

PLANS AND DOCUMENTS
referred to in the PDA
DEVELOPMENT APPROVAL

Approval no: DEV2022/1325

Date: 17/05/2023



APPENDIX E

UPDATED ENGINEERING INFRASTRUCTURE REPORT

ENGINEERING INFRASTRUCTURE REPORT

**North Star
Corner Knowledge Street and Bonner Street,
Southport, QLD**

Lot 3A-2 on Lot 9 On SP275512

For Gold Coast 888 Trust

20 December 2022

File No: OSK5554-0003-B

**PLANS AND DOCUMENTS
referred to in the PDA
DEVELOPMENT APPROVAL**

Approval no: DEV2022/1325

Date: 17/05/2023



DOCUMENT CONTROL SHEET

Title:	Engineering Infrastructure Report
Document No:	OSK5554-0003-B
Original Date of Issue:	26 October 2021
Project Manager:	Aaron Pianta
Author:	Ethan Grice
Client:	Gold Coast 888 Trust
Client Contact:	Matt Grbcic – MG Group
Client Reference:	North Star
Synopsis:	This report examines the existing infrastructure and future engineering impacts for the proposed development of the site, including the availability of services and the provision of water and sewerage servicing the development site and determines the demand on these systems from the proposed development.

Reviewed by RPEQ	Reg. No.	Signed	Date
Aaron Pianta	10423		20 December 2022

Revision/Checking History			
Revision No	Date	Checked By	Issued By
Draft	26 October 2021	Jason Webster	Ethan Grice
Draft-2	28 July 2022	Trent Purdon	Aaron Pianta
A	4 August 2022	Aaron Pianta	Ethan Grice
B	20 December 2022	Scott Newland	Aaron Pianta

Distribution		
Recipient	No of Copies	Method
Matt Grbcic – MG Group	1	PDF

The information contained within this report is provided in good faith in the belief that no information, opinions or recommendations made are misleading. All comments and opinions given in this report are based on information supplied by the client, their agent and third parties.

© Copyright of OSKA Civil Consultants. No part of this document can be reproduced without the prior permission in writing of the Director of OSKA Civil Consultants.

CONTENTS

1.0	INTRODUCTION.....	1
1.1	Background	1
2.0	SITE DESCRIPTION.....	1
2.1	Location.....	1
2.2	Site Topography.....	2
2.3	Vegetation and Land Use	2
2.4	Proposed Development	3
3.0	ROADWORKS	3
4.0	EARTHWORKS	4
5.0	STORMWATER	4
6.0	SEWERAGE	5
7.0	WATER	6
8.0	ELECTRICAL AND TELSTRA	7
9.0	CONCLUSIONS.....	7

TABLES

Table 1:	Site Description	1
Table 2:	Proposed Development Sewerage Demand.....	5
Table 3:	Proposed Development Water Demand	6

FIGURES

Figure 1:	Locality Plan (Source: Nearmap).....	2
Figure 2:	Aerial Image of the Site (Source: Nearmap – Image taken 12 October 2021).....	3

APPENDICES

Appendix A	Project Land Services, <i>Contour and Detail Survey</i> (Ref: 21035.1)
Appendix B	TVS Architects, <i>Ground Floor Plan</i> , (Ref: 6140.1S.02.001)
	TVS Architects, <i>Site Plan</i> , (Ref: 6140.1S.01.001)
Appendix C	Preliminary Roadworks Layout (Ref: OSK5554/P009/B)
	Preliminary Bulk Earthworks Layout (Ref: OSK5554/P010/C)
	Preliminary Bulk Earthworks Sections (Ref: OSK5554/P011/C)
	Preliminary Civil Services Connection Plan (Ref: OSK5554/P012/B)
Appendix D	Dial Before You Dig Plans

1.0 INTRODUCTION

1.1 Background

OSKA Civil Consultants has been commissioned by Gold Coast 888 Trust to prepare an *Engineering Infrastructure Report* (EIR) to support a Development Application (DA) to Economic Development Queensland (EDQ) for the proposed medical precinct development (North Star) situated at the corner of Knowledge Street and Bonner Street, Southport. The subject site is described as Lot 3A-2 on Lot 9 on SP275512.

The proposed development is situated within the Southport Priority Development Area (PDA). The purpose of this report is to demonstrate that the proposed development can be connected to Council's existing stormwater drainage, sewerage, water supply and other utility services.

2.0 SITE DESCRIPTION

2.1 Location

The subject site is located on the corner of Knowledge Street and Bonner Street in the suburb of Southport. The site fronts Knowledge Street to the south-east, Bonner Street to the south-west with commercial lots to the north and east. The site covers a total combined area of 0.2554ha, with details as summarised in *Table 1* and as located in *Figure 1*.

Table 1: Site Description

Client	Lot and Property Description	Street Address
Gold Coast 888 Trust	Lot 9 On SP275512	Corner Knowledge Street and Bonner Street, Southport, QLD

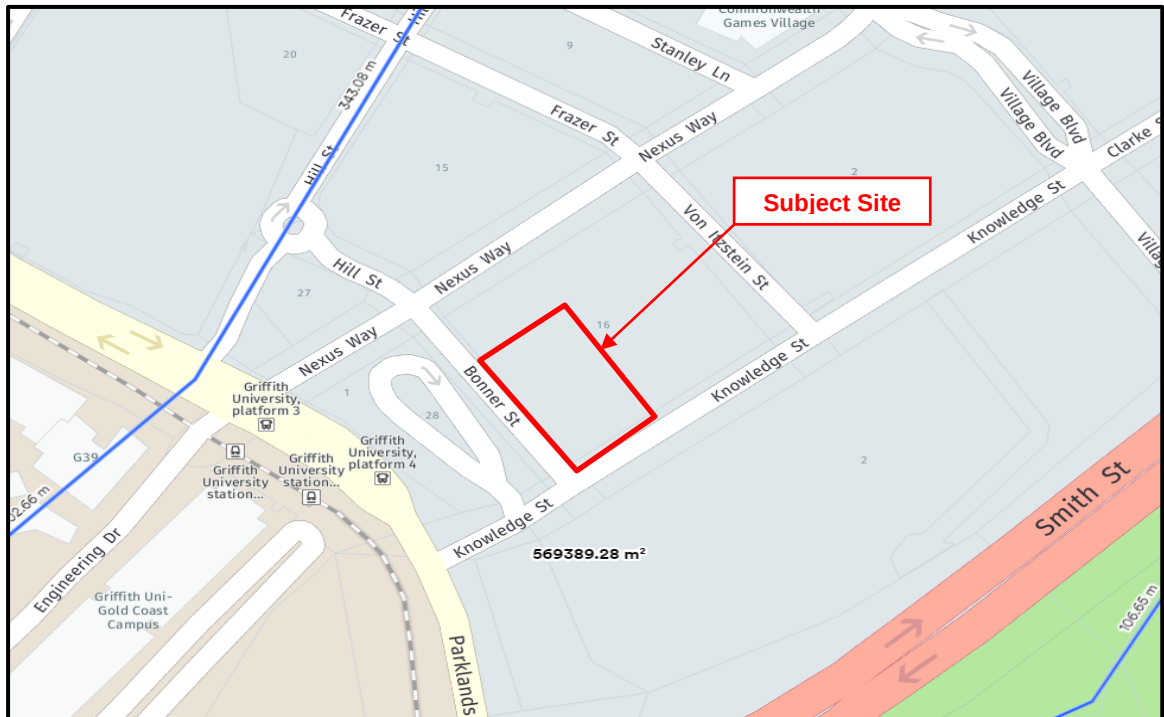


Figure 1: Locality Plan (Source: Nearmap)

2.2 Site Topography

The existing site has spot heights ranging from approximately RL 14.75m AHD to 20.25 m AHD and an average grade of 6.80%. The site generally slopes towards south-east. Based on the provided survey and aerial information, any stormwater runoff from site surfaces drains to Knowledge Street at the south-east of site.

Further information of the site survey has been provided by Project Land Services, *Contour and Detail Survey* (Ref: 21035.1) included as Appendix A.

2.3 Vegetation and Land Use

The subject site is currently a vacant lot. This site is covered by grassed areas and bitumen surfaces. Access to the site is gained from either Bonner Street to the south-west or Knowledge Street from the south-east.

An aerial photograph taken on the 12 October 2021 of the subject site is included in *Figure 2*.



Figure 2: Aerial Image of the Site (Source: Nearmap – Image taken 12 October 2021)

2.4 Proposed Development

The subject site is proposed to be a medical precinct development including health care areas, carparking areas, bar/café areas, commercial areas, and a function centre. The development will also include a services easement located to the north-west of the site.

Refer to Appendix B for the proposed architectural details prepared by TVS Architects, *Ground Floor Plan*, (Ref: 6140.1S.02.001-P) and *Site Plan*, (Ref: 6140.1S.01.001-N)

3.0 ROADWORKS

The proposed development will be accessed from Bonner Street via a 5.50m wide Vehicle Crossover in accordance with IPWEA Standard Drawings RS-049-051. A proposed service easement is located to the north of the site. For further details, see preliminary drawing showing the proposed roadworks as illustrated in the OSKA Consulting Group, Preliminary Roadworks Layout (Ref: OSK5554/P009/B) included in *Appendix C*.

4.0 EARTHWORKS

Earthworks shall be required for the proposed development. For further details, see the preliminary drawing showing the proposed earthworks as illustrated in the OSKA Consulting Group, Preliminary Bulk Earthworks Plan (Ref: OSK5554/P010/C) and Preliminary Earthworks Sections (Ref: OSK5554/P011/C) included in *Appendix C*. All earthworks will be designed generally in accordance with the requirements of CoGC City Plan Land Development Guidelines and the Australian Standards for Earthworks for Commercial and Residential Development (AS3798-2007).

5.0 STORMWATER

The site is defined as Lot 3A-2 on Lot 9 on SP275512 of the Gold Coast Parklands development and falls within the Knowledge Development precinct of the Gold Coast Parklands Masterplan. In conjunction with the Hyder Consulting Pty Ltd: Gold Coast Parklands Early Works & Trunk Infrastructure Flooding & Hydraulics report, approved 27 June 2014 by EDQ, Lot 3A-2 on Lot 9 of SP275512 is situated within the Biggera Creek Catchment 16 proposed 55% impervious development area (refer Section 5.2 of the Hyder report).

The proposed impervious area of the Gold Coast Parklands Redevelopment discharges to the Parkland bio-retention basin in Catchment 15 which now exists. As such the proposed development site impervious area, and mitigation of the stormwater runoff from the development, is accommodated in the existing bio-retention and detention system and no stormwater quality or quantity treatment is required for the proposed development.

6.0 SEWERAGE

The subject site will be serviced by a 150mm property connection from the existing 150mm uPVC sewer main located in Knowledge Street.

For further details, see drawings showing the existing sewer infrastructure and the proposed modifications to the existing network as illustrated in the OSKA Consulting Group, Preliminary Civil Services Connection Plan (Ref: OSK5554/P012/B) included in *Appendix C*.

In accordance with the SEQ Water Supply and Sewerage Design & Construction Code (SEQ WS&S D&C Code), the proposed sewerage demand has been calculated based on City of Gold Coast water and sewage demand table GFA rates for the uses summarised in Table 2.

Table 2 shows the demand upon the existing sewerage system from the development.

Table 2: Proposed Development Sewerage Demand

Land Use	GFA (m ²)	Loading (EP/100 sqm GFA)	Total EP	PWWF (L/s)
Commercial	4,439	1.68	74.58	1.795 L/s
Conference – Meeting Centre	121	4.47	5.41	
Medical Centre	3,978	1.68	66.83	
Cafe	196	4.29	8.41	
Total	7351		155.23	

$$\begin{aligned}\text{ADWF} &= 200\text{L/EP/d} \times \text{EP} \\ &= 31,046 \text{ L/d} \\ &= 0.359 \text{ L/s}\end{aligned}$$

$$\begin{aligned}\text{PWWF} &= 5 \times \text{ADWF} \\ &= 155,230 \text{ L/d} \\ &= 1.795 \text{ L/s}\end{aligned}$$

The proposed development will create an Average Dry Weather Flow (ADWF) of 0.359 L/s and a Peak Wet Weather Flow (PWWF) of 1.795 L/s. It is not anticipated that this discharge will have any adverse impact on Council's sewer network.

7.0 WATER

There is an existing 250mm PVC water main along Bonner Street. It is proposed to connect into this main and include a water meter and easement as per CoGC standards.

The existing water infrastructure and available water connections are illustrated on the OSKA Consulting Group, Preliminary Civil Services Connection Plan (Ref: OSK5554/P012/B) included in *Appendix C*.

The proposed demands upon the existing water network due to the proposed development have been calculated in accordance with the SEQ Water Supply and Sewerage Design & Construction Code (SEQ WS&S D&C Code) using the City of Gold Coast water and sewage demand table GFA rates for the uses summarised in Table 3.

Table 3: Proposed Development Water Demand

Land Use	GFA (m ²)	Loading (EP/100 sqm GFA)	Total EP
Commercial	4,439	1.68	74.58
Conference – Meeting Centre	121	4.47	5.41
Medical Centre	3,978	1.68	66.83
Cafe	196	4.29	8.41
Total	8,634		155.23

Peaking Factors (Commercial/Public)

MDMM/AD	= 1.06
PD/AD	= 1.12
PH/PD	= 2.07
PH/AD	= 2.32

Non Revenue Water (NRW) = 20 L/EP/d

Average Day Demand (AD) = (220L/EP/d + NRW) x EP
 = 240L/EP/d x EP
 = 37,255 L/d
 = 0.431 L/s

Peak Day Demand (PD) = (PD/AD) x AD
 = 1.12 x 37,255 = 41,726 L/d
 = 1.12 x 0.431 L/s = 0.483 L/s

Peak Hour Demand (PH) = (PH/AD) x AD
 = 2.32 x 37,255 L/d = 86,432 L/d
 = 2.32 x 0.431 L/s = 1 L/s

The proposed development will create a total Average Day Demand (AD) of 0.431 L/s, a Peak Day Demand (PD) of 0.483 L/s and a Peak Hour Demand (PH) of 1.0 L/s. The water infrastructure required to service the proposed development will need to be of sufficient capacity to cater for these flows. The firefighting requirements for this development area are Urban Area Flows: Commercial/Industrial: 30L/s for 4 hours.

8.0 ELECTRICAL AND TELSTRA

Fibre-Optic and Electrical services are available along Knowledge Street and Bonner Street. Load requirements and any necessary upgrades will need to be investigated by an electrical consultant as part of the detailed design for the proposed development.

The Dial Before You Dig searches for the existing services are included as *Appendix D*.

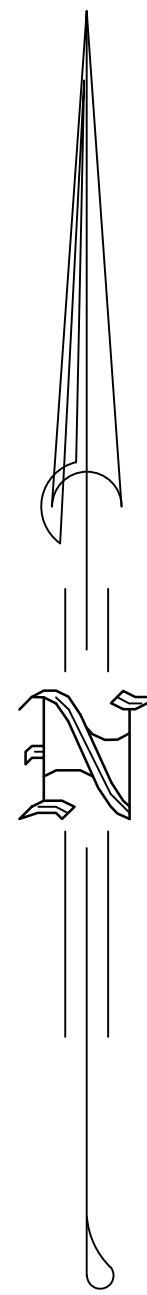
9.0 CONCLUSIONS

This Engineering Infrastructure Report has detailed the existing infrastructure and the provision of services to the proposed development and determined the proposed demand on the existing water and sewerage infrastructure. The location of the existing water and sewerage reticulation infrastructure as well as the proposed connection points for the development have been shown on the servicing plans in addition to the proposed roadworks.

APPENDIX

A

*Project Land Services
Contour and Detail Survey
(Ref: 21035.1)*



NEXUS STREET

BONNER STREET

VON ITZSTEIN STREET

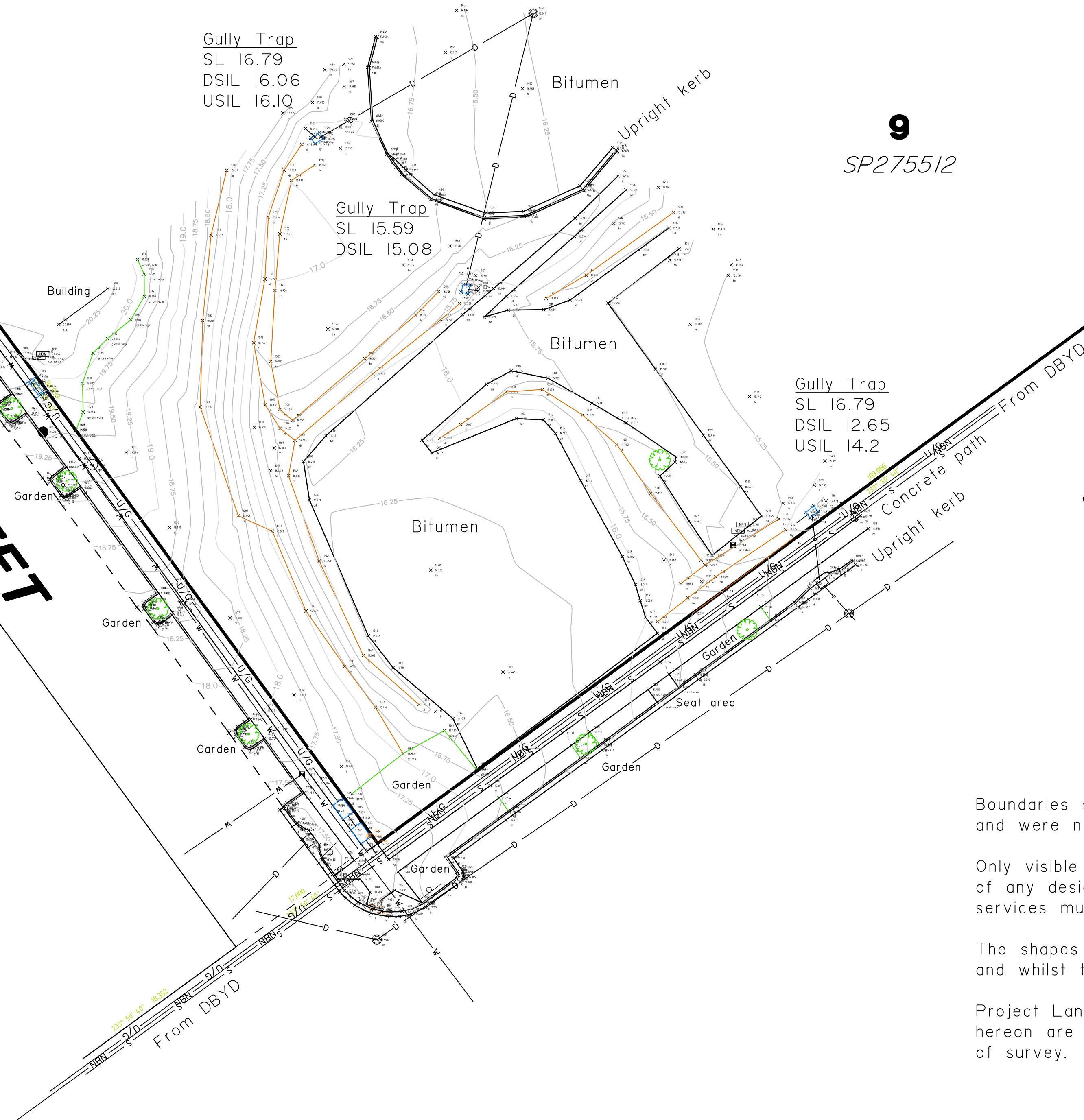
3
SP275512

9
SP275512

KNOWLEDGE STREET

10
SP275512

Legend	
Sewer	S
NBN	NBN
Electricity	E
UG Electr	U/G
Water	W
Electric Power Box	
Bollard	
Electric Light Pole	
Fire Hydrant	
Sewerage Manhole	
Stormwater Manhole	
Telstra Pit	
Water Meter	
Water Valve	
Gully Trap	
Survey Mark	
Temporary Bench Mark	
Bitumen surface	tn
Electricity Pit	
Tree	
Road sign	
Other Features noted on Face of Plan	



DISCLAIMER

Boundaries shown hereon are plotted from deed dimensions and were not reinstated at the time of survey.

Only visible services have been located. Before commencement of any design and construction works, the location of these services must be verified on site by the relevant authorities.

The shapes displaying services are symbolic representations and whilst they are accurately placed they are not to scale.

Project Land Services certify that the levels and detail shown hereon are an accurate representation of the site at the time of survey.



CLIENT	NORTHSTAR	NOTES	AMENDMENTS	DATE	COMPUTER FILE	
PROJECT	Contour and Detail Survey Corner of Bonner & Knowledge Streets Southport part of Lot 9 on SP275512	Level Datum - AHD PM110693 - 19.635m AHD Coordinate System - Arbitrary Azimuth - SP275512	A B C D E F G		DRAWN JTP	DATE 01/09/2021
					SHEET NO... 1 OF 1 ...SHEETS	SCALE 1:300 @ A1
					DRAWING No 21035.1	AMEND

APPENDIX

B

TVS Architects

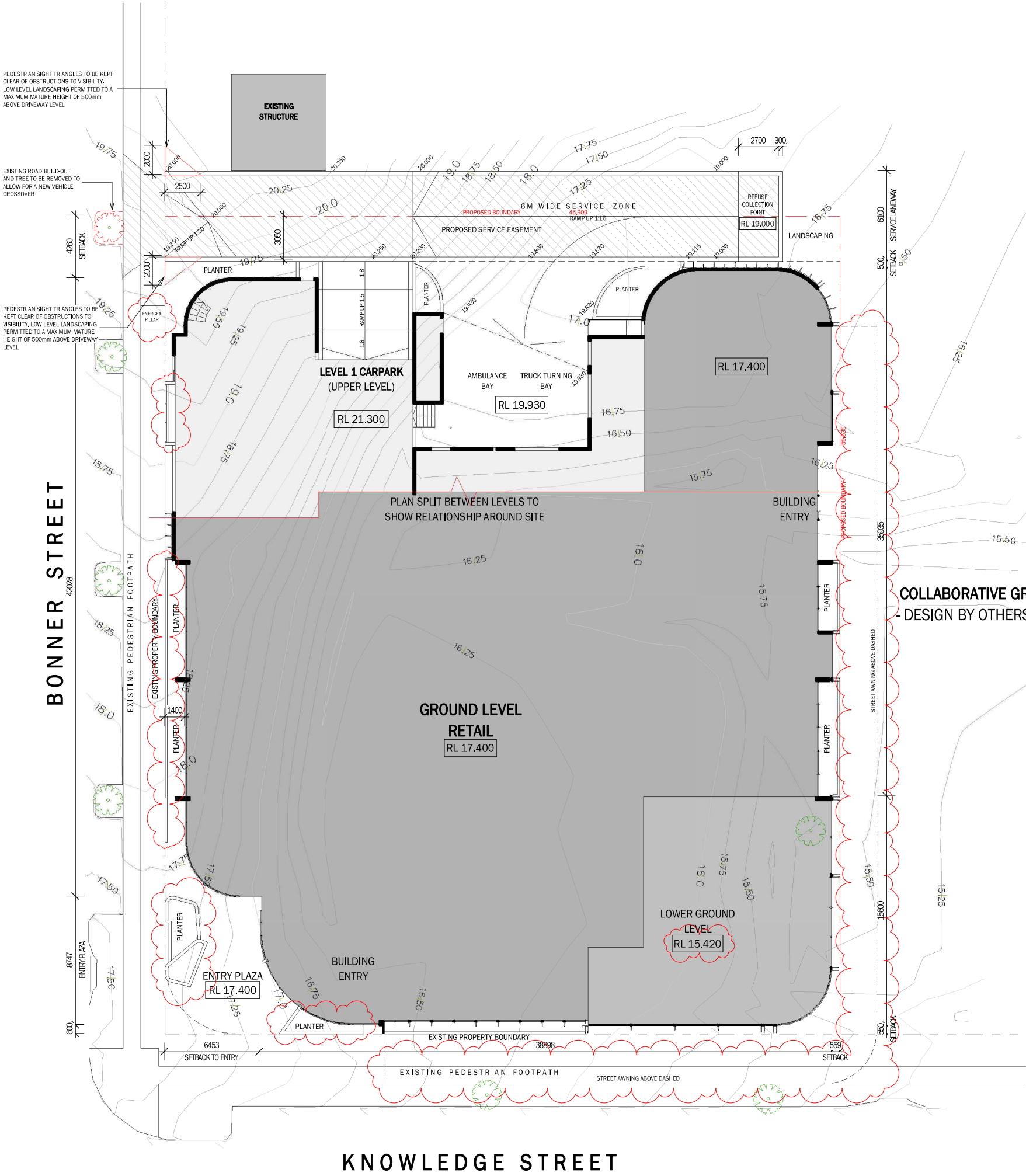
Ground Floor Plan

(Ref: 6140.1S.02.001)

TVS Architects

Site Plan

(Ref: 6140.1S.01.001)



1. The Client/Consultant/Author understands that they accept all responsibility and must check all details for the accuracy and information presented on this DWG file and/or electronically by TVS Architects.
2. The Architect accepts no liability for the DWG file or any other data or thermal sensor.
3. No changes to the file are allowed and any changes that are made by others will immediately and permanently remove any liability for the information presented on the drawing files.
4. The drawings should not be displayed in any way to the receiving parties for design purposes that are not directly related to this project.
5. The drawings should only be used by the consultant that have received them directly via email or on a web based distribution and should not be forwarded on to any other parties unless agreed to do so by TVS Architects.
6. The Client/Consultant/Author understands that all dimensions are to be verified on site prior to commencement of work. Normalised dimensions are to be used in preference to scaling off drawings.
7. Any drawing issued without a current revision date represents an unapproved copy of the original document.

LEGEND

Revision	Description	Date	Initials
N	Further Issues Response	16-12-22	CZ
M	Preliminary FI Response	07-12-22	CZ
L	Development Application	02-09-22	CZ
K	Prelodgement Updates	19-07-22	CZ
J	Amended Site Boundaries	28-03-22	CZ
I	General Amendments	14-12-21	CZ
H	Preliminary DA Set	30-11-21	CZ
G	Preliminary DA Set	28-10-21	CZ
F	Concept Design	11-10-21	CZ
E	Concept Design	06-10-21	CZ
D	Concept Design	30-09-21	CZ
C	Concept Design	23-09-21	CZ
B	General Amendments	02-08-21	CZ

TVS

SX

Brisbane
1/9 Edmondstone St, South Brisbane Q 4101
+61 07 3831 2116

Gold Coast
Level 9, 1 Corporate Ct, Bundall Q 4217
+61 07 5574 2266

tvсарchitects.com.au

ARCHITECTURE .
INTERIORS .
ENVIRONMENT .
MASTERPLANNING .

0 3 6 9 12 15

Scale (m) 1: 150 @A1
Scale (m) 1: 300 @A3

PROJECT
NORTH STAR
LOT 3A-2 CORNER OF KNOWLEDGE AND
BONNER STREET, GCHKP

CLIENT
GOLD COAST 888 TRUST

DRAWING TITLE
SITE PLAN

Project Architect/Designer	Drawn By	Date Drawn
MK	CZ	
Checked	Date Checked	Scale @ A1
-		1: 150
Drawing No.	Revision	
6140.1S.01.001	N	



GROUND FLOOR PLAN
Scale @ A1 1:100

OTVS architects 16/12/2022 3:03:59 PM

1. The Client/Consultant/Author understands that they accept all responsibility and must check all details for the accuracy and information presented on this DWG file provided electronically by TVS Architects.
2. The Architect accepts no liability for the DWG file or any other data or information derived therefrom.
3. No changes to the file are allowed and any changes that are made by others will immediately and permanently remove any liability for the information presented on the drawing files.
4. The drawings should not be displayed in any way to the receiving parties for design purposes that are not directly related to this project.
5. The drawings should only be used by the consultant that have received them directly via email or on a secure cloud distribution and should not be forwarded on to any other parties unless approved to do so by TVS Architects.
6. The Client/Consultant/Author understands that all dimensions are to be verified on site prior to commencement of work. Normalised dimensions are to be used in preference to scaling off drawings.
7. Any drawing issued without a current revision date represents an uncontrolled copy of the original document.

LEGEND

APPROXIMATE AREAS

TENANCIES: 1,590m²
COMMON (Excl Entry Foyer): 363m²
TOTAL CALCULATED GFA: 1,953m²

P	Further Issues Response	16-12-22	CZ
O	Preliminary FI Response	07-12-22	CZ
N	Preliminary FI Response	08-11-22	CZ
M	Development Application	03-08-22	CZ
L	Prelodgement Updates	19-07-22	CZ
K	Amendment Site Boundaries	28-03-22	CZ
J	General Amendments	14-12-21	CZ
I	Preliminary DA Set	08-11-21	CZ
H	Preliminary DA Set	28-10-21	CZ
G	Concept Design	11-10-21	CZ
F	Concept Design	06-10-21	CZ
E	Concept Design	28-09-21	CZ
D	Concept Design	23-09-21	CZ

Revision	Description	Date	Initials
----------	-------------	------	----------

TVS

Brisbane

1/9 Edmondstone St, South Brisbane Q 4101
+61 07 3831 2116

Gold Coast

Level 9, 1 Corporate Ct, Bundall Q 4217
+61 07 5574 2266

tvсарchitects.com.au

ARCHITECTURE .
INTERIORS .
ENVIRONMENT .
MASTERPLANNING .

0 2 4 10

Scale (m) 1: 100 @A1 Scale (m) 1: 200 @A3

PROJECT
NORTH STAR
LOT 3A-2 CORNER OF KNOWLEDGE AND
BONNER STREET, GCHKP

CLIENT
GOLD COAST 888 TRUST

DRAWING TITLE
GROUND FLOOR PLAN

Project Architect/Designer	Drawn By	Date Drawn
MK	CZ	
Checked	Date Checked	Scale @ A1
-		1: 100
Drawing No.	Revision	
6140.1S.02.001	P	

APPENDIX

C

OSKA Consulting Group
Preliminary Roadworks Layout
(Ref: OSK5554/P009-B)
Preliminary Bulk Earthworks Layout
(Ref: OSK5554/P010-C)
Preliminary Bulk Earthworks Sections
(Ref: OSK5554/P011-C)
Preliminary Civil Services Connection Plan
(Ref: OSK5554/P012-B)

ROADWORKS LEGEND

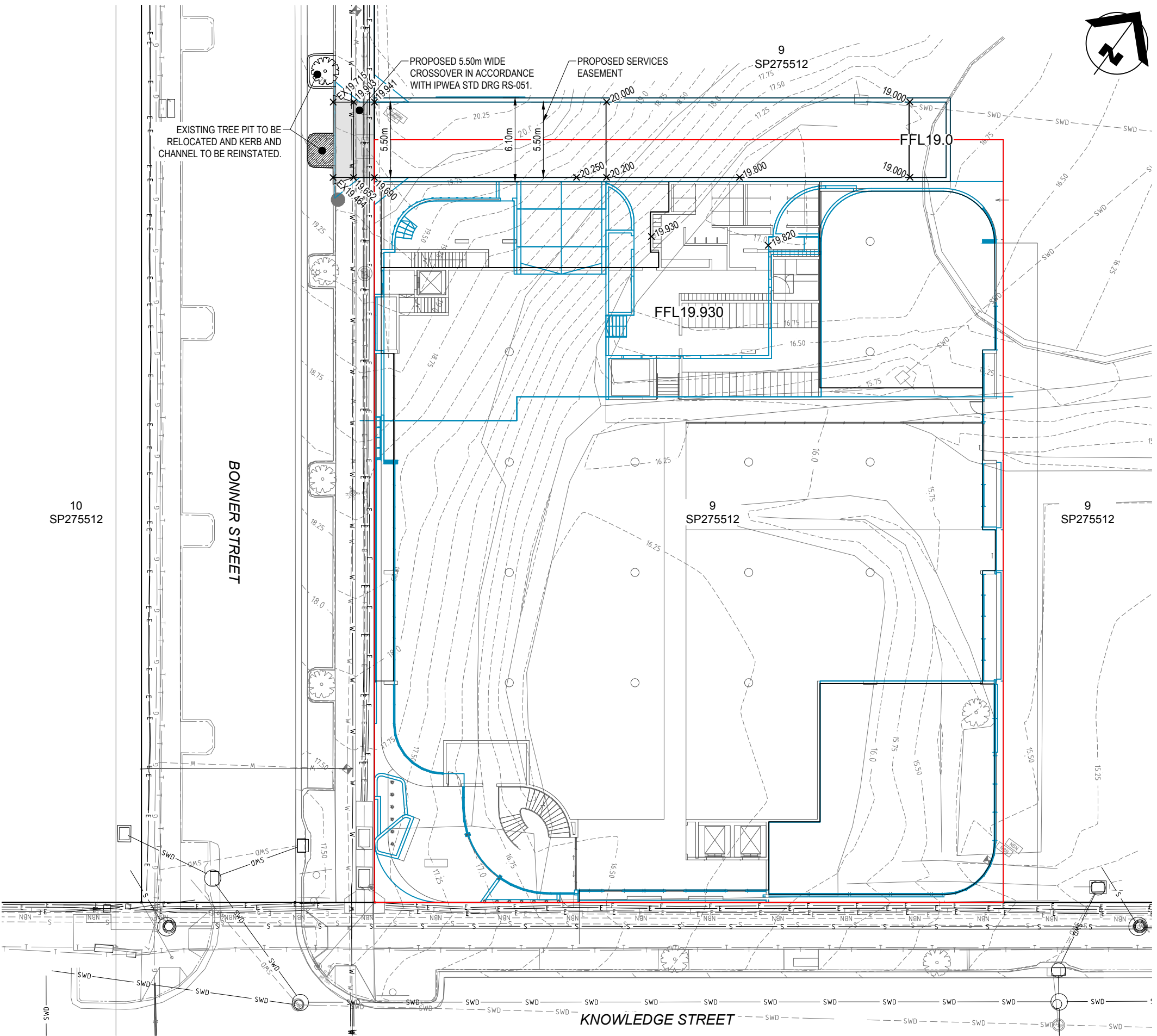
- PROPOSED VEHICLE CROSSOVER. REFER IPWEA STD DRG RS-049-051.
- 80.0 FINISHED SURFACE CONTOURS
- 80.0 EXISTING SURFACE CONTOURS
- SITE BOUNDARY
- ARCHITECTURAL (SITE PLAN)
- ARCHITECTURAL (GROUND FLOOR)

EXISTING SERVICES LEGEND

- S EXISTING SEWER
- W EXISTING WATER
- E - O/H EXISTING OVERHEAD ELECTRICAL
- T EXISTING TELSTRA CONDUIT
- G EXISTING GAS
- SWD EXISTING STORMWATER

REPORT ISSUE
NOT FOR CONSTRUCTION

CONTRACTOR TO DETERMINE AND
LOCATE ALL EXISTING SERVICES PRIOR
TO COMMENCEMENT OF WORKS



				CLIENT GOLD COAST 888 TRUST	DESIGN EG	DRAWN EG	APPROVED	TITLE PRELIMINARY ROADWORKS LAYOUT	PROJECT NO. OSK5554
				PROJECT NORTH STAR CORNER BONNER STREET AND KNOWLEDGE STREET SOUTHPORT, QLD, 4215					DWG NO. P009
B	28-07-22	ISSUED FOR REPORT							
A	25-10-21	ISSUED FOR REPORT							
ISSUE No.	DATE	AMENDMENT							

BULK EARTHWORKS LEGEND

- FFL

BEL

× 00.000
- AREA OF CUT (TO BULK EARTHWORKS SURFACE)

AREA OF FILL (TO BULK EARTHWORKS SURFACE)

— 80.0 —

--- 80.0 ---

— SITE BOUNDARY

--- EXTENT OF WORKS

— ARCHITECTURAL (SITE PLAN)

— ARCHITECTURAL (GROUND FLOOR)

→ → → PROPOSED TURFED SWALE DRAIN
- FINISHED FLOOR LEVEL

BULK EARTHWORKS LEVEL

FINISHED SURFACE SPOT LEVEL

AREA OF CUT (TO BULK EARTHWORKS SURFACE)

AREA OF FILL (TO BULK EARTHWORKS SURFACE)

— 80.0 —

--- 80.0 ---

FINISHED SURFACE CONTOURS

EXISTING SURFACE CONTOURS

SITE BOUNDARY

EXTENT OF WORKS

ARCHITECTURAL (SITE PLAN)

ARCHITECTURAL (GROUND FLOOR)

PROPOSED TURFED SWALE DRAIN

EXISTING SERVICES LEGEND

- S

W

E - O/H

T

G

SWD
- EXISTING SEWER

EXISTING WATER

EXISTING OVERHEAD ELECTRICAL

EXISTING TELSTRA CONDUIT

EXISTING GAS

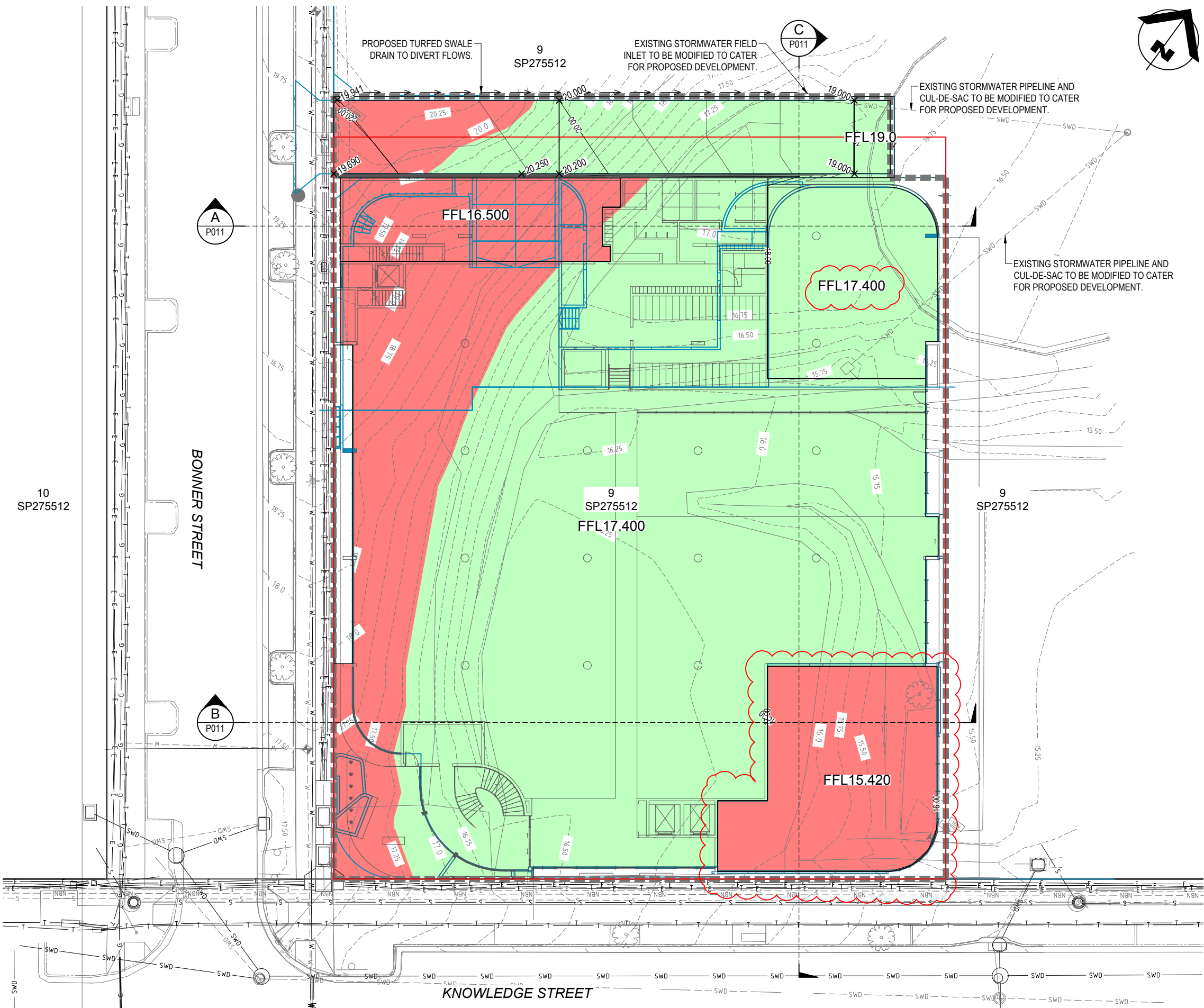
EXISTING STORMWATER

BULK EARTHWORKS VOLUMES	
ITEM	VOLUME (m³)
CUT	652
FILL	1888
BALANCE	1236 (IMPORT)

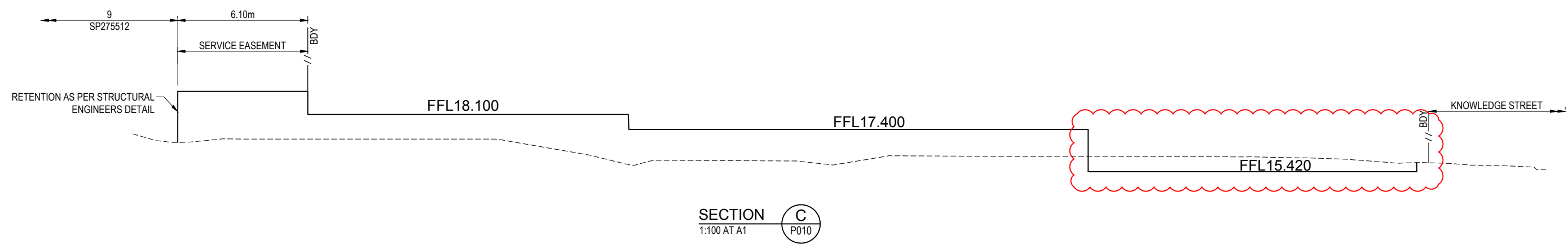
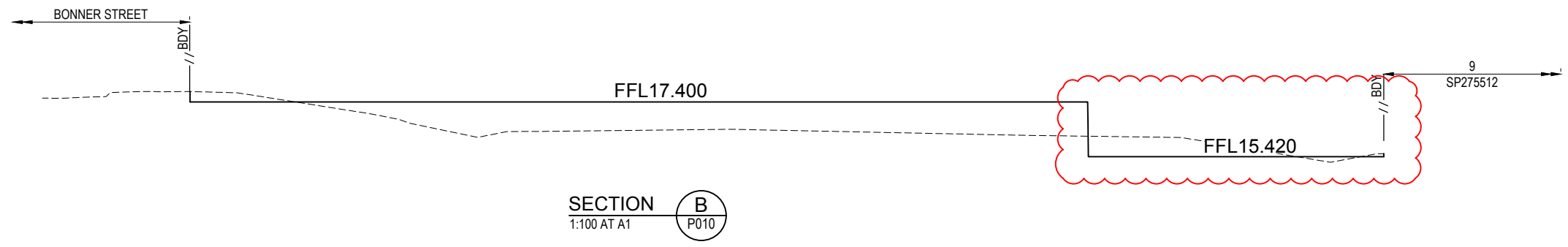
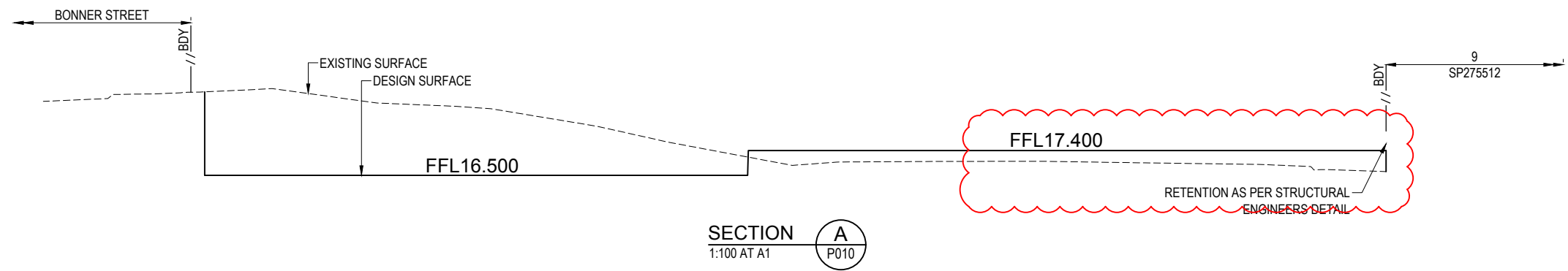
NOTE
PRELIMINARY BULK EARTHWORKS VOLUMES HAVE BEEN CALCULATED BY COMPARISON OF NATURAL SURFACE LEVELS TO FINISHED SURFACE MINUS 200mm.

REPORT ISSUE
NOT FOR CONSTRUCTION

CONTRACTOR TO DETERMINE AND LOCATE ALL EXISTING SERVICES PRIOR TO COMMENCEMENT OF WORKS

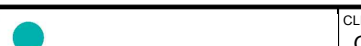


			CLIENT GOLD COAST 888 TRUST			DESIGN EG	DRAWN EG	APPROVED		TITLE PRELIMINARY BULK EARTHWORKS PLAN		PROJECT NO. OSK5554	
			PROJECT NORTH STAR CORNER BONNER STREET AND KNOWLEDGE STREET SOUTHPORT, QLD, 4215							SCALE 1:150 AT A1 1:300 AT A3		DWG NO. P010	ISSUE C
										0 5 10 15m			
ISSUE No.	DATE	AMENDMENT											
C	20-12-22	EARTHWORKS LEVELS AMENDED											
B	28-07-22	ISSUED FOR REPORT											
A	25-10-21	ISSUED FOR REPORT											



REPORT ISSUE
NOT FOR CONSTRUCTION

CONTRACTOR TO DETERMINE AND
LOCATE ALL EXISTING SERVICES PRIOR
TO COMMENCEMENT OF WORKS

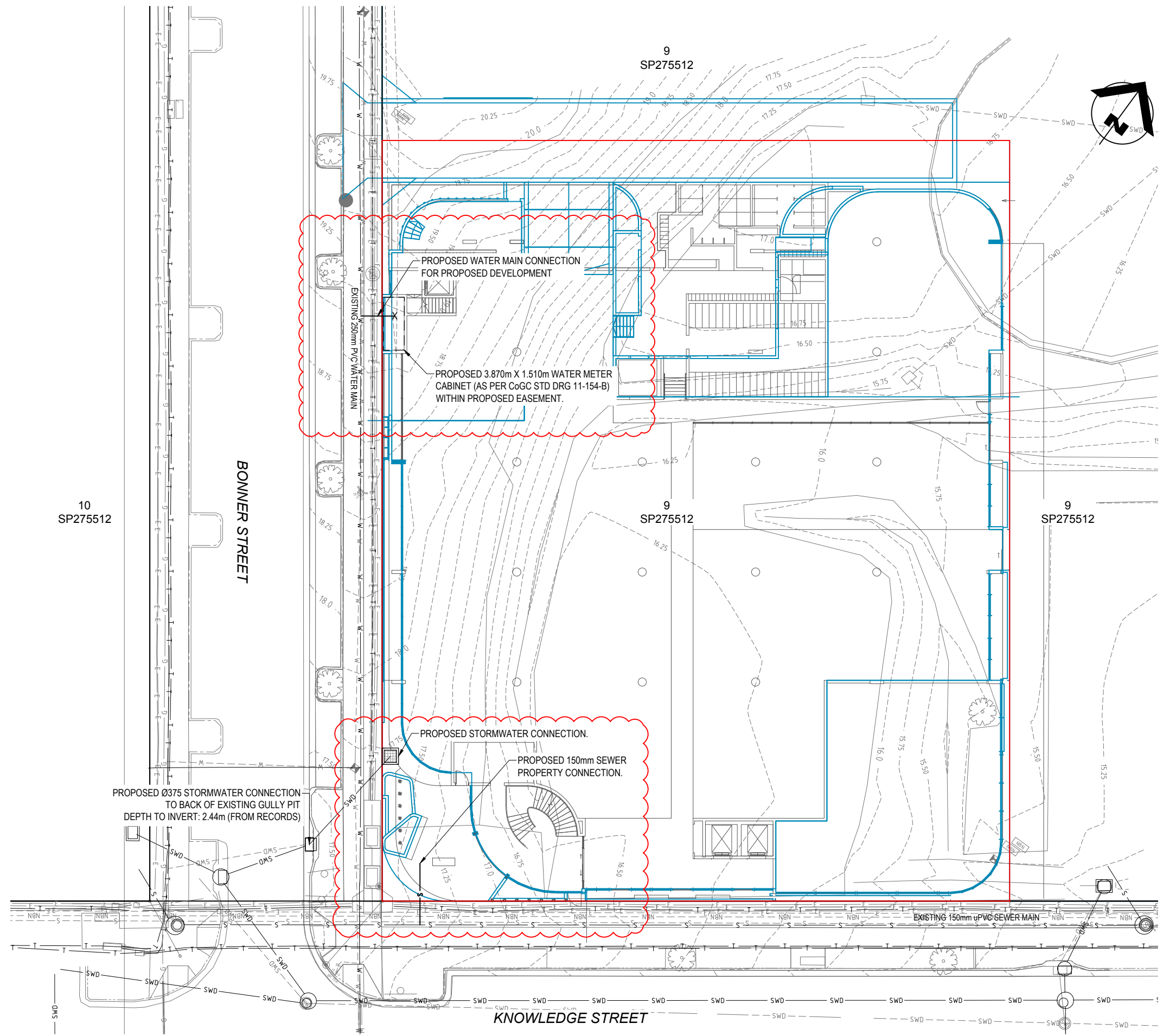
				CLIENT GOLD COAST 888 TRUST	DESIGN EG	DRAWN EG	APPROVED	TITLE PRELIMINARY BULK EARTHWORKS SECTIONS	PROJECT NO. OSK5554	
C	20-12-22	SECTIONS UPDATED TO SUIT REVISED ARCHITECTUAL PLANS		PROJECT NORTH STAR CORNER BONNER STREET AND KNOWLEDGE STREET SOUTHPORT, QLD, 4215				SCALE 1:100 AT A1 1:200 AT A3 	DWG NO. P011	ISSUE C
B	28-07-22	ISSUED FOR REPORT								
A	25-10-21	ISSUED FOR REPORT								
ISSUE No.	DATE	AMENDMENT								

WATER RETICULATION LEGEND

- POTABLE WATER MAIN
- PROPOSED EASEMENT
- PROPOSED SEWER MAIN & PROPERTY CONNECTION BRANCH
- PROPOSED SEWER MAINTENANCE HOLE
- EXISTING SURFACE CONTOURS
- PROPOSED STORMWATER DRAINAGE
- SITE BOUNDARY
- ARCHITECTURAL (SITE PLAN)
- ARCHITECTURAL (GROUND FLOOR)

EXISTING SERVICES LEGEND

- EXISTING SEWER
- EXISTING WATER
- EXISTING OVERHEAD ELECTRICAL
- EXISTING TELSTRA CONDUIT
- EXISTING GAS
- EXISTING STORMWATER



REPORT ISSUE
NOT FOR CONSTRUCTION

CONTRACTOR TO DETERMINE AND
LOCATE ALL EXISTING SERVICES PRIOR
TO COMMENCEMENT OF WORKS

				CLIENT	GOLD COAST 888 TRUST	DESIGN	EG	DRAWN	EG	APPROVED	TITLE	PRELIMINARY CIVIL SERVICES CONNECTION PLAN	PROJECT NO.	OSK5554	
				PROJECT	NORTH STAR CORNER BONNER STREET AND KNOWLEDGE STREET SOUTHPORT, QLD, 4215								DWG NO.	ISSUE	
B	20-12-22	UPDATED LAYOUT												P012	B
A	28-07-22	ISSUED FOR REPORT													
ISSUE No.	DATE	AMENDMENT													

APPENDIX

D

Dial Before You Dig Plans



Legend | Scale: 1:2554



- Enquiry Area
- AARNet Fibre Optic Assets
- AARNet Power Assets
- Cadastre

DISCLAIMER: While reasonable measures have been taken to ensure the accuracy of the information contained in this plan response, neither AARNet or 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.



Legend | Scale: 1:1500



- Enquiry Area
- AARNET Fibre Optic Assets
- AARNET Power Assets
- Cadastre

DISCLAIMER: While reasonable measures have been taken to ensure the accuracy of the information contained in this plan response, neither AARNET or 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.

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

For Emergency Situations
please call 13 19 62



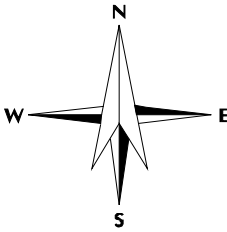
DBYD

Sequence: 203960797
Date: 12/10/2021

Scale: 1:1538
OVERVIEW

For a full list of Map
Symbols, please
refer to the supplied
DBYD Symbology
Legend page

AS5488 Category “D” Plan



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.

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

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

For Emergency Situations
please call 13 19 62

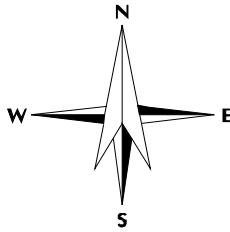


DBYD

Sequence: 203960797
Date: 12/10/2021
Scale: 1:500
Tile No: 1

For a full list of Map
Symbols, please
refer to the supplied
DBYD Symbology
Legend page

AS5488 Category “D” Plan



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.

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

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

For Emergency Situations
please call 13 19 62

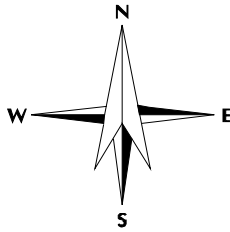


DBYD

Sequence: 203960797
Date: 12/10/2021
Scale: 1:500
Tile No: 2

For a full list of Map
Symbols, please
refer to the supplied
DBYD Symbology
Legend page

AS5488 Category “D” Plan



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.

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

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

For Emergency Situations
please call 13 19 62

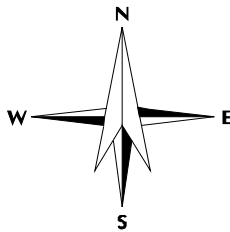


DBYD

Sequence: 203960797
Date: 12/10/2021
Scale: 1:500
Tile No: 3

For a full list of Map
Symbols, please
refer to the supplied
DBYD Symbology
Legend page

AS5488 Category "D" Plan



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.

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

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

For Emergency Situations
please call 13 19 62

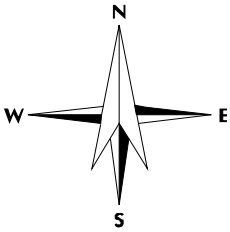


DBYD

Sequence: 203960797
Date: 12/10/2021
Scale: 1:500
Tile No: 4

For a full list of Map
Symbols, please
refer to the supplied
DBYD Symbology
Legend page

AS5488 Category “D” Plan



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.

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

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

For Emergency Situations
please call 13 19 62

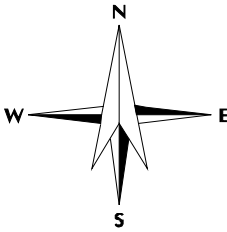


DBYD

Sequence: 203960797
Date: 12/10/2021
Scale: 1:500
Tile No: 5

For a full list of Map
Symbols, please
refer to the supplied
DBYD Symbolgy
Legend page

AS5488 Category "D" Plan



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.

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

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

For Emergency Situations
please call 13 19 62

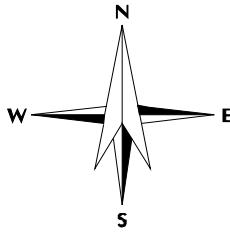


DBYD

Sequence: 203960797
Date: 12/10/2021
Scale: 1:500
Tile No: 6

For a full list of Map
Symbols, please
refer to the supplied
DBYD Symbology
Legend page

AS5488 Category “D” Plan



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.

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

To: Ethan Grice
Phone: Not Supplied
Fax: Not Supplied
Email: egrice@oska.net.au

Dial before you dig Job #:	30677810	 DIAL BEFORE YOU DIG www.1100.com.au
Sequence #	203960798	
Issue Date:	12/10/2021	
Location:	16 Nexus Way , Southport , QLD , 4215	

Indicative Plans

1

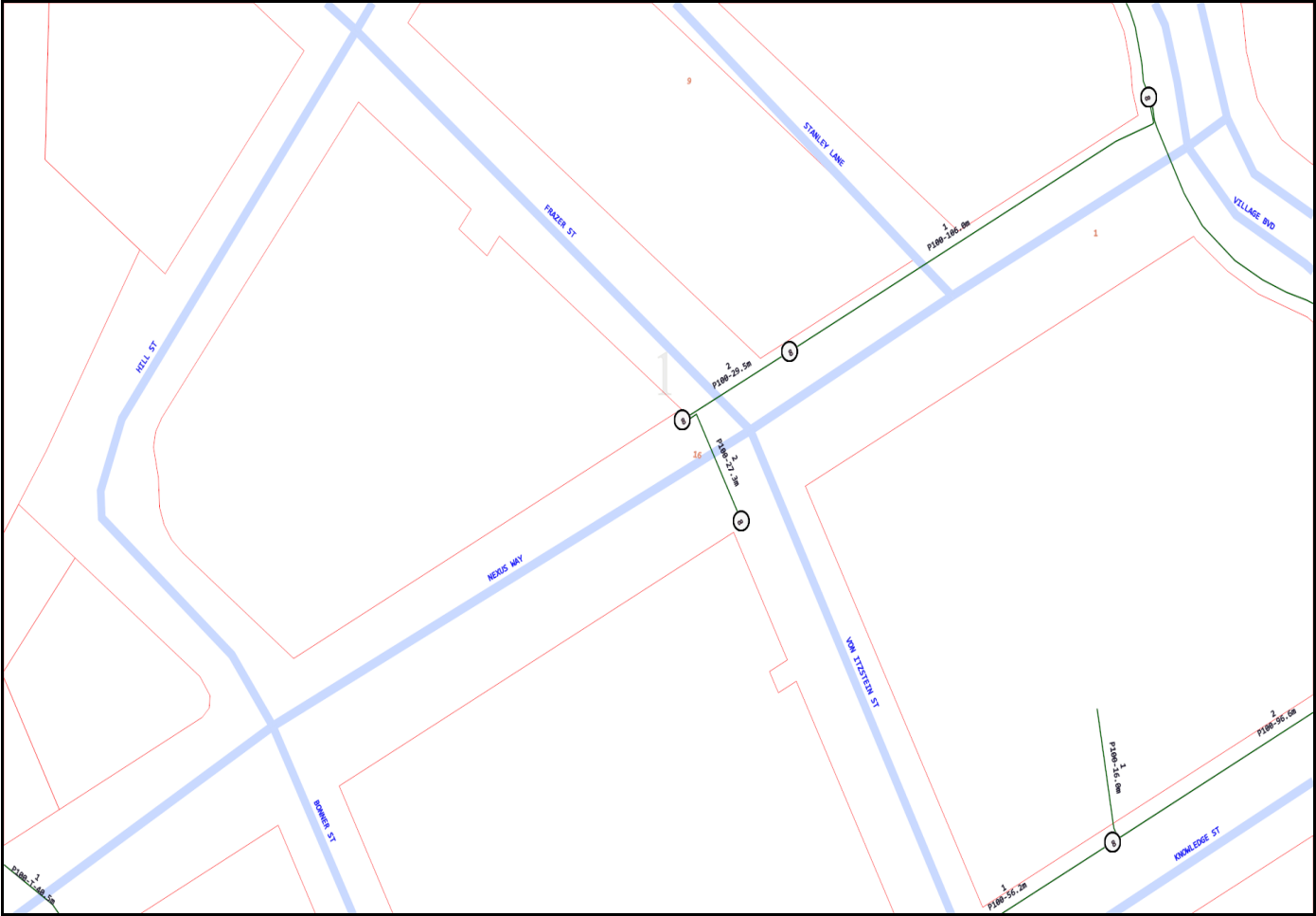
2

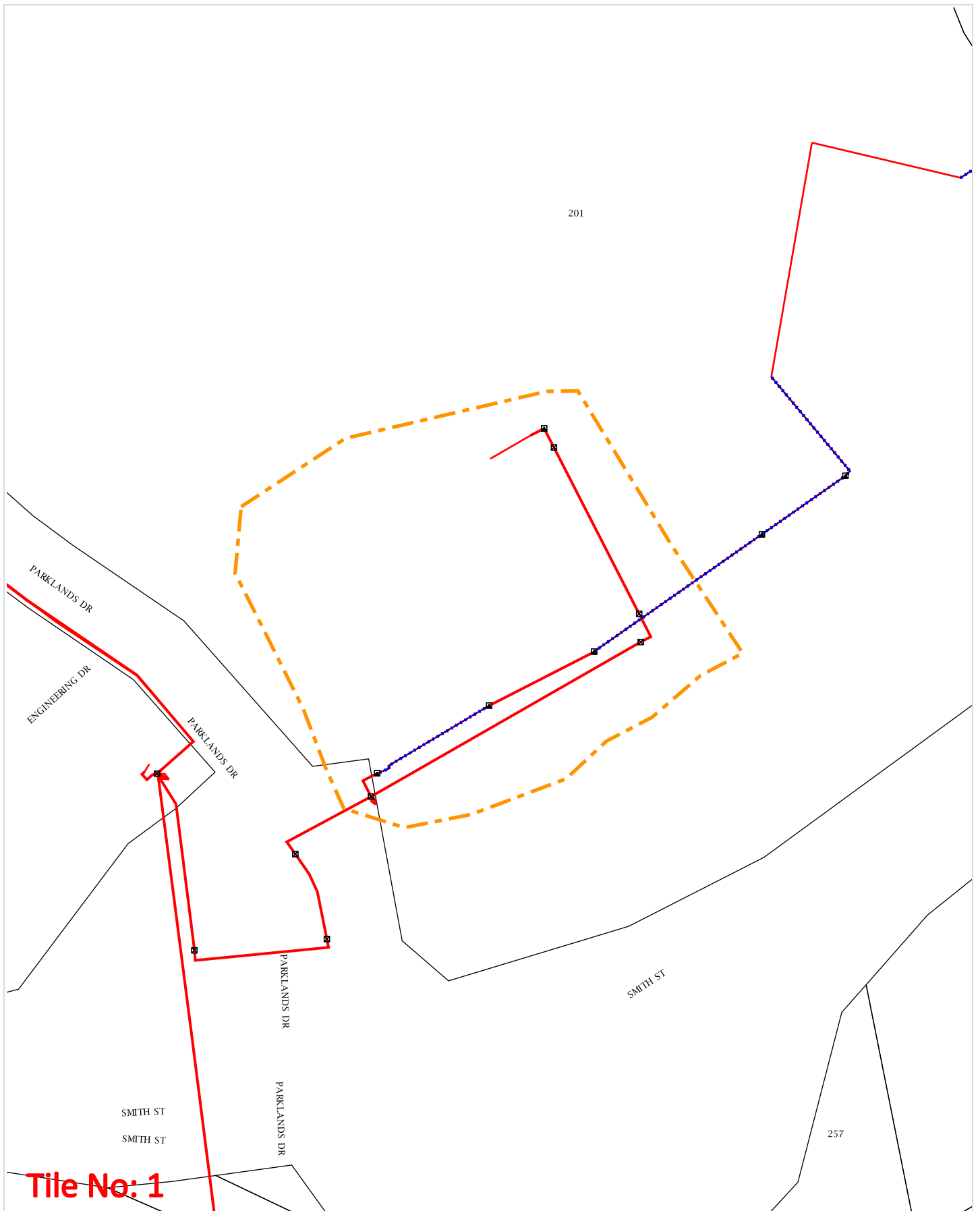


LEGEND



	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





WARNING: This document is confidential and may also be privileged. Confidentiality nor privilege is not waived 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 our records is believed to be accurate, but no responsibility is assumed for any error or omission. Optus Plans and information supplied are valid for 30 days from the date of issue. If this timeline has elapsed, please raise a new enquiry.

Sequence Number: 203960799

Date Generated: 12 Oct 2021



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





Tile No: 1

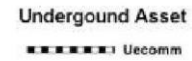
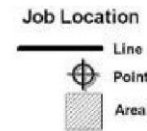
Uecomm Underground Cable

Scale: 1:2500

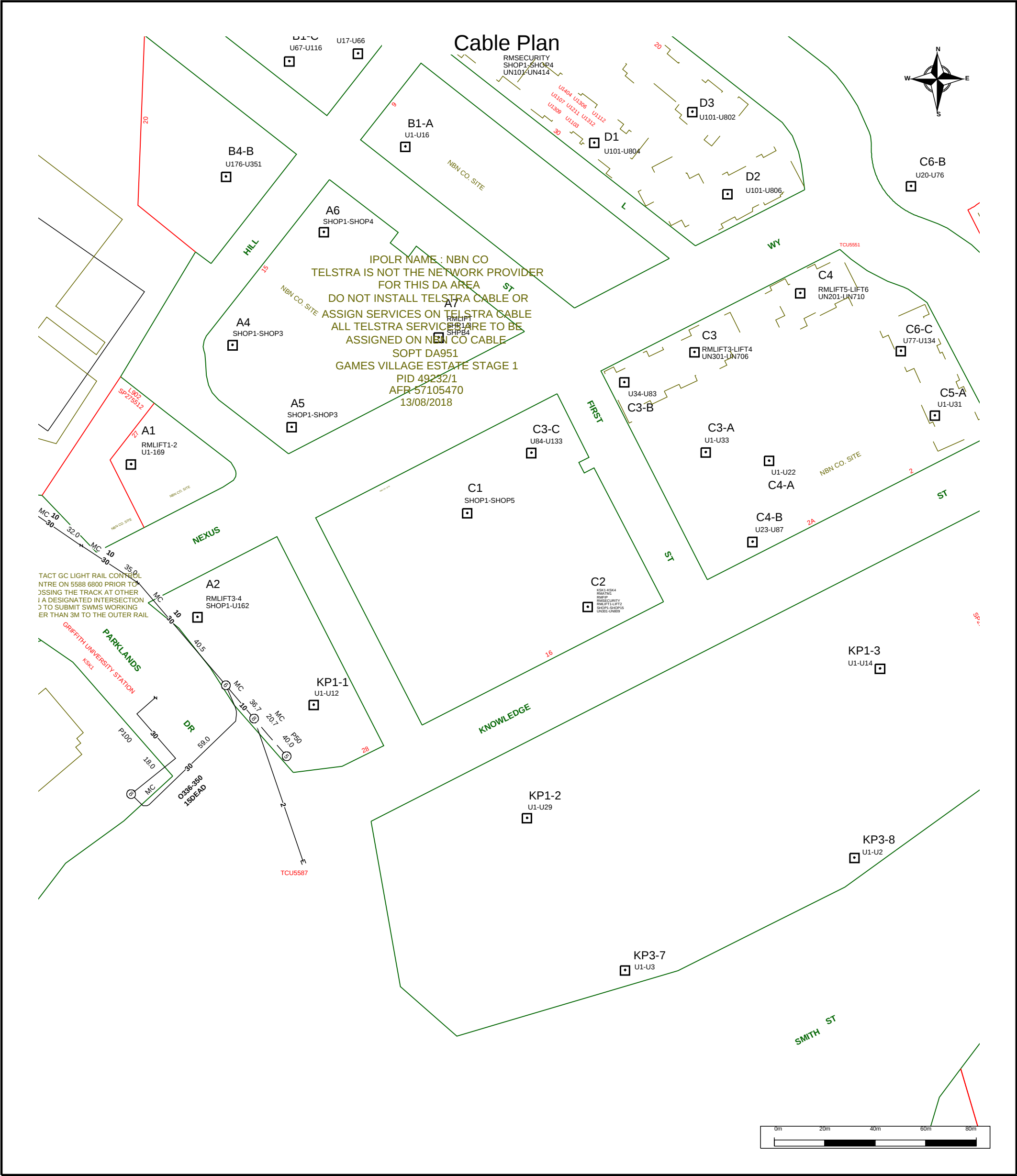
Printed on: 12 Oct 2021

Sequence Number: 203960799

Location: 16 Nexus Way, Southport, QLD 4215



This document is confidential 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 our records is believed to be accurate, but no responsibility is assumed for any error or omission.



	For all Telstra DBYD plan enquiries - email - Telstra.Plans@team.telstra.com For urgent onsite contact only - ph 1800 653 935 (bus hrs)	Sequence Number: 203960800
	TELSTRA CORPORATION LIMITED A.C.N. 051 775 556	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.
Generated On 12/10/2021 11:25:44		

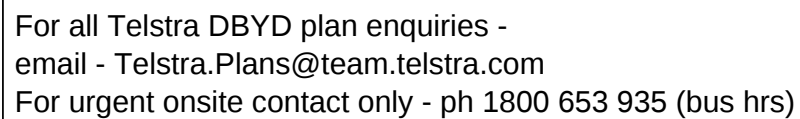
The above plan must be viewed in conjunction with the Mains Cable Plan on the following page

WARNING - Due to the nature of Telstra underground plant and the age of some cables and records, it is impossible to ascertain the precise location of all Telstra plant from Telstra's plans. The accuracy and/or completeness of the information supplied can not be guaranteed as property boundaries, depths and other natural landscape features may change over time, and accordingly the plans are indicative only. Telstra does not warrant or hold out that its plans are accurate and accepts no responsibility for any inaccuracy shown on the plans.

It is your responsibility to locate Telstra's underground plant by careful hand pot-holing prior to any excavation in the vicinity and to exercise due care during that excavation.

Please read and understand the information supplied in the duty of care statement attached with the Telstra plans. TELSTRA WILL SEEK COMPENSATION FOR LOSS CAUSED BY DAMAGE TO ITS PLANT.

Telstra plans and information supplied are valid for 60 days from the date of issue. If this timeframe has elapsed, please reapply for plans.



Generated On 12/10/2021 11:25:46

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.

Telstra plans and information supplied are valid for 60 days from the date of issue. If this timeframe has elapsed, please reapply for plans.

12/10/2021

Company:
Ethan Grice
Varsity Parade
Varsity Lakes
QLD 4227

egrice@oska.net.au

Dear Ethan Grice

Sequence Number: 203960801
Worksite Address: 16 Nexus Way
Southport
QLD 4215

RE: REQUEST FOR APA GROUP (APA) UNDERGROUND DIAL BEFORE YOU DIG

Dear Sir/Madam

In response to the above enquiry we wish to confirm that APA **operates underground plant** (Mains and / or Services) at or in the vicinity of the above address.

Please check that the following map represents the area you requested - if the area is not correct please contact our Dial Before You Dig Officer - 1800 085 628. If works are proposed adjacent to any underground plant operated by APA please ensure compliance with the attached "DUTY OF CARE"

Please find enclosed the following information in support of the above: -

1. A location map of the **suburb** the service is in and an A4 location map showing the **status** of APA underground plant (Mains and / or Services) adjacent to the subject site
2. DUTY OF CARE statement which forms **an integral part** of any information supplied by APA

For **GAS EMERGENCIES 24 HOURS - 1800 GAS LEAK (1800 427 532)**

Please note that as work on APA underground plant is ongoing any information supplied on their status can only be considered current for **30 days from the date of this response**. Expired locations, i.e., over 30 days from the date of this response, require a new Dial Before You Dig request to validate location information.

Should you have any questions with **regards to the attached information** please contact our Dial Before You Dig officer - 1800 085 628.

For any excavation works, including vacuum excavations, an "Authority to Work" Permit may be required and a Site Watch may need to be scheduled.

A minimum of 5 business days' notice is required to process permit applications. Permit applications can be made by: -

Post: Permit Applications QLD, PO Box 885 Hamilton Central QLD 4007 or

Email: permitsqld@apa.com.au or Phone: (07) 3215 6644 though an application will most likely be required

Charges may apply for Site Watch requests. Your sequence number may be requested when making your booking, please have this available when you request either a mains location or site watch.

For other enquiries please contact your gas retailer

To find out who your retailer is call 1800 657 567

Warning: if there are high or transmission pressure gas mains present in the vicinity of your area of interest, an APA employee must be in attendance during any excavation within 3 metres of high or transmission pressure mains, and an "Authority to Work" permit must be issued prior to work commencing.

Please contact us for a permit to work request if you believe your work is within this zone, by completing the "Authority to Work" request form attached and sending to APA. 5 days' notice is required prior to the commencement of any excavation to assess and allocate resources. Contact phone numbers are shown at the end of the notice of location.

Please Note: For some DBYD enquiries, you might receive 2 responses from the APA Group. Please read both responses carefully as they will relate to different assets. It is your responsibility to action all requirements set out in APA Group responses.

Please take some time to review the entire response document and check the information supplied and please let us have any feedback by sending an email to DBYDNetworksAPA@apa.com.au or contacting us direct on 1800 085 628.

Yours faithfully

Dial Before You Dig Officer
APA Group

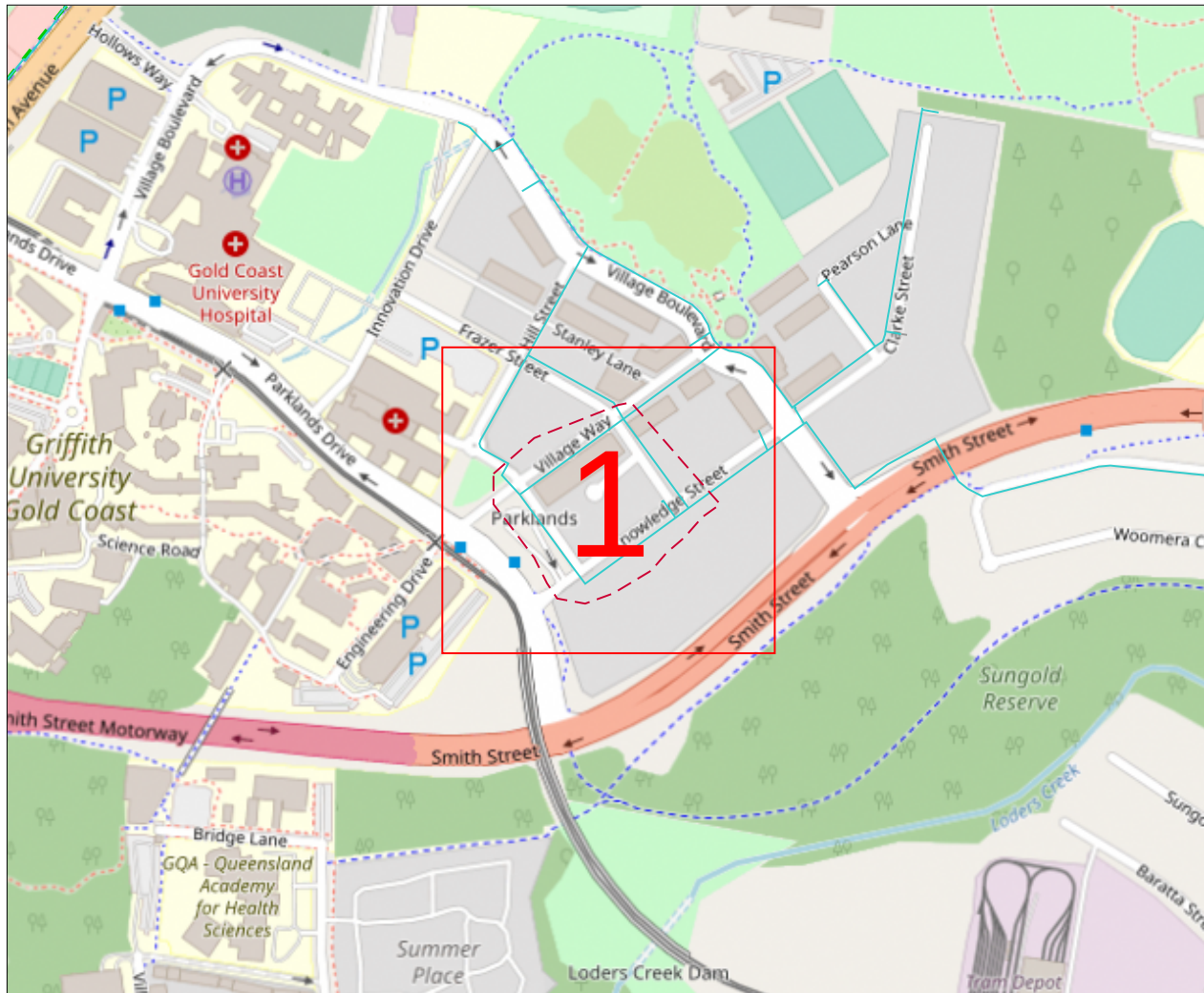
Email DBYDNetworksAPA@apa.com.au
Ph. 1800 085 628

12/10/2021

SCALE: DO NOT SCALE

REF NO: 203960801

As work on APA underground plant is ongoing any drawing with an issue date of more than 30 days previous can no longer be considered valid. All persons planning civil works on any site are advised to contact APA to confirm location. All underground gas pipelines are the property of APA & are not to be accessed by unauthorised persons. All care is taken with preparation of the drawings & no responsibility is accepted for errors or omissions



Enquiry: 203960801

Papersize: A4 Scale: 1: 6000

0 0.07km



Data Source

Pipeline Data Copyright APA Group, Property Parcels Copyright QLD Government, UBD Imagery – Copyright Sensis, DBYD Dig Location provided by DBYD.

operated by



This maps is created in colour and shall be printed in colour

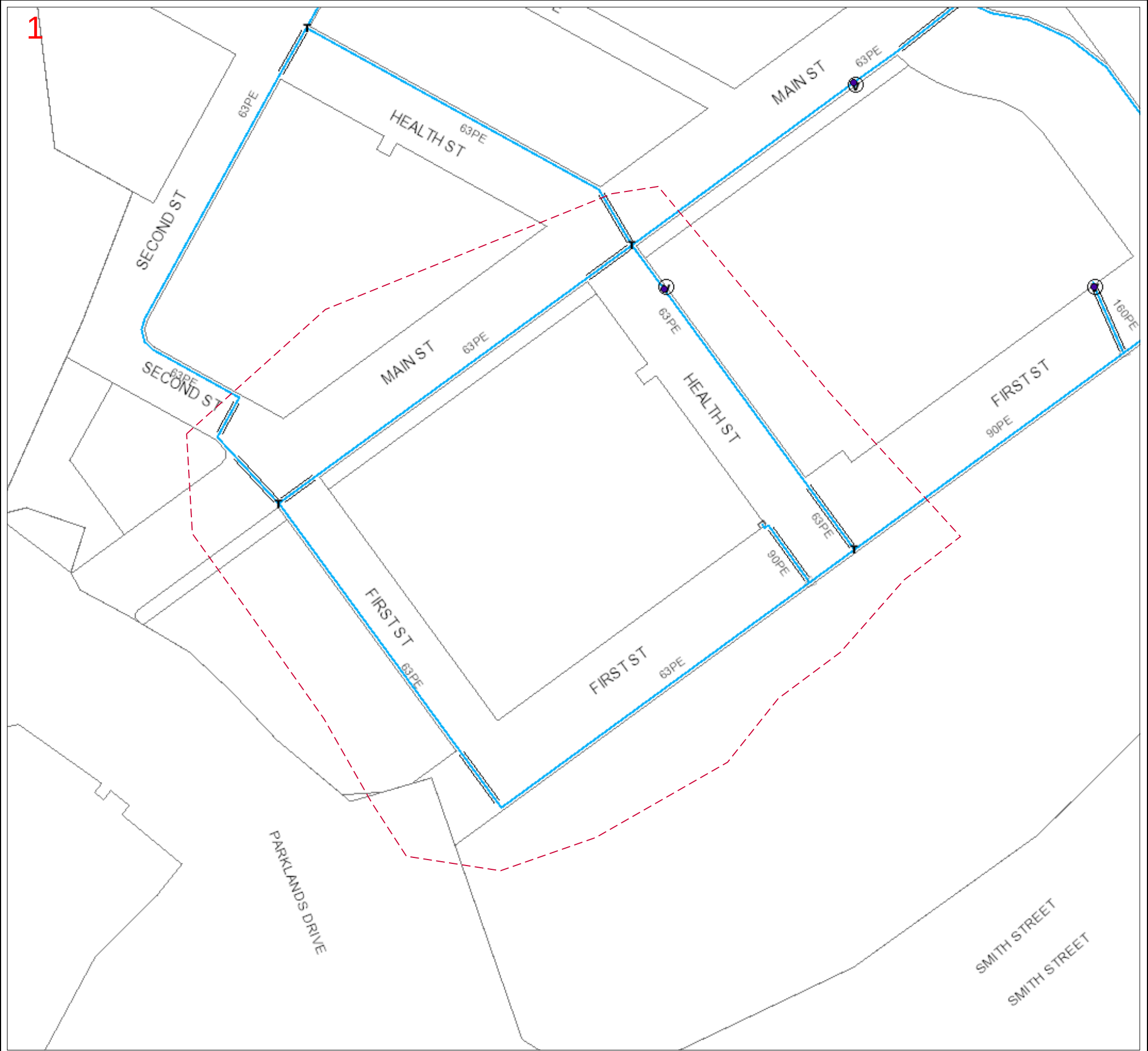
Legend

Distribution Main	Gas Assets and Fittings	Pipe Materials
- Class 900 Transmission - Class 600 Transmission - Class 300 Transmission - High Pressure Steel - High Pressure PE Trunk - High Pressure/ Class 500 - Medium Pressure PE/ Nylon - Medium Pressure (Allgas) - Low Pressure - LPG - TLP - Proposed/ Under Construction - Idle Gas Pipe - Abandoned Gas Pipe - Sleeve	- Gate Station - Regulator Station - Block/ Emergency Valve - Isolation Valve - Test Point - Syphon - Anode - Pipeline Marker - Trace Wire Point - Reducer - Pipe Connector/ Tee - Pipe Connector - End Cap	- CI Cast Iron - CU Copper - GAL Wrought Galvanised Iron - PGAL Poly Coated Wrought Galvanised Iron - ST Steel - NY/ NY11 Nylon - PE Polyethylene - MDPE Medium Density Polyethylene - HDPE High Density Polyethylene - DN Nominal Diameter - OD Outside Diameter

Examples: 40PE in DN80 CI 40mm Polyethylene in an 80mm (Nominal Diameter) Cast Iron Sleeve
63PE INS 63mm Polyethylene inserted in another pipe

Line/ Polygon Request

APA Group does not guarantee the accuracy or completeness of the map and does not make any warranty about the data. APA Group is not under any liability to the user for any loss or damage (including consequential loss or damage) which the user may suffer resulting from the use of this map.



203960801 Map Sheet: 1

Papersize: A3 Scale: 1: 1000

0 0.01km



Map Key:

1

This maps is created in colour and shall be printed in colour

Legend

Distribution Main

- Class 900 Transmission
- Class 600 Transmission
- Class 300 Transmission
- High Pressure Steel
- High Pressure PE Trunk
- High Pressure/ Class 500
- Medium Pressure PE/ Nylon
- Medium Pressure (Allgas)
- Low Pressure
- LPG
- TLP
- Proposed/ Under Construction
- Idle Gas Pipe
- Abandoned Gas Pipe
- Sleeve

(1) Medium Pressure in AGN/ Nylon in Allgas

Gas Assets and Fittings

- Gate Station
- Regulator Station
- Block/ Emergency Valve
- Isolation Valve
- Test Point
- Syphon
- Anode
- Pipeline Marker
- Trace Wire Point
- Reducer
- Pipe Connector/ Tee
- Pipe Connector
- End Cap

Pipe Materials

- | | |
|----------|-------------------------------------|
| CI | Cast Iron |
| CU | Copper |
| GAL | Wrought Galvanised Iron |
| PGAL | Poly Coated Wrought Galvanised Iron |
| ST | Steel |
| NY/ NY11 | Nylon |
| PE | Polyethylene |
| MDPE | Medium Density Polyethylene |
| HDPE | High Density Polyethylene |
| DN | Nominal Diameter |
| OD | Outside Diameter |

Examples: 40PE in DN80 CI 40mm Polyethylene in an 80mm (Nominal Diameter) Cast Iron Sleeve
63PE INS 63mm Polyethylene inserted in another pipe

Line/ Polygon Request

Data Source

Pipeline Data Copyright APA Group, Property Parcels Copyright QLD Government, UBD Imagery – Copyright Sensis, DBYD Dig Location provided by DBYD.

Working Around Gas Assets: Duty of Care and Responsibilities

It is illegal to interfere or tamper with gas infrastructure.

Offenders who interfere or tamper with gas infrastructure may be prosecuted under relevant legislation and there are very serious penalties for such offences

"Gas infrastructure" or "infrastructure" in this document refers to any infrastructure or property owned or operated by APA Group including, but not limited to natural gas mains, services and regulator/meter stations or regulator pits.

1. Planning Your Work

- a. The constructor must:
 - i. Request plans of APA Group infrastructure for a particular location at a reasonable time before construction begins (at least 5 business days);
 - ii. Design for minimal impact and ensure protection of APA Group infrastructure, this includes networks managed by APA on behalf of Australian Gas Networks and Allgas; and
 - iii. Contact APA Group if their infrastructure is in any way affected by planned construction activities.

2. Before You Start Work

- a. Please Note: You will be responsible to pay for the repair of **any damage by you to gas assets**.
- b. You must obtain **Dial Before You Dig (DBYD)** documentation before any on-site construction or excavation commences. This document is to be read in conjunction with the Dial Before You Dig plans and other relevant documentation.
APA Group will provide free site plans if an APA Group infrastructure location request is made to APA on **1800 085 628**
- c. If DBYD documents indicate you will be working within 3m of a high pressure or transmission gas pipeline, you must complete and submit the **Authority to Work Request** provided with your DBYD documentation **five (5) business days** prior to commencing the work. Requests **under** five (5) business days will incur extra charges.
- d. APA Group shall assess your Authority to Work Request and will inform you if a Site Watch is required. A Site Watch involves the presence of an APA representative at site to advise on locating and working around the asset. Where on-site location advice is provided, the constructor is responsible for all hand digging (potholing) to visually locate and expose APA Group infrastructure. Vacuum excavations may only be used if permission is granted by APA and if it is used on high pressure mains Site Watch will be required. **Site Watch services are charged at an hourly rate.**
- e. The principal contractor for the site must provide APA Group with a written construction methodology for all works impacting or encroaching on APA infrastructure. All construction methodology documents will be reviewed by APA Group prior to the commencement of site works. Construction methodology documents must be submitted as part of an Authority to Work Request (send to permitsqld@apa.com.au).
- f. Site Plans
 - i. Plans and/or details provided by APA Group through DBYD or otherwise are current for one (1) month from the date of dispatch and should be disposed of by shredding or any other secure disposal method after use.
 - ii. APA Group retains copyright in all plans and details provided in connection with any request.
 - iii. APA Group plans or other details are provided for the use of the applicant, its servants, employees, contractors and agents, and must not be used for any unauthorised purpose.
 - iv. APA Group plans are pipe indication diagrams only and indicate the presence of plant in the general vicinity of the geographical area shown. Exact ground cover and alignments cannot be given with any certainty as such levels can change over time.
 - v. APA Group, its servants, employees, or agents shall not be liable for any loss or damage caused or occasioned by the use of plans and/or details so supplied to the applicant/constructor, its servants, employees, contractors and/or agents, and the applicant/constructor agrees to indemnify APA Group against any claim or demand for any such loss or damage.
 - vi. The constructor is responsible for all infrastructure damage occasioned to APA Group infrastructure.
 - vii. APA Group reserves all rights to recover compensation for loss or damage caused by interference or damage, including consequential loss and damages to its property and gas infrastructure.
 - viii. All care is taken in the preparation of location drawings and plans, but NO responsibility is accepted by APA Group for errors or omissions.

3. Working in the Vicinity of a Gas Pipeline

a. Excavation near Gas Mains and Services

PLEASE NOTE: Unless otherwise approved, mechanical excavation is not permitted above, or within 600mm of either side of APA Group infrastructure.

- i. **Location of Gas Mains and Services:** Examining the DBYD documentation and other plans is not sufficient as reference points may change from the time of installation and recording on documentation. You MUST use appropriately qualified plant locators to accurately locate and prove the position of all assets and then validate these positions prior to commencing work. For all work to be done within 3.0 metres of APA Group infrastructure, the constructor is required to hand dig (pothole) and expose the plant, hence proving its exact location before work can commence. Vacuum excavation can cause failure of some types of gas mains and therefore APA Group must be contacted prior to any vacuum excavation.
Please note that new APA Group gas mains generally have a plastic warning tape or lightweight plastic board buried above the pipe but this is not the case for older mains or when pipe is laid by means of boring or located in conduit.
 - ii. **IMPORTANT NOTE: Not all gas services (i.e. pipe from gas main to a gas meter in an individual property) are captured on APA Plans. Gas services shown on plans are indicative only and do not pinpoint the exact location of APA's asset. A gas service may also cross a road to reach a property. To confirm the presence of a gas service, please contact the APA DBYD number below for further information.**
 - iii. **Installation of Utilities Parallel to Gas Mains and Services:** If construction work is being undertaken parallel to APA Group gas mains, then hand digging (potholing) at least every 4 m is required to establish the location of all gas mains. Nominal locations must be confirmed before work can commence. A minimum clearance of 600mm must be maintained from gas mains unless otherwise approved by APA. If an excavation exceeds the depth of the gas mains and it is likely that the covers or bedding material around the pipes will move, approval must be sought from APA Group's Capital Works team.
 - iv. **Installation of Utilities Across Gas Mains and Services:** A minimum clearance of 300mm above and below and APA Group gas mains must be maintained unless otherwise approved by APA. If the width or depth of the excavation is such that the gas mains will be exposed or unsupported, then APA Group must be contacted to determine whether the gas mains should be taken out of service, or whether they need to be protected or supported. Protective cover strips when removed must be replaced under APA Group supervision.
 - v. **Exposed Gas mains and Services:** Exposure of APA infrastructure shall be limited to potholing for location purposes. Any other exposure of pipe is not permitted unless expressly approved by APA Group. Exposed gas pipes must be protected by the constructor against the effects of heat by shielding or covering with a suitable material. Heating of exposed plastic pipes is dangerous. If depth of cover is compromised in any way due to works, please contact APA immediately.
 - vi. **Heavy machinery Operation over Gas Mains and Services:** Where heavy "Crawler" or "Vibration" type machinery is operated over the top of gas mains, a minimum cover of 750mm to the gas mains must be maintained using load bearing protection whilst the machinery is in operation.
 - vii. **Directional Drilling Near Gas Mains and Services:** When drilling parallel to gas mains, trial holes must be carefully hand dug at least every 4m to prove the actual location of the conduits/pipes before using drilling machinery. Where it is required to drill across the line of gas mains, the actual location of the gas mains must first be proven by the constructor by hand digging. A trench must be excavated one metre from the side of the gas mains where the auger will approach to ensure a minimum clearance of 600mm for gas mains can be maintained unless otherwise approved by APA.
 - viii. **Explosives:** Clearances must be obtained from APA Group's Networks Engineering Manager for use of explosives in the vicinity of gas mains. Please contact the APA Group.
- b. **Damage Reporting:** All damage to conduits and pipes and any other gas infrastructure and property must be reported to APA Group no matter how insignificant the damage appears to be. Even very minor damage to protective coverings can lead to eventual failure through corrosion. All work in the vicinity of damaged infrastructure should cease and the area should be vacated until a clearance to continue work has been obtained from an APA Group officer. Please contact the Emergency number below to report damage.
- c. **Solutions and Assistance:** If it is determined that APA Group infrastructure is likely to be impacted or encroached upon by planned construction, APA Group must be contacted to arrange for possible engineering solutions. If APA Group relocation or protection works are part of the agreed solution, then payment to APA Group for the cost of this work will be the responsibility of the principal contractor. APA Group will provide an estimated quotation for work on receipt of the order number before work will proceed.
- d. **Reinstatement:** APA assets affected by third party works as highlighted above are to be reinstated as per APA requirements, potentially including but not limited to; warning tape/marker board, soft bedding/backfill materials, trench dimensions, depth of cover, trace wire for PE mains, compaction requirements, concrete protection, and surface re-instatement.

4. Contacting APA

GAS EMERGENCIES 24 HRS 1800 GAS LEAK (1800 427 532)	GAS PLANT RELOCATIONS APA CAPITAL WORKS PH: 07 3215 6709 FAX: 07 3215 6699 capitalworksqldnetworks@apa.com.au	APA GROUP GAS ASSET LOCATIONS TEAM (PERMITS OFFICE) PH: 07 3215 6644 FAX: 07 3215 6699 permitsqld@apa.com.au	DIAL BEFORE YOU DIG SUPPORT PH: 1800 085 628
--	---	---	---

HIGH PRESSURE GAS DISTRIBUTION MAINS "AUTHORITY TO WORK" REQUEST

N.B. THIS IS NOT A PERMIT TO WORK

SITE ADDRESS:

SUBURB: UBD MAP REF:

DBYD Sequence Number: Date of DBYD Enquiry:

(Note: Only valid enquiries will be accepted and the currency of DBYD requests will affect your permit period. APA Group's DBYD requests are valid for 30 days only. Enquiries may need to be renewed and a new application may be required)

COMMENTS:

BROAD DESCRIPTION OF WORK (please provide any approvals from APA Group related to these works)

WORK TO BE CARRIED OUT:

- | | | |
|----------|---|--------------------------|
| Class 1. | Location | |
| | Works crossing a high pressure gas mains | ☐ |
| Class 2. | Location | |
| | Works within 3 metres of a high pressure gas mains | ☐ |
| Class 3. | Location | |
| | Works involving large excavations that would cause ground movement, vibrations or blasting beyond 3m of a high pressure gas mains | ☐ |
| Class 4. | Location | |
| | Works within 1m of gas service or connection to industrial gas meter | ☐ |

DETAILS OF WORK INVOLVED (Tick Applicable)

- | | | | |
|-----------------------------------|--------------------------|---------------------------|--------------------------|
| Excavation | ☐ | Change to surface level | ☐ |
| Service crossing (Gas CONNECTION) | ☐ | Boring | ☐ |
| Proving (Dial Before You Dig) | ☐ | Blasting | ☐ |
| Earthworks | ☐ | Road Construction/Change? | ☐ |
| Vacuum Excavation | ☐ | Other (give details) | ☐ |

Relevant drawings, Block Plans etc, attached Yes ☐ No ☐

PROPOSED DATES AND TIMES

From:

To:

Excavation / / 20... am/pm / / 20... am/pm

Backfill / / 20... am/pm / / 20... am/pm

Insurance Cover – Current Level None ☐ \$5M ☐ \$10M ☐ \$20M ☐ Other ☐ _

NOTES

1. This Authority to Work applies only to work in the vicinity of the Gas Mains. It does not authorise work near or on the Gas Mains itself.
2. A minimum of 5 business days must be allowed between receipt by APA Group of this Request and a response. However, more time for notification may be necessary.
3. For Class 1 and Class 2 classifications, this application must be accompanied by a detailed sequence of events, outlining all aspects of work involved and work is not permitted until an Authority to Work is issued.
4. For class 1 and 2 Dial Before You Dig, APA Group will arrange for an inspector to be on site as necessary during the work. An inspector must be present at all times for works involving excavation within 1m of the Gas Mains. APA Group will advise the requirement for an inspector for other works within 3m of the Gas Mains.
5. The applicant is responsible for any damage resulting from the work and all consequential damages and losses arising from such damage and therefore must insure against every liability of the contractor in respect of or arising out of any loss of life, loss of or damage to property of person (both real and personal), arising out of or in any way connected to this permit.

Such insurance must be arranged for an indemnity of not less than \$20 Million unless otherwise agreed.

Permit Requested By (print name).....

Signature.....Date...../...../.....

Company Name..... Postal Address.....

Phone Email.....

Requestors PO Number.....

Site Contact Details: Name..... Phone.....

Company / Contractor Responsible for Charges.....

Company / Contractor Name.....

Company / Contractor Email.....

Company / Contractor Phone.....

Please be advised;
Under the Work Health and Safety Act 2011, each work place has an obligation to comply to Workplace Health and Safety Regulations and Codes of Practice.

APA Group brings to your attention Work Health and Safety Regulations 2011, Chapter 4: Hazardous Work. Failure to comply to the above regulation may result in APA Group reporting the non-compliance to Workplace Health and Safety.

Further information can be requested via:

Post: **Permit Applications QLD**

PO Box 885 Hamilton Central QLD 4007

Phone: (07) 3215 6644 though an application will most likely be required

Email: permitsqld@apa.com.au

Infrastructure Network Capacity Analysis

Parklands PDA – Individual development applications

Purpose of this form

The infrastructure of the Parklands PDA has a finite capacity which needs to be managed and updated as new development comes online. The information contained on this form will be used to determine:

1. if there is sufficient capacity in the networks to accommodate this proposal; and
2. the infrastructure implications for future sites as a result of the cumulative impacts of other development within the PDA.

How to use this form

This form is to be completed by the applicant prior to, or at the time of lodgement. This form, in association with other supporting information will be assessed to determine whether further information is required, to decide the appropriateness of the proposal in terms of infrastructure, and to inform conditions, should the MEDQ decide to approve the proposal.

Site Details (applicant to complete)

Street address	Corner of Knowledge Street and Bonner Street, GCHKP	Lot on Plan (e.g. Lot 3 on RP123456)	Lot 3A-2
Type of Application (MCU, RaL etc)	RaL		
Proposal Description (eg. offices and ground floor retail, medical suites etc)	10 Storey mixed commercial tenancies / health care / carpark / conference facilities/ cafe		
Site area (m ²)	2,554m ²	Total GFA (m ²)	9,588m ²
Parking spaces (total)	165	Residential uses (if applicable)	suites (hotel/bed) 1 BR units 2 BR units 3 BR units

Summary Infrastructure Demand - Proposal (applicant to complete)

Infrastructure Type	Details of infrastructure demand – proposal (applicant to complete)		
Stormwater management	Submit a site-based stormwater management plan, certified by an RPEQ, for the site discharge point/s designed generally in accordance with EDQ Guideline 13 – Engineering Standards – Stormwater Quantity.		
	Site Area (m ²)		
	Site cover (m ²)	Site cover (%)	
	Discharge Points	Location	Flow (L/s)
	#1		
	#2		



Infrastructure Type	Details of infrastructure demand – proposal (applicant to complete)																																								
Water and Sewer	Provide an Engineering Services Report, certified by an RPEQ, which identifies the water and sewer demands of the proposal. Note: The City of Gold Coast's water and sewerage demand table must be used to calculate discharge loads. <table border="1"> <thead> <tr> <th>Land use</th><th>GFA (m²)</th><th>Bedrooms (if applicable)</th><th>EPs</th></tr> </thead> <tbody> <tr> <td>Commercial</td><td>4439</td><td></td><td>74.58 (1.68 x 15.90)</td></tr> <tr> <td>Conference Facilities</td><td>121</td><td></td><td>5.41 (4.47 x 1.21)</td></tr> <tr> <td>Medical Centre</td><td>3978</td><td></td><td>66.83 (1.68 x 39.78)</td></tr> <tr> <td>Cafe</td><td>196</td><td></td><td>8.41 (4.29 x 1.96)</td></tr> <tr> <td></td><td></td><td></td><td></td></tr> <tr> <td></td><td></td><td></td><td></td></tr> <tr> <td>Total demand</td><td></td><td></td><td>155.23</td></tr> </tbody> </table>	Land use	GFA (m ²)	Bedrooms (if applicable)	EPs	Commercial	4439		74.58 (1.68 x 15.90)	Conference Facilities	121		5.41 (4.47 x 1.21)	Medical Centre	3978		66.83 (1.68 x 39.78)	Cafe	196		8.41 (4.29 x 1.96)									Total demand			155.23								
Land use	GFA (m ²)	Bedrooms (if applicable)	EPs																																						
Commercial	4439		74.58 (1.68 x 15.90)																																						
Conference Facilities	121		5.41 (4.47 x 1.21)																																						
Medical Centre	3978		66.83 (1.68 x 39.78)																																						
Cafe	196		8.41 (4.29 x 1.96)																																						
Total demand			155.23																																						
Traffic	Provide a traffic impact assessment report, certified by an RPEQ that identifies impacts and proposed mitigations for the proposal. <table border="1"> <thead> <tr> <th>Land use</th><th>Trip generation rate</th><th colspan="2">Vehicles per hour</th></tr> </thead> <tbody> <tr> <td></td><td></td><td>AM</td><td>PM</td></tr> <tr> <td></td><td></td><td>AM</td><td>PM</td></tr> <tr> <td></td><td></td><td>AM</td><td>PM</td></tr> <tr> <td></td><td></td><td>AM</td><td>PM</td></tr> <tr> <td></td><td></td><td>AM</td><td>PM</td></tr> <tr> <td>Total demand</td><td></td><td>AM</td><td>PM</td></tr> </tbody> </table> <table border="1"> <thead> <tr> <th>Critical intersection(s)</th><th>Performance</th><th>Asset Owner</th></tr> </thead> <tbody> <tr> <td></td><td></td><td></td></tr> <tr> <td></td><td></td><td></td></tr> <tr> <td></td><td></td><td></td></tr> </tbody> </table>	Land use	Trip generation rate	Vehicles per hour				AM	PM			AM	PM			AM	PM			AM	PM			AM	PM	Total demand		AM	PM	Critical intersection(s)	Performance	Asset Owner									
Land use	Trip generation rate	Vehicles per hour																																							
		AM	PM																																						
		AM	PM																																						
		AM	PM																																						
		AM	PM																																						
		AM	PM																																						
Total demand		AM	PM																																						
Critical intersection(s)	Performance	Asset Owner																																							

Office Use Only

Component	Allocation (based on the Cardno model and Lumina Sales Map)	Assessment Comments (sufficient / insufficient capacity / more information required)
Water & Sewer		
Traffic		
Stormwater		

I _____, a Registered Professional Engineer of Queensland (RPEQ) am satisfied there is sufficient capacity in the following existing infrastructure networks to accommodate the proposal

- ☐ Water and Sewer
- ☐ Traffic
- ☐ Stormwater

OR

I _____, a Registered Professional Engineer of Queensland (RPEQ) require the submission of additional information before being able to make a determination on whether the existing infrastructure network can accommodate the proposal.

Delete the statement that does not apply