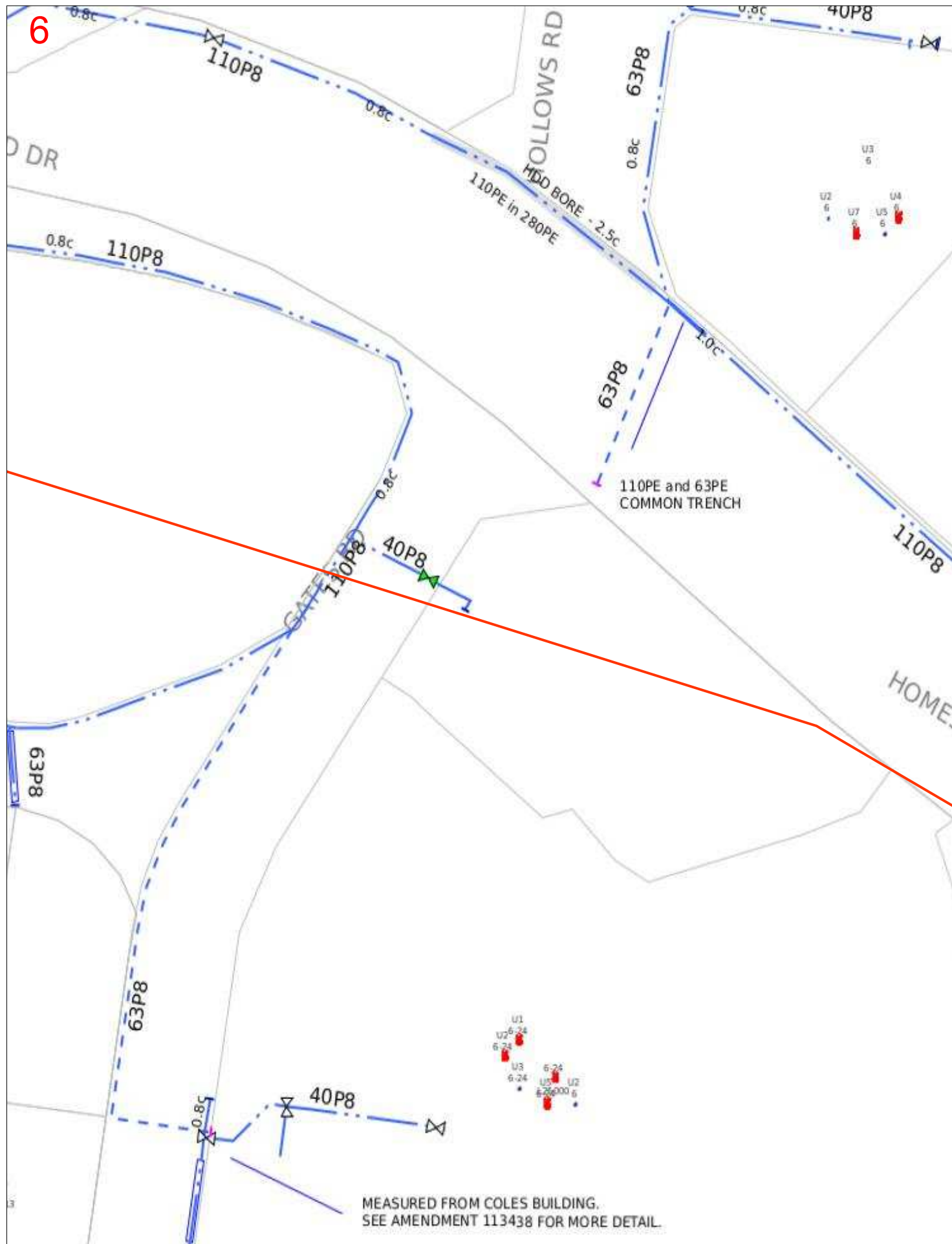
Map Sources: Esri, Garmin, HERE, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community



Enquiry Area

Map Key Area





Scale 1: 700 map

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



Enquiry Area

Map Key Area



7



Scale 1: 700 map

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

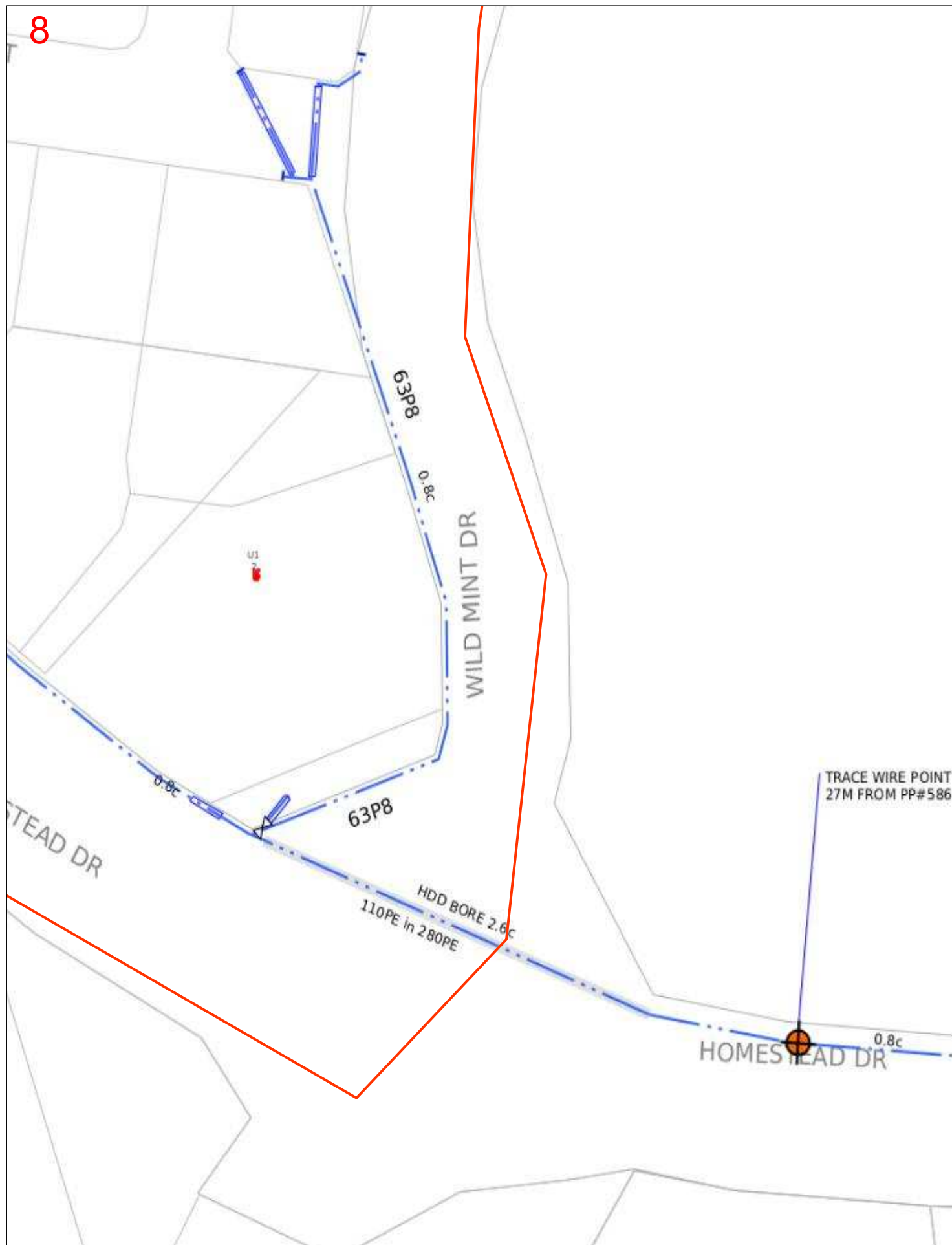


Enquiry Area

Map Key Area



8



Scale 1: 700 map

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



Enquiry Area

Map Key Area



Map Symbolology

Pipe	Pipe code and material	Object
Low pressure	C* (for example, C2) Cast iron	Valve
Medium pressure	CU Copper	Buried valve
High pressure	N2 Nylon	Regulator
Transmission pressure	P* Polyethylene (PE)	Gas supplied = yes
Critical main (behind pipe)	P6, P7, P9–P12 Medium density PE	CP rectifier terminal
Proposed (pressure by colour)	P2, P4, P8 High density PE	CP test station
LPG (pressure by colour)	S* Steel	CP anode
Abandoned	W2 Wrought galv iron	CP bond wire
Idle/inactive	W3 PE coat wrought galv iron	Syphon
Sleeve		Trace wire point
Casing (behind pipe)		
Area	Abbreviation	
BYDA area of interest	BoK Back of kerb	FoK Front of kerb
	C Depth of cover	Galv Galvanized
	CP Cathodic protection	NTI Not tied in

Example

Pipe	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

Referral

253790911

Member Phone

(08) 8217 4366

Responses from this member

Response received Tue 15 Apr 2025 7.00pm

File name	Page
Response Body	123
253790911.pdf	124

Dear Sir/Madam,

We acknowledge your Before You Dig Australia search as per above.

If your proposed works are in/under/over/immediately adjacent to, you are unsure of how to identify the rail corridor boundary, or the proposed works have the potential to effect the ARTC rail corridor, please complete the Third Party Works Application Form, which can be found at: <https://www.artc.com.au/work/external-parties/> and email it to the appropriate email address on the last page of the form.

If your Before You Dig Australia search area is outside the ARTC Rail Corridor then please disregard this email.

Regards,

ARTC Before You Dig

WARNING

If your proposed works are in/under/over/immediately adjacent to, you are unsure of how to identify the rail corridor boundary, or the proposed works have the potential to effect the ARTC rail corridor, please complete the Third Party Works Application Form, which can be found at: <https://www.artc.com.au/work/external-parties/> and email it to the appropriate email address on the last page of the form.

If your Before You Dig Australia search area is outside the ARTC Rail Corridor then please disregard this email.

Regards,

ARTC Before You Dig

Referral

253790913

Member Phone

13 12 53

Responses from this member

Response received Tue 15 Apr 2025 7.02pm

File name	Page
Response Body	126
Working Near Overhead and Underground Electric Lines.pdf	129
Energex BYDA Terms and Conditions.pdf	157
253790913 - Energex Plan.pdf	162

Assets and Planned Assets found Before You Dig Australia (BYDA) Request

Please DO NOT SEND A REPLY to this email as it has been automatically generated and replies are not monitored.

Our search has revealed there is existing and planned Energex Assets within the defined search area.

They are shown on the attached plan.

There is a possibility the planned Assets may have been installed prior to your enquiry.

You:

Jai Waters

BYDA Enquiry No:

253790913

Company:

Pinnacle Engineering Group

Date of Response:

15 Apr 2025

Search Location:

14 Wild Mint Drive
Flagstone,
QLD 4280

Period of Plan Validity:

4 Weeks

External Comments (if any):

WARNING: When working in the vicinity of Energex's Assets You have a legal Duty of Care that must be observed.

It is important that You note:

1. Immediately report life threatening emergencies to Emergency Services on **000** or to ENERGEX on **13 19 62**.
2. Please read and understand all the information and disclaimers provided - including the Terms and Conditions on the attached pages.
3. We have only searched the area which has been nominated in the request. If this nominated area is not what You require, please resubmit another enquiry with BYDA.
4. Plans provided by ENERGEX are only an indication of the presence of underground assets within the nominated area. Locations provided are approximate and the plans are not suitable for scaling purposes, as exact ground cover and alignments cannot be provided. You must confirm the exact location of underground electrical equipment by use of an electronic cable locator followed by careful, non-mechanical excavation (ie, potholing).
5. Plans provided by ENERGEX do not encompass ENERGEX's overhead Assets.
6. ENERGEX, its servants or agents shall not be liable for any loss or damage caused or occasioned by the use of plans and details supplied pursuant to the BYDA Request and You agree to indemnify ENERGEX against any claim or demand for any such loss or damage to You, Your servants or Your agents.

7. You are responsible for any damage to Assets caused by works pursuant to or in any way connected with this BYDA Request.
8. In addition to Assets marked on attached plan, there could be underground earth conductors, underground substation earth conductors, Multiple Earthed Network (MEN) conductors, Single Wire Earth Return (SWER) Substation Earth Conductors, Air Break Switch (ABS) Earth Mats or Consumer Mains in the vicinity or private underground cables (inc. consumers' mains that may run from ENERGEX mains onto private property) in the vicinity of the nominated work area(s) that are not marked on the plans.
9. Independent underground cable locators can be found via the [Certified Locator website](#) with LV Cable (up to 1kV), HV Cable (1kV-<33kV) & HV cable (33kV and over) displayed.
10. The ENERGEX Before You Dig Australia (BYDA) information map(s) provide the vicinity of underground cable and will not be adequate for conveyancing purposes. A Request for Search (Property Search) can be arranged through ENERGEX.
11. The attached plans are only valid for a period of four weeks from receipt. If excavation does not commence within four weeks, a new plan must be obtained.
12. The ENERGEX BYDA map (named maps.pdf) may contain shaded area(s), indicating the location of planned work(s). Should You find planned works that You believe may affect Your planned work(s), please contact the ENERGEX BYDA team on the details listed below.
13. ENERGEX may contact You to discuss Your proposed excavation in the vicinity of feeders identified on the attached plan(s).
14. Do not access any Assets, for example conduits, cables, pits or cabinets.
15. Your work will need to comply with:
 - [Working near overhead and underground electric lines - Electrical safety code of practice 2020](#)
 - [Managing Electrical Risk in Workplace Electrical Safety Code of Practice \(2013\)](#)
 - [Excavation Work Code of Practice \(2021\)](#)
16. **NOTE:** Where Your proposed work location contains ENERGEX 33kV or greater Underground cables please access the [Energenx before you dig Website](#) for more information.

General enquiries (7:00am - 5:30pm Mon to Fri) **13 12 53**
Life threatening emergencies only triple zero (000) or **13 19 62**

To re-submit or change the nominated search area please visit BYDA.com.au

E: custserve@energex.com.au

E: byda@energyq.com.au

ABN: 40 078 849 055



Disclaimer: While reasonable measures have been taken to ensure the accuracy of the information contained in this plan response, neither Energex nor PelicanCorp shall have 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.

If you are unable to launch any of the files for viewing and printing, you may need to download and install free viewing and printing software such as [Adobe Acrobat Reader \(for PDF files\)](#)



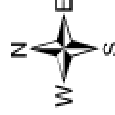
BYDA

Sequence: 253790913
Date: 15/04/2025
Scale: 1:2904
Title No: **OVERVIEW**

**CAUTION - HIGH
VOLTAGE**

- LEGEND**
- Substation
 - Cable Marker
 - Rt
 - Pole
 - Pillar
 - LV Cable (up to 1kV)
 - HW Cable (1kV - <33kV)
 - HW Cable (33kV and over)
 - Rt Boundary
 - Planned Works Area

AS5488 Category 'D' Plan



DISCLAIMER: While reasonable measures have been taken to ensure the accuracy of the information contained in this plan, neither Energex nor Pelican Corp shall have any liability whatsoever in relation to any loss, damage, cost or expense arising from the use of this plan. The user acknowledges and agrees in writing that the user shall be responsible for the accuracy of the information. Use of such information is subject to the terms and conditions of the user's agreement and constitutes acceptance of those terms.





BYDA

Sequence: 253790913
Date: 15/04/2025
Scale: 1:500
Title No: 1

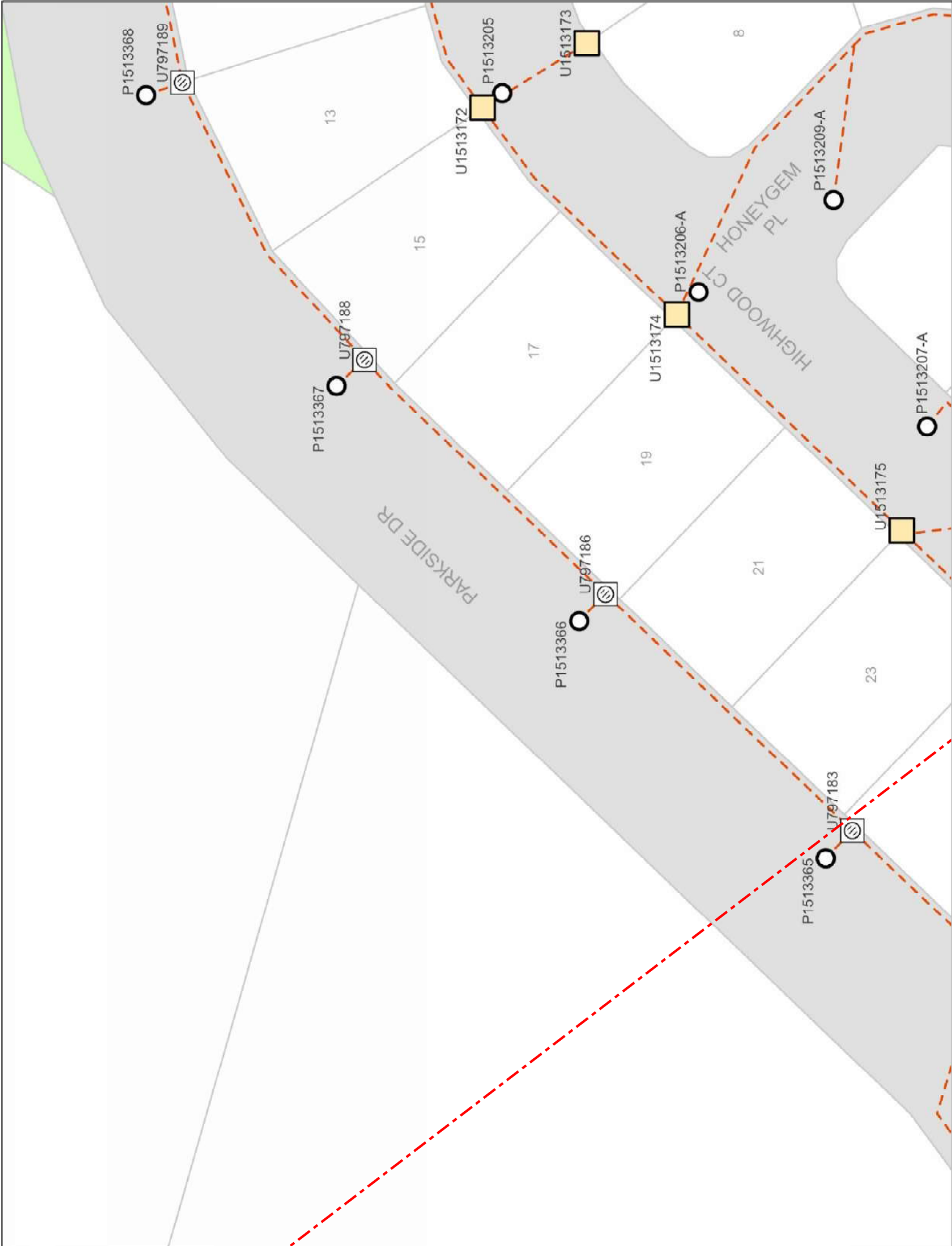
**CAUTION - HIGH
VOLTAGE**

- LEGEND**
- Substation
 - Cable Marker
 - Pit
 - Pole
 - Pillar
 - LV Cable (up to 1kV)
 - HV Cable (1kV - <33kV)
 - HV Cable (33kV and over)
 - Pit Boundary
 - Planned Work Area

AS5488 Category 'D' Plan



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BYDA

Sequence: 253790913
Date: 15/04/2025
Scale: 1:500
Title No: 2

CAUTION - HIGH
VOLTAGE

- LEGEND
- Substation
 - Cable Marker
 - Rt
 - Pole
 - Pillar
 - LV Cable (up to 1kV)
 - HV Cable (1kV - <33kV)
 - HV Cable (33kV and over)
 - Rt Boundary
 - Planned Work Area

AS5488 Category 'D' Plan



DISCLAIMER: While reasonable measures have been taken to ensure the accuracy of the information contained in this plan, neither Energex nor Pelican Corp shall have any liability whatsoever in relation to any loss, damage, cost or expense arising from the use of this plan. The user of this plan shall be deemed to have accepted the information contained in it on the completeness or accuracy of such information. Use of such information is subject to and constitutes acceptance of these terms.



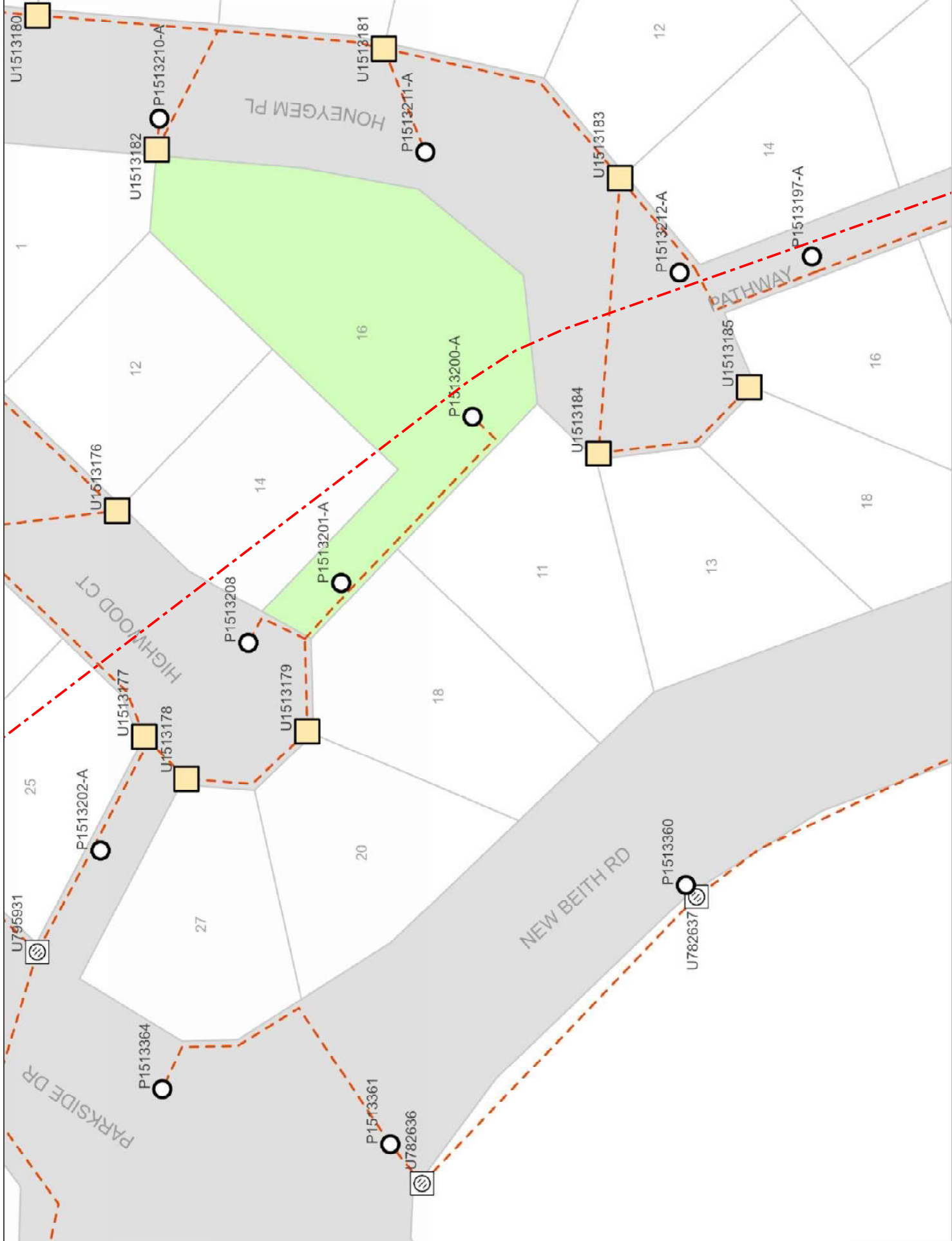
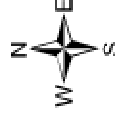
BYDA

Sequence: 253790913
Date: 15/04/2025
Scale: 1:500
Title No: 3

**CAUTION - HIGH
VOLTAGE**

- LEGEND**
- Substation
 - Cable Marker
 - Pt
 - Pole
 - Pillar
 - LV Cable (up to 1kV)
 - HV Cable (1kV - <33kV)
 - HV Cable (33kV and over)
 - Pt Boundary
 - Planned Work Area

AS5488 Category 'D' Plan



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BYDA

Sequence: 253790913
Date: 15/04/2025
Scale: 1:500
Title No: 4

**CAUTION - HIGH
VOLTAGE**

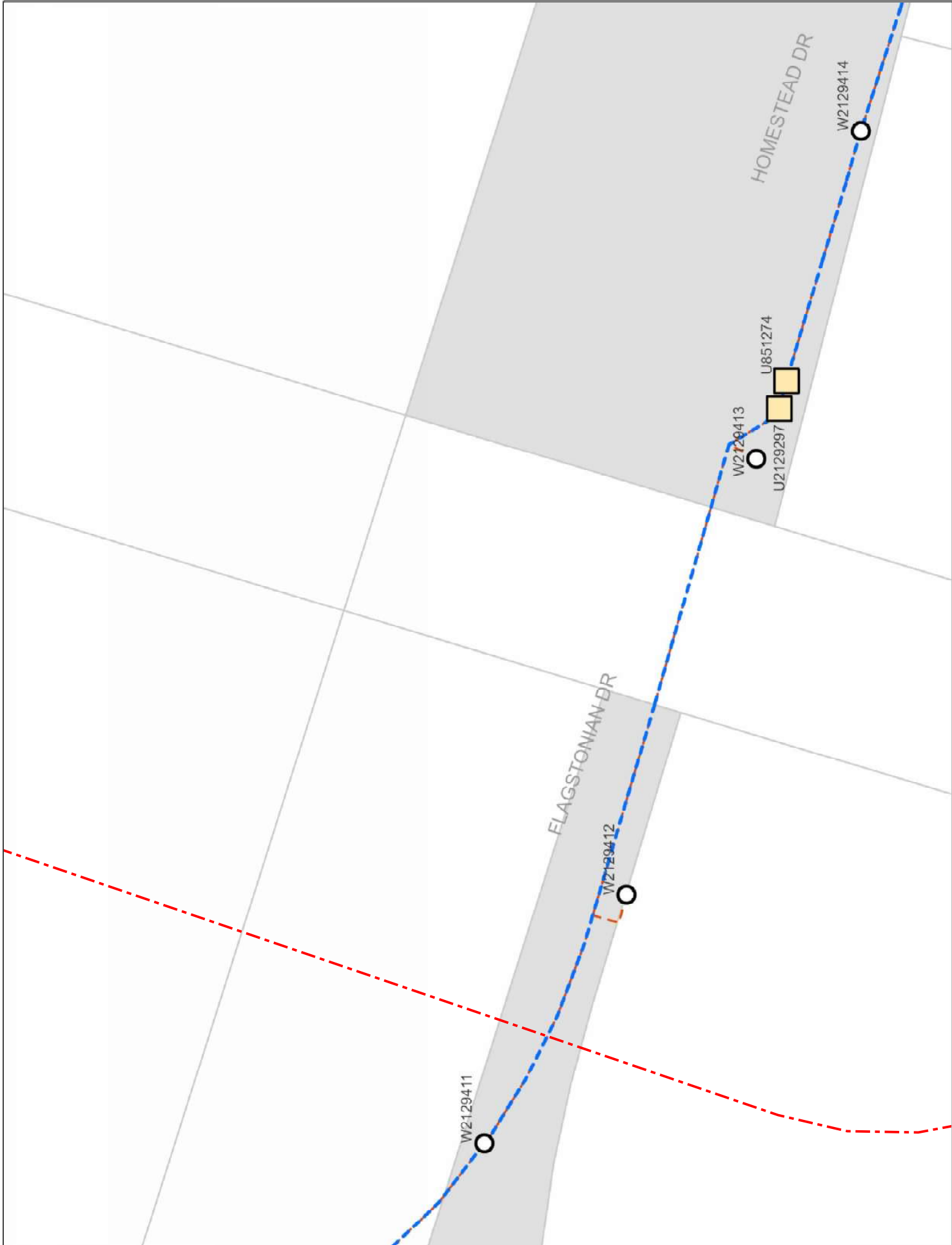
LEGEND

- Substation
- Cable Marker
- Pt
- Pole
- Pillar
- LV Cable (up to 1kV)
- HV Cable (1kV - <33kV)
- HV Cable (33kV and over)
- Pt Boundary
- Planned Work Area

AS5488 Category 'D' Plan



DISCLAIMER: While reasonable measures have been taken to ensure the accuracy of the information contained in this plan, neither Energex nor Pelican Corp shall have any liability whatsoever in relation to any loss, damage, cost or expense arising from the use of this plan. The user of this plan shall be deemed to have accepted the responsibility for the information. Use of such information is subject to information. Use of such information is subject to and constitutes acceptance of these terms.





BYDA

Sequence: 253790913
Date: 15/04/2025
Scale: 1:500
Title No: 5

**CAUTION - HIGH
VOLTAGE**

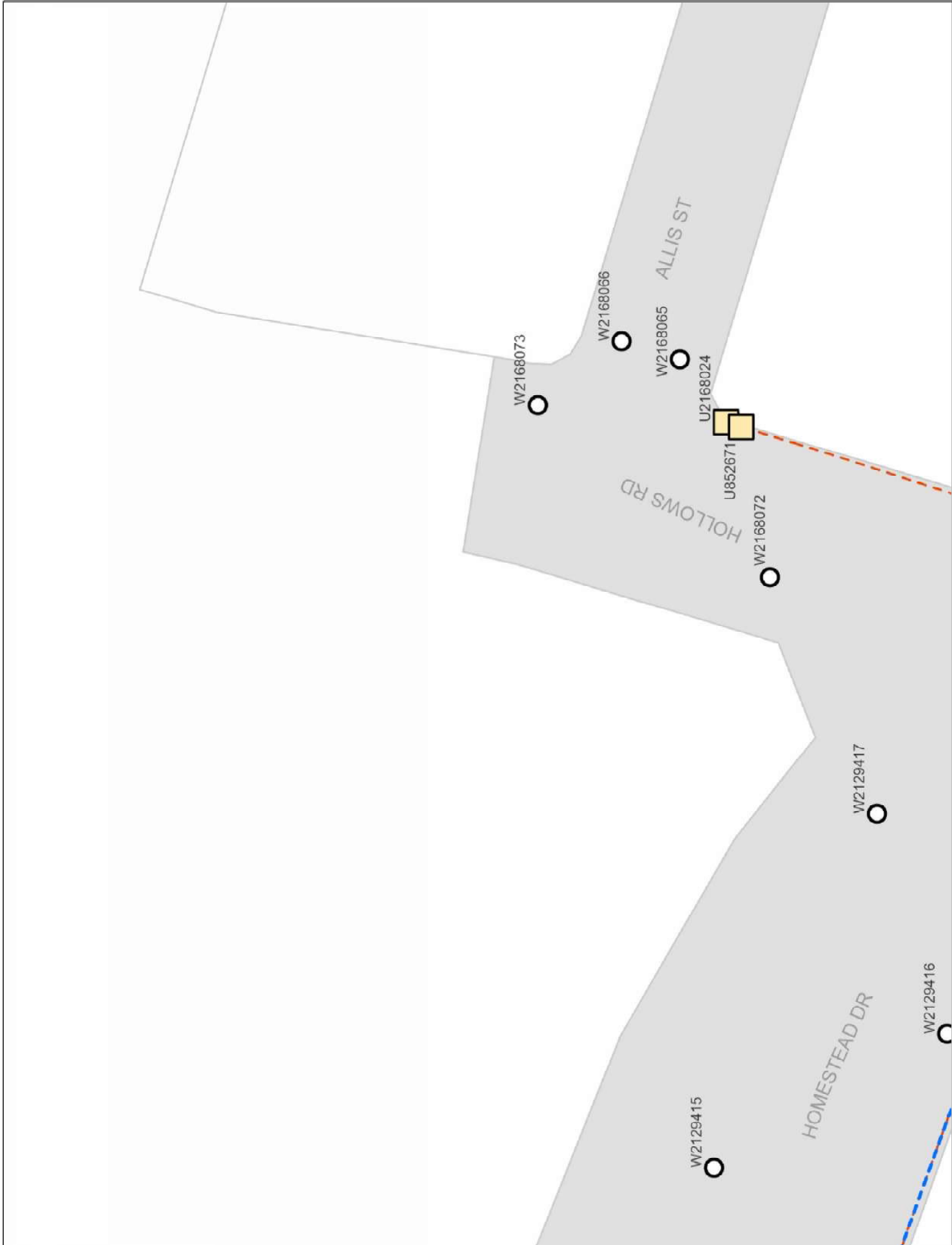
LEGEND

- Substation
- Cable Marker
- Pt
- Pole
- Pillar
- LV Cable (up to 1kV)
- HV Cable (1kV - <33kV)
- HV Cable (33kV and over)
- Pt Boundary
- Planned Work Area

AS5488 Category 'D' Plan



DISCLAIMER: While reasonable measures have been taken to ensure the accuracy of the information contained in this plan, neither Energex nor Pelican Corp shall have any liability whatsoever in relation to any loss, damage, cost or expense arising from the use of this plan. The user of this plan shall be deemed to have accepted the information contained in it for the completeness or accuracy of such information. Use of such information is subject to and constitutes acceptance of these terms.





BYDA

Sequence: 253790913
Date: 15/04/2025
Scale: 1:500
Title No: 6

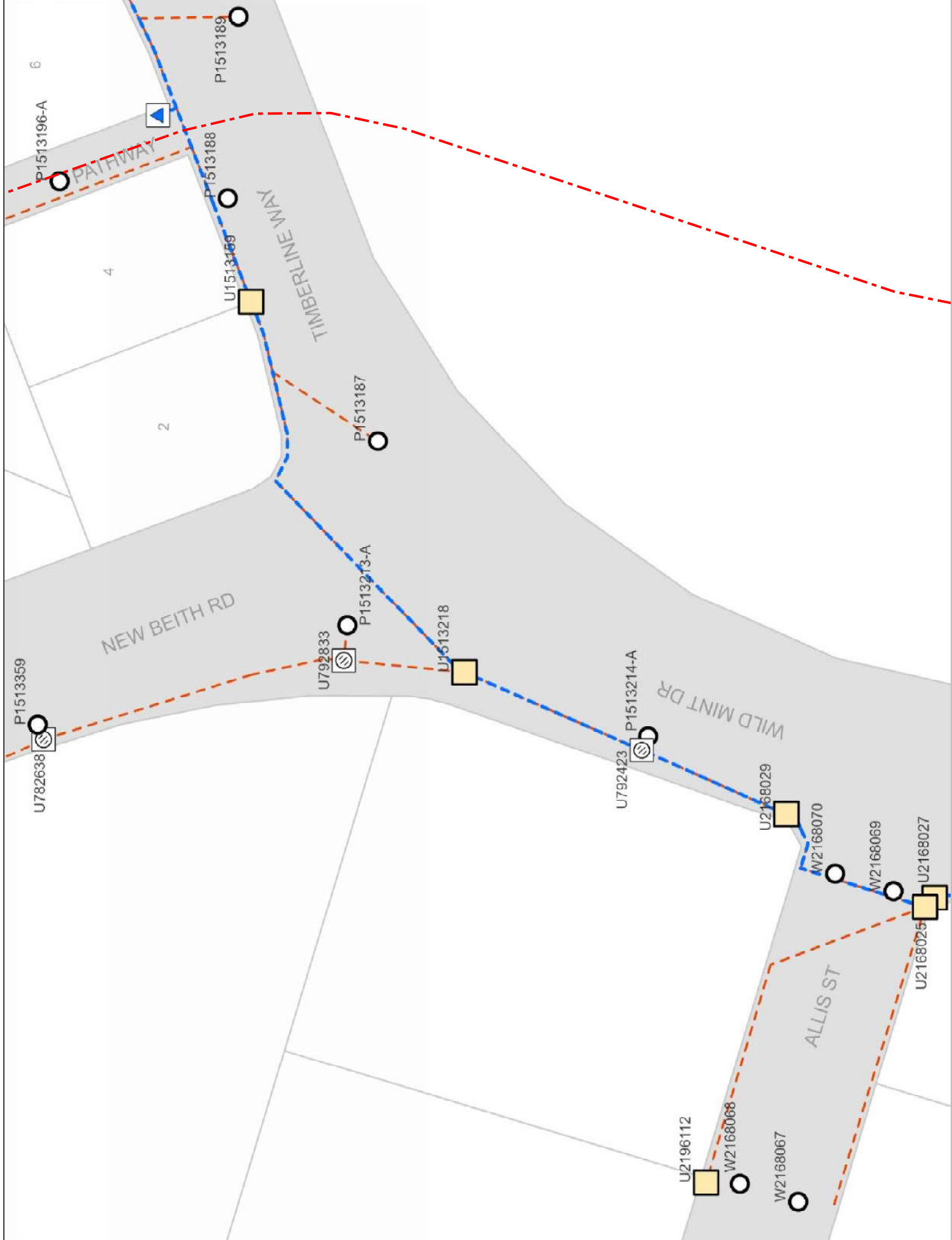
**CAUTION - HIGH
VOLTAGE**

- LEGEND**
- Substation
 - Cable Marker
 - Rt
 - Pole
 - Pillar
 - LV Cable (up to 1kV)
 - HV Cable (1kV - <33kV)
 - HV Cable (33kV and over)
 - Rt Boundary
 - Planned Work Area

AS5488 Category 'D' Plan



DISCLAIMER: While reasonable measures have been taken to ensure the accuracy of the information contained in this plan, neither Energen nor Pelican Corp shall have any liability whatsoever in relation to any loss, damage, cost or expense arising from the use of this plan. The user of this plan shall be deemed to accept the responsibility for the accuracy of the information. Use of such information is subject to the terms and conditions of the licence of use and the acceptance of these terms.





BYDÅ

Sequence: 253790913
Date: 15/04/2025
Scale: 1:500
Title No: 7

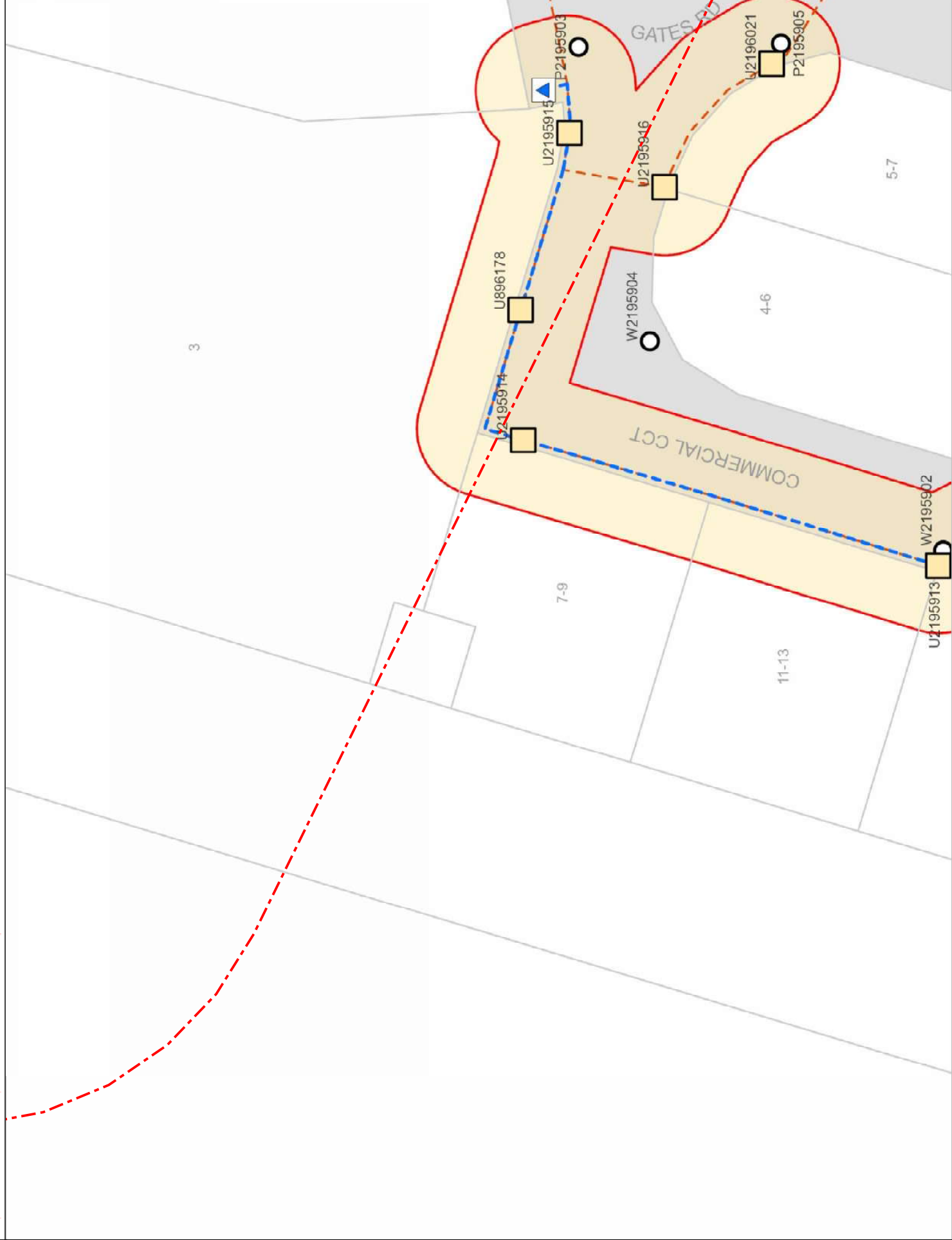
CAUTION - HIGH VOLTAGE

- LEGEND**
- | | |
|---|--------------------------|
|  | Substation |
|  | Cable Marker |
|  | Pit |
|  | Pole |
|  | Pillar |
|  | LV Cable (up to 15kV) |
|  | HV Cable (15kV - <33kV) |
|  | HW Cable (33kV and over) |
|  | Pit Boundary |
|  | Planned Work Area |

A55488 Category "D" Plan



DISCLAIMER: While reasonable measures have been taken to ensure the accuracy of the information contained in this plan register, neither Energen nor Pelex Corp shall have any liability whatsoever in relation to any loss, damage, cost or expense arising from the use of this plan register 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.





BYDA

Sequence: 253790913
Date: 15/04/2025
Scale: 1:500
Title No: 8

**CAUTION - HIGH
VOLTAGE**

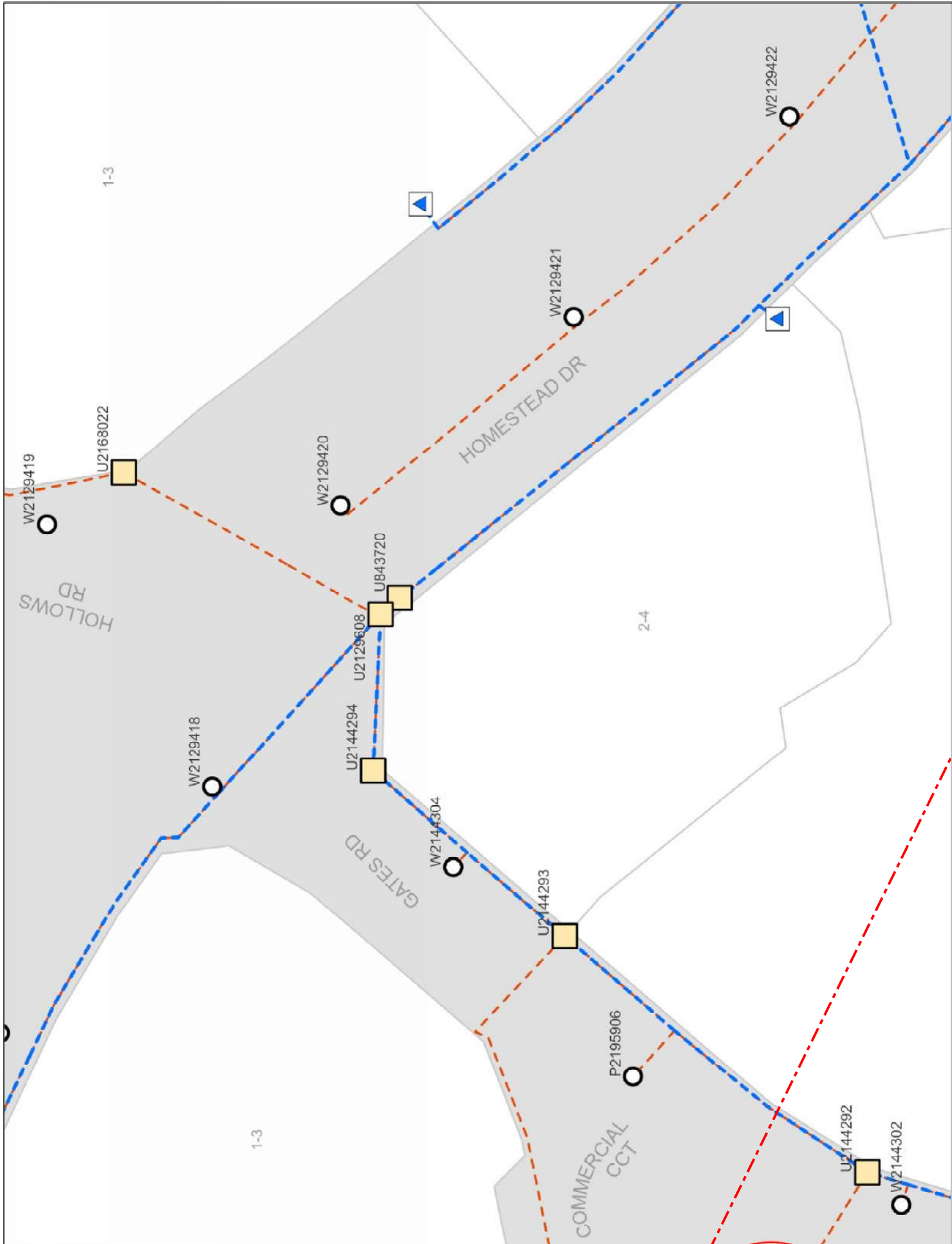
LEGEND

- Substation
- Cable Marker
- Pit
- Pole
- Pillar
- LV Cable (up to 1kV)
- HV Cable (1kV - <33kV)
- HV Cable (33kV and over)
- Pit Boundary
- Planned Works Area

AS5488 Category 'D' Plan



DISCLAIMER: While reasonable measures have been taken to ensure the accuracy of the information contained in this plan, neither Energex nor Pelican Corp shall have any liability whatsoever in relation to any loss, damage, cost or expense arising from the use of this plan. The user of this plan shall be deemed to accept the responsibility for the accuracy of the information. Use of such information is subject to and constitutes acceptance of these terms.





BYDA

Sequence: 253790913
Date: 15/04/2025
Scale: 1:500
Title No: 9

**CAUTION - HIGH
VOLTAGE**

LEGEND

- Substation
- Cable Marker
- Pt
- Pole
- Pillar
- LV Cable (up to 1kV)
- HV Cable (1kV - <33kV)
- HV Cable (33kV and over)
- Pt Boundary
- Planned Works Area

AS5488 Category 'D' Plan



DISCLAIMER: While reasonable measures have been taken to ensure the accuracy of the information contained in this plan, neither Energex nor Pelican Corp shall have any liability whatsoever in relation to any loss, damage, cost or expense arising from the use of this plan. The user of this plan shall be deemed to have accepted the responsibility for the information. Use of such information is subject to the terms and conditions of the license and contribution acceptance of these terms.



BYDA

Sequence: 253790913
Date: 15/04/2025
Scale: 1:500
Title No: 10

**CAUTION - HIGH
VOLTAGE**

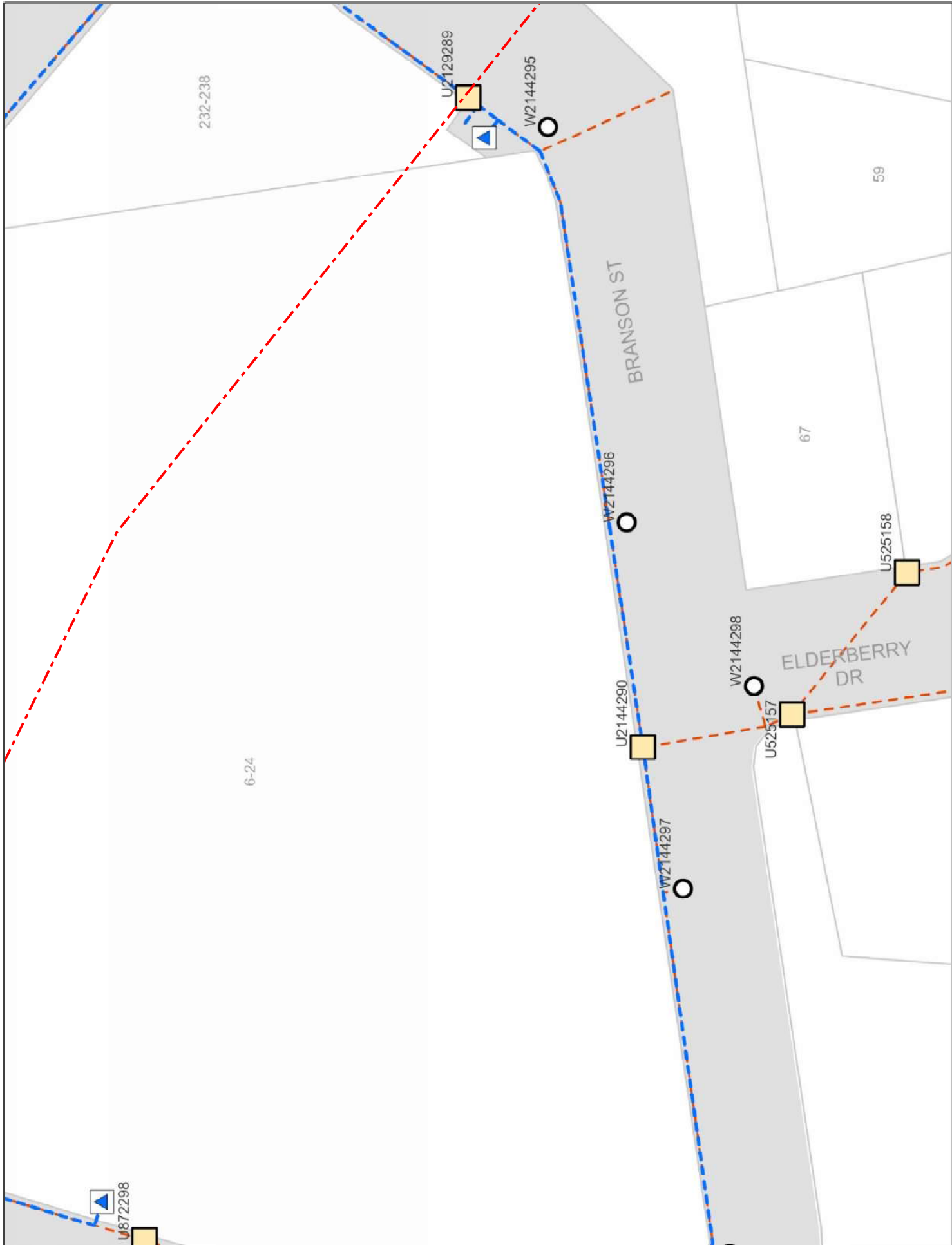
LEGEND

- Substation
- Cable Marker
- Pt
- Pole
- Pillar
- LV Cable (up to 1kV)
- HV Cable (1kV - <33kV)
- HV Cable (33kV and over)
- Pt Boundary
- Planned Works Area

AS5488 Category 'D' Plan



DISCLAIMER: While reasonable measures have been taken to ensure the accuracy of the information contained in this plan, neither Energex nor Pelican Corp shall have any liability whatsoever in relation to any loss, damage, cost or expense arising from the use of this plan. The user of this plan shall be deemed to have accepted the information contained in it on the completeness or accuracy of such information. Use of such information is subject to and constitutes acceptance of these terms.





BYDA

Sequence: 253790913
Date: 15/04/2025
Scale: 1:500
Title No: 11

**CAUTION - HIGH
VOLTAGE**

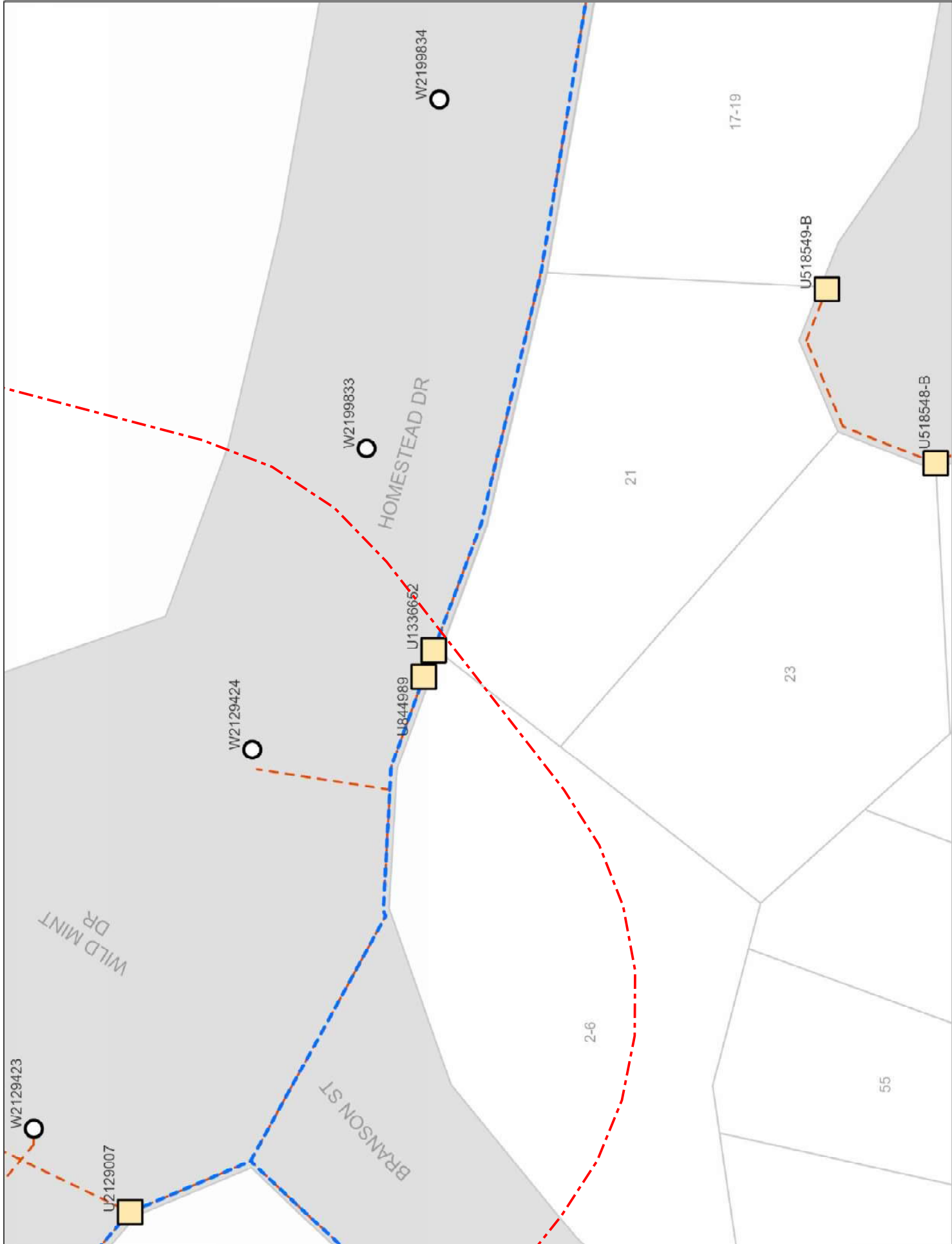
LEGEND

- Substation
- Cable Marker
- Pt
- Pole
- Pillar
- LV Cable (up to 1kV)
- HV Cable (1kV - <33kV)
- HV Cable (33kV and over)
- Pt Boundary
- Planned Work Area

AS5488 Category 'D' Plan



DISCLAIMER: While reasonable measures have been taken to ensure the accuracy of the information contained in this plan, neither Energex nor Pelican Corp shall have any liability whatsoever in relation to any loss, damage, cost or expense arising from the use of this plan. The user of this plan shall be deemed to have accepted the information contained in it on the completeness or accuracy of such information. Use of such information is subject to and constitutes acceptance of these terms.



Referral

253790907

Member Phone

(07) 3412 3412

Responses from this member

Response received Tue 15 Apr 2025 7.00pm

File name	Page
Response Body	175
253790907.pdf	176

Request: 253790907 Enquirer: Pinnacle Engineering Group - 3309841 Contact: Jai Waters Email: jai@pinnacleeng.com.au Phone: +61455996516 Address: 19 Short Street Southport QLD 4215 Site Address: 14 Wild Mint Drive Flagstone QLD 4280 Activity: Planning and Design Job Number: 39116646

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.qov.au • ABN 21-627-796 435



Pinnacle Engineering Group - Jai Waters

19 Short Street

Southport

QLD

4215

jai@pinnacleeng.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	253790907
Enquiry Date	15/04/2025 19:00
Response	AFFECTED
Address	14 Wild Mint Drive Flagstone
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.

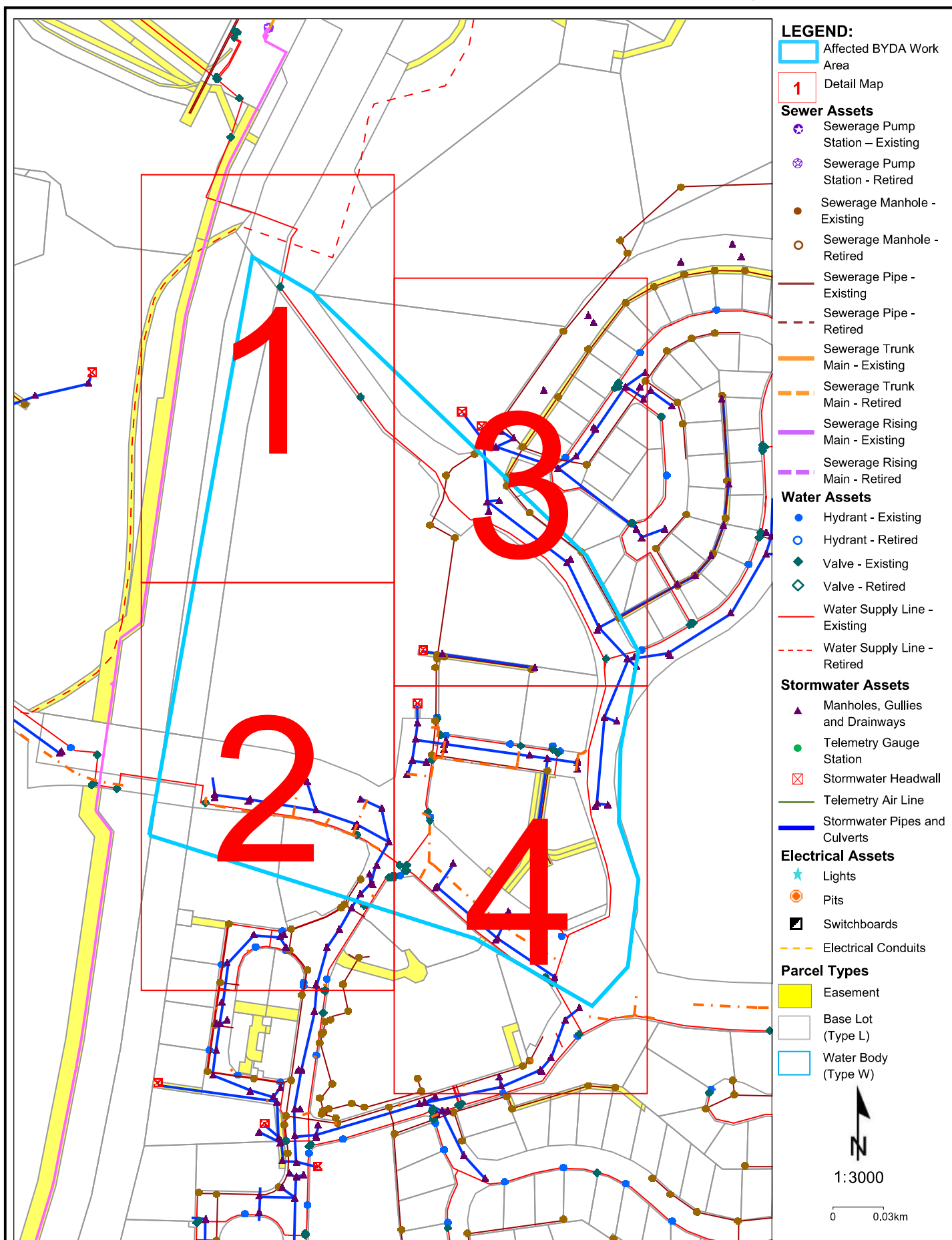
Unfortunately, not all properties will have plan records accessible on-line. The following options are available to customers should a record not be available:

- **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.

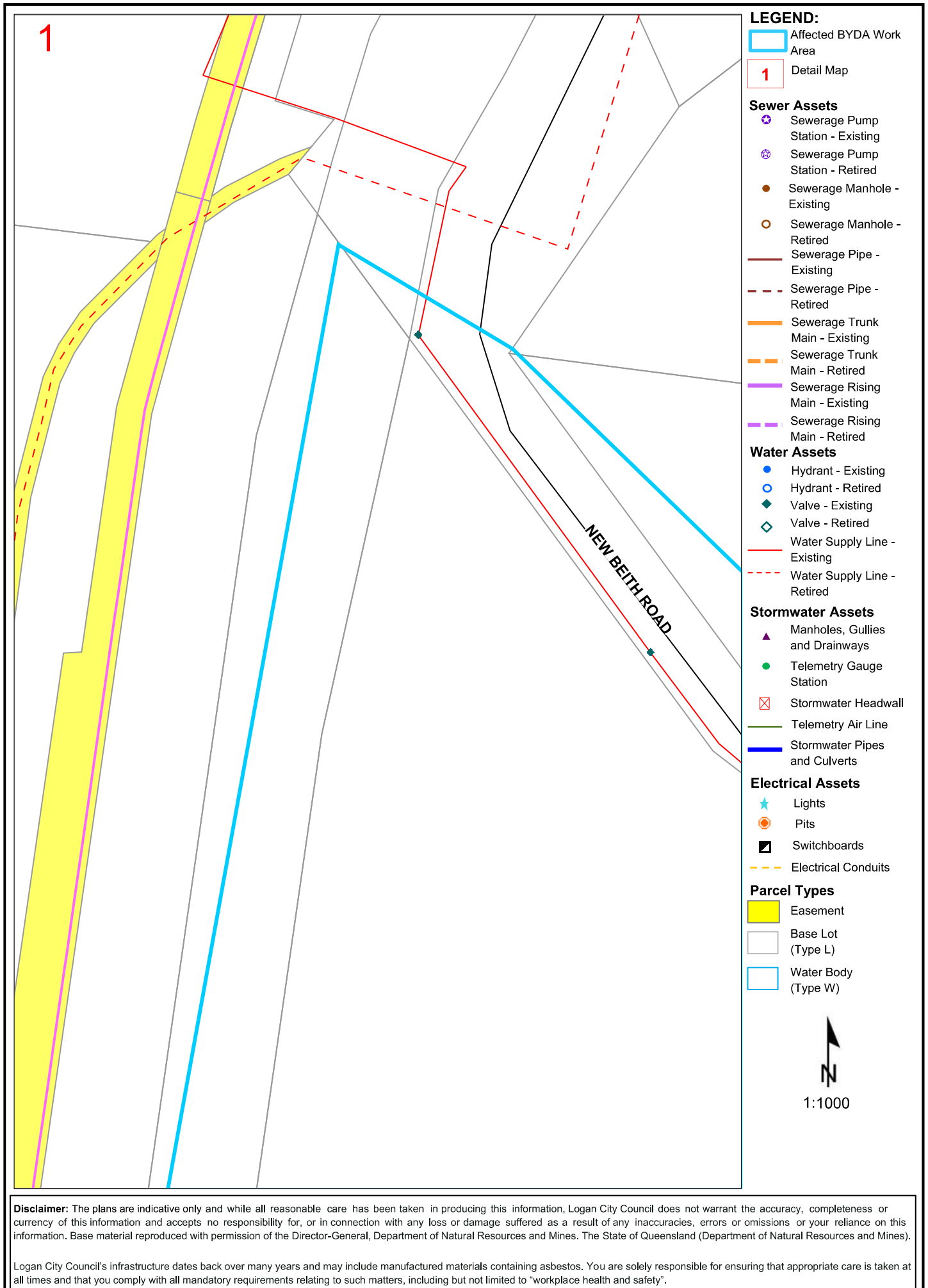
Disclaimer: This document is confidential to the addressee and may also be privileged, and neither confidentiality nor privilege is waived, lost or destroyed by virtue of it being transmitted to an incorrect addressee. Unauthorised use of the contents is therefore strictly prohibited. Any information contained in this document that has been extracted from Council's records is believed to be accurate, but no responsibility is assumed for any error or omission. Council will only accept responsibility for information contained under official letterhead and duly signed by, or on behalf of, Chief Executive Officer.

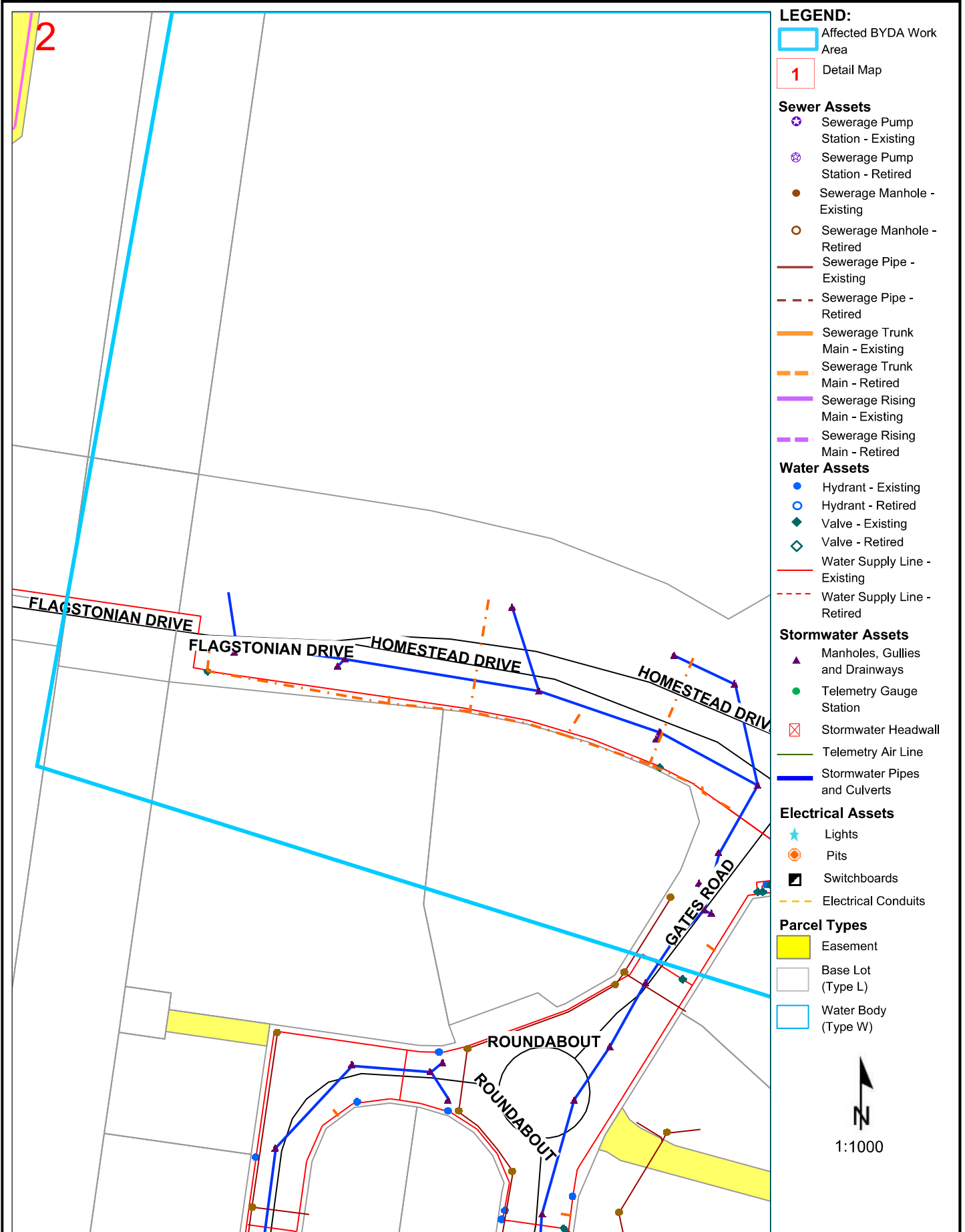
Logan City Council's infrastructure dates back over many years and may include manufactured materials containing asbestos. You are solely responsible for ensuring that appropriate care is taken at all times and that you comply with all mandatory requirements relating to such matters, including but not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

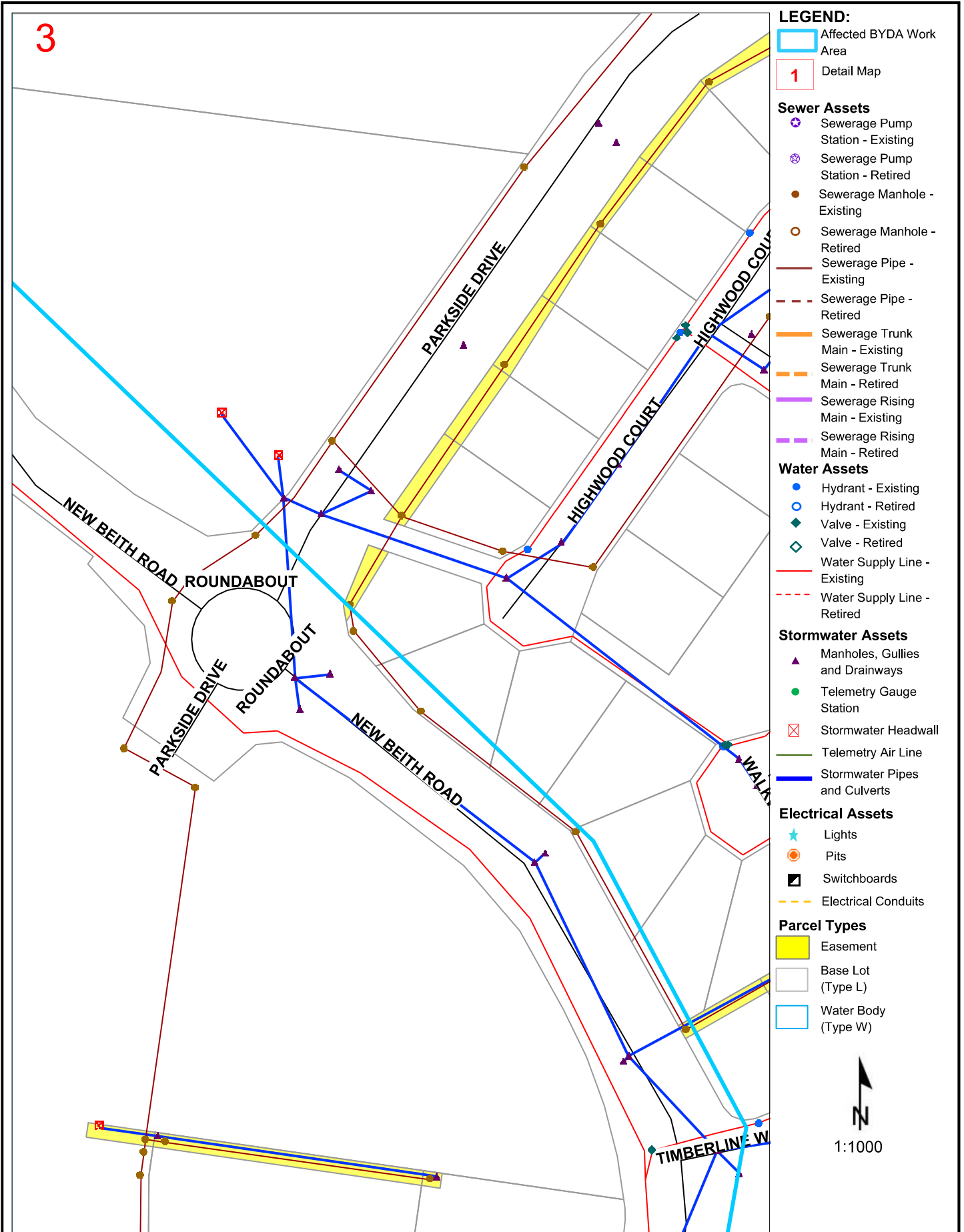
Logan City Council's infrastructure dates back over many years and may include manufactured materials containing asbestos. You are solely responsible for ensuring that appropriate care is taken at all times and that you comply with all mandatory requirements relating to such matters, including but not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





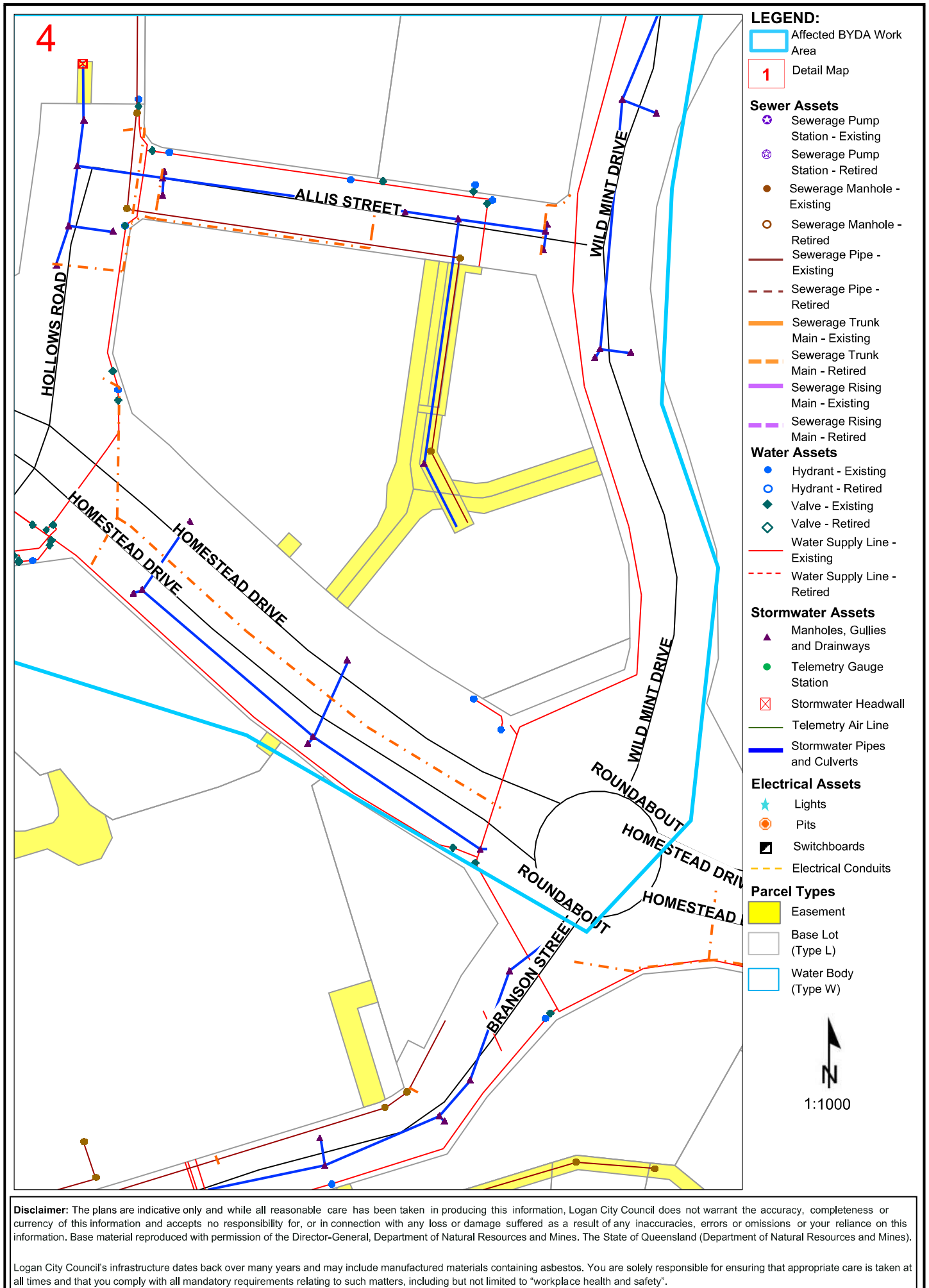
Disclaimer: The plans are indicative only and while all reasonable care has been taken in producing this information, Logan City Council does not warrant the accuracy, completeness or currency of this information and accepts no responsibility for, or in connection with any loss or damage suffered as 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).

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).

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".



National Fire Ant Eradication Program

Referral

253790919

Member Phone

-

Responses from this member

Response received Tue 15 Apr 2025 7.01pm

File name	Page
Response Body	183

BYDA members

Your property and/or business is located in the [fire ant suppression treatment area](#). You're legally required to follow your biosecurity requirements and understand how you can help prevent the spread of fire ants.

Fire ants are a super pest, threatening Australia's health, environment, economy, and outdoor way of life. Eradicating them is a national priority, with all states, territories, and the Australian Government committed to the National Fire Ant Eradication Program (NFAEP) – the world's largest ant eradication effort.

[Fire ant biosecurity zones](#) are essential for containing and controlling fire ants in the suppression treatment area until the NFAEP eradication treatment reaches the area. Suppression efforts focus on reducing nest numbers, limiting spread, and preparing for eradication treatment. This includes self-treatment, containment, and prevention to minimise the impact of these pests.

Strict rules for managing soil, including fill, clay, and scrapings within the zones, are outlined in the [Biosecurity Regulation 2016](#) and [Soil movement guidelines](#) under the [Biosecurity Act 2014 \(Qld\)](#).

Materials that can carry fire ants

Here's what you need to know, whether you're a resident or a business, and how to manage [materials that can carry fire ants](#) like soil, baled materials, mulch, manure, quarry products, turf, and potted plants.

For residents:

- [look for](#) and [report](#) any suspect fire ants or nests within 24 hours
- ensure any materials you buy within the fire ant biosecurity zones are handled using fire ant-safe practices
- use the NFAEP's [Material movement advice tool](#)
- apply Australian Pesticides and Veterinary Medicines Authority approved fire ant treatment products to areas before starting any excavation work
- keep records for up to 2 years of your fire ant management actions.

For businesses:

If your business handles materials, you must follow these requirements:

- **[Look for and report](#):** inspect your site regularly, especially high-risk areas. Sightings of suspect fire ants and nests must be reported within 24 hours to the NFAEP, either [online](#) or by calling **132 ANT** (13 22 68). [Fire ant training](#) is recommended.
- **Fire ant-safe practices:** ensure materials are processed, stored, treated, and transported in compliance with the [Biosecurity Regulation 2016](#). Use the NFAEP's [Fire ant compliance tool](#).
 - **Handling soil:** [fire ant nests](#) are often found within the top metre of soil. After excavation, replace or keep this top layer separate from other soil being moved. It should stay on-site or be taken to a waste facility within the [fire ant biosecurity zones](#) (restrictions apply). Avoid this method in areas with loamy or sandy soil, as nests may extend deeper.
 - **Disturbance and storing:** before moving untreated soil off-site, disturb it using machinery – turning, crushing, washing, or screening. Disturb stockpiles every 21 days and 24 hours before movement.
 - **Treatment:** look for and report any suspect nests immediately. Mark them so workers on-site know their locations. Treat or engage a licensed pest manager to carry out broadscale fire ant treatment and/or nest treatment before excavation continues. No live fire ants must leave the site.
 - **Recordkeeping:** keep a written record of all activities, including chemical treatments and disturbance actions, for at least 2 years.

Soil movement

Soil can be transported between or outside fire ant biosecurity zones if you follow these measures:

- Movements within the same zone or between zone 1 to zone 2 must follow the [Soil movement guidelines](#).
- A biosecurity instrument permit (BIP) is required to:
 - move soil from any zone to outside the zone
 - move soil from zone 2 to zone 1
 - move soil when none of the approved options allow to your situation.

Other biosecurity measures

In addition to managing soil movement, there are further biosecurity measures you, your business, and employees can take to support the eradication of fire ants:

- Fire ant training – the NFAEP offers free online [training and tools](#) for residents, primary producers, worksites, and pest managers. These resources help you identify, treat, and prevent fire ant spread. Proactive training is a cost-effective risk mitigation strategy and can help you avoid penalties for breaching your [general biosecurity obligation](#).
- Health and safety – fire ants can have devastating impacts, including inflicting [painful, fiery stings](#), which can trigger a severe allergic reaction in humans. If you're digging or starting work, please wear personal protective equipment, including a long-sleeve shirt, long pants, boots, and gloves.

Eradicating fire ants is a shared responsibility. We all play a role in eradicating fire ants from Queensland, and ultimately Australia, by 2032.

Visit fireants.org.au or call 13 22 68 for more information.

Referral

253790906

Member Phone

1800 687 626

Responses from this member

Response received Tue 15 Apr 2025 7.05pm

File name	Page
Response Body	186
253790906_20250415_090439122608_1.pdf	187
Disclaimer_253790906_20250415_090439122608.pdf	197
4678_NBN_Dial_Before_You_Dig_Poster_20170517.pdf	201

Hi Jai Waters,

Please find attached the response to your DBYD referral for the address mentioned in the subject line. The location shown in our DBYD response is assumed based off the information you have provided. If the location shown is different to the location of the excavation then this response will consequently be rendered invalid.

Take the time to read the response carefully and note that this information is only valid for 28 days after the date of issue.

If you have any further enquiries, please do not hesitate to contact us.

Regards,
Network Services and Operations
NBN Co Limited
P: 1800626329
E: dbyd@nbnco.com.au
www.nbnco.com.au

Confidentiality and Privilege Notice

This e-mail is intended only to be read or used by the addressee. It is confidential and may contain legally privileged information. If you are not the addressee indicated in this message (or responsible for delivery of the message to such person), you may not copy or deliver this message to anyone, and you should destroy this message and kindly notify the sender by reply e-mail. Confidentiality and legal privilege are not waived or lost by reason of mistaken delivery to you. Any views expressed in this message are those of the individual sender, except where the sender specifically states them to be the views of NBN Co Limited

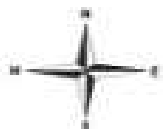
Please Do Not Reply To This Mail

To: Jai Waters
Phone: Not Supplied
Fax: Not Supplied
Email: jai@pinnacleeng.com.au

Dial before you dig Job #:	39116646	
Sequence #	253790906	
Issue Date:	15/04/2025	
Location:	14 Wild Mint Drive , Flagstone , QLD , 4280	

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

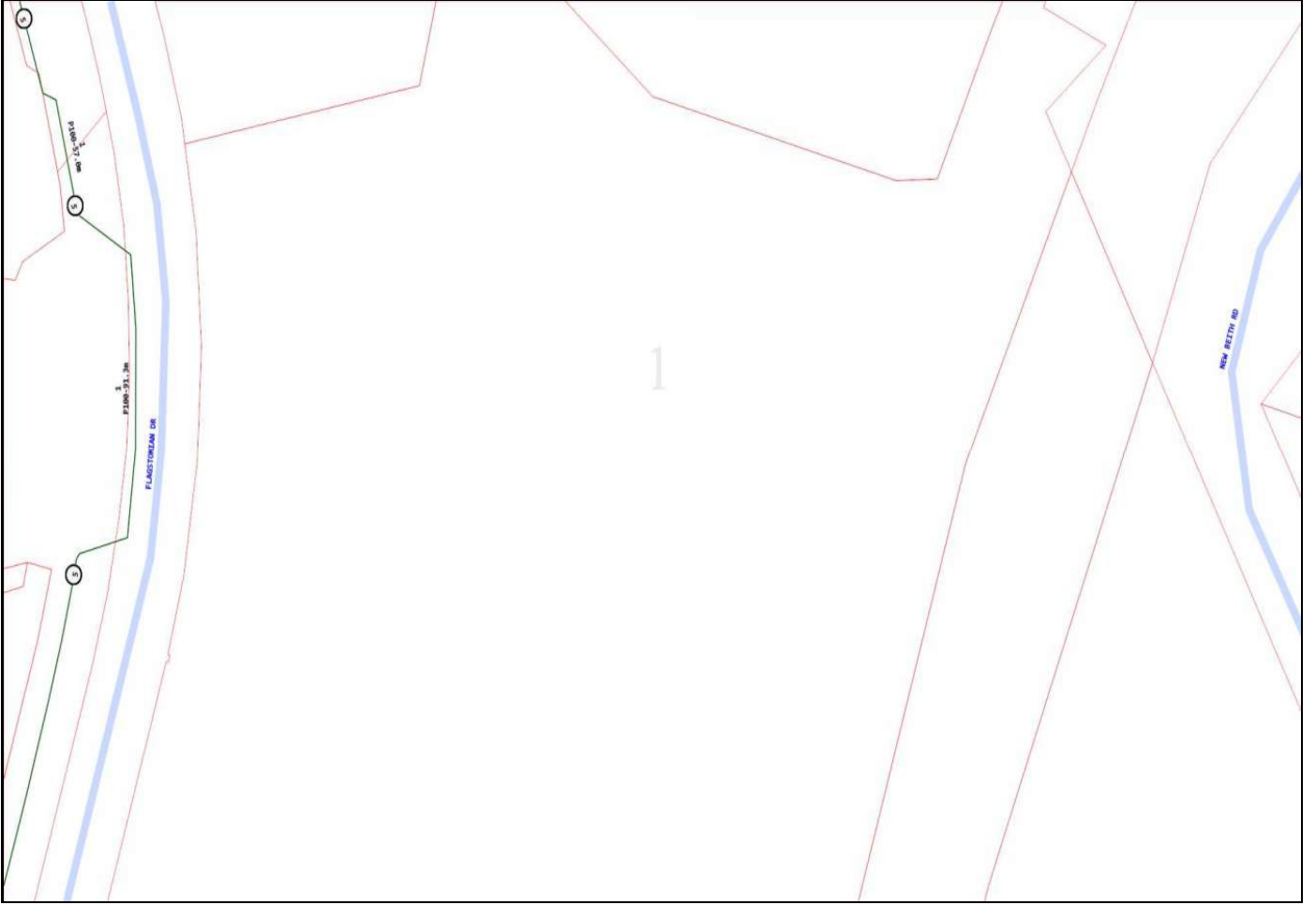
1	5
2	6
3	7
4	8

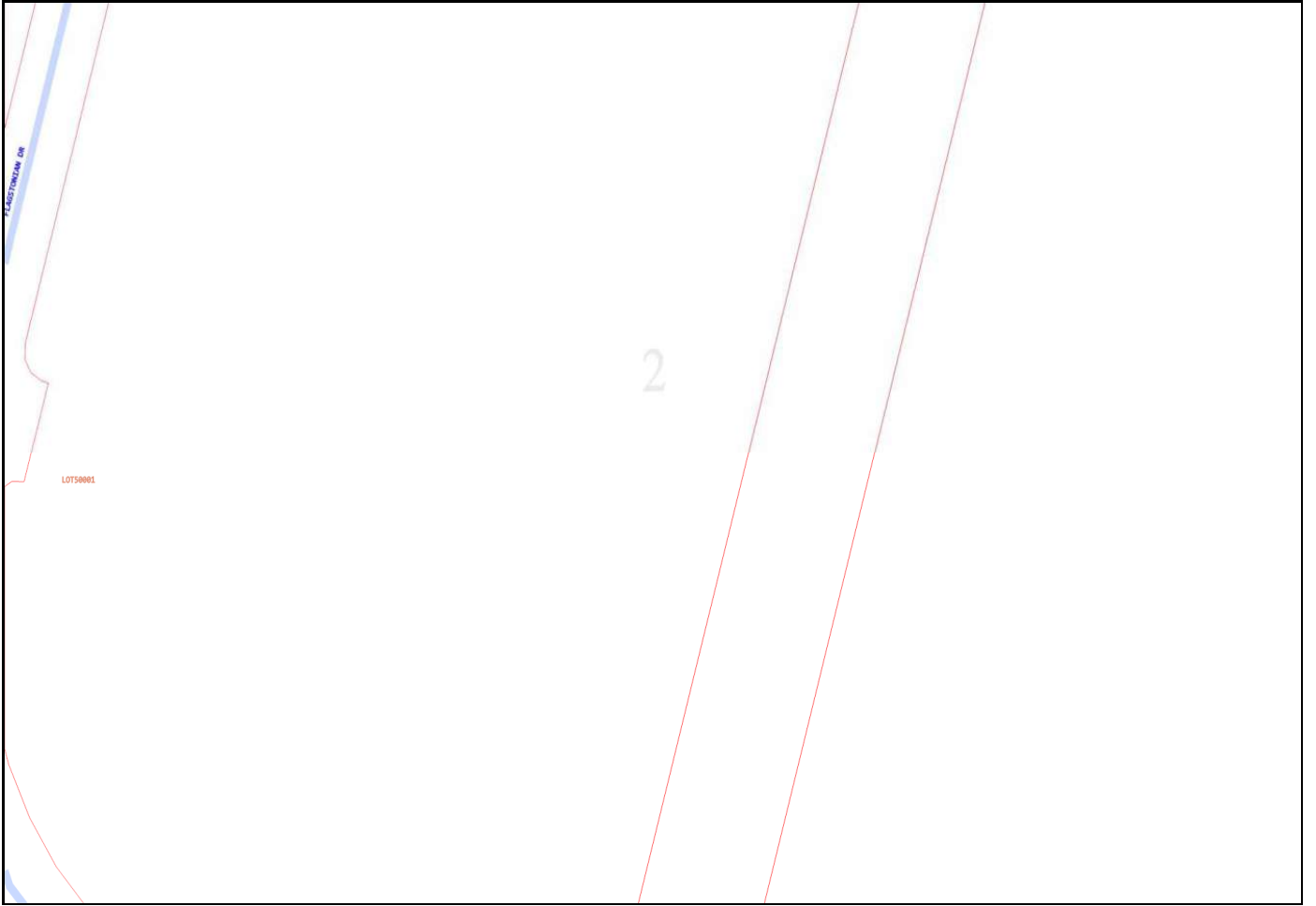


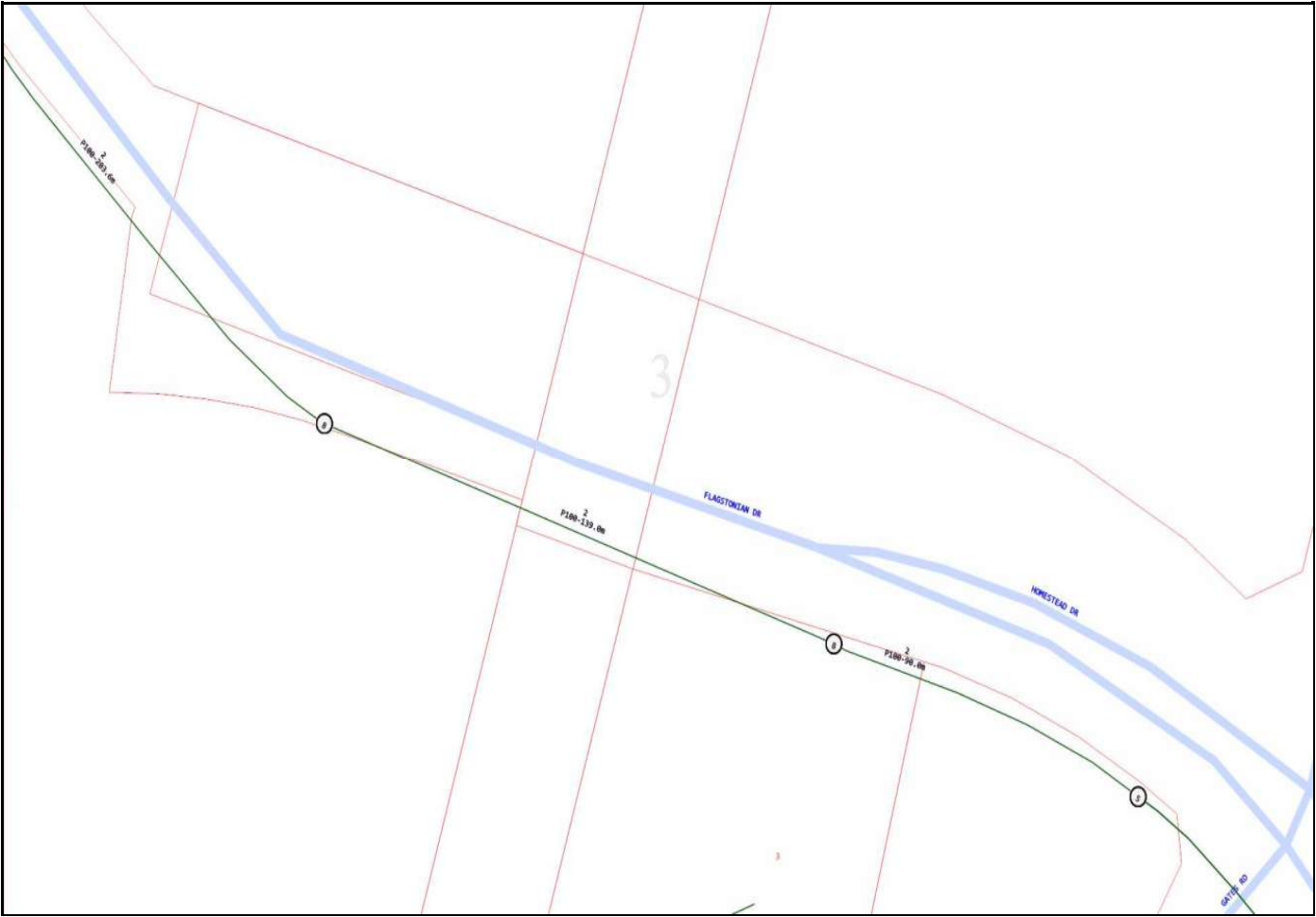
LEGEND

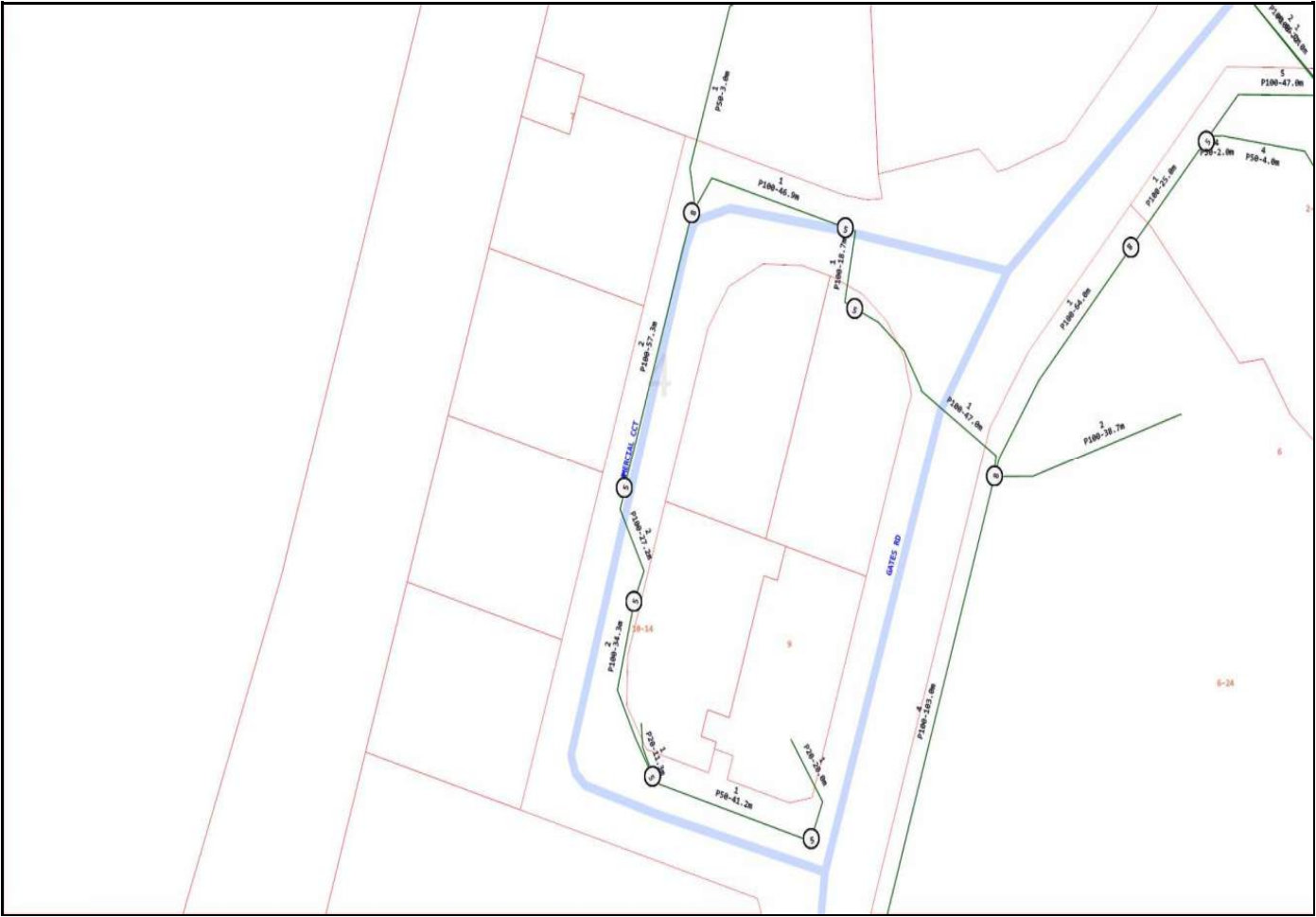


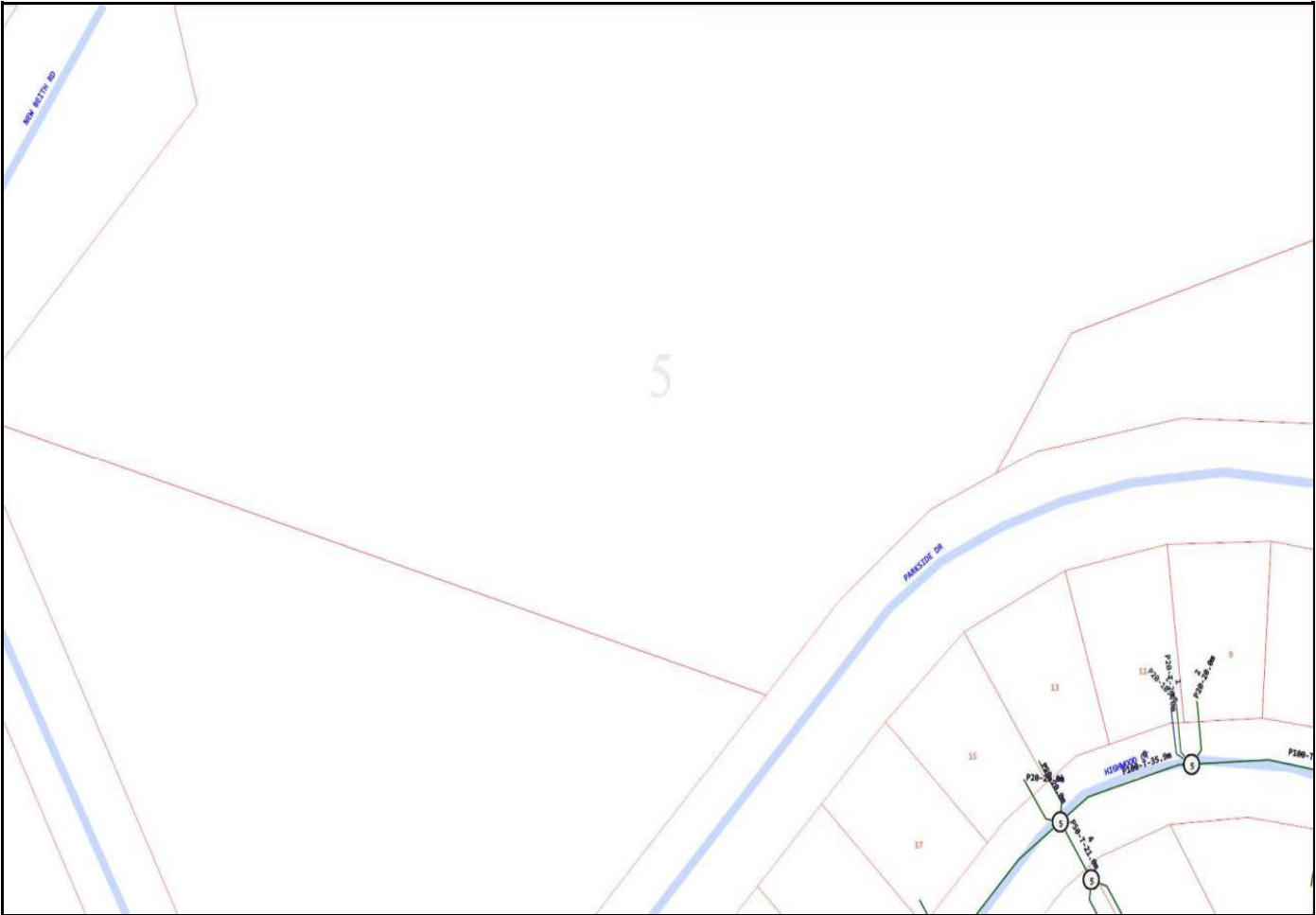
	Parcel and the location
	Pit with size "5"
	Power Pit with size "2E". Valid PIT Size: e.g. 2E, 5E, 6E, 8E, 9E, E, null.
	Manhole
	Pillar
	Cable count of trench is 2. One "Other size" PVC conduit (PO) owned by Telstra (-T-), between pits of sizes, "5" and "9" are 25.0m apart. One 40mm PVC conduit (P40) 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 

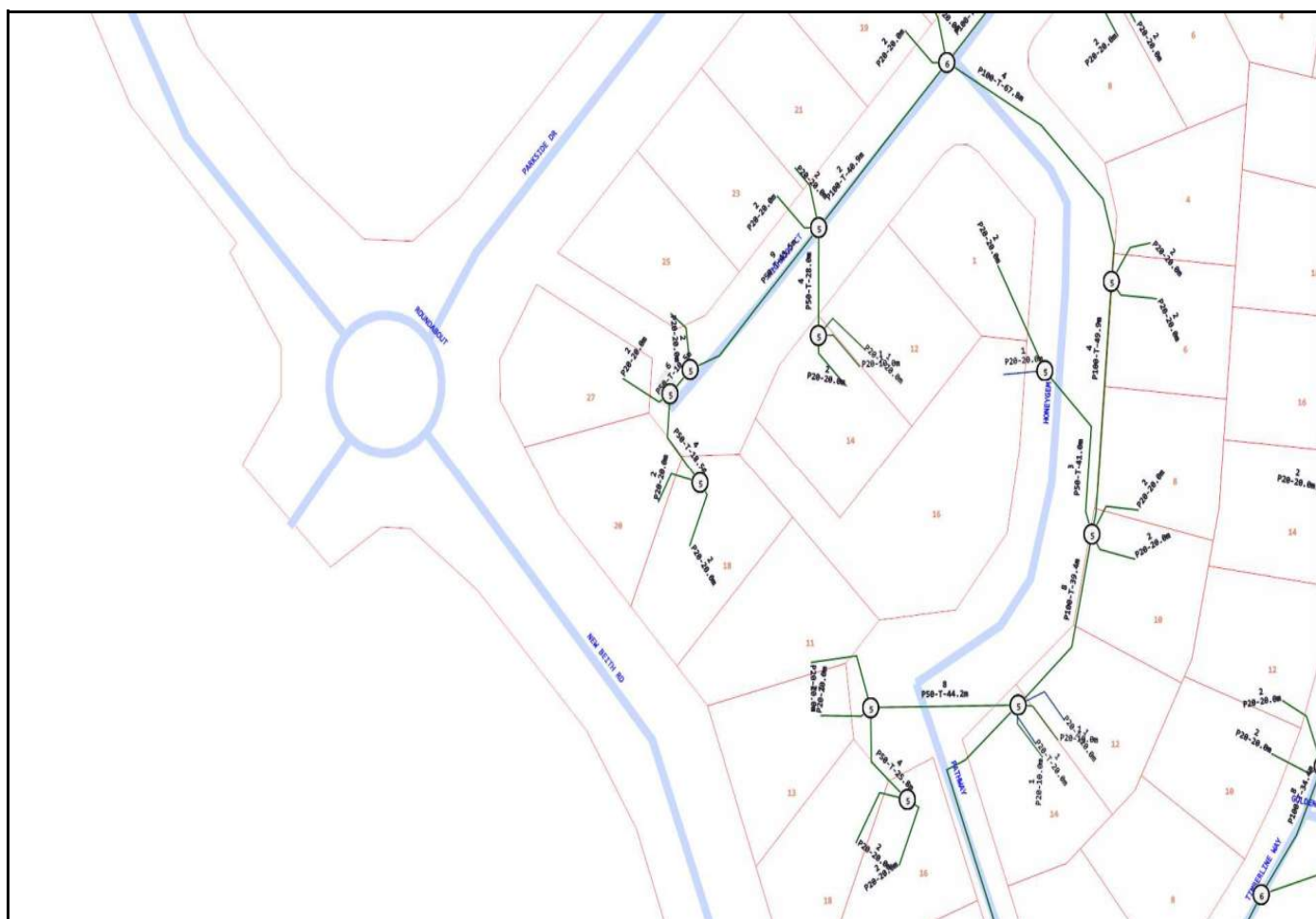














To: Jai Waters
Phone: Not Supplied
Fax: Not Supplied
Email: jai@pinnacleeng.com.au

Before You Dig Australia Job #:	39116646	 BEFORE YOU DIG www.byda.com.au Zero Damage - Zero Harm
Sequence #	253790906	
Issue Date:	15/04/2025	
Location:	14 Wild Mint Drive , Flagstone , QLD , 4280	

Information

The area of interest requested by you contains one or more assets.

nbn™ Assets	Search Results
Communications	Asset identified
Electricity	No assets

In this notice **nbn™ Facilities** means *underground fibre optic, telecommunications and/or power facilities, including but not limited to cables, owned and controlled by nbn™*

Location of nbn™ Underground Assets

Referral

253790917

Member Phone

1800 653 935

Responses from this member

Response received Tue 15 Apr 2025 7.03pm

File name	Page
Response Body	204
Telstra Duty of Care v32.0c.pdf	206
Telstra Map Legend 4.0b.pdf	208
AccreditedPlantLocators 2025-01-08a.pdf	209
253790917.pdf	210



Sequence Number: 253790917

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.

Page 1 of 2



Generated On 15/04/2025 19:02:17

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.

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.



End of document

i This document may exclude some files (eg. DWF or ZIP files)

This document was automatically generated at a point-in-time. Be aware that the source information from which this document was created may have changed since it was produced. This document may contain incomplete or out-of-date information. Always check your enquiry details in the BYDA Referral Service for the most recent information. For copyright information refer to individual responses.

Appendix E

LCC Mapping

PROPERTY FLOOD REPORT



Property Details

Address: Lot 25009 Hollows Road FLAGSTONE QLD 4280

Lot/Plan: Lot 25009 SP 303120

Size/Area: 61,402 m²

Property Key: 390590

Catchment(s): Logan River, Sandy Creek

View Logan's [catchments and waterways map](#) (PDF)



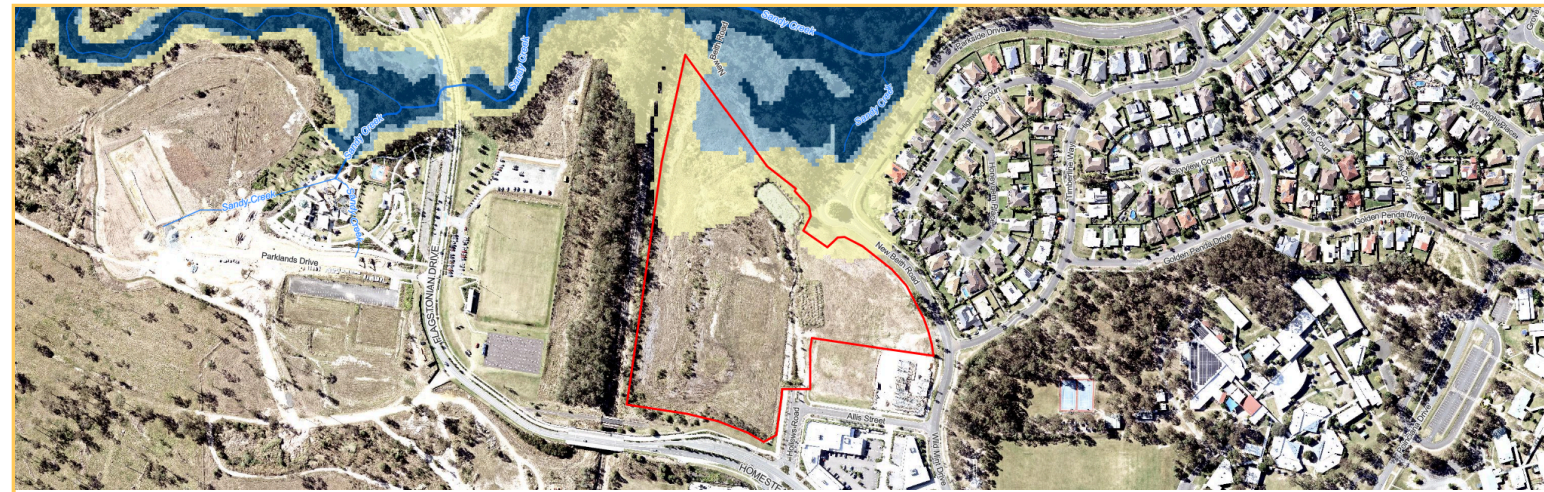
Summary Flood Assessment

The table below presents the flood risks applicable to the selected property. There may be multiple studies and flood scenarios affecting the property, particularly for larger sites.

Assessment	Details
Other information	GREATER FLAGSTONE - This property is in the Greater Flagstone Priority Development Area (PDA). Please contact Economic Development Queensland Development for advice about development. This report is for flood risk awareness only. EDQ PDA - Greater Flagstone
Risk area(s)	Moderate, Low
Investigation area	Not applicable
Isolation risk	Not applicable
River flooding	Not applicable
Creek flooding	1% chance of a flood this size or larger happening in any given year
Overland flow	Applies. It is possible that flooding from a local waterway which has not yet been studied may also impact the property. Please contact Council for further advice. Overland flow is water (stormwater run-off) that travels over land during heavy rainfall events. It generally occurs quickly and for short durations.

Latest Flood Risk

The extract below comes from the flood risk map based on the latest (most recent) flood studies accepted by Council applicable for this property.



LEGEND



High

Floodwaters may be deep or fast flowing, or have a relatively high chance of occurrence (e.g. 80% chance in 30 years). Conditions may pose a risk to life and cause damage to buildings, possibly severe. Limited development may be considered if not increasing the flood risk exposure for people or property. These areas are generally better suited to environmental, recreational and some agricultural uses.



Moderate

Less frequently affected by flooding or if more frequent, with shallow or slower moving floodwater. Conditions may pose an unacceptable risk to people or property if not mitigated. Development may be tolerable if measures are taken to address flood impacts, protect people and limit damage.



Low

Extremely unlikely chance of flooding (1% chance or less over a 30 year period) and/or relatively shallow or benign flooding conditions. Development is generally acceptable except for essential community infrastructure (e.g. emergency services). Vulnerable uses (e.g. childcare, aged care) may be ok subject to building, site access and safe shelter mitigation measures. Shows the full floodplain under the largest flood that could conceivably occur.



Investigation area

Locations where a current flood study has not been delivered and information to determine flood risk is not available. The approximation of the floodplain in these areas is based on a citywide overland flow study. Development should avoid these areas until further investigation (updated flood study or localised risk assessment) is completed.



The flood studies this map is based on consider the impacts of climate change, as required by Queensland's planning legislation and policies. The map considers the whole floodplain for Logan and reflects a risk-based approach that takes into account:

- How likely a flood of a given size is in any given year, and
- What the impact or level of danger of that flood is.

Flood Levels

The table below displays flood levels from the most recently accepted flood studies affecting this property. To view the flood study documents please see the [Flood page](#) on Council's website.

The levels are measured in Australian Height Datum (AHD), where sea level is approximately zero (0) metres. The level displayed in the table below is the maximum flood level on the property for that event (likelihood). For some properties, particularly large properties or those on a significant slope, flood levels can vary significantly.

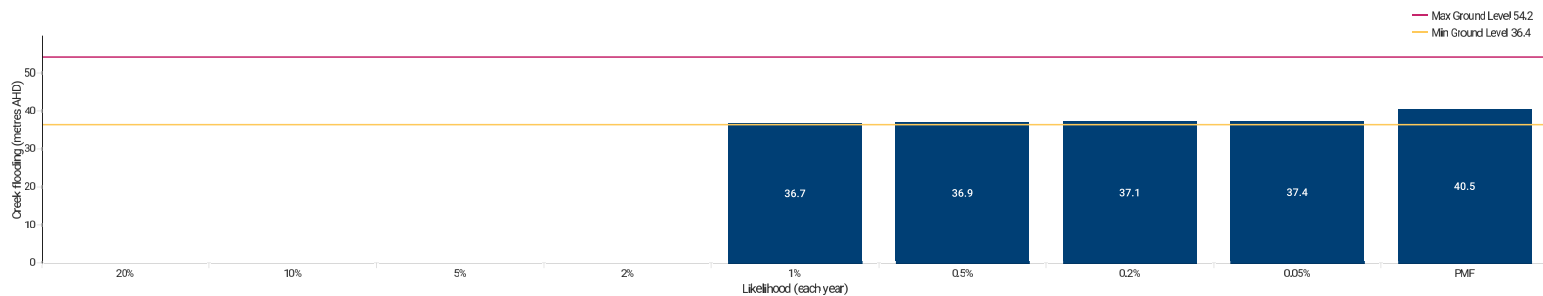
The most likely flood scenarios is shown at the top of the table, with the Probable Maximum Flood (PMF) at the bottom, being the least likely but most serious flood scenario.

Some properties may be impacted by only river flooding or only creek flooding, and some may be impacted by both. There may also be other sources of inundation that may impact the property and affect flood levels, based on overland flow or local creeks where studies have not yet been completed.

Study: Flagstone & Sandy Creeks Flood Study 2025

Likelihood (each year)	Creek flooding
20% chance	Not applicable
10% chance	Not applicable
5% chance	Not applicable
2% chance	Not applicable
1% chance	36.7 metres AHD
0.5% chance	36.9 metres AHD
0.2% chance	37.1 metres AHD
0.05% chance	37.4 metres AHD
PMF	40.5 metres AHD

Flood and Ground Levels in metres AHD



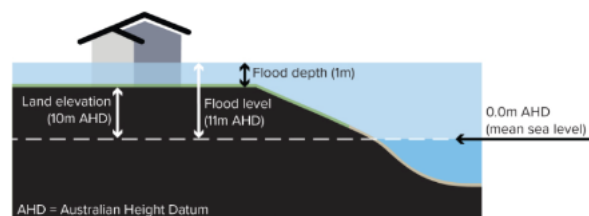
Ground Levels

Ground levels are based on an aerial LiDAR (Light Detection and Ranging) survey, which uses millions of laser point measurements to build a model of the ground surface. The source of the data is displayed in the table below so that you know when the survey was conducted.

Ground level	Details
Minimum ground level	36.4 metres AHD
Maximum ground level	54.2 metres AHD

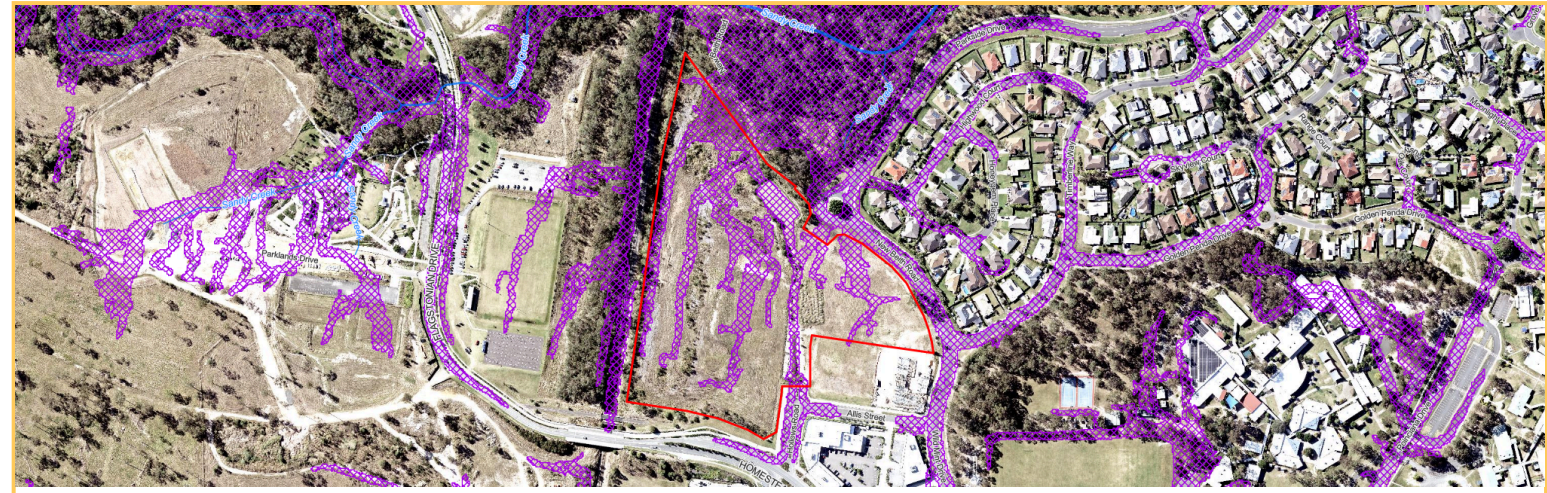
Source: 2021 Digital elevation model (1 metre grid)

The projected flood depth (how deep the water may be above ground, in metres) is the difference between the flood levels in the section above and the ground levels in this table. The diagram below provides an example (land elevation is ground level).



Overland Flow

Overland flow is water (stormwater/rainfall run-off) that exceeds the capacity of drains, pipes and channels during heavy rainfall events and travels over land towards waterways. It generally occurs quickly and for shorter periods of time. The impact of overland flow is dependent on local conditions, so the mapping is a guide only. It is possible that flooding from a local waterway which has not yet been studied may also impact the property. Please contact Council for further advice.



LEGEND

 Overland flow extent (areas possibly impacted)

Future Climate Scenarios

This extract comes from the map showing the projected extent of flooding (affected areas) for multiple flood scenarios for all relevant flood studies, **including the projected impacts of climate change**. This map corresponds with the flood levels provided in the table above for the 5%, 2%, 1%, 0.5%, 0.05% and Probable Maximum Flood (PMF) scenarios.



LEGEND

5% chance

The areas modelled to be impacted by a flood that has a 5% (or 1 in 20) chance of happening in any given year, or 80% chance over a 30 year period, which is the common term of a mortgage. This modelling **includes the impacts of climate change** and represents our understanding of future risk.

2% chance

The areas modelled to be impacted by a flood that has a 2% (or 1 in 50) chance of happening in any given year, or 45% chance over a 30 year period, which is the common term of a mortgage. This modelling **includes the impacts of climate change** and represents our understanding of future risk.

1% chance

The areas modelled to be impacted by a flood that has a 1% (or 1 in 100) chance of happening in any given year, or 25% chance over a 30 year period, which is the common term of a mortgage. This modelling **includes the impacts of climate change** and represents our understanding of future risk.

0.5% chance

The areas modelled to be impacted by a flood that has a 0.5% (or 1 in 200) chance of happening in any given year, or 15% chance over a 30 year period, which is the common term of a mortgage. This modelling **includes the impacts of climate change** and represents our understanding of future risk.

0.05% chance

The areas modelled to be impacted by a flood that has a 0.05% (or 1 in 2000) chance of happening in any given year. This is an extremely unlikely flood event with a 1% chance of happening over a 30 year period, not including the impacts of climate change.

PMF

The PMF or probable maximum flood scenario represents the full extent of the floodplain, or the most serious flood that could be expected to occur. This is usually estimated based on the probable maximum rainfall, not including the impacts of climate change.

Investigation area

Locations where a current flood study has not been delivered and information to determine flood risk is not available. The approximation of the floodplain in these areas is based on a citywide overland flow study. Further investigation is needed.

Current Climate Scenarios

This extract comes from the map showing flood affected areas **without** considering the impacts of climate change. This map represents modelled flooding under current conditions, and can be used for insurance purposes.



LEGEND

5% chance

The areas modelled to be impacted by a flood that has a 5% (or 1 in 20) chance of happening in any given year, or 80% chance over a 30 year period, which is the common term of a mortgage. This modelling is based on **current (present day) conditions** and does not take into account the impacts of climate change.

2% chance

The areas modelled to be impacted by a flood that has a 2% (or 1 in 50) chance of happening in any given year, or 45% chance over a 30 year period, which is the common term of a mortgage. This modelling is based on **current (present day) conditions** and does not take into account the impacts of climate change.

1% chance

The areas modelled to be impacted by a flood that has a 1% (or 1 in 100) chance of happening in any given year, or 25% chance over a 30 year period, which is the common term of a mortgage. This modelling is based on **current (present day) conditions** and does not take into account the impacts of climate change.

0.5% chance

The areas modelled to be impacted by a flood that has a 0.5% (or 1 in 200) chance of happening in any given year, or 15% chance over a 30 year period, which is the common term of a mortgage. This modelling is based on **current (present day) conditions** and does not take into account the impacts of climate change.

0.05% chance

The areas modelled to be impacted by a flood that has a 0.05% (or 1 in 2000) chance of happening in any given year. This is an extremely unlikely flood event with a 1% chance of happening over a 30 year period, not including the impacts of climate change.

PMF

The PMF or probable maximum flood scenario represents the full extent of the floodplain, or the most serious flood that could be expected to occur. This is usually estimated based on the probable maximum rainfall, not including the impacts of climate change

Investigation area

Locations where a current flood study has not been delivered and information to determine flood risk is not available. The approximation of the floodplain in these areas is based on a citywide overland flow study. Further investigation is needed.

Historic Flood Events

Based on the best information available to Council, the table below indicates whether or not the selected property may have been impacted by significant historic flood events. It is possible that other creek flooding or overland flow, which is not included in Council's mapping of these events, may have impacted the property.

Flood event	Property impacted
1974	No
2017 (after ex Tropical Cyclone Debbie)	No
2022 (late February / early March)	No

Planning Scheme Maps

The selected property is shown below on an extract of the Flood Overlay Maps from the Logan Planning Scheme 2015 V9.1 with TLPI No. 1/2024. Various provisions of the planning scheme which refer to properties affected by the Flood Overlay Maps will apply to the flood affected areas for the purposes of planning and development. This may include, for example, raised building floor levels and achieving safe vehicle access to the road network.

OM-05.01 Isolated islands



OM-05.02 High flow area



OM-05.04 Flood risk areas



MAP LEGEND

High

Floodwaters may be deep or fast flowing, or have a relatively high chance of occurrence (e.g. 80% chance in 30 years). Conditions may pose a risk to life and cause damage to buildings, possibly severe. Limited development may be considered if not increasing the flood risk exposure for people or property. These areas are generally better suited to environmental, recreational and some agricultural uses.

Moderate

Less frequently affected by flooding or if more frequent, with shallow or slower moving floodwater. Conditions may pose an unacceptable risk to people or property if not mitigated. Development may be tolerable if measures are taken to address flood impacts, protect people and limit damage.

Low

Extremely unlikely chance of flooding (1% chance or less over a 30 year period) and/or relatively shallow or benign flooding conditions. Development is generally acceptable except for essential community infrastructure (e.g. emergency services). Vulnerable uses (e.g. childcare, aged care) may be ok subject to building, site access and safe shelter mitigation measures. Shows the full floodplain under the largest flood that could conceivably occur.

Investigation area

Locations where a current flood study has not been delivered and information to determine flood risk is not available. The approximation of the floodplain in these areas is based on a citywide overland flow study. Development should avoid these areas until further investigation (updated flood study or localised risk assessment) is completed.

MAP LEGEND



High flow area

High hazard areas of flooding where significant (deeper, faster) flow of water occurs and in which a building is vulnerable to structural damage or failure from floodwater. Classified as H5 or H6 in the Australian Institute of Disaster Resilience (AIDR) Guideline 7-3 'Flood Hazard'.



High flood island

Areas which are isolated from flood-free land (surrounded by floodwater) but retain a portion of the area as flood free in a probable maximum flood (PMF).



Low flood island

Areas which are surrounded by floodwater and at first isolated from flood-free land, then completely inundated by floodwater (submerged) as the flood continues to rise.



Meadowbrook flood assessment area

Area where the function of important community infrastructure needs to be maintained. Flood mitigation measures and comprehensive emergency management planning is required to adequately manage the risk for flood events.



If more recent flood studies have been completed and accepted by Council, the Latest Flood Risk Map shown at the top of this report may be different from the planning scheme map. The latest flood information should be used to inform development decisions and will be incorporated into the planning scheme in a future amendment.

Further Information

1. Floods are highly unpredictable and variable, and properties may be affected by other sources of potential flooding. Each flood and its impact is different. Areas that were not flooded previously may be affected by future events. Areas that have been previously flooded may be impacted in different ways. This online report cannot take all of this into account.
2. The flood mapping and levels in this report are based on data from flood studies undertaken at a particular time and are subject to change. For example, if the method for calculating flood levels is updated, industry guidelines are updated or more recent information becomes available, this may result in changes to the information in this report. In areas where development is ongoing, the flood mapping and levels may not reflect developed conditions.
3. Flood studies do not create risk. They help us to understand the risk, based on relevant legislation and Queensland Government policies and guidelines. Flood studies also consider a range of other factors such as rainfall and river level information from recent events, climate change and trends, the impacts of development, changes to catchment conditions, new technologies and industry best practice (which help to improve accuracy).
4. Flood studies and models are developed from the best information available at the time. They do not tell you how the flood waters might behave, how quickly they may rise, or how dangerous the flooding will be. The models also cannot represent changes that have occurred since they were developed which may impact flood behaviour, such as earthworks, new developments or road infrastructure.
5. This report is not a substitute for independent professional advice. You should engage the services of a Registered Professional Engineer of Queensland (RPEQ) to get site specific information regarding the flood risk to your property, and how that might affect any proposed building or development work.
6. While Logan City Council takes reasonable care in producing this report, it does not guarantee that the information is accurate, complete or current. Logan City Council does not accept any responsibility for any loss or damage (however it was caused) in connection with the use of or reliance on the information in this report.

Contact Information

Where to go for further information depends on the type of information you need. Please refer to the [Flood Risk Fact Sheet](#) or contact Council using the details below.

Topic	Contact Details
Flood studies and modelling information, and the flood risk on your property	Contact Council on 07 3412 3412 or email council@logan.qld.gov.au . Further information about flooding and flood studies is available on the Flood page on Council's website.
Planning and development enquiries or proposals	Contact Council on 07 3412 3412 or email development@logan.qld.gov.au . Before lodging a development application, pre-lodgement advice is recommended.
Building information	Contact Council on 07 3412 3412 or email council@logan.qld.gov.au . You can also contact a private building certifier .
Properties in Priority Development Areas	Contact Economic Development Queensland . Council is not the planning authority for these properties.
Independent advice about flooding on your property	Contact a registered engineer through the Board of Professional Engineers of Queensland: Phone: 07 3210 3100 Email: admin@bpeq.qld.gov.au Web: Home - Board of Professional Engineers Queensland (bpeq.qld.gov.au)

Appendix F

LCC 'As Con' Layouts



HOMESTEAD 1/~~ROAD 1~~ - CL1 HOMESTEAD 1/~~ROAD 1~~ - CL2

[illegible][illegible]

FIRE ANT NOTE:

UNDER QUEENSLAND LEGISLATION, FIRE ANTS ARE A NOTIFIABLE PEST AND SUSPECTED SIGHTING MUST BE REPORTED TO BIOSECURITY QUEENSLAND. MOVEMENT OF FIRE ANTS IS PROHIBITED UNLESS APPROVED OTHERWISE BY THE DEPARTMENT OF PRIMARY INDUSTRIES. THE CONTRACTOR SHALL ACQUIRE THE NECESSARY PERMITS TO COMPLETE THE WORKS.

EDU FILE REF NO:	DEV2012/402
RP DESCRIPTION:	
PARISH/COUNTY:	UNDULLAH/STANLEY
ORIGIN:	PM107142 (RL39.078)
HORIZONTAL DATUM:	MGA

ECONOMIC DEVELOPMENT QUEENSLAND (EDQ) REFERENCE
DEV2012/402

I, John Harrison hereby certify that the As Constructed information shown on this plan is a true and correct record of the sizes, types, materials, classes etc., and it corresponds with the relevant approved Engineering Drawings.

Signature

Title: State Leader – Land Development
Firm: Bradlees
Date: 22nd August 2017

[illegible]

RPEQ 5023

Approved by for and on behalf of Brazil

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QUALITY ASSURED COMPANY
AS/NZS ISO 9001:2008
REG. NO. 233

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ABN 29 064 159 191

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Gold Coast Office Level 1, 34 Thomas Drive, Chervon Island
Brisbane Ph 07 3018 5034 Sunshine Coast Ph 07 5451 199

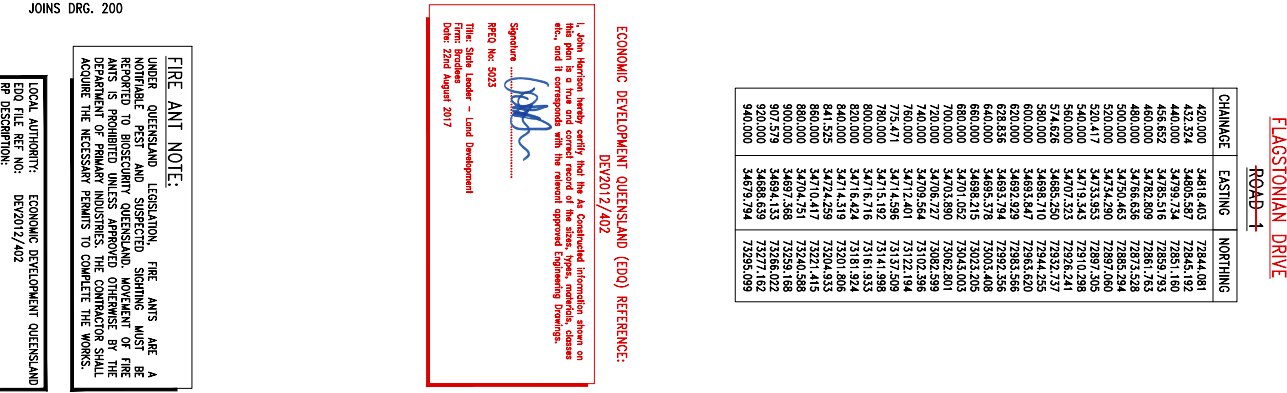
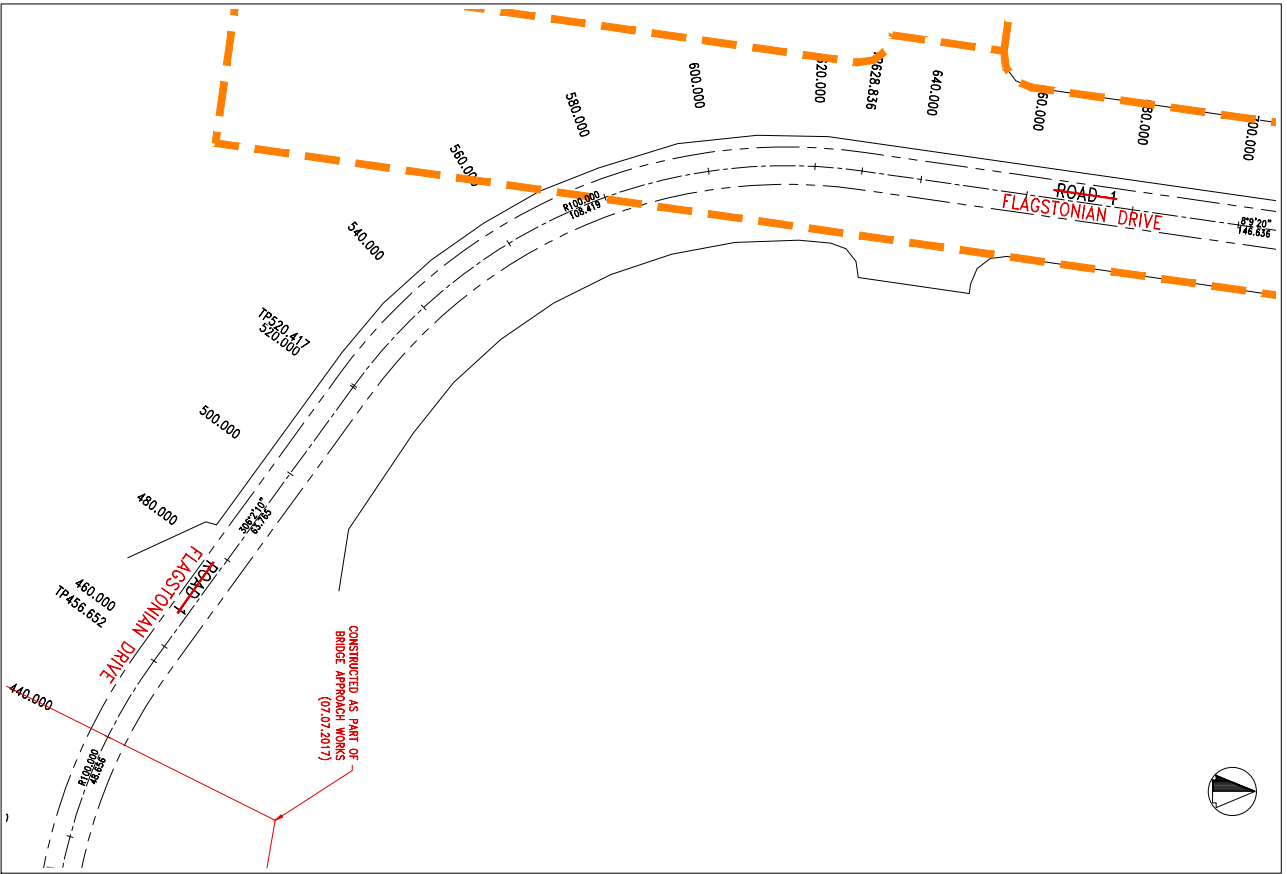
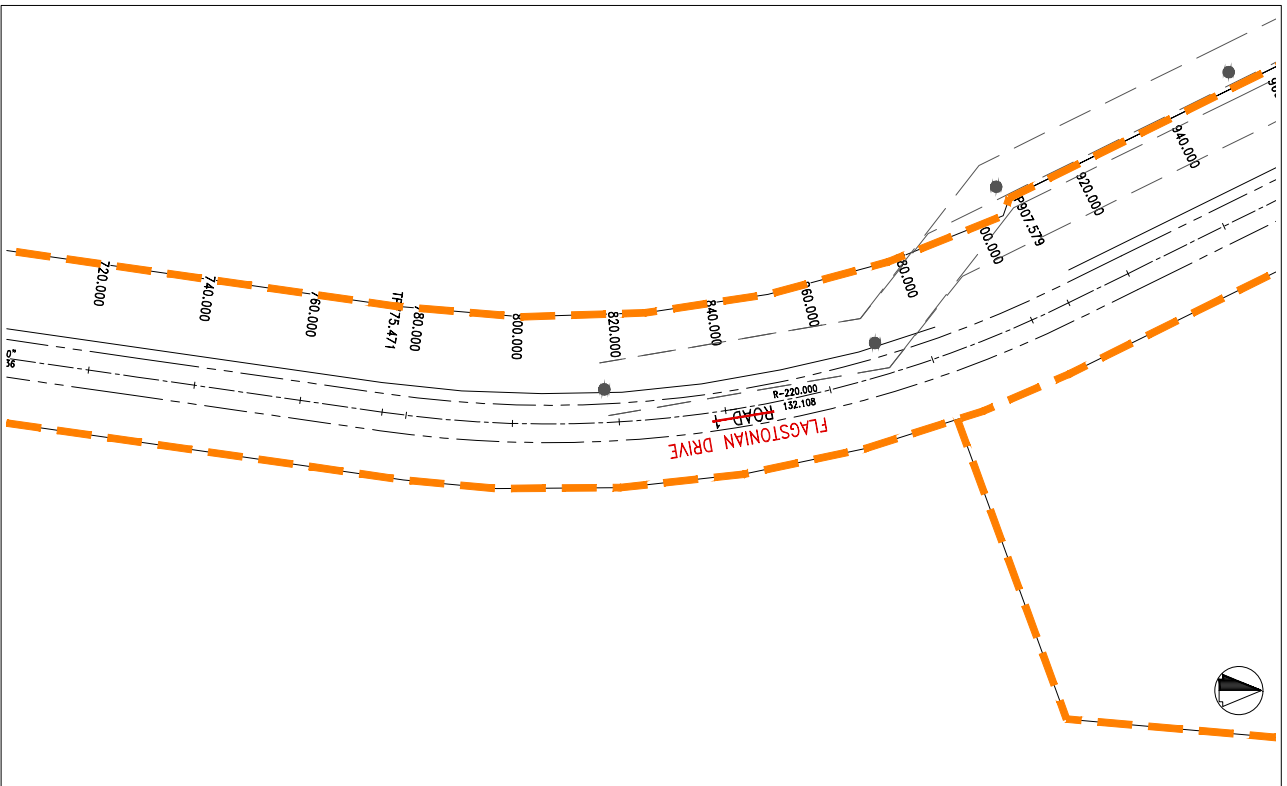
PEET FLAGSTONE CITY PTY. LTD

ROAD ALIGNMENT & SETOUT PLAN
SHEET 1 OF 3

ROAD 1 & HOMESTEAD DRIVE

ECONOMIC DEVELOPMENT C
AS CONSTRUCTED

PROJECT No	DESIGNED	DRAWN	APPROVED	DATE	SCALE @ 1"	SHEET
	AC	NMI	JH	20.02.15	1:500	1 of 1
15-838	DRAWING No		C1-T1A-C11-200		REV	



FLAGSTONIAN DRIVE

HEAD +

CHAINAGE	EASTING	NORTHING
420,000	34818.403	72844.081
432,324	34805.587	72845.182
440,000	34799.734	72851.180
456,632	34765.518	72859.793
470,000	34728.520	72863.528
480,000	34718.636	72863.528
500,000	34720.463	72885.294
520,000	34734.290	72897.080
520,417	34733.953	72897.505
540,000	34719.343	72910.298
560,000	34702.523	72926.241
574,165	34693.229	72939.347
580,000	34688.710	72944.255
600,000	34693.847	72963.620
620,000	34692.929	72983.586
628,636	34693.794	72992.356
640,000	34695.218	73003.408
660,000	34699.523	73015.538
680,000	34701.032	73043.003
700,000	34703.890	73062.801
720,000	34706.727	73082.599
740,000	34709.564	73102.396
760,000	34712.401	73122.194
776,000	34715.238	73141.988
780,000	34715.183	73141.988
800,000	34716.716	73161.933
820,000	34716.424	73181.924
840,000	34714.319	73201.806
841,525	34724.259	73204.933
860,000	34710.417	73222.415
880,000	34697.368	73259.168
900,000	34694.133	73266.022
907,579	34688.639	73277.182
920,000	34679.794	73295.099

ECONOMIC DEVELOPMENT QUEENSLAND (EDQ) REFERENCE:

DEV2012/402

I, John Bradles, hereby certify that the As Constructed information shown on this plan is a true and correct record of the sites, types, materials, classes etc., and it corresponds with the relevant approved Engineering Drawings.

Signature: [Signature]

RPED No: 5023

Title: State Leader - Land Development
Firm: Bradles
Date: 22nd August 2017

FIRE ANT NOTE:

UNDER QUEENSLAND LEGISLATION, FIRE ANTS ARE A NOTIFIABLE PEST AND SUSPECTED SIGNING MUST BE REPORTED TO BIOSECURITY QUEENSLAND. MOVEMENT OF FIRE ANTS IS PROHIBITED UNLESS APPROVED OTHERWISE BY THE DEPARTMENT OF PRIMARY INDUSTRIES. THE CONTRACTOR SHALL ACQUIRE THE NECESSARY PERMITS TO COMPLETE THE WORKS.

LOCAL AUTHORITY: ECONOMIC DEVELOPMENT QUEENSLAND

EDQ FILE REF NO: DEV2012/402

PROJECT DESCRIPTION: INDUSTRY/STABILITY

PARKS/COUNTY: RUSSELL (RUS3078)

HORIZONTAL DATUM: MGA

ROAD 1 & HOMESTEAD DRIVE

PEET FLAGSTONE CITY PTY. LTD.

ROAD ALIGNMENT & SETOUT PLAN

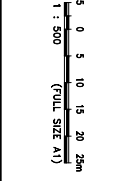
SHEET 2 OF 3

AS CONSTRUCTED

C1-TA-CIL-201

F

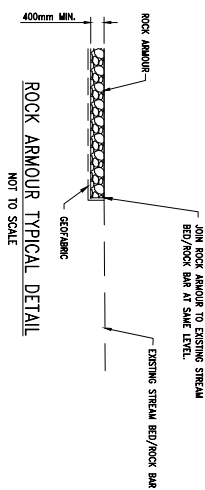
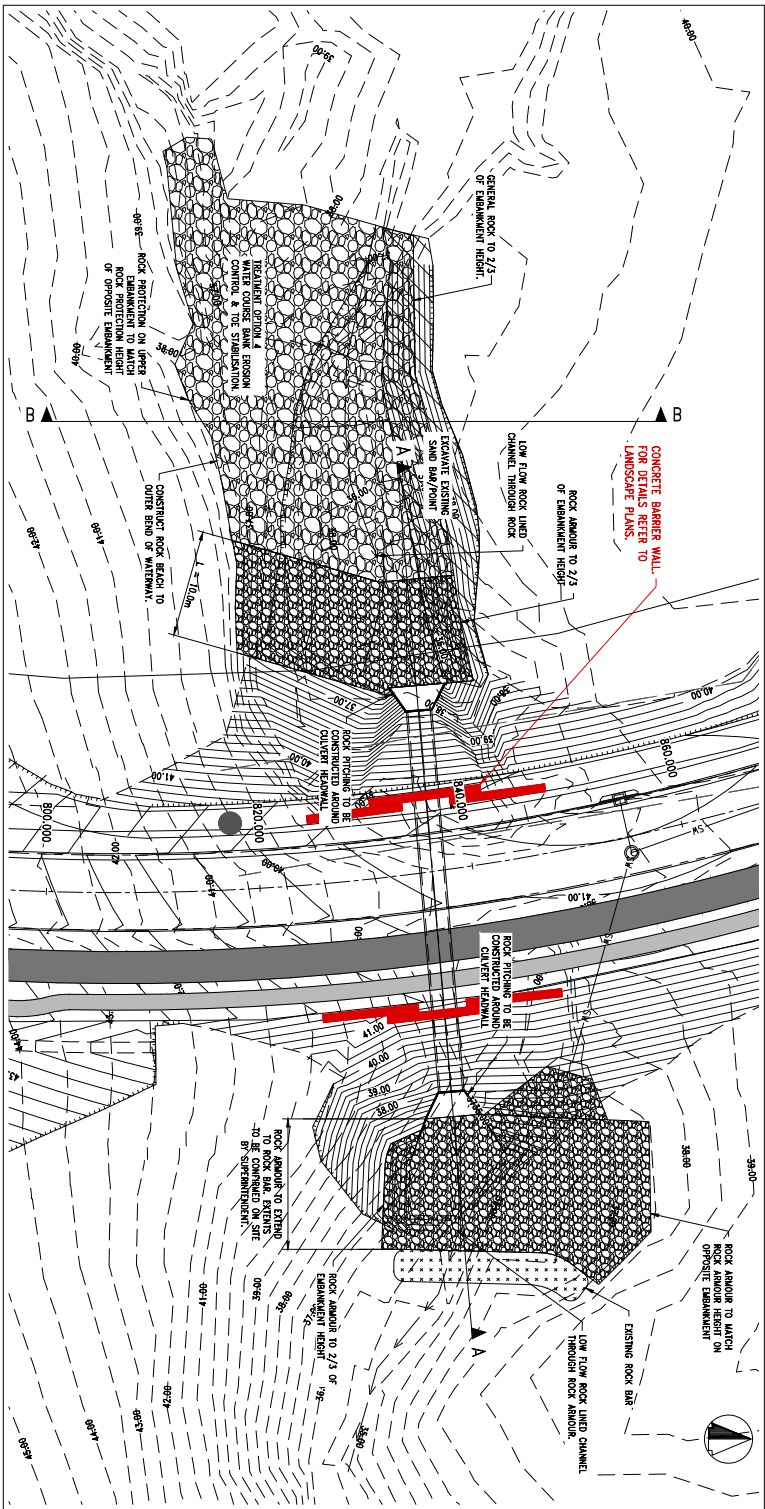
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15/08/17	AS CONSTRUCTED	15/08/17	15/08/17	15/08/17	15/08/17



Approved by, for and on behalf of: [Signature]
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Bradles Pty Ltd
15/08/17
15/08/17
15/08/17
15/08/17
15/08/17
15/08/17



NOTES:

1. ROCK ARMOUR TO BE CLEAN ROCKS (MIN. 200mm DIAMETER) WITH MINIMAL FINE MATERIAL. ROCK ARMOUR SHALL NOT BE OVERCOMPACTED BUT LEFT PILED AND UNEVEN (TRACK-ROLLED) FINISH OR ROLLED.
2. APRON TO BE INSTALLED AT SAME GRADIENT AS PIPE CULVERT OR FLATTER.
3. STREAM BED TO ADAPT ROCK ARMOUR AT SAME LEVEL. REFER DETAIL.
4. GENERAL ROCKS TO BE CLEAN ROCK (OR GEOTEXTILE) WITH MINIMAL FINE MATERIAL. ROCKS TO BE TRACK ROLLED FINISH AND ROLLED. GENERAL ROCK TO BE SOURCED FROM AVAILABLE SITE ROCK MATERIAL THAT IS APPROVED BY SUPERINTENDENT.

LEGEND:

- ROCK ARMOUR
- EXCAVATE EXISTING SAND BAR AND REFACE WITH ROCK ARMOUR
- GENERAL ROCK. REFER NOTE 4.
- EXISTING ROCK BAR
- LOW FLOW ROCK LINED CHANNEL

ECONOMIC DEVELOPMENT QUEENSLAND (EDQ) REFERENCE:
DEV2012/402

I, John Horrobin hereby certify that the As Constructed information shown on this plan is a true and correct record of the size, type, material, classes etc., and it corresponding with the relevant approved Engineering Drawings.

Signature: [Signature]

REF: No. 5023

Title: State leader - Land Development
Firm: Bradlades
Date: 22nd August 2017

LOCAL AUTHORITY: ECONOMIC DEVELOPMENT QUEENSLAND
EDQ THE REF NO: DEV2012/402
PROJECT/STABILITY: LUDOLLAH/STABILITY
DATE: 27/1/12 (R133078)
HORIZONTAL DATUM: MGA

WHERE ROCK ARMOUR JOINS EXISTING ROCK BAR, THE ROCK ARMOUR SHOULD BE ANCHORED AGAINST EXISTING ROCK BAR TO REQUIRE TO JOIN TO ASSIST BONDING OF ROCKS WHERE DIRECTED BY SUPERINTENDENT.

LAYOUT PLAN

SCALE 1:250

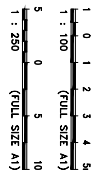
SECTION A

SCALE 1:100

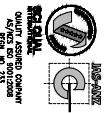
SECTION B

SCALE 1:100

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APPROVED BY: [Signature]
DATE: 2012/07/25
PROJECT: ROAD 1 & HOMESTEAD DRIVE
DRAWN BY: [Signature]
DATE: 2012/07/25
CHECKED BY: [Signature]
DATE: 2012/07/25
SCALE: 1:250



APPROVED BY: [Signature]
DATE: 2012/07/25
PROJECT: ROAD 1 & HOMESTEAD DRIVE
DRAWN BY: [Signature]
DATE: 2012/07/25
CHECKED BY: [Signature]
DATE: 2012/07/25
SCALE: 1:250

PEET FLAGSTONE CITY PTY. LTD.
CULVERT SETOUT PLAN & SECTION

ROAD 1 & HOMESTEAD DRIVE
ECONOMIC DEVELOPMENT QUEENSLAND
AS CONSTRUCTED

NO.	DESCRIPTION	DATE	BY	CHECKED
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CHINAUGE LIMITS	SURFACE TYPE	PRIMER SEAL	BASE COURSE CARB60	SUB-BASE CARB60	SELECT MATERIAL CAR15	BLANKET COURSE CAR15	TOTAL DEPTH (mm)
0-6000-6500-mm AC	5	125	125	125	350	750	440-
0-6000-6500-mm AC	5	125	125	125	350	750	630
180-000-180,000 50mm AC	5	125	125	125	150	750	450

Title: State Leader – Land Development
Firm: Bradlees
Date: 22nd August 2017



R247

R-19

R10C

R100

LOCAL AUTHORITY:	ECONOMIC DEVELOPMENT
EDD FILE REF NO:	DEV2012/402
RP DESCRIPTION:	
PARISH/COUNTY:	UNDULLAH/STANLEY
ORIGIN:	PA107142 (RL33.078)
HORIZONTAL DATUM:	MGA

ECONOMIC DEVELOPMENT QUEENSLAND (EDQ) REFERENCE:
DEV2012/402

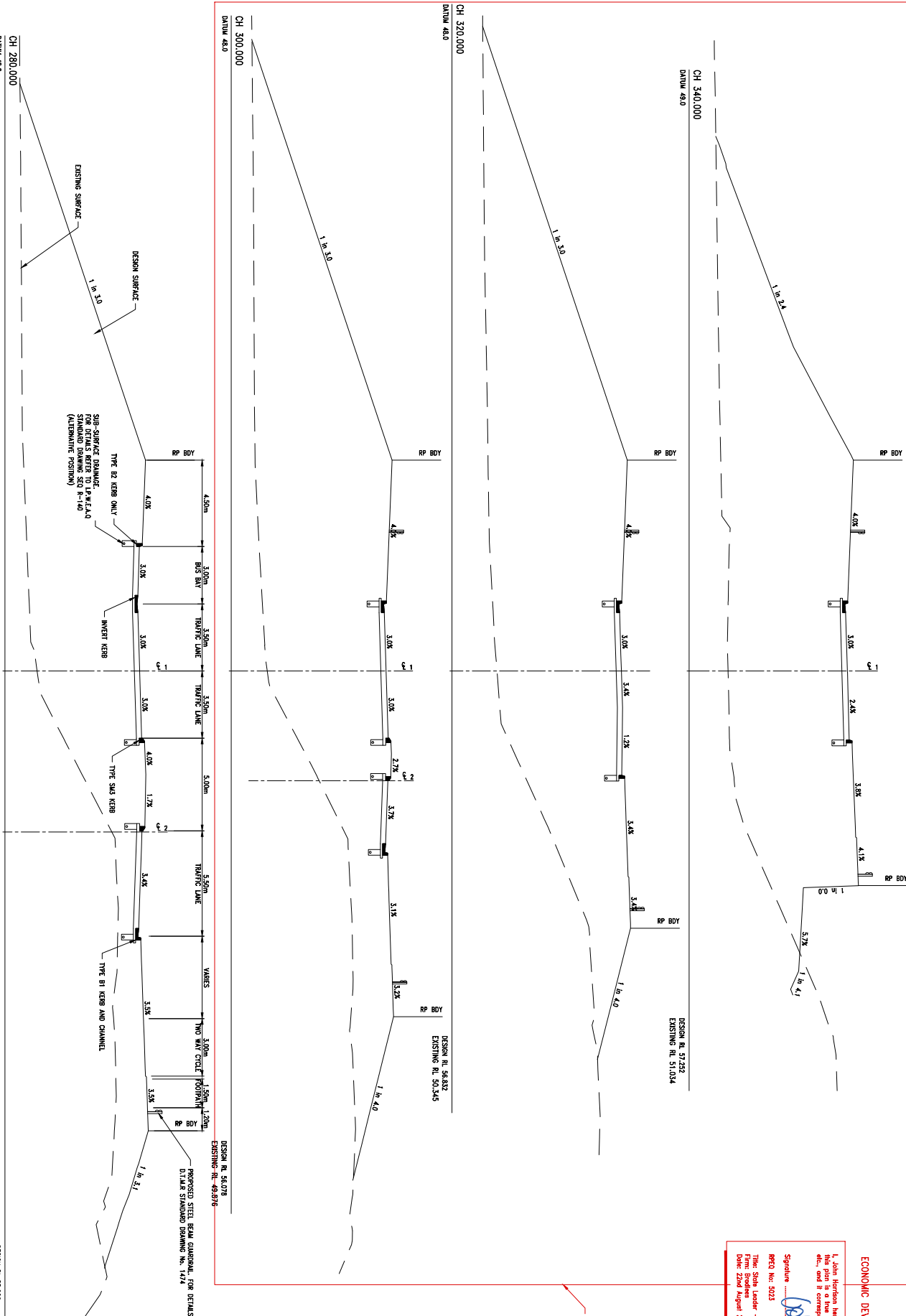
I, John Thornton hereby certify that the As Constructed Information shown on this drawing is a true and correct representation of the actual construction of the project, and it corresponds with the relevant approved Engineering Drawings.

Signature: 

PRCQ No: 5023

John Thornton
The State Leader - Local Development
Project Coordinator
Date: 22nd August 2017

CONSTRUCTED AS PART OF BRIDGE APPROACH WORKS (07/07/2017)



REFER LANDSCAPE ARCHITECT PLANS FOR FOOTPATH DETAILS (CH000-CH340.000)
EXTENT OF EARTHWORKS AND BORROW PIT TO BE CONFIRMED ON SITE BY SUPERINTENDENT

LOCAL AUTHORITY: ECONOMIC DEVELOPMENT QUEENSLAND
EDQ FILE REF NO: DEV2012/402
PROJECT DESCRIPTION: JINDULLAH/STANLEY PARKWAY/ROAD
DRAWN BY: PWT/142 (R133078)
HORIZONTAL DATUM: MGA

DESIGNER		CHECKED		PROJECT	
A. DESIGNER B. DESIGNER C. DESIGNER D. DESIGNER E. DESIGNER F. DESIGNER G. DESIGNER H. DESIGNER I. DESIGNER J. DESIGNER K. DESIGNER L. DESIGNER M. DESIGNER N. DESIGNER O. DESIGNER P. DESIGNER Q. DESIGNER R. DESIGNER S. DESIGNER T. DESIGNER U. DESIGNER V. DESIGNER W. DESIGNER X. DESIGNER Y. DESIGNER Z. DESIGNER		A. CHECKER B. CHECKER C. CHECKER D. CHECKER E. CHECKER F. CHECKER G. CHECKER H. CHECKER I. CHECKER J. CHECKER K. CHECKER L. CHECKER M. CHECKER N. CHECKER O. CHECKER P. CHECKER Q. CHECKER R. CHECKER S. CHECKER T. CHECKER U. CHECKER V. CHECKER W. CHECKER X. CHECKER Y. CHECKER Z. CHECKER		A. PROJECT B. PROJECT C. PROJECT D. PROJECT E. PROJECT F. PROJECT G. PROJECT H. PROJECT I. PROJECT J. PROJECT K. PROJECT L. PROJECT M. PROJECT N. PROJECT O. PROJECT P. PROJECT Q. PROJECT R. PROJECT S. PROJECT T. PROJECT U. PROJECT V. PROJECT W. PROJECT X. PROJECT Y. PROJECT Z. PROJECT	
15-838		C1-T1A-CL-225		G	

ROAD 1 & HOMESTEAD DRIVE
ECONOMIC DEVELOPMENT QUEENSLAND
AS CONSTRUCTED

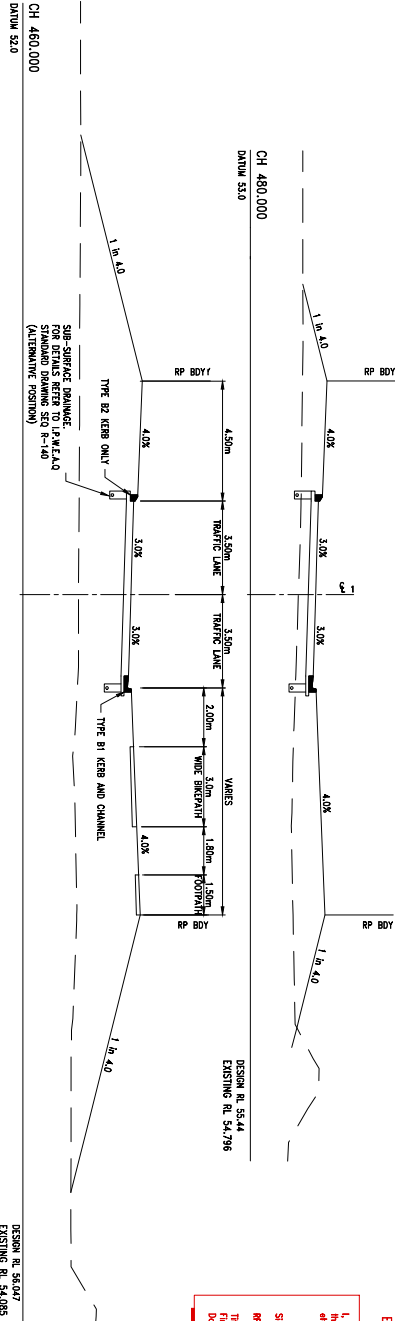
1. Joint Horizon survey party find the As Constructed information shown on this drawing to be inconsistent with the EDQ Reference Drawing. The EDQ Reference Drawing, and it corresponds with the relevant approved Engineering Drawings.

Signature: 

PP20 No: 5023

Title: Joint Leader - Land Development
From: Surveyor General
Date: 22nd August 2017

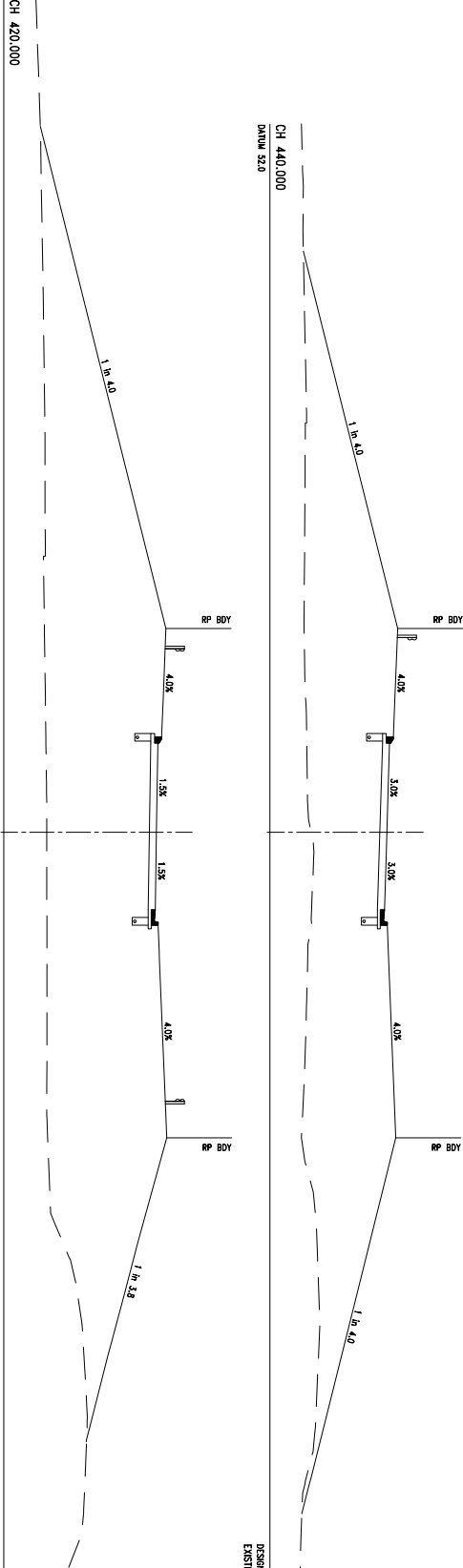
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DATUM 53.0



DESIGN RL 55.44
EXISTING RL 54.786

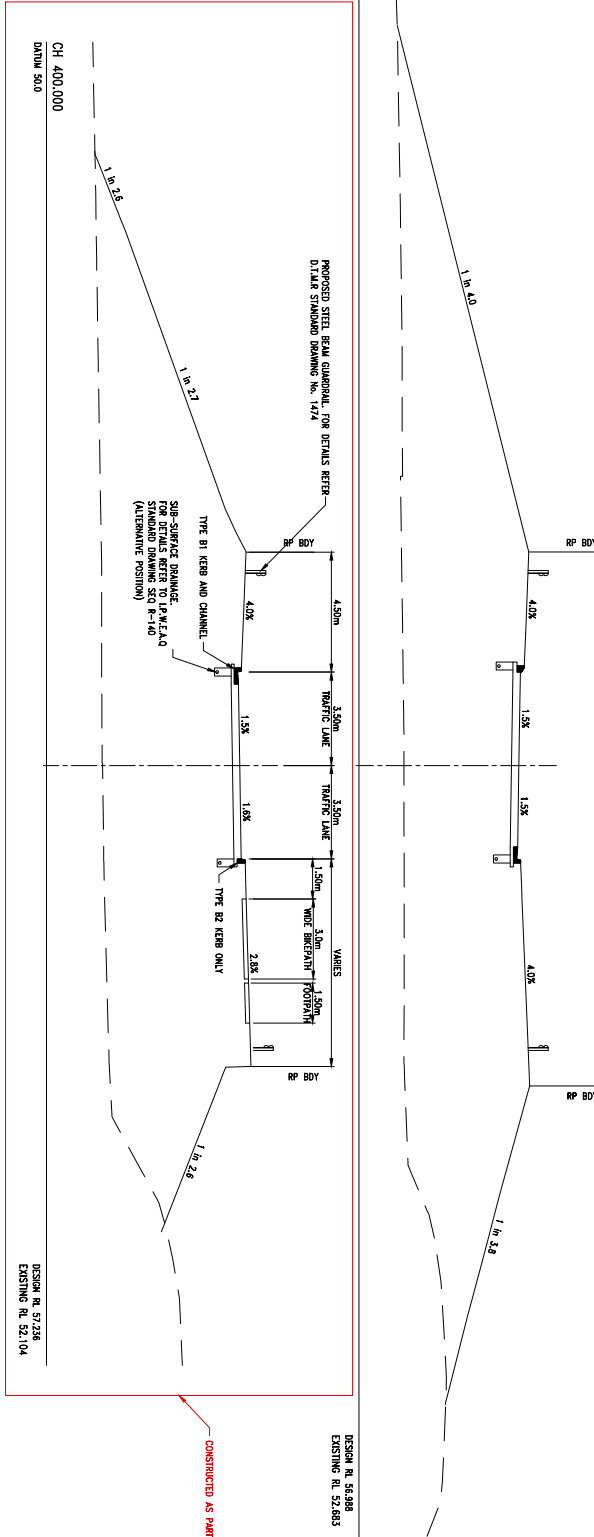
DESIGN RL 55.637
EXISTING RL 54.085

CH 440.000
DATUM 52.0



DESIGN RL 55.587
EXISTING RL 53.622

CH 420.000
DATUM 51.0



DESIGN RL 55.588
EXISTING RL 52.653

CONSTRUCTED AS PART OF BRIDGE APPROACH WORKS (07/20/2017)

EXTENT OF EARTHWORKS AND BORROW PIT TO
BE CONFIRMED ON SITE BY SUPERINTENDENT

LOCAL AUTHORITY: ECONOMIC DEVELOPMENT QUEENSLAND
EDQ FILE REF NO: DEV2012/402
PROJECT DESCRIPTION: JINDILLAH/STANLEY
PARISH/COUNTY: PARISH 142 (RL53078)
HORIZONTAL DATUM: MGA

DESIGNER		DATE		PROJECT	
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DEV2012/402

**on the
issues**

Ver-

502

Title: State Leader – Land Development
Firm: Bradlees
Date: 22nd August 2017



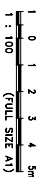
PARISH/COUNTY: UNDELLAH/STANLEY
ORIGIN: PM107142 (RL39.078)
HORIZONTAL DATUM: MGA

ROAD 1 & HOMESTEAD DRIVE

AS CONSTRUCTED

DESIGNED AC	DRAWN MM	APPROVED JH	DATE 20.02.15	SHEET 1:100	SHEET 8 of 1
			SCALE @ A1		
PROJECT No 15-838		DRAWING No C1-T1A-CIL-230		REV G	

REV	DESCRIPTION	DATE	BY	APP
1	ORIGINAL ISSUE	05/05/2016	MA	APP
2	DESIGN SECTION AMENDED	05/05/2016	MA	APP
3	DESIGN SECTION AMENDED	05/05/2016	MA	APP
4	DESIGN SECTION AMENDED	05/05/2016	MA	APP
5	DESIGN SECTION AMENDED	05/05/2016	MA	APP
6	CONSTRUCTION ISSUE	05/05/2016	MA	APP
7	CONSTRUCTION ISSUE	05/05/2016	MA	APP
8	CONSTRUCTION ISSUE	05/05/2016	MA	APP
9	UNREVIEWED CONSTRUCTION	11/05/2016	MA	APP



SURVEYOR



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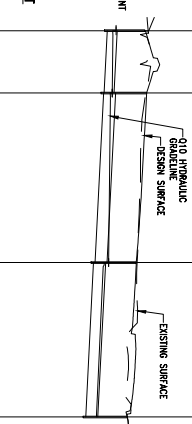


Bradford Lees Pty Ltd
ABN 29 064 159 191
Ph: 07 5528 6411
Fax: 07 5528 6422
Web: www.bradlees.com.au
Email: mail@bradleesmelbhard.com
Postal PO Box 2293, Southport QLD 4215
Gold Coast Office Level 1, 34 Thomas Drive, Chevron Island QLD 4215
Bridgeway Ph: 07 2018 5924, Sunlivera Court Ph: 07 5451 1094

PEET FLAGSTONE CITY PTY. LTD.

CROSS SECTIONS
SHEET 8 OF 11

- PITS LESS THAN 1.0m DEEP = 600x600 PIT.
- PITS GREATER THAN 1.0m, BUT LESS THAN 1.5m DEEP = 600x900 PIT.
- PITS GREATER THAN 1.5m DEEP = 600x600 PIT ON Ø1050mm MANHOLE.



1000000

ECONOMIC DEVELOPMENT QUEENSLAND (EDO) REFERENCE:
DEV2012/402

LOCAL AUTHORITY:	ECONOMIC DEVELOPMENT QUEENSLAND
EDO FILE REF NO:	DEY2012/402
PP DESCRIPTION:	
PARISH/COUNTY:	UNDULMAN/STANLEY
ORIGIN:	PL07142 (RL39.078)
HORIZONTAL DATUM:	MA

STRUCTURE NAME	STRUCTURE DESCRIPTION	STRUCTURE LOCATION	STRUCTURE TYPE	STRUCTURE SIZE (CLASS)	STRUCTURE GRADE %	STRUCTURE FULL PIPE VELOCITY (m/s)	STRUCTURE PART FULL VELOCITY (m/s)	STRUCTURE HYDRAULIC GRADELINE	STRUCTURE PIPE FLOW (Cumecs)	STRUCTURE PIPE CAPACITY AT GRADE (Cumecs)	STRUCTURE DEPTH TO INVERT	STRUCTURE INVERT LEVEL	STRUCTURE FINISHED SURFACE LEVEL	STRUCTURE DISTANCE ALONG DRAINLINE	STRUCTURE LOCATION
1/EXT1	STD LCC MANHOLE	23.327	1.410	0.045	0.124	0.201	0.201	47.487	0.045	0.124	0.201	47.487	48.500	23.327	EXT1
2/EXT1	STD LCC MANHOLE	63.465	1.594	0.080	0.201	0.201	0.201	47.341	0.080	0.201	0.201	47.341	48.610	63.465	EXT1
3/EXT1	STD LCC MANHOLE	57.839	1.599	0.181	0.201	0.201	0.201	47.203	0.181	0.201	0.201	47.203	48.220	57.839	EXT1
1/EXT1A	STD LCC MANHOLE	2.482	1.410	0.047	0.124	0.124	0.124	47.481	0.047	0.124	0.124	47.481	48.540	2.482	EXT1A
2/EXT1	STD LCC MANHOLE	2.482	1.500	0.047	0.124	0.124	0.124	47.341	0.047	0.124	0.124	47.341	48.610	2.482	EXT1A
1/EXT1B	STD LCC MANHOLE	2.136	1.410	0.051	0.124	0.124	0.124	47.240	0.051	0.124	0.124	47.240	48.140	2.136	EXT1B
3/EXT1	STD LCC MANHOLE	2.136	1.504	0.051	0.124	0.124	0.124	47.203	0.051	0.124	0.124	47.203	48.220	2.136	EXT1B
1/EXT1C	STD LCC MANHOLE	23.608	1.410	0.066	0.124	0.124	0.124	47.295	0.066	0.124	0.124	47.295	48.170	23.608	EXT1C
3/EXT1	STD LCC MANHOLE	23.608	1.579	0.066	0.124	0.124	0.124	47.203	0.066	0.124	0.124	47.203	48.220	23.608	EXT1C
1/EXT2	STD LCC MANHOLE	11.135	1.720	0.014	0.175	0.393	0.393	55.776	0.014	0.175	0.393	55.776	56.600	11.135	EXT2
2/EXT2	STD LCC MANHOLE	11.047	1.410	0.037	0.175	0.393	0.393	55.768	0.037	0.175	0.393	55.768	56.600	11.047	EXT2
3/EXT2	STD LCC MANHOLE	52.961	1.538	0.048	0.394	0.394	0.394	54.320	0.048	0.394	0.394	54.320	55.868	52.961	EXT2
4/EXT2	STD LCC MANHOLE	54.814	1.731	0.087	0.390	0.390	0.390	51.677	0.087	0.390	0.390	51.677	52.940	54.814	EXT2
5/EXT2	STD LCC MANHOLE	70.682	1.436	0.142	0.374	0.374	0.374	49.712	0.142	0.374	0.374	49.712	51.040	70.682	EXT2
6/EXT2	STD LCC MANHOLE	38.897	1.709	0.212	0.453	0.453	0.453	48.170	0.212	0.453	0.453	48.170	49.570	38.897	EXT2
7/EXT2	STD LCC MANHOLE	196.133	1.472	0.453	0.453	0.453	0.453	46.814	0.453	0.453	0.453	46.814	47.160	196.133	EXT2
1/EXT2A	STD LCC MANHOLE	2.117	1.408	0.033	0.198	0.198	0.198	55.771	0.033	0.198	0.198	55.771	56.880	2.117	EXT2A
2/EXT2	STD LCC MANHOLE	2.117	1.522	0.033	0.198	0.198	0.198	55.768	0.033	0.198	0.198	55.768	56.880	2.117	EXT2A
1/EXT2B	STD LCC MANHOLE	2.954	1.412	0.014	0.245	0.245	0.245	54.614	0.014	0.245	0.245	54.614	55.840	2.954	EXT2B
3/EXT2	STD LCC MANHOLE	2.954	1.457	0.014	0.245	0.245	0.245	54.320	0.014	0.245	0.245	54.320	55.868	2.954	EXT2B
1/EXT2C	STD LCC MANHOLE	23.892	1.560	0.255	0.455	0.455	0.455	52.354	0.255	0.455	0.455	52.354	53.430	23.892	EXT2C
4/EXT2	STD LCC MANHOLE	23.892	1.414	0.255	0.455	0.455	0.455	51.677	0.255	0.455	0.455	51.677	52.940	23.892	EXT2C



0 25m 50m 75m 100m 125m 150m 175m 200m 225m 250m 275m 300m 325m 350m 375m 400m 425m 450m 475m 500m 525m 550m 575m 600m 625m 650m 675m 700m 725m 750m 775m 800m 825m 850m 875m 900m 925m 950m 975m 1000m



Consulting Engineer's Certification.
I, James J. O'Sullivan, hereby certify that the As Constructed information shown on this plan is a true and correct record of the sizes, types, materials, classes etc., and it corresponds with the relevant approved Engineering Drawings.

Signed, RPEO No. Dated,

Registered Surveyor's Certification.
We, Quinn & O'Sullivan Surveying Pty Ltd, hereby certify that the horizontal and vertical locations, and dimensions shown on this plan are a true and correct record of the As Constructed information.

Signed, James J. O'Sullivan Surveyor
A. O'Sullivan, Reg. No. 6152, Dated, 14/08/2017

FLAGSTONE
STAGE 7B
PEET FLAGSTONE
CITY PTY LTD

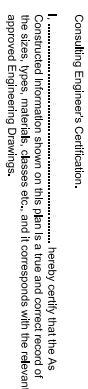
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SHEET: _____
DATE: _____

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Signed..... RPEQ No Dated.....

Registered Surveyor's Certification.

Queensland Surveying Pty Ltd hereby certify that the horizontal and vertical locations, and dimensions shown on this plan are a true and correct record of the As Constructed information.

Signed.. *AF Wright* .
Cadastral
Surveyor
& Delegate. Reg. No. 6152 Dated: 24/08/2017

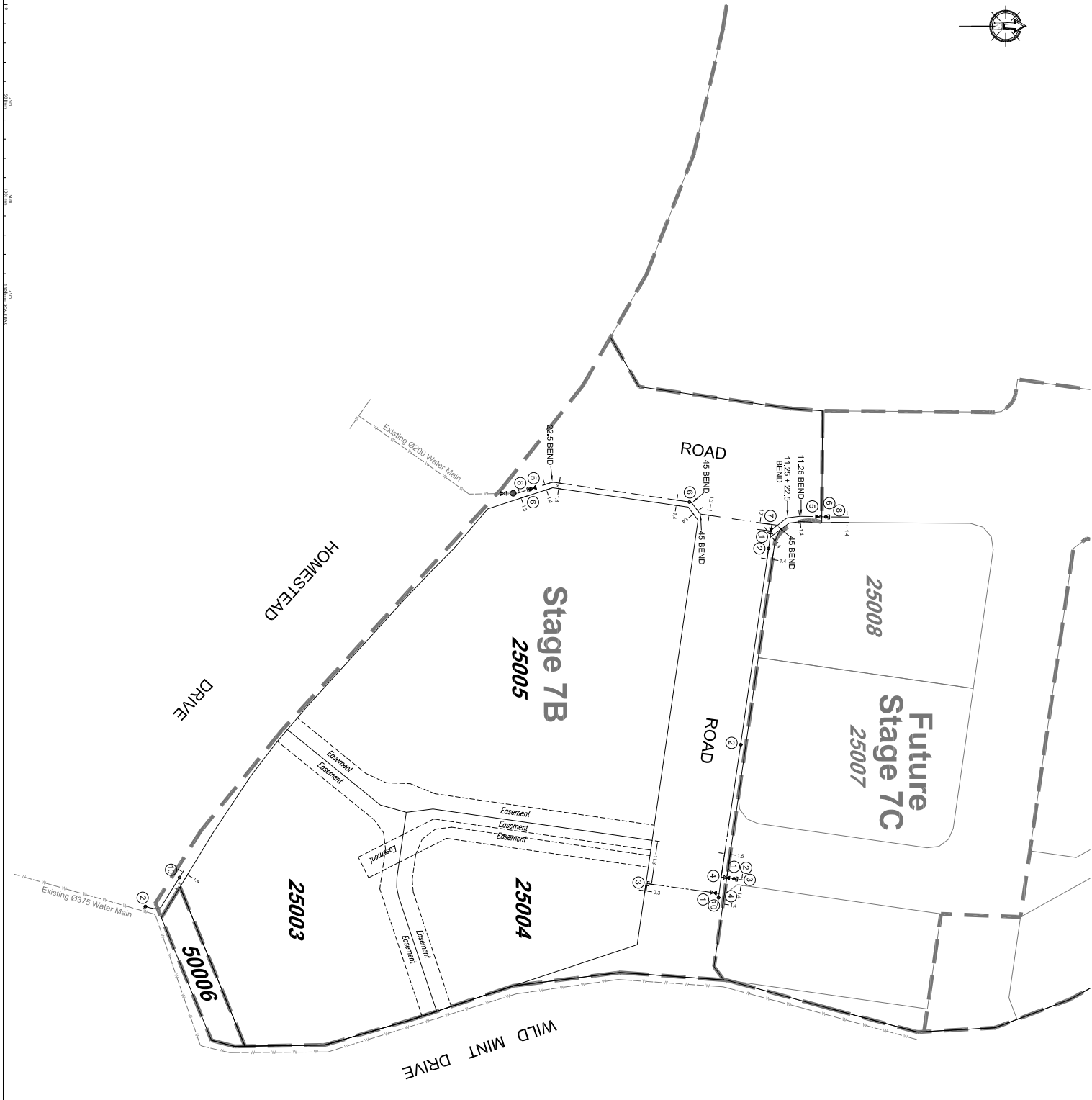
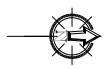
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MACLAY
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WHITSUNDAYS
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CAIRNS
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Signed..... RPEO No. Dated.....

Registered Surveyor's Certification.

We, Queensland Surveying Pty Ltd, hereby certify that the horizontal and vertical control and information shown on this plan are a true and correct record of the As Constructed information.

Signed.....
Gustaf
Surveyor
No. 6152
Reg. No. 6152
Dated: 24/08/2017

LEGEND

- Ø100 MPAVC PN16
- Ø100 DCL PN35
- Ø150 MPAVC PN16
- Ø150 DCL PN35
- Ø150 DCL PN35
- 40PE Lbs 25003 & 25005

TABLE OF FITTINGS

- ① Ø100 Stop Valve
- ② Ø100 Fire Hydrant
- ③ Ø100 Dead End Cap
- ④ Ø100 x Ø100 Tee
- ⑤ Ø150 Stop Valve
- ⑥ Ø150 Fire Hydrant
- ⑦ Ø150 x Ø100 Tee
- ⑧ Ø150 Dead End Cap
- ⑨ Ø100 End of Line FH

