

Design for a better *future* /

WALKER MAROOCHYDORE
DEVELOPMENTS PTY LTD

LOT 71
MAROOCHYDORE CITY
CENTRE, 50 FIRST
AVENUE,
MAROOCHYDORE

CIVIL ENGINEERING
SERVICES AND SITE
BASED STORMWATER
MANAGEMENT REPORT



PLANS AND DOCUMENTS
referred to in the PDA
DEVELOPMENT APPROVAL

Approval no: DEV2021/1249

Date: 17 March 2022



AMENDED IN RED

By: Leila Torrens

Date: 16 March 2022



NOVEMBER 2021

CONFIDENTIAL

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Lot 71 Maroochydore City Centre, 50 First Avenue, Maroochydore
Civil Engineering Services and Site Based Stormwater Management Report

Walker Maroochydore Developments Pty Ltd

WSP

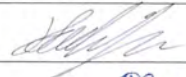
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1 PURPOSE OF DOCUMENT

This document has been prepared by WSP as part of the Development Application submission for the 50 First Avenue, Maroochydore development.

The purpose of this report is to address the engineering considerations and infrastructure that will be required to service the proposed development.

This report was prepared using information obtained from the following sources:

- Architectural Plans of the proposed development prepared by Cox Architecture;
- Contour and Detail Survey prepared by Project Urban;
- Sunshine Coast Council MyMaps
- Dial-Before-You-Dig (DBYD) services;
- Cornmeal Creek Flood Study, prepared November 6, 2013, by Cardno;
- Maroochydore City Centre – Flooding and Stormwater Management Considerations for Stage 1, prepared August 26, 2015, by Cardno; and
- Maroochydore City Centre – Stage 1 Local Flooding Technical Memorandum, prepared 29 October 2015 by Cardno.

2 INTRODUCTION

2.1 PROJECT DESCRIPTION

The proposed development is situated on a freehold lot of approximately 1,407m² of land, impacting the following real property lots:

Table 2.1 Land Details

STREET ADDRESS	50 FIRST AVENUE, MAROOCHYDORE QLD 4558
Real Property Description	Lot 71 on SP308184

Source: Sunshine Coast Council MyMaps

The proposed development is located in the newly developed Maroochydore City Centre, just to the west of the main access road First Avenue. The site is bounded to the south by South Sea Islander Way, and Lightning Lane to the west. Another freehold property, Lot 74, bounds the site to the north and has recently had a new development constructed.

The proposed site is currently undeveloped and falls within the Maroochydore/Kuluin Local Plan Area and the Priority Development Area (subject to the Economic Development Act 2012).

2.2 LOCALITY



Figure 1 – 50 First Avenue, Maroochydore Locality Plan (Source: SCC MyMaps)

2.3 PROPOSAL DETAILS

The proposed development is to be comprised of a 15 storey building, primarily for commercial office use. The ground floor will house retail space and an integrated lobby café space. The site has no proposed basement levels and incorporates four levels of carparking above the ground floor. The proposed development has vehicle access via the western boundary on Lightning Lane, while pedestrian traffic is directed to the First Avenue frontage.

2.3.1 DENSITY

The expected commercial and retail floor areas have been calculated based on the architectural layouts provided by Cox Architecture, Rev 13 dated 18th October 2021.

The following tables detail the expected densities of the proposed development, and calculations for an estimate of the Equivalent Persons (EP's) to assist in determining the water and sewer demands created by the proposed land uses. Ground floor tenancies are yet to be determined, and therefore the more conservative land use type of food and drink outlet has been utilised, rather than general retail or commercial.

Table 2.2 Equivalent Persons (EP's) Sewer and Water Supply Demand Calculations

LAND USE TYPE	GFA	GFA TO EP CONVERSION RATE	TOTAL EP'S
Commercial	10,381	0.8/100m2 GFA	83
Food and Drink Outlet	468	5.4EP/100m2 GFA	25
Total	10,849	N/A	108

Note: EP's have been calculated using UnityWater Netserv Appendix B – Schedule of Works Table 2.

3 EXISTING INFRASTRUCTURE

3.1 EXISTING WATER

There is existing water reticulation in Lightning Lane available for connection to the proposed development. The water reticulation main is a 150mm PVC-O pipe that forms a ring around lot 71 and 74.

There is an existing 150mm stub stemming from the reticulation main in Lightning Lane ready for connection to the proposed development. This property connection meets the UnityWater requirements for a commercial building.

3.2 EXISTING SEWER

There is existing sewer reticulation in Lightning Lane available for connection to the proposed development. The reticulation main is a 150mm PVC-U pipe that drains to a 225mm reticulation main in South Sea Islander Way that then heads west to the trunk main in Golf Street.

There is an existing 150mm stub stemming from a manhole on the western side of Lightning Lane ready for connection to the proposed development. This property connection meets the UnityWater requirements for a commercial building.

3.3 EXISTING STORMWATER

Existing stormwater infrastructure can be found surrounding the site. There are two field inlets currently draining the undeveloped site, via separate 375mm RCP's. The western field inlet drains to a 525mm pipe in Lightning Lane. The south-east field inlet drains to a 750mm pipe in South Sea Islander Way. Both pipes connect to a 1200mm pipe that heads south via Lightning Lane and discharges directly to Maud Drain at the intersection of Lightning Lane and Sunshine Coast Parade.

3.4 OTHER SERVICES

The site survey and Dial Before You Dig information suggests electrical and NBN services are available for connection. Further design and documentation of these connections and correspondence with service providers will be required during detailed design by relevant Services Engineer. The Dial Before You Dig information and site survey is available in Appendix J.

4 PROPOSED INFRASTRUCTURE

4.1 PROPOSED WATER

An existing 150mm PVC-O reticulation main is present in the adjacent Lightning Lane and has a 150mm stub ready for connection to Lot 71. This stub is appropriately sized for the proposed development.

A Service Advice Notice (SAN) application was submitted to UnityWater, dated August 4, 2021. The request has detailed the expected permissible connection location for the proposed development, considering the proposed GFA and floor plans. The response has not yet been received. However, the SAN response is expected to be supportive of the development and able to supply the required water demands.

Due to the updated architectural drawings a revised SAN has been submitted to UnityWater on October 26, 2021, to reflect the increased GFA. UnityWater have advised that due to the high demand of applications, a response within the nominated 20 days is unlikely. On this basis it is assumed that there is sufficient capacity of the water demand of the proposed development which will need to be confirmed upon receipt of the SAN from UnityWater.

The response from UnityWater regarding the requested SAN advice is currently outstanding, correspondence with UnityWater is included in Appendix F.

4.2 PROPOSED SEWER

An existing 150mm PVC-U sewer reticulation main is present in the adjacent Lightning Lane and has a 150mm stub stemming from a manhole on the western side of Lightning Lane ready for connection to Lot 71. This stub is appropriately sized for the proposed development.

A Service Advice Notice (SAN) application was submitted to UnityWater, dated August 4, 2021. The request has detailed the expected permissible connection location for the proposed development, considering the proposed GFA and floor plans. The response has not yet been received. However, the SAN response is expected to be supportive of the development and able to meet the required sewer demands.

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The response from UnityWater regarding the requested SAN advice is currently outstanding, correspondence with UnityWater is included in Appendix F.

4.3 PROPOSED STORMWATER

4.3.1 STORMWATER QUANTITY

As part of the proposed development, additional impervious area will be created, increasing the expected stormwater runoff generated by the site. In accordance with Sunshine Coast Council Flooding and Stormwater Management Guidelines, this additional runoff is to be attenuated to prevent adverse impacts to public stormwater infrastructure, unless the stormwater infrastructure has been adequately sized to incorporate the additional runoff generated by the development or the site discharges directly to a tidal waterway.

The Cornmeal Creek Flood Study, prepared November 6, 2013, by Cardno, states that the Stage 1 catchment areas have been assessed based on their future land use. Section 4.4.2 states an impervious area for a commercial lot is expected to be 90% impervious. Due to the flood study assumptions, the public infrastructure has been adequately sized to allow for the additional post development flows, and therefore no attenuation is required for this development.

Rainwater harvesting for stormwater re-use is not required for this development however it is being implemented as part of best practices for Water Sensitive Urban Design and water conservation strategies and will be considered under the Greenstar assessment process.

4.3.2 STORMWATER QUALITY

As per the technical memo “Maroochydore City Centre – Flooding and Stormwater Management Considerations for Stage 1”, prepared August 26, 2015, by Cardno, the treatment of internal lots for Stage 1 is the responsibility of the developer, and this development has therefore not been accounted for in an end of line treatment device. Section 3.2 of the Sunshine Coast Council Flooding and Stormwater Management Guidelines states the following requirements are therefore applicable for pollutant load reductions relative to an unmitigated development case:

- Total Suspended Solids (TSS): 80%
- Total Phosphorus (TP): 60%
- Total Nitrogen (TN): 45%
- Gross Pollutants: 90%

The performance of the proposed stormwater quality treatment train has been modelled via MUSIC software. The compliance of the proposed stormwater quality treatment train to the requirements as set out in SCC’s guidelines for the stormwater quality has then been assessed.

4.3.2.1 PROPOSED STORMWATER QUALITY TREATMENT TRAIN

Due to the fully developed nature of the proposed site, consisting almost entirely of roof area, a proprietary treatment system is proposed to meet the abovementioned pollution reduction targets. The roof water runoff captured in the drainage system will be discharged to rainwater harvesting tank within the building for re-use in internal water systems and for irrigation of landscape features.

Stormwater pollution reduction will be accomplished by utilising a variety of proprietary products. Total Suspended Solids will be targeted by filtration bags, while phosphorous and nitrogen pollutants are to be handled by a cartridge filter system stored in a tank.

Stormwater TSS filtration bags are to be located prior to the cartridge filter tank in a pipe flow configuration (refer to Appendix G for further information on Ocean Protect OceanGuard arrangements). The proposed cartridge filter system and associated storage tank is proposed to be located in the loading bay access area on the western boundary of the site. The storage chamber has been optimized to a 1.6m² manhole containing three (3) PSORB Ocean Protect filter cartridges. An access lid for cartridge maintenance will be required, in accordance with the proprietary device suppliers’ details (refer to Appendix G).

4.3.2.2 MUSIC MODELLING

Utilising the abovementioned treatment train, a stormwater quality model was produced utilising the MUSIC software package. The water quality pollution reduction targets outlined in Section 4.3.2 have been met by the proposed treatment train. The MUSIC model inputs can be found in Appendix E. The following table details the resulting outputs of the proposed treatment train methodology.

Table 3 - Post-Development MUSIC Modelling Results

POLLUTANT	REQUIRED POLLUTANT REDUCTION (%)	ACHIEVED REDUCTION (%)
Total Suspended Solids	80	83.7
Total Phosphorous	60	66.9
Total Nitrogen	45	49.2
Gross Pollutants	90	100

The results outlined in Table 7 demonstrate that the proposed development will achieve the required pollutant reduction targets as required by SCC and are in line with the Water by Design: WSUD Technical Design Guidelines in SEQ 2006.

4.3.2.3 STORMWATER MAINTENANCE PLANS

Maintenance for the stormwater quality treatment devices proposed for the development is to be consistent with the requirements of this report and the manufacturer's advice regarding the proprietary devices. The devices used for the purposes of the MUSIC model are proprietary devices supplied by Ocean Protect, but similar approved products from other suppliers may be used. The general requirement of maintenance during the operational phase will be in accordance with the Ocean Protect OceanGuard and Stormfilter recommendations and operational manual. Refer to Appendix G for further details.

The ownership of the stormwater quality treatment train is intended to remain under private ownership as part of the proposed development and will not become a Sunshine Coast Council asset.

4.3.3 LEGAL POINT OF DISCHARGE

There are two existing field inlets installed as part of the previously completed subdivision works that currently drain Lot 71. One inlet borders the western boundary adjacent Lightning Lane, the other is in the southeast corner of the lot. Each are drained to public street infrastructure by 375mm RCP, then both flowing to the 1200mm RCP that heads south from the intersection of Lightning Lane and South Sea Islander Way.

It is proposed to drain the site via the western stormwater connection, primarily for ease of construction with the proposed stormwater quality treatment tank to be located nearby. The available 375mm RCP connection is suitably sized to take the developed 1% AEP flow from the site, and the street drainage upsizes appropriately after the connection to accommodate the expected developed flow.

4.3.4 FLOODING

A technical memorandum, Maroochydore City Centre – Stage 1 Local Flooding, was prepared by Cardno on October 29, 2015. The memo encompasses the proposed development site and provides flood extents and minimum floor levels for Lot 71. The modelling as stated within the memo has incorporated climate change factors associated with the rainfall data, and a tailwater of 2.35 mAHD was introduced at the outlet location in accordance with the 1% AEP storm tide level. Wave impacts are not included as the outlet is in Maud Drain, which is a protected waterway. The results detailed in the report gives a minimum floor level of 3.82 mAHD for Lot 71, providing 297mm freeboard (for a worst-case scenario of 1% AEP storm with complete blockage of stormwater gullies and inlets).

Therefore, the development should adopt a minimum floor level of 3.82 mAHD. No further flood risk management should be required for this development. Appendix I includes copies of the Cardno Flood Technical Memo, dated October 29, 2015.

5 ENGINEERING

5.1 SITE GRADING AND VEHICLE ACCESS

The site is proposed to be graded to tie in with the existing street levels, while maintaining the minimum flood immune floor level of 3.82 mAHD. The existing street levels range from a low point of 3.42 mAHD at the south-east boundary of Lot 71, to a high point of 3.82 mAHD at the north-east corner

An existing concrete driveway has been constructed at the north-west corner of the site from Lightning Lane, as part of the previous subdivision works, which is proposed to be partial access to the carparking levels above the ground floor. Another street access is proposed just to the south along Lightning Lane to give access to the proposed loading dock, which will result in the removal of existing parallel car parking.

The preliminary bulk earthworks volumes are to be established as the design develops.

6 EROSION AND SEDIMENT CONTROL

6.1 SITE CONTROLS

The erosion and sediment control measures will be designed during the detail design stage to include in the building contract. The contractor will engage a RPEQ or CPESC engineer to design and certify the required erosion and sediment control mitigation measures. It will be the responsibility of the contractor to implement and maintain an erosion and sediment control plan during the construction and on-maintenance period.

6.2 GENERAL REQUIREMENTS

All erosion and sediment control measures are required to be installed and functional prior to works commencing. The following implementation sequence shall be adopted where practicable with the construction program. Plans shall be updated, and measures moved and reinstated to reflect the progression of the works.

A site-based Erosion and Sediment Control Management Plan will be required and implemented under the direct supervision of a Registered Professional Engineer of Queensland. Indicative ESC measures will be required on the detailed design drawings and a final Erosion and Sediment Control Management Plan (ESCMP) shall be prepared by the Contractor as part of the Construction Management Plan for the information of the relevant parties prior to the Pre-start Meeting. The ESCMP to be generally in accordance with Best Practice Erosion & Sediment Control Document published by International Erosion Control Association (Australasia) 2008.

The contractor is, at all times, responsible for the establishment, management and maintenance of the erosion and sediment control measures, to ensure minimal environmental harm and to comply with Council's standards.

Once the site is stripped, the contractor will need to ensure that sediment is not washed into drains and that the loose dense silty sand and clays are not eroded away and bypass the site. Sediment fencing around the area of works and to direct the flows needs to be provided.

6.3 CONSTRUCTION PHASE STORMWATER QUALITY MANAGEMENT

Before construction activities begin, and throughout the construction process the following water quality management measures need to be in place to ensure minimal disturbance and pollution to stormwater runoff.

- Sediment fences constructed to the perimeter of the construction area as required;
- Designation of areas for plant and construction material storage;
- Diversion of upstream stormwater runoff around disturbed areas of the development as required;
- Immediate stabilisation of disturbed areas where possible;
- Monitoring of stormwater quality discharging from the development and the implementation of additional measures or improvement of existing measures if the quality of stormwater discharging from the site is adversely affected;
- Protection of drainage structures within the site, and within the roadways adjacent to the site;
- Regular inspection and maintenance of the erosion control measures. Following rainfall events greater than 20 mm, inspection of erosion control measures and removal of collected material shall be undertaken. Replacement of any damaged equipment shall be performed immediately.
- Education of site personnel to the sediment and erosion control measures implemented on site.

7 CONCLUSIONS

The site is currently appropriately serviced by existing public utilities. All information discussed in this report is inferred from Sunshine Coast Council MyMaps underground services information, site survey, Dial-Before-You-Dig records, and Nearmap satellite imagery.

Existing water and sewer services are located within the immediate vicinity of the site, both with appropriately sized stubs ready for connection to the proposed development. The stormwater from the site is proposed to be connected to existing stormwater infrastructure in either Lightning Lane or South Sea Islander Way. A water quality treatment train comprising of proprietary cartridges located in the loading bay within the building and inlet filters located prior to the cartridges has been proposed to meet the SCC targets.

The minimum floor level of 3.82 mAHD has been provided by Cardno, as a previously conducted technical memo reviewing the flood impacts of the Maroochydore City Centre Stage 1, utilising stormwater modelling and incorporating climate change factors and storm tide tailwaters.

With no basement levels proposed, the earthworks required for the development will be minor associated with raising the existing levels to meet the required minimal floor level nominated in the flood report to ensure that flood immunity is achieved.

It is unlikely any of the surrounding services require an upgrade, but this will be confirmed and addressed by the relevant service consultants at the detailed design stage of the project.

8 LIMITATIONS

This Report is provided by WSP Australia Pty Limited (*WSP*) for Walker Maroochydore Developments Pty Ltd (*Client*) in response to specific instructions from the Client and in accordance with WSP's proposal dated July 2021.

8.1 PERMITTED PURPOSE

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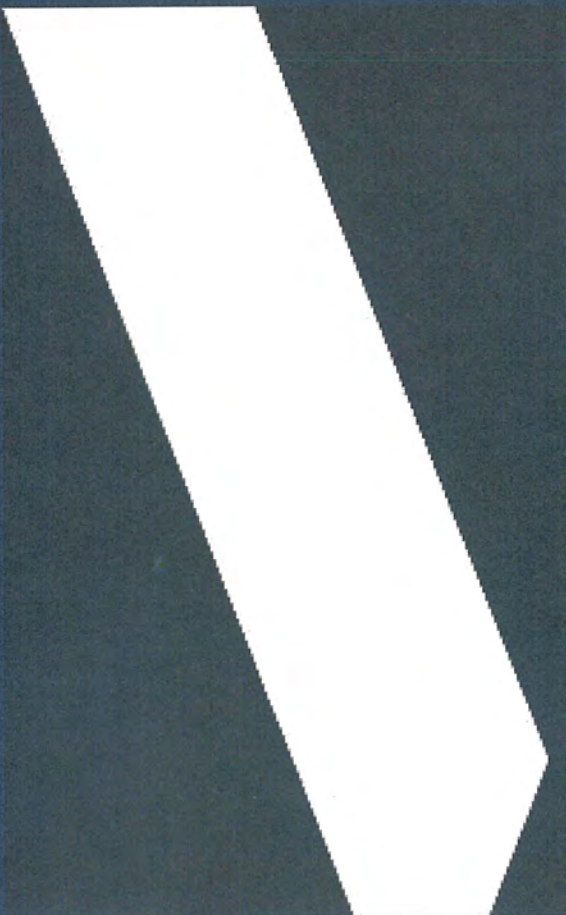
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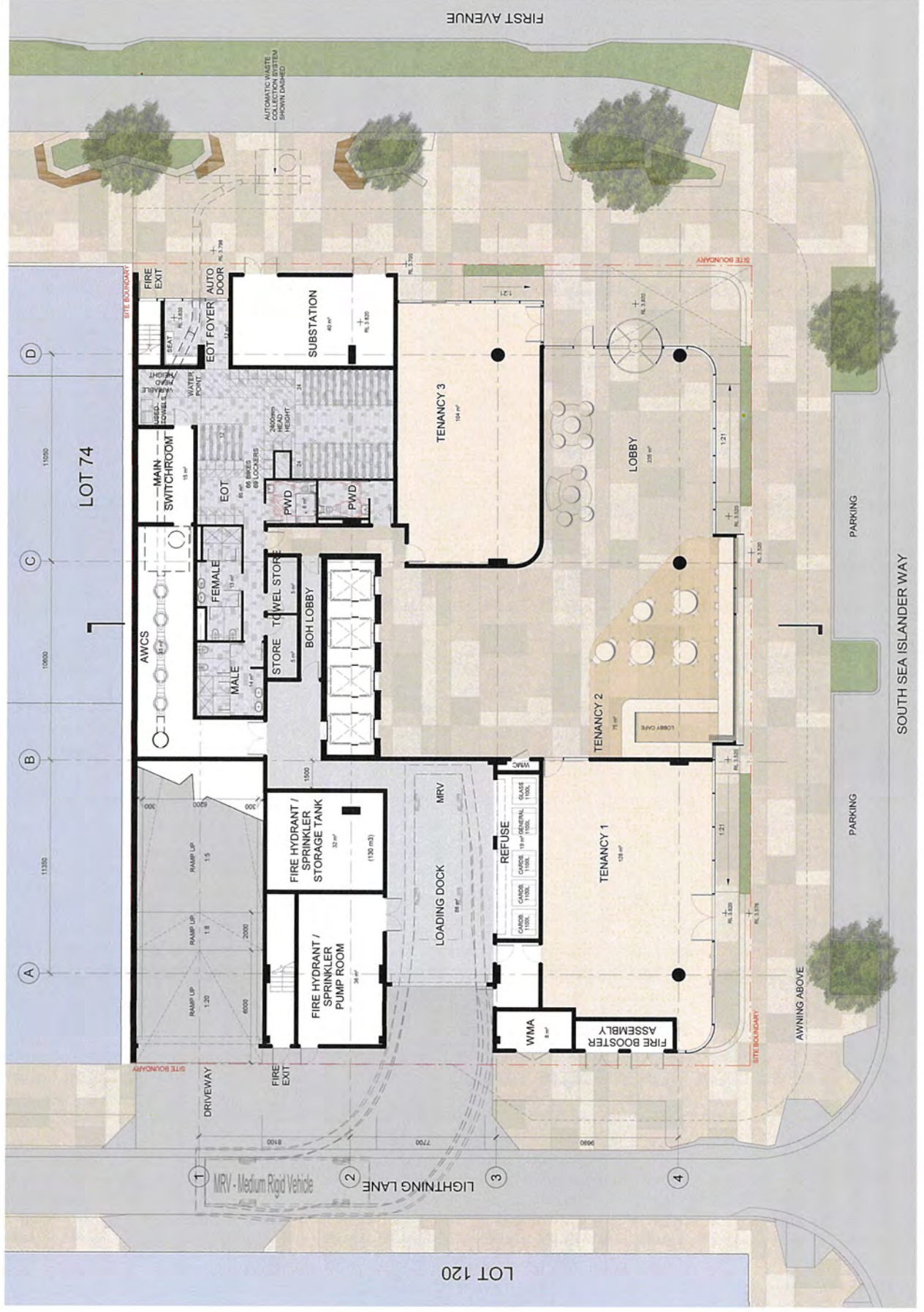
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APPENDIX A

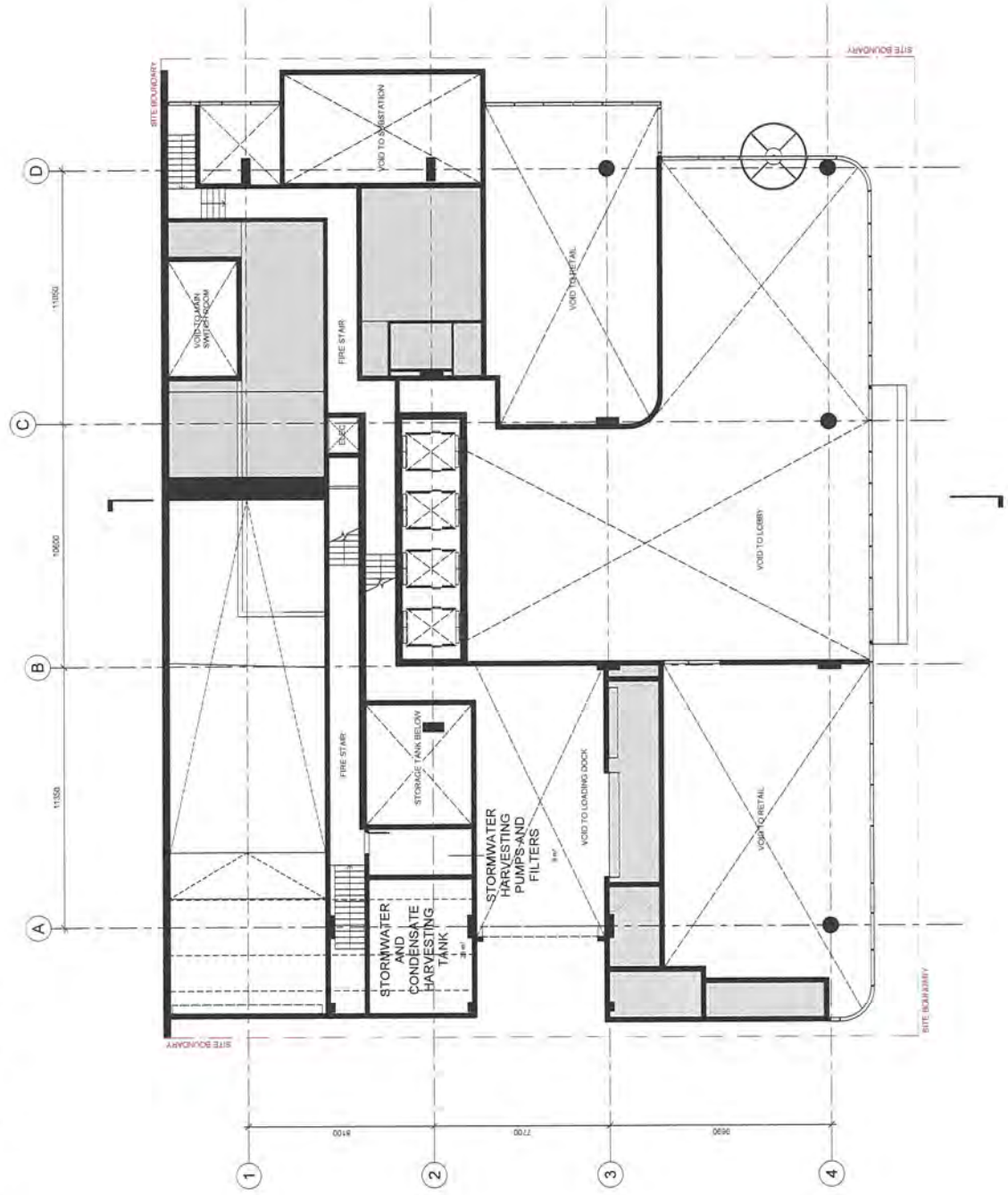
ARCHITECTURAL PLANS



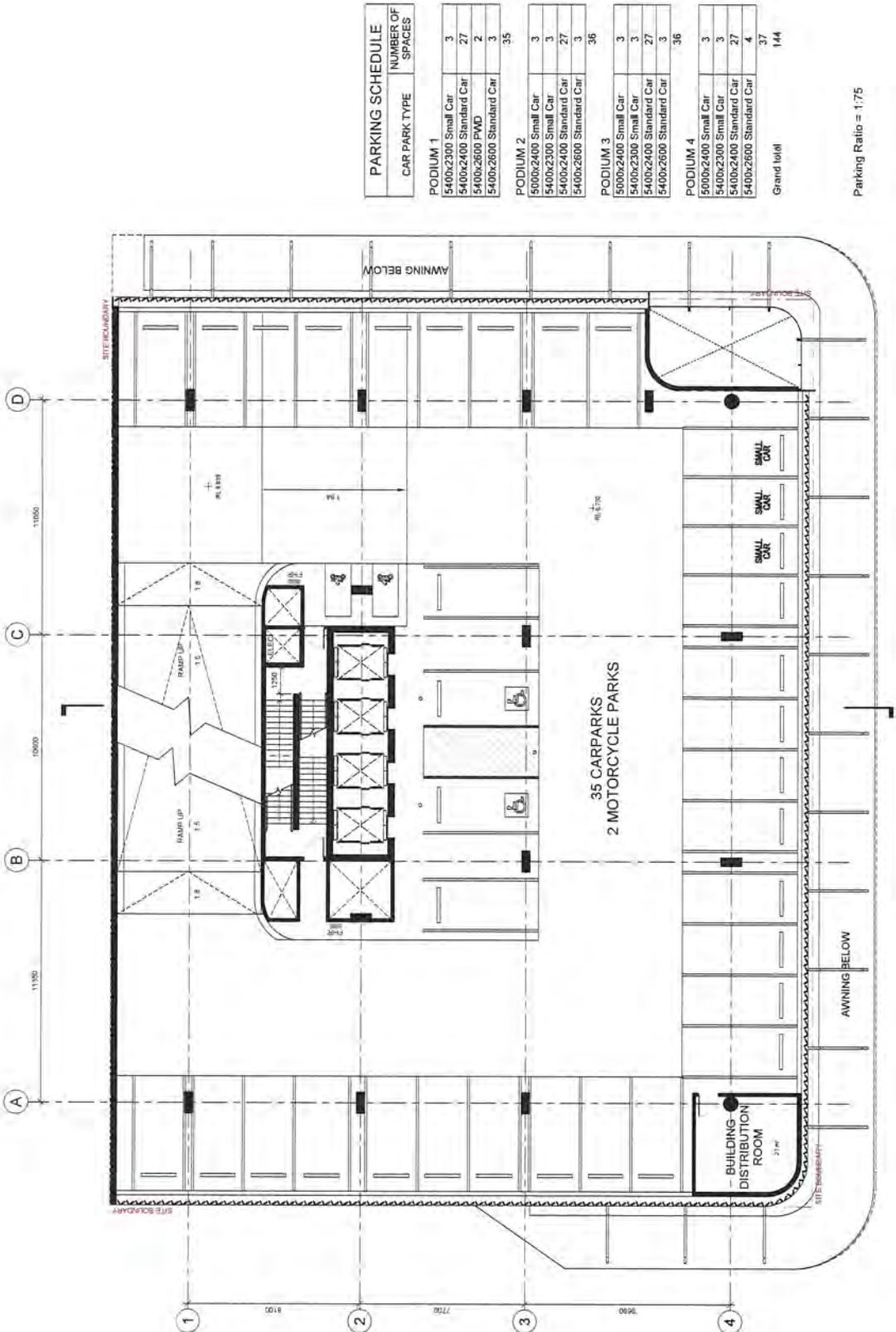
Ground Floor Plan



Mezzanine Level Floor Plan



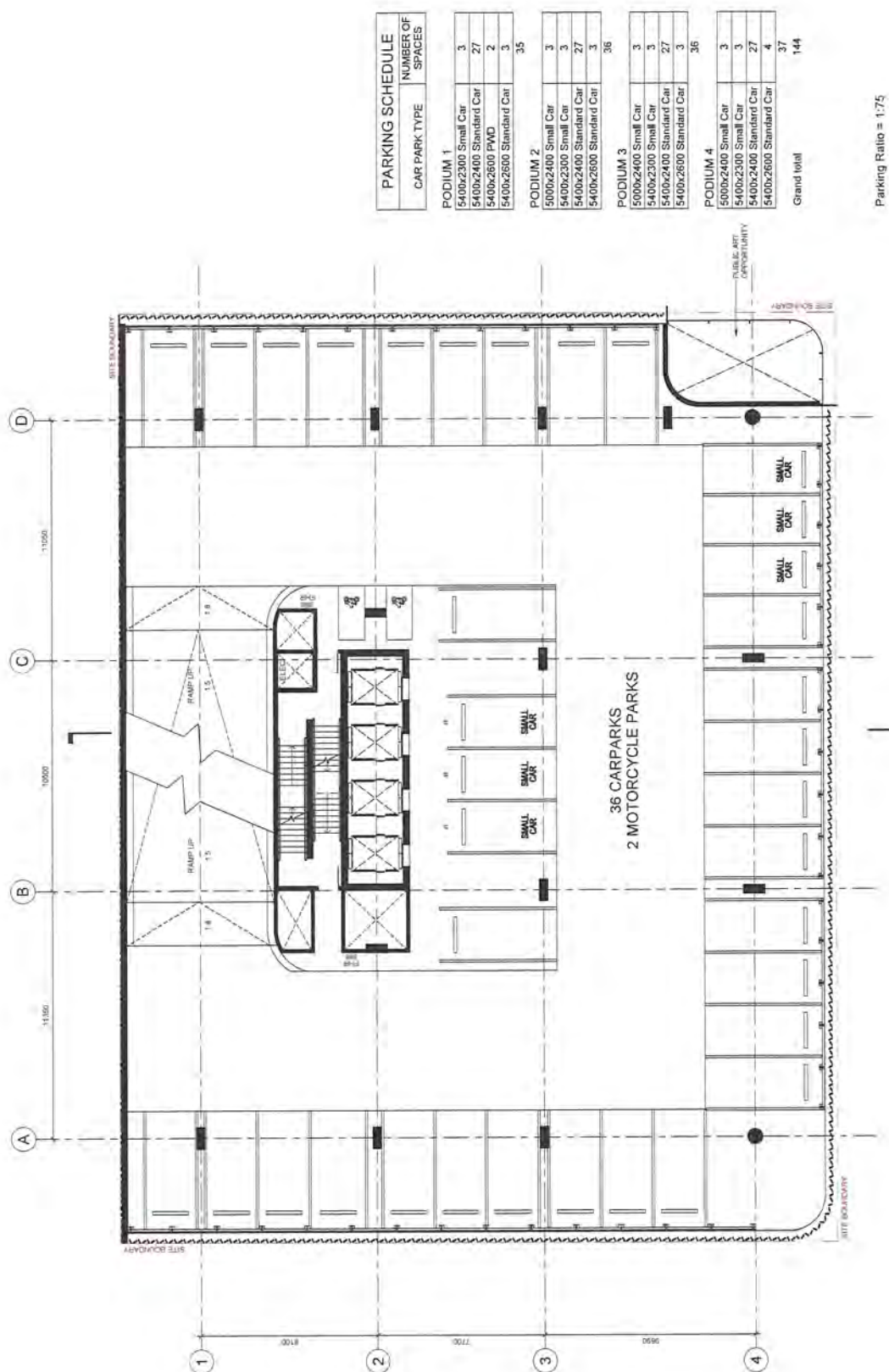
Level 1 Floor Plan



PARKING SCHEDULE	
CAR PARK TYPE	NUMBER OF SPACES
PODIUM 1	
5400x2300 Small Car	3
5400x2400 Standard Car	27
5400x2600 PWD	2
5400x2600 Standard Car	3
PODIUM 2	
5000x2400 Small Car	3
5400x2300 Small Car	3
5400x2400 Standard Car	27
5400x2600 Standard Car	3
PODIUM 3	
5000x2400 Small Car	3
5400x2300 Small Car	3
5400x2400 Standard Car	27
5400x2600 Standard Car	3
PODIUM 4	
5000x2400 Small Car	3
5400x2300 Small Car	3
5400x2400 Standard Car	27
5400x2600 Standard Car	4
Grand total	144

Parking Ratio = 1:75

Level 2-3 Floor Plan



PARKING SCHEDULE	
CAR PARK TYPE	NUMBER OF SPACES

PODIUM 1	
5400x2300 Small Car	3
5400x2400 Standard Car	27
5400x2600 PWD	2
5400x2600 Standard Car	3
35	

PODIUM 2	
5000x2400 Small Car	3
5400x2300 Small Car	3
5400x2400 Standard Car	27
5400x2600 Standard Car	3
36	

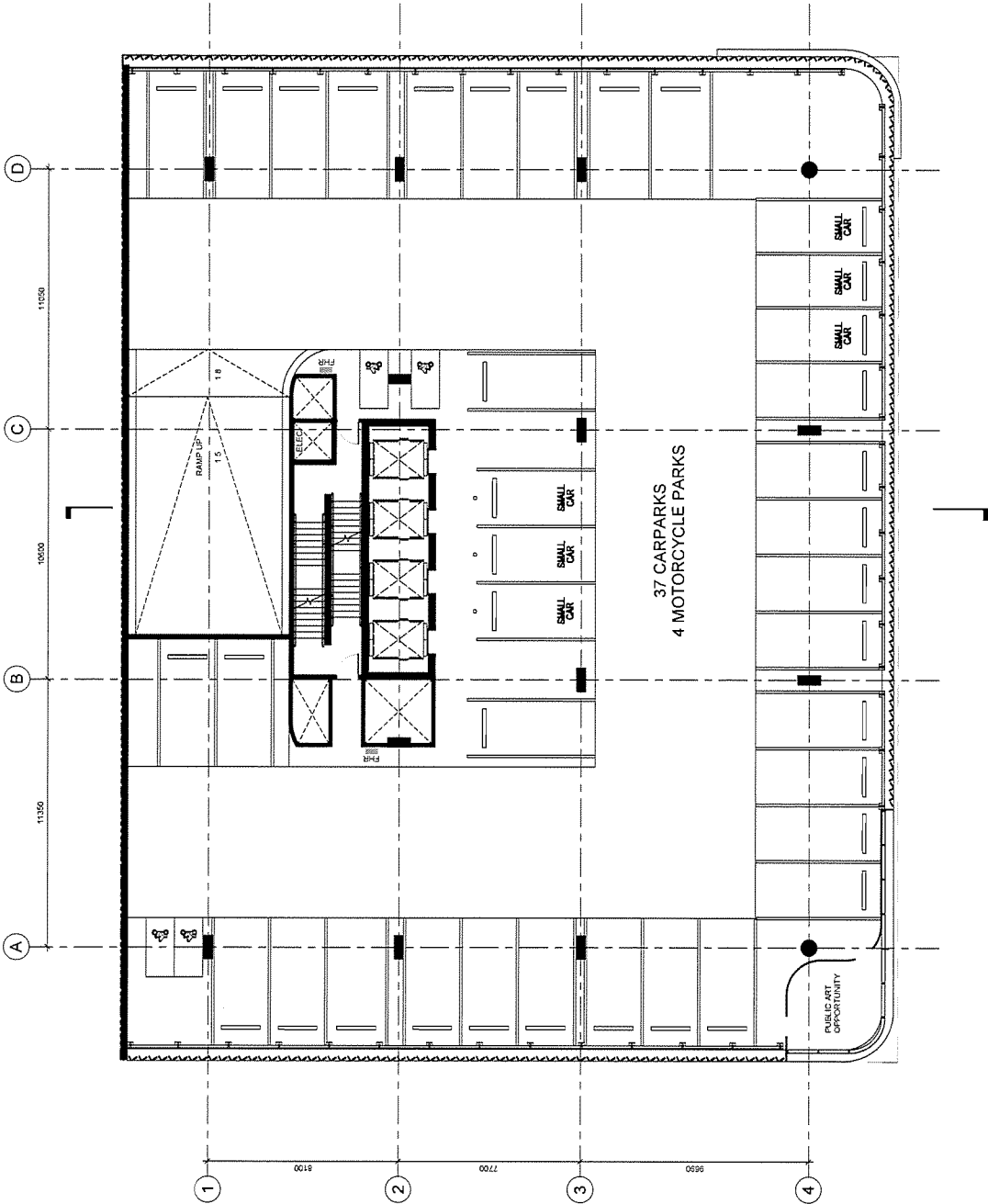
PODIUM 3	
5000x2400 Small Car	3
5400x2300 Small Car	3
5400x2400 Standard Car	27
5400x2600 Standard Car	3
36	

PODIUM 4	
5000x2400 Small Car	3
5400x2300 Small Car	3
5400x2400 Standard Car	27
5400x2600 Standard Car	4
37	

Grand total 144

Parking Ratio = 1:75

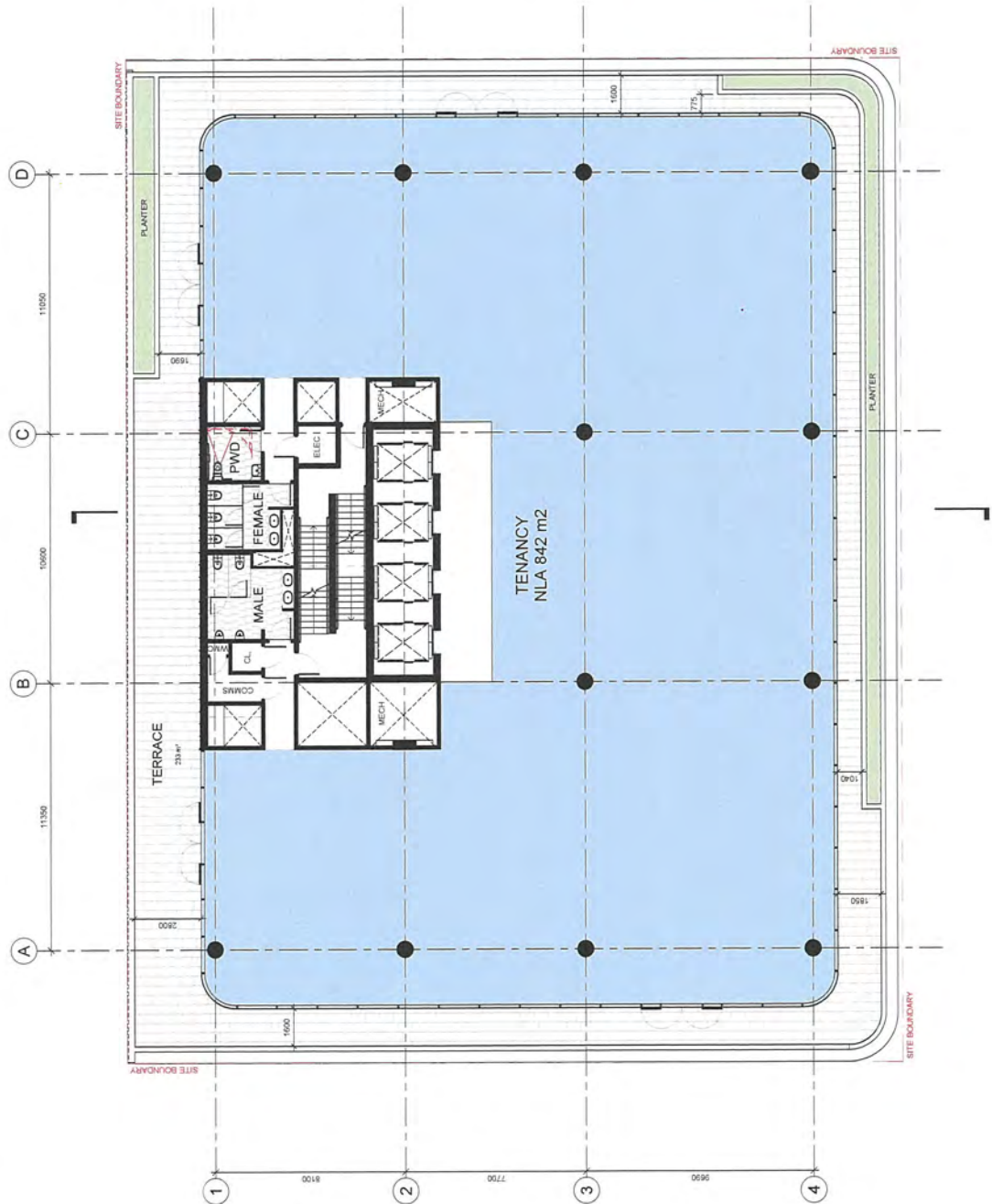
Level 4 Floor Plan



PARKING SCHEDULE	
CAR PARK TYPE	NUMBER OF SPACES
PODIUM 1	
5400x2300 Small Car	3
5400x2400 Standard Car	27
5400x2600 PWD	2
5400x2600 Standard Car	3
PODIUM 2	
5000x2400 Small Car	3
5400x2300 Small Car	3
5400x2400 Standard Car	27
5400x2600 Standard Car	3
PODIUM 3	
5000x2400 Small Car	3
5400x2300 Small Car	3
5400x2400 Standard Car	27
5400x2600 Standard Car	3
PODIUM 4	
5000x2400 Small Car	3
5400x2300 Small Car	3
5400x2400 Standard Car	27
5400x2600 Standard Car	4
Grand total	144

Parking Ratio = 1:75

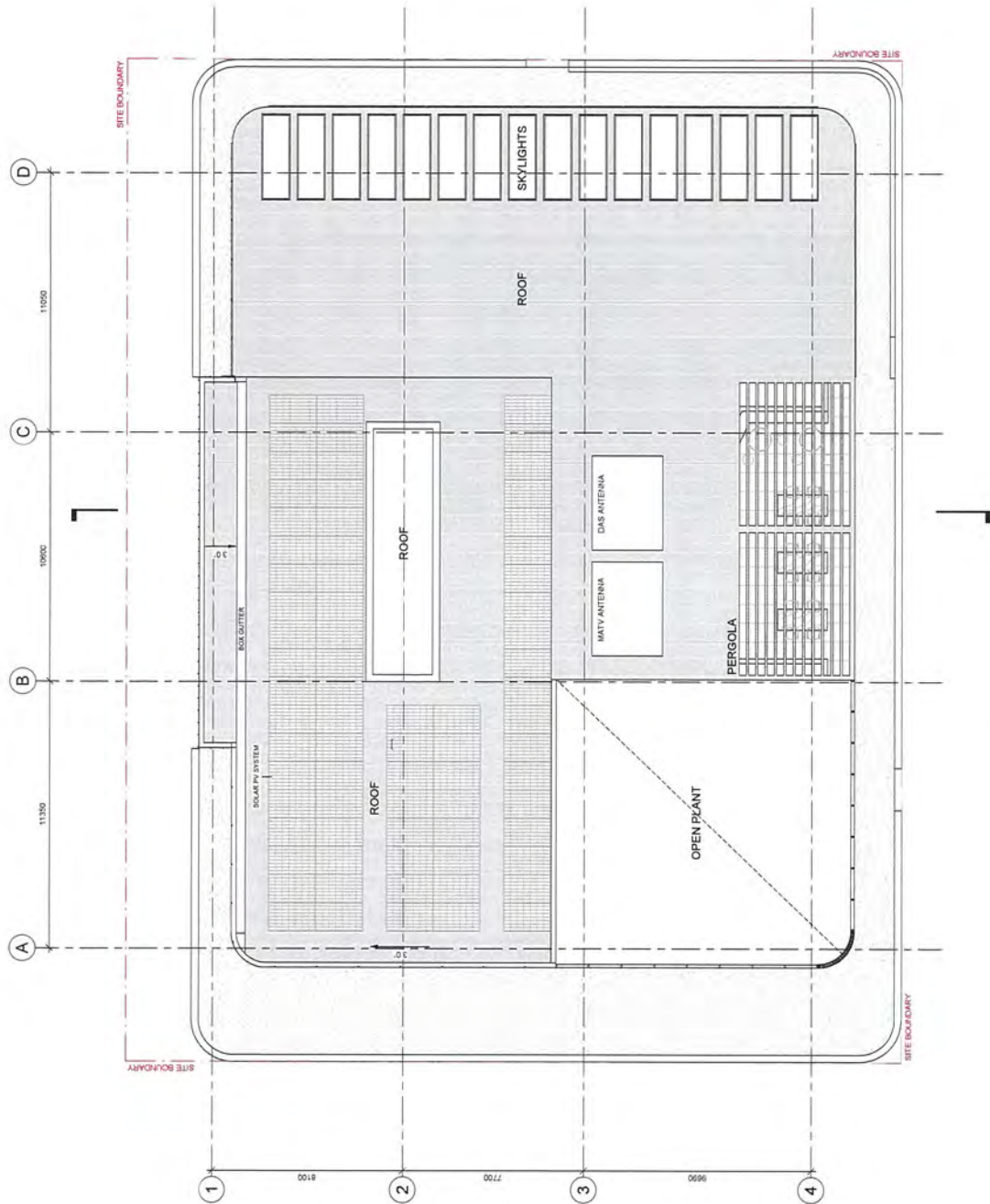
Level 5 Floor Plan



Typical Tower Plan (Levels 6-13)

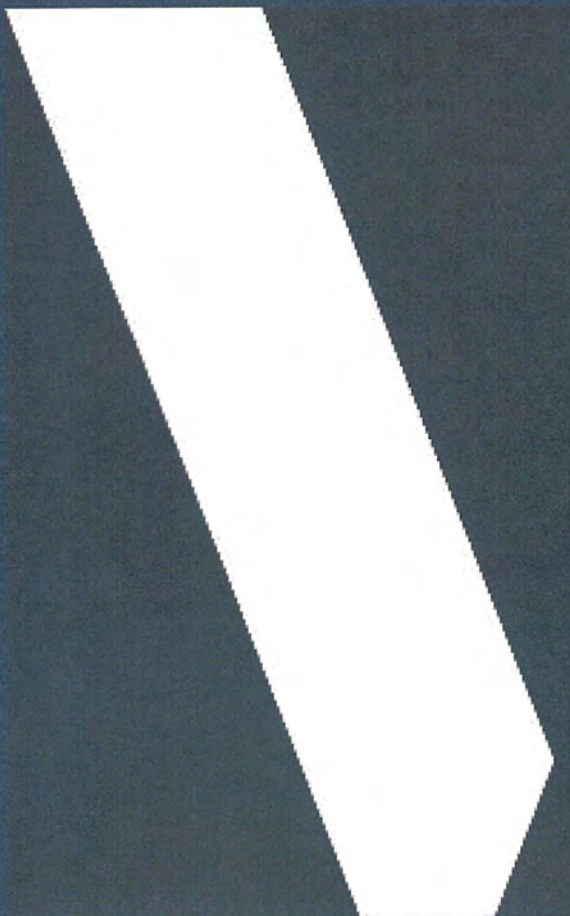


Roof Plan



APPENDIX B

CONCEPT EROSION AND SEDIMENT CONTROL PLAN





LEGEND

- FFL XX.XX
- PROPOSED FINISHED FLOOR LEVEL
- PROPOSED BUILDING AREA OUTLINE
- PROPOSED ASPHALT PAVEMENT
- TEMPORARY SEGMENT BARRIERS
- PROPOSED STABILISED SITE ENTRY/EXIT
- FINL LOCATION TO BE DETERMINED BY
- CONSTRUCTION
- PROPOSED ROCK CHECK DAM

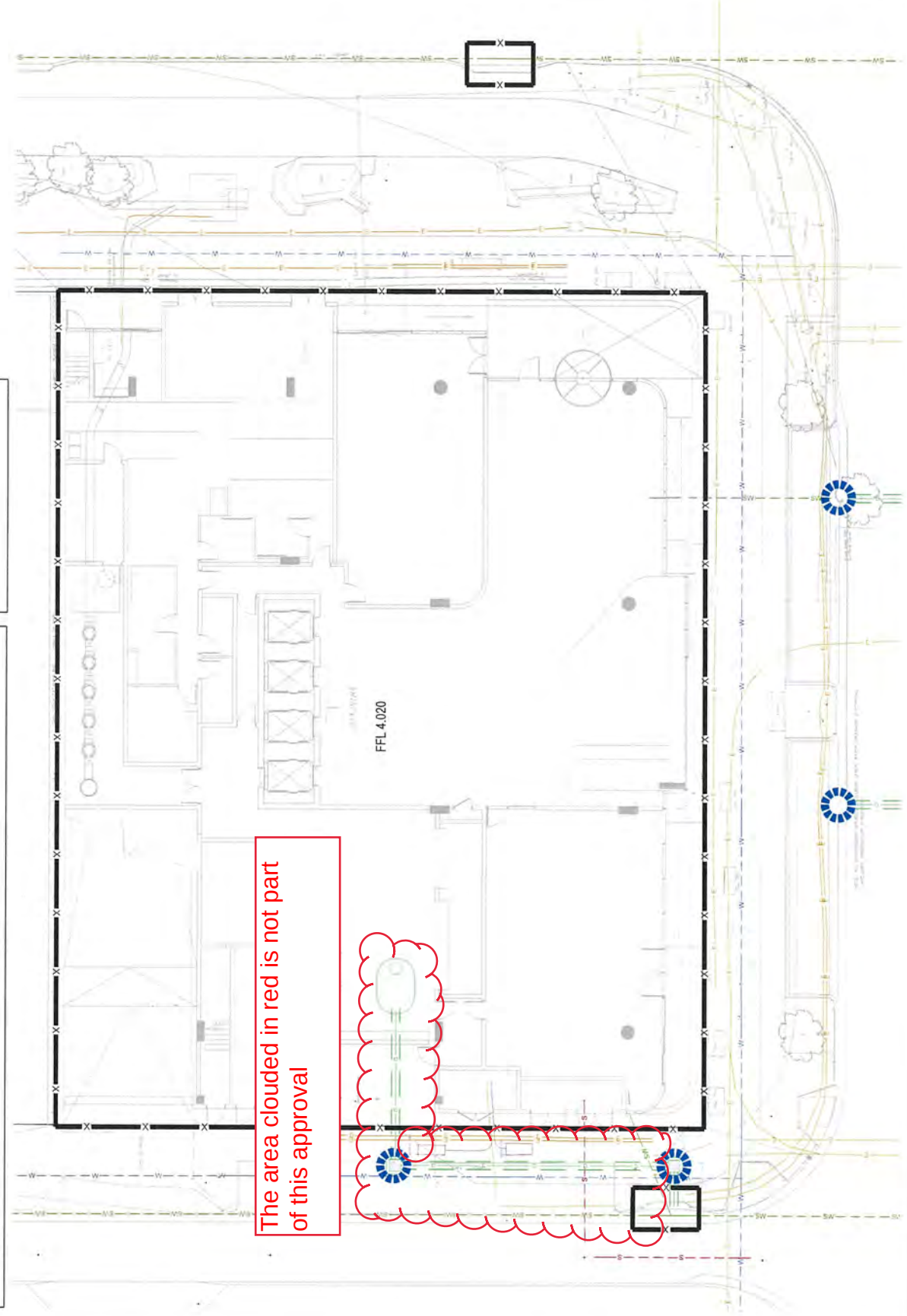
- PROPOSED PERMET SEGMENT TEMP
- PROPOSED SEGMENT FENCE
- PROPOSED TEMPORARY DRAINAGE DRAIN
- PROPOSED FINISHED MAJOR CONTOUR
- PROPOSED FINISHED MINOR CONTOUR
- PROPOSED BULK EARTHWORKS MAJOR CONTOUR
- EXISTING CONTOUR MAJOR
- EXISTING CONTOUR MINOR

- EXISTING ELECTRICAL
- EXISTING STORMWATER
- EXISTING WATER
- EXISTING SEWER
- EXISTING COMMUNICATIONS
- EXISTING SURFACE LEVEL
- EXISTING TREE

NOTES

1. GRAVEL SHAKE DOWN AND WASH DOWN AREA. DISCHARGE TO SUITABLE SEDIMENT CAPTURE DEVICE. DETAILS TO BE DETERMINED BY THE CONTRACTOR.
2. SEGMENT FENCES MUST BE LOCATED PARALLEL TO SUITABLE SEDIMENT CAPTURE DEVICE.
3. TURNOUTS ARE TO BE INCORPORATED TO PREVENT CONCENTRATION OF FLOWS.
4. FRENCH GRATE.
5. FOR EROSION AND SEDIMENT CONTROL NOTES AND DETAILS REFER DWG 2001, 2002 AND 2003.

The area clouded in red is not part of this approval



SCALE
1:100 @ A1
1:200 @ A3

NOTES: EROSION AND SEDIMENT CONTROL PLAN

NO	DATE	BY	DESCRIPTION	CHK	APP
1	10/01/17	ES	FOR INFORMATION	ES	ES
2	10/01/17	ES	FOR INFORMATION	ES	ES

INFORMATION ONLY
NOT TO BE USED FOR CONSTRUCTION

wsp

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www.wsp.com

CUSTOMER
WALKER MAROOCHDORE
DEVELOPMENTS PTY LTD

PROJECT
LOT 71 MAROOCHDORE CITY CENTRE
50 FIRST AVENUE, MAROOCHDORE

TITLE
EROSION AND SEDIMENT CONTROL PLAN

SCALE @ A1	CHECKED	DATE	APPROVED
AS ABOVE	SN		SN
PROJECT NUMBER	RAO		DATE
PS125823			
DATE			
2000			

REV B

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GENERAL INSTRUCTIONS

GENERAL INSTRUCTIONS

- ### RECOMMENDED IMPLEMENTATION SEQUENCE

100

12. LOCATIONS WHERE DEVELOPMENT WORKS SUCH AS LANE
13. CLOSURE IS REQUIRED TO BE MAINTAINED WITHIN THE
14. DESIGNATED AREAS TO THE EXTENT OF THE WORK. THE
15. METERS (PREFERABLY 2 METERS) FROM THE SIDEWALK
16. WORK AREAS TO BE DELINEATED BY BARRIERS, FENCING,
17. AND INTERLOCK CHAIN LINKS, AND SIGNAGE TO PREVENT
18. THE CONTRACTOR FROM INFRINGING THAT THE EXISTING
19. VEHICULAR AND PEDESTRIAN CIRCULATION BE REMAINED
20. OPEN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR
21. TOPPING SHALL BE STRIPPED AND STOCKPILED FOR
22. LATER USE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR
23. CLEARING AND STOCKPILED SHALL BE MAINTAINED AND
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CONSTRUCTION COMPLETION
SEDIMENT LAGOON WATER SHALL BE PREVENTED FROM

- ## DUST CONTROL

- ## OTHER MATTERS

- MAINTENANCE OF PUBLIC ROADS

- ## SITE INSPECTION AND MAINTENANCE

- WATERING SHOULD VARY DEPENDING ON WEATHER AND SOIL CONDITIONS

AS A MINIMUM
WEEK 1

- ## SEDIMENT BASIN MAINTENANCE

- | PARAMETER | RELEASE CRITERIA |
|-------------------|-----------------------|
| SUSPENDED SOLIDS | 50mg MAX |
| pH | WITHIN RANGE: 6.5-9.5 |
| VISUAL APPEARANCE | NO VISUAL PLUME |

HANDHELD TURBIDITY METER FOR SAMPLES COLLECTED FOR LABORATORY TESTING ONLY

DATE		TIME		NO.		DATE		TIME		NO.	
14		12		1		14		12		1	
15		12		2		15		12		2	
16		12		3		16		12		3	
17		12		4		17		12		4	
18		12		5		18		12		5	
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87		12		74		87		12		74	

WSP

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CLIENT

WALKER MAROOCHYOORE
DEVELOPMENTS PTY LTD

PROJECT

LOT 11 MAROOCHYOORE CITY CENTRE
50 FIRST AVENUE, MAROOCHYOORE

TITLE

EROSION AND SEDIMENT CONTROL NOTES

FORM 111	FORM 112	FORM 113
AS ABOVE	SN	SN
PUBLIC NUMBER	SNAP	DATE
PS 25923	RAO	
DRAWN BY: REV A		
2001		

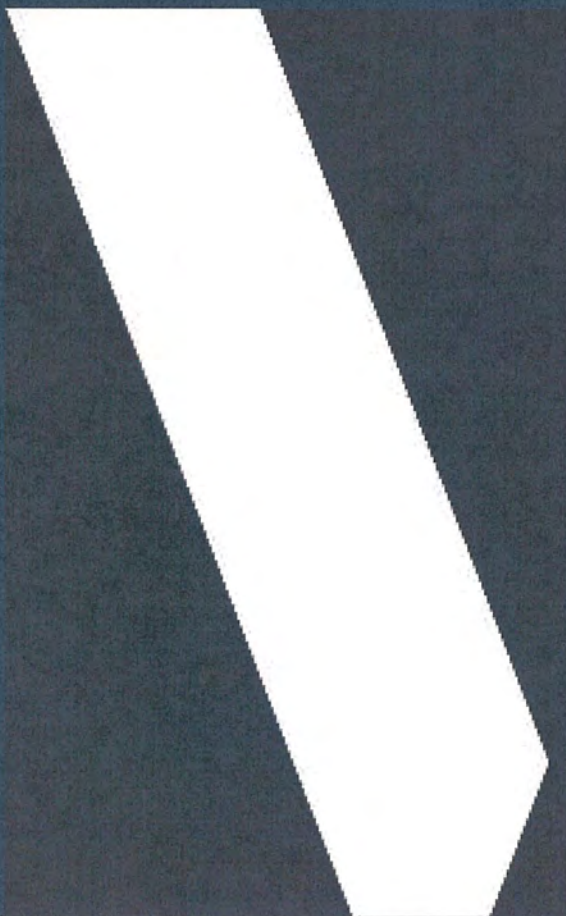
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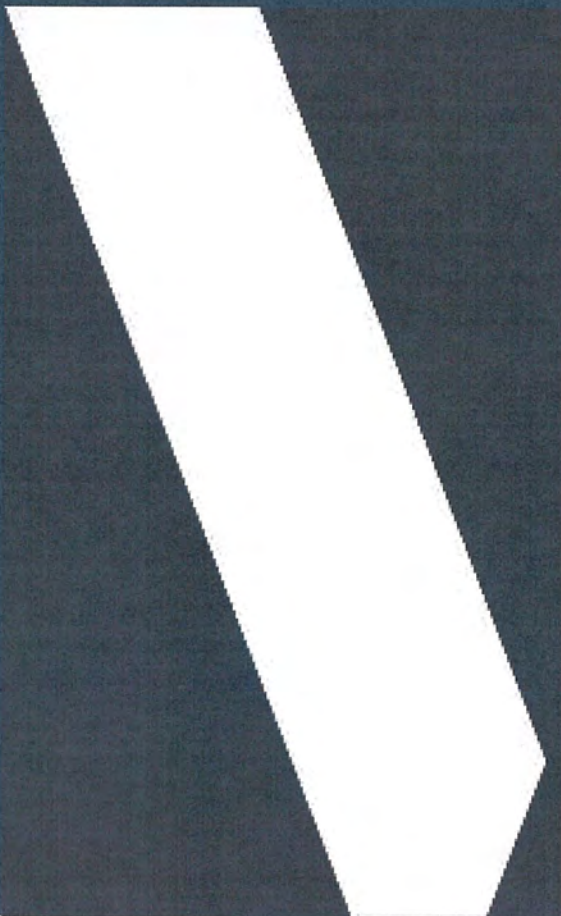
APPENDIX C

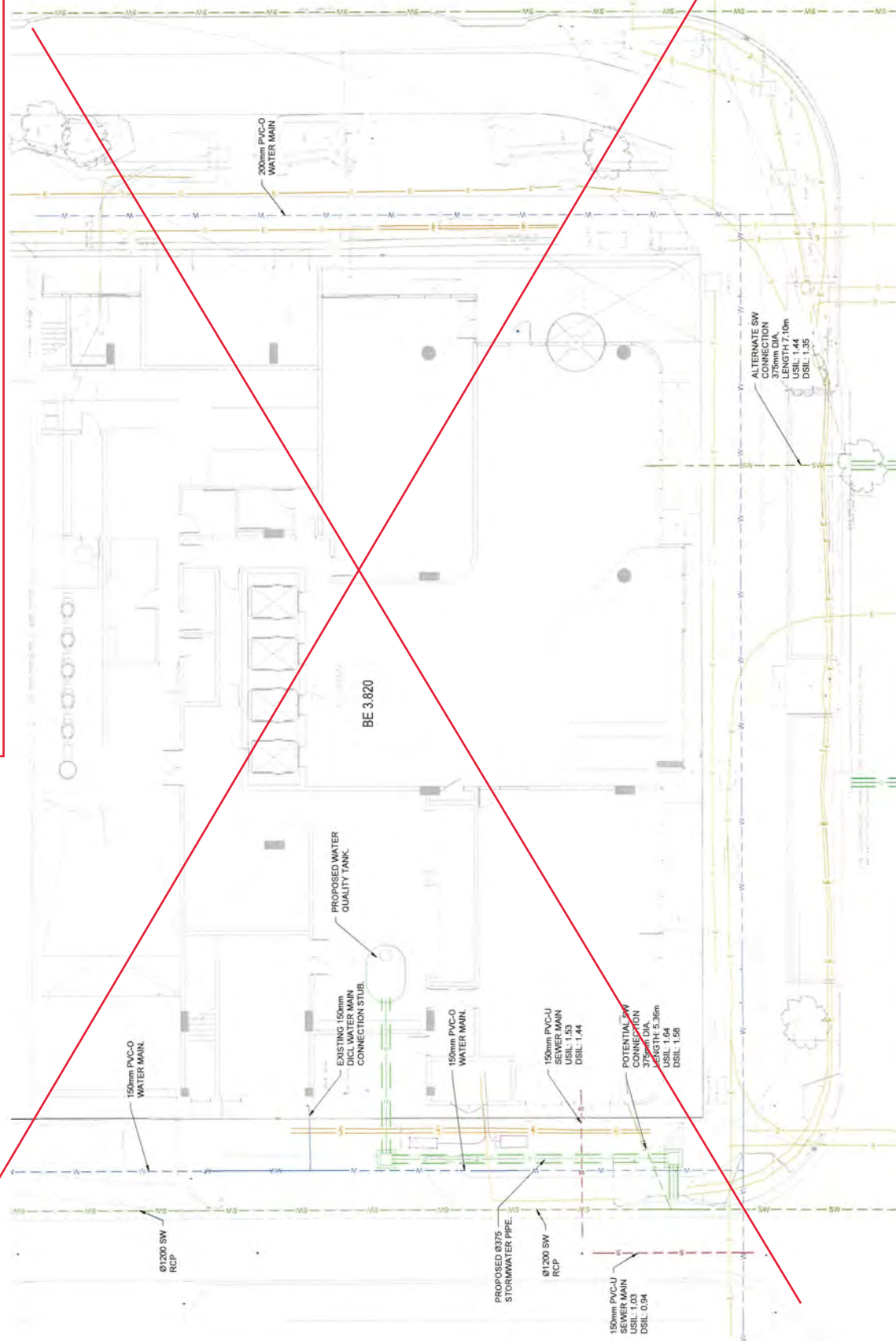
CONCEPT BULK EARTHWORKS PLAN



APPENDIX D

CONCEPT SITE SERVICES LAYOUT





SCALE		1 IN. = 4' 0"		1/2" = 10' 0"		1/4" = 20' 0"		1/8" = 40' 0"		1/16" = 80' 0"		1/32" = 160' 0"		1/64" = 320' 0"		1/128" = 640' 0"		1/256" = 1280' 0"		1/512" = 2560' 0"		1/1024" = 5120' 0"		1/2048" = 10240' 0"		1/4096" = 20480' 0"		1/8192" = 40960' 0"		1/16384" = 81920' 0"		1/32768" = 163840' 0"		1/65536" = 327680' 0"		1/131072" = 655360' 0"		1/262144" = 1310720' 0"		1/524288" = 2621440' 0"		1/1048576" = 5242880' 0"		1/2097152" = 10485760' 0"		1/4194304" = 20971520' 0"		1/8388608" = 41943040' 0"		1/16777216" = 83886080' 0"		1/33554432" = 167772160' 0"		1/67108864" = 335544320' 0"		1/134217728" = 671088640' 0"		1/268435456" = 1342177280' 0"		1/536870912" = 2684354560' 0"		1/1073741824" = 5368709120' 0"		1/2147483648" = 10737418240' 0"		1/4294967296" = 21474836480' 0"		1/8589934592" = 42949672960' 0"		1/17179869184" = 85899345920' 0"		1/34359738368" = 171798691840' 0"		1/68719476736" = 343597383680' 0"		1/137438953472" = 687194767360' 0"		1/274877906944" = 1374389534720' 0"		1/549755813888" = 2748779069440' 0"		1/1099511627776" = 5497558138880' 0"		1/2199023255552" = 10995116277760' 0"		1/4398046511104" = 21990232555520' 0"		1/8796093022208" = 43980465111040' 0"		1/17592186044416" = 87960930222080' 0"		1/35184372088832" = 175921860444160' 0"		1/70368744177664" = 351843720888320' 0"		1/140737488355328" = 703687441776640' 0"		1/281474976710656" = 1407374883553280' 0"		1/562949953421312" = 2814749767106560' 0"		1/1125899906842624" = 5629499534213120' 0"		1/2251799813685248" = 11258999068426240' 0"		1/4503599627370496" = 22517998136852480' 0"		1/9007199254740992" = 45035996273704960' 0"		1/18014398509481984" = 90071992547409920' 0"		1/36028797018963968" = 180143985094819840' 0"		1/72057594037927936" = 360287970189639680' 0"		1/144115188075855872" = 720575940379279360' 0"		1/288230376151711744" = 1441151880758558720' 0"		1/576460752303423488" = 2882303761517117440' 0"		1/1152921504606846976" = 5764607523034234880' 0"		1/2305843009213693952" = 11529215046068469760' 0"		1/4611686018427387904" = 23058430092136939520' 0"		1/9223372036854775808" = 46116860184273879040' 0"		1/18446744073709551616" = 92233720368547758080' 0"		1/36893488147419103232" = 184467440737095516160' 0"		1/73786976294838206464" = 368934881474191032320' 0"		1/147573952589676412928" = 737869762948382064640' 0"		1/295147905179352825856" = 1475739525896764129280' 0"		1/590295810358705651712" = 2951479051793528258560' 0"		1/1180591620717411303424" = 5902958103587056517120' 0"		1/2361183241434822606848" = 11805916207174113034240' 0"		1/4722366482869645213696" = 23611832414348226068480' 0"		1/9444732965739290427392" = 47223664828696452136960' 0"		1/18889465931478580854784" = 94447329657392904273920' 0"		1/37778931862957161709568" = 188894659314785808547840' 0"		1/75557863725914323419136" = 377789318629571617095680' 0"		1/151115727451828646838272" = 755578637259143234191360' 0"		1/302231454903657293676544" = 1511157274518286468382720' 0"		1/604462909807314587353088" = 3022314549036572936765440' 0"		1/1208925819614629174706176" = 6044629098073145873530880' 0"		1/2417851639229258349412352" = 12089258196146291747061760' 0"		1/4835703278458516698824704" = 24178516392292583494123520' 0"		1/9671406556917033397649408" = 48357032784585166988247040' 0"		1/19342813113834066795298816" = 96714065569170333976494080' 0"		1/38685626227668133590597632" = 193428131138340667952988160' 0"		1/77371252455336267181195264" = 386856262276681335905976320' 0"		1/154742504910672534362390528" = 773712524553362671811952640' 0"		1/309485009821345068724781056" = 1547425049106725343623905280' 0"		1/618970019642690137449562112" = 309485009821345068	
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class

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www.wsp.com

CLIENT
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PROJECT
LOT 71 MAROOCHYDORE CITY CENTRE
50 FIRST AVENUE, MAROOCHYDORE

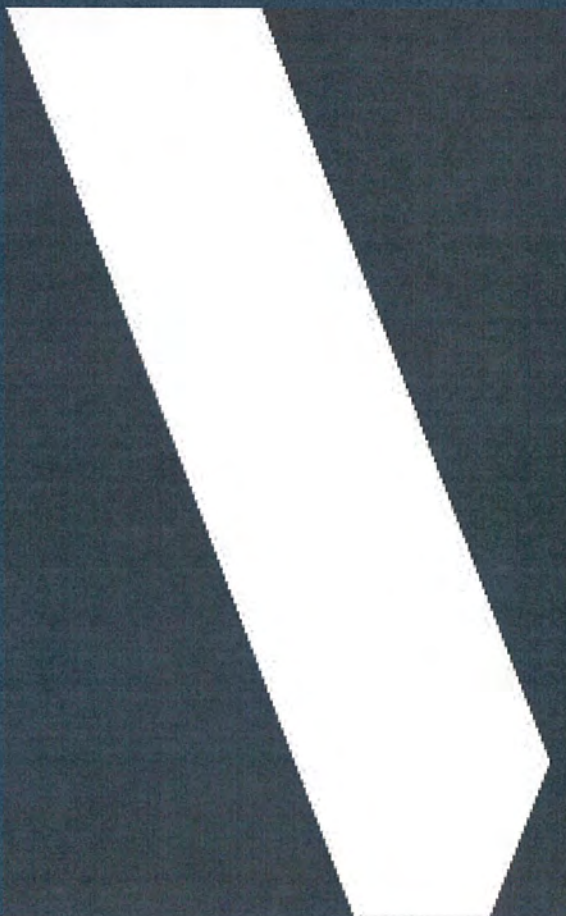
TITLE	DATE	BY	REVISION
SITE SERVICES PLAN			

SCALE @ 1/4" = 1'-0"	CHECKED	APPROVED
AS ABOVE	SN	SN
PROJECT NUMBER	DATE	DATE
2515923	RAO	RAO
DRAWING No.		REV
30000		B

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APPENDIX E

MUSIC MODELLING



1 x 100kL RWT



Roof - 1650m² (100% Imp.) [Commercial]



1 x OceanGuard



SF Chamber 1.6m²



3 x 690 PSORB Stormfilter (MCC Brisbane)

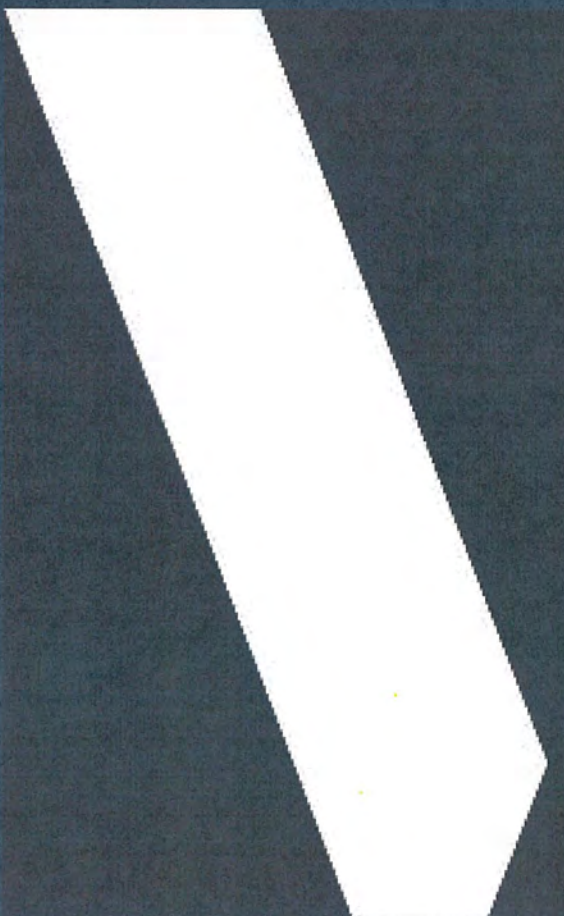


Receiving Node

Treatment Train Effectiveness - Receiving Node				
	Sources	Residual Load	% Reduction	
Flow (ML/yr)	1.77	1.77	0	
Total Suspended Solids (kg/yr)	51.9	8.86	82.9	
Total Phosphorus (kg/yr)	0.304	0.0955	68.6	
Total Nitrogen (kg/yr)	5.64	2.86	49.3	
Gross Pollutants (kg/yr)	41.2	0	100	

APPENDIX F

UNITYWATER SAN





Unitywater
ABN: 89 791 717 472

F9289 - Services Advice Notice Request Form

Postal Address
PO Box 953
Caboolture QLD 4510

Unitywater
Ph: 1300 0 UNITY (1300 086 489)
Fax: 07 5431 8288

Internet
www.unitywater.com
Development.Services@unitywater.com

Please note:

A Service Advice Notice does not currently attract a fee. The quality of advice provided is dependent on the quality of the information submitted.

Generally, it will take 20 business days to process an application.

A Service Advice Notice is advisory only and does not represent approval of the connection or any associated works.

A Services Advice Notice is not for requesting general advice or enquires. The intention of a Services Advice Notice is to provide advice in relation to development proposals prior to lodging a formal connection application with Unitywater.

A Service Advice Notice does not include a detailed assessment of any related documents (including drawings and technical reports).

A Service Advice Notice does not include a hydraulic model analysis by Unitywater to determine the network capacities where the proposed development demand is determined to be greater than Unitywater's demand allocation for the site.

Applicant Details

Name (individual or Company name in full): WSP

Contact Person: Jared Falkenhagen

Email: Jared.Falkenhagen@WSP.com

Daytime Contact Number: 0433 013 006

Mobile Number: 0433 013 006

Postal address: Level 12, 900 Ann Street, Fortitude Valley 4006

Subject Property Details

Street address: Lot 71, Maroochydore City Centre

Real Property Description – Lot / Plan: 71 SP308184

Proposed Connection Application information

Service Type: (Please tick appropriate box/es)

☒ Water Supply ☒ Sewerage

What is the application for? (Please tick appropriate box/es)

☒ New Connection ☐ Alteration to a Connection
☐ Disconnection ☐ Alterations to Unitywater network

Provide a brief description of the development proposal, including the use and number of buildings or structures where applicable (e.g. six unit apartment building, 30 lot residential subdivision etc.).

a new 12-level commercial building with site area of 1407sqm, the development is primarily commercial with levels 4 – 11 proposed for office space. The project also includes a Lobby, retail tenancies, end of trip facilities, a loading bay and bike parking on the ground floor. Remaining levels will be occupied with podium car parks and storage

Development Type (Planning scheme definition of the proposed development e.g. Reconfiguring a lot, Material change of use, Residential, commercial, retail, mixed, industrial, other). Primarily Commercial

Provide any specific enquiries relating to the development proposal.

Demand availability, site EP allocation for water and sewer, and connection points for water and sewer

Do you have a proposed / preliminary layout for the development proposal? ☒ Yes ☐ No
 (If yes Please attach)

Are there any existing approvals, applications or infrastructure agreements on the property (if yes please detail / attach). ☐ Yes ☐ No

What is the current lawful use of the property? _____
 New commercial development on old golf course

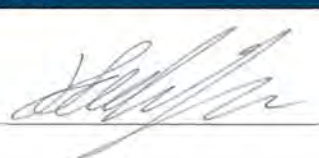
Is the property connected to Unitywater's water and sewer infrastructure? ☐ Water ☐ Sewer

List below all of the forms and supporting information that accompanies this request (Include design plans, reports, etc.)

Please ensure your request has all relevant supporting documentation attached. Failure to provide suitable or adequate information may affect the quality of the response to this request.

Description of Attachment or Title of Attachment:	Method of Lodgement to Unitywater
Floor Plans	Email (attached to SAN request form)
Survey	Email (attached to SAN request form)

Applicant Signature

Signature:  Date: 04/08/2021

Privacy statement

Unitywater is collecting your personal information for the purpose of providing the requested service. The collection of this information is authorised under the South East Queensland Water (Distribution and Retail Restructuring) Act 2009. Your information will not be given to any other person or agency unless required by law or we have your permission in writing.

McLauchlan, Fraser

From: McLauchlan, Fraser
Sent: Monday, 25 October 2021 3:20 PM
To: Development Services
Cc: Falkenhagen, Jared
Subject: DA#2021020267 - SAN for Lot 71 Maroochydore City Centre (SP308184)
Attachments: Services Advice Notice Request Form - Lot 71, Maroochydore City Centre.pdf; Lot 71 Arch Drawings.pdf

Hi Jarred,

I spoke with Megan this morning regarding the status of the SAN for Lot 71, Maroochydore City Centre (SP308184) submitted on August 4, 2021. Can you please provide an update?

Please find the original SAN application attached issued by my colleague Jared.

In addition, please find updated drawings to accompany the SAN attached separately to the email. Please note that the building height is now increasing from 12 levels to 15 levels. This increases the GFA however the site area remains the same as the original SAN application. The ground floor is to be retail and an integrated lobby café, levels 1-4 to be car park and storage, levels 5-14 to be office space. Total GFA = 10,648 sqm.

Please let me know if you have any issues or require any further information.

Thanks,



Fraser McLauchlan
Civil Engineer

T: +61 7 3854 6064

Fraser.McLauchlan@wsp.com

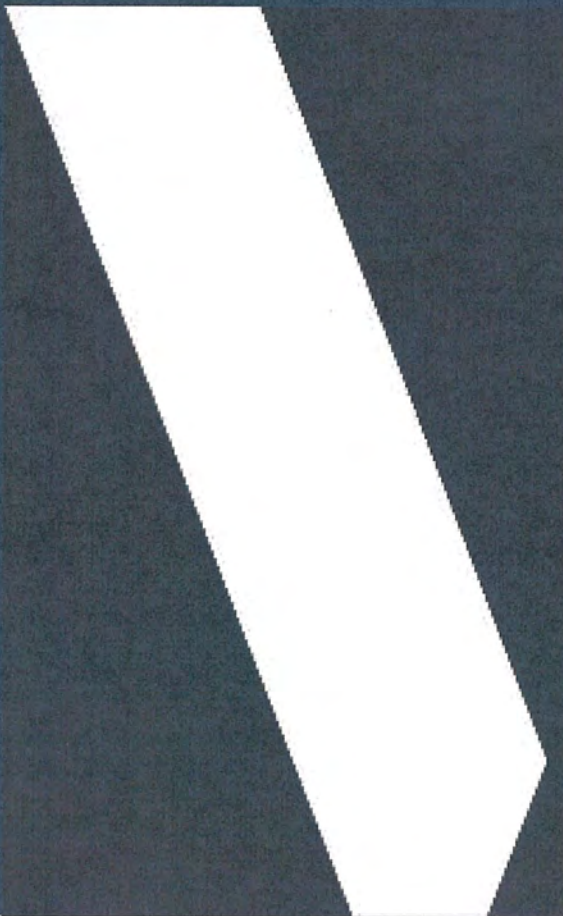
WSP Australia Pty Limited
900 Ann Street, Level 12
Fortitude Valley, QLD 4006
Australia

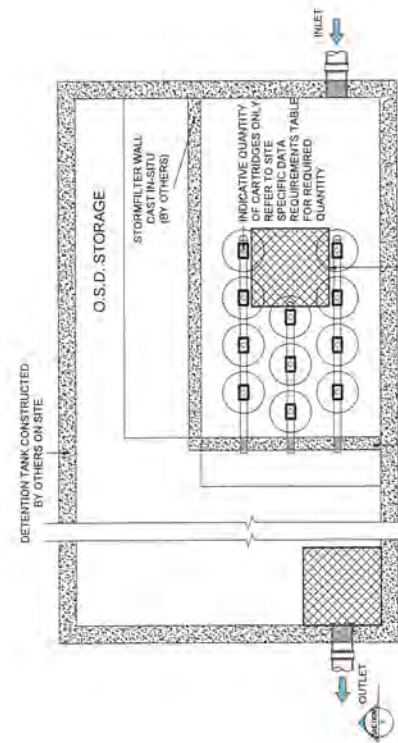
wsp.com/au

WSP acknowledges that every project we work on takes place on First Peoples lands. We recognise Aboriginal and Torres Strait Islander Peoples as the first scientists and engineers and pay our respects to Elders past and present.

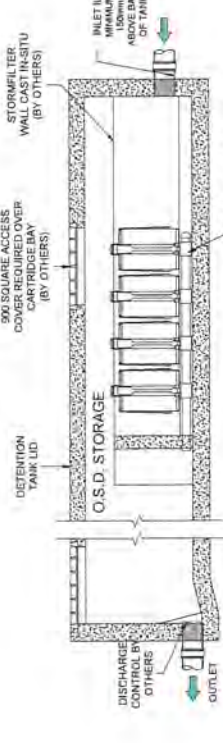
APPENDIX G

STORMWATER QUALITY PROPRIETARY DEVICES

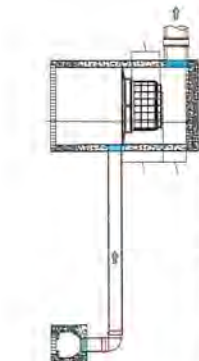




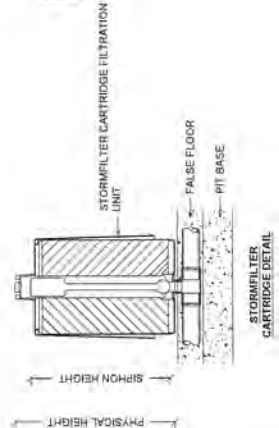
PLAN LAYOUT



SECTION A



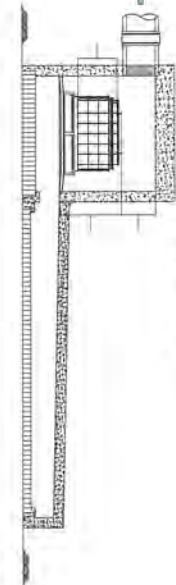
GRATED STRIP DRAIN EXTERNAL OCEANGUARD PIT CONFIGURATION



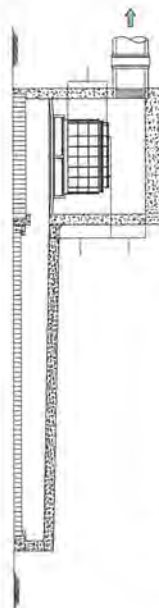
PIPE FLOW CONFIGURATION

SURFACE FLOW CONFIGURATION

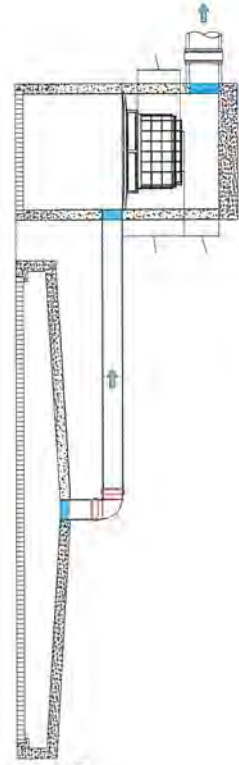
SURFACE FLOW CONFIGURATION



GRATED STRIP DRAIN CONFIGURATION



GRATED STRIP DRAIN INTERNAL OCEANGUARD CONFIGURATION



GRATED STRIP DRAIN EXTERNAL OCEANGUARD PIT CONFIGURATION

NO.	REVISION	DATE	BY	FOR	OWN
1	ISSUED	20/01/2024	WSP	FOR CONSTRUCTION	WSP

INFORMATION ONLY
NOT TO BE USED FOR CONSTRUCTION

WSP
Level 12, 200 Ave Street, Portlands Valley QLD 4206, Australia
Tel: 461 7355 9603 Fax: 461 7355 9699
www.wsp.com.au

CLIENT
WALKER MAROOCHYDORE DEVELOPMENTS PTY LTD

PROJECT
LOT 71 MAROOCHYDORE CITY CENTRE
50 FIRST AVENUE, MAROOCHYDORE

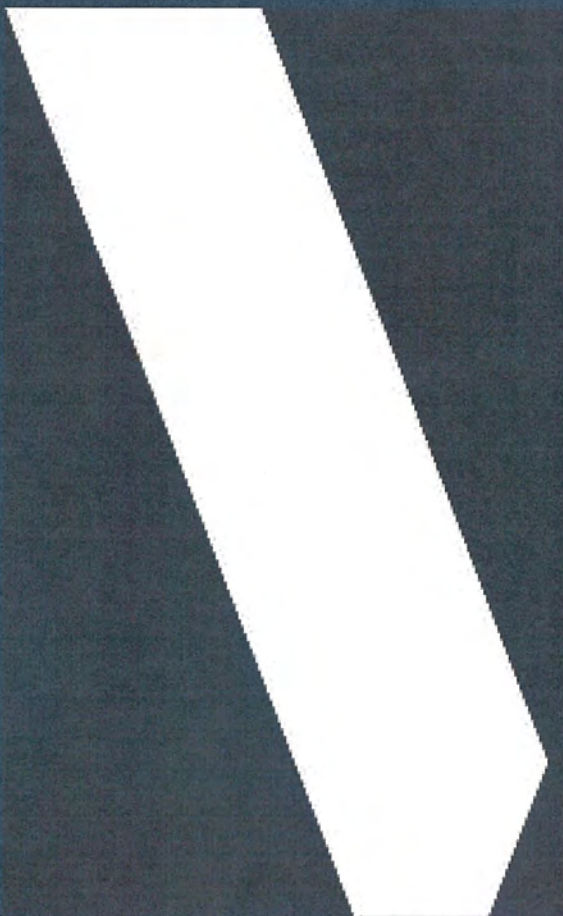
WATER QUALITY DETAILS

SCALE	DATE	CHECKED	APPROVED
NTS	20/01/2024	RAO	DATE
PROJECT NUMBER	PS125523	RAO	DATE
PROJECT NAME	LOT 71 MAROOCHYDORE CITY CENTRE	RAO	DATE
PROJECT SITE	50 FIRST AVENUE, MAROOCHYDORE	RAO	DATE
PROJECT SHEET	4000	RAO	DATE
PROJECT	A	RAO	DATE

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APPENDIX H

SCC INFRASTRUCTURE MAPPING





ArcGIS Web Map



Sunshine Coast Council
Locked Bag 72
Sunshine Coast Mail Centre QLD 4560

1:1,128

0 0.025 0.05 0.1 km

Printed on A3 paper

8/11/2021, 2:43:33 PM

Author: ArcGIS Web AppBuilder

Disclaimer
While every care is taken to ensure the accuracy of this product, neither the Sunshine Coast Regional Council nor the State of Queensland makes any representations or warranties about its accuracy, completeness, timeliness, or suitability for any purpose and disclaims all responsibility and all liability (including without limitation, liability in negligence) for all expenses, losses, damages (including indirect or consequential damage) and costs that may occur as a result of the product being inaccurate or incomplete in any way or for any reason.
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8QLW\ZDWHU 0DS



30

:DWHU 6\VWH\WYHJXQN 081000VWUH

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PL
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1365 (VUL k 2SHQ6WUHHW0DS FRQWULEXWRU

1365 (VUL k 2SHQ6WUHHW0DS FRQWULEXWRU + (5) *DUPLQ 86*6 _ k 6WDWH RI 4XHHQVODQG 'HSDUWPHQW RI 'DWXUDO 5HVRXUFHV DQG 0LQHV _ 0RUHWRO %DI 5HJLRQDO &RXQFLO

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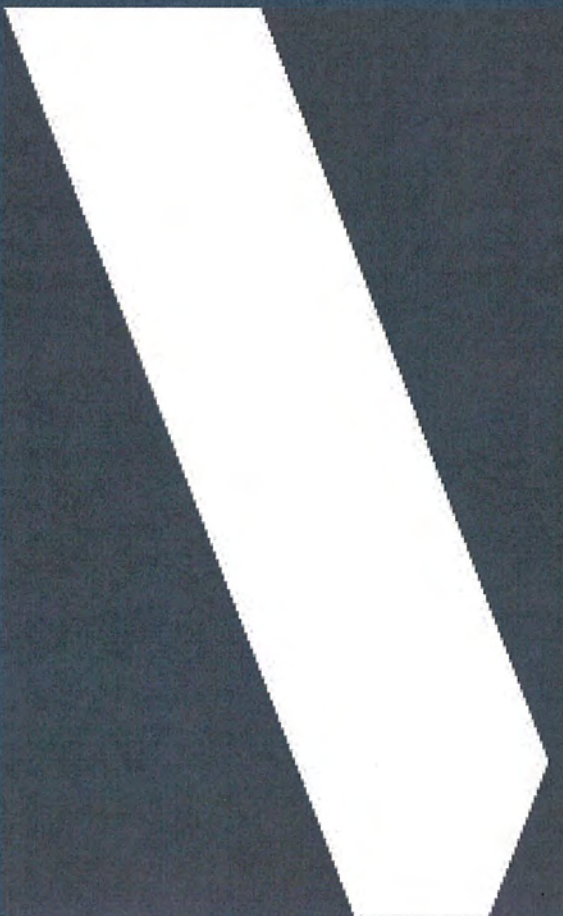
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- 1HWZRUN 0HW\H\$LU 6HZHU 3UHVXX 08DLQW\ZDWHU 2SHUDWLRQDO \$UHD
- 6HZHU 0DQKROH 5HIOX[5LVLQJ 0DLQ
- 0DLQWHQDQGHZ\H\1W\YLW 08QFHVV &KDPEHU
- 0DQKROH 7UXQN 0DLQDGDVWUH
- 6WRS 5HWLFXOD 08DWHQ

1365 (VUL k 2SHQ6WUHHW0DS FRQWULEXWRUV +(5(*DUPLQ 86*6 _ k 6WDWH RI 4XHHQVODQG 'HSDUWPHQW RI 1DWXUDO 5HVRXUFHV DQG 0LQHV - 0RUHWRQ %D\ 5HJLRQDO &RXQFLO 80LW\ZDWHU'

PL
NP

APPENDIX I

FLOOD TECHNICAL MEMO



Technical Memorandum

Title	Maroochydore City Centre Stage 1 Local Flooding		
Client	Suncentral Maroochydore	Project No	249402
Date	29 October 2015	Status	Preliminary
Author	Nadia Guterres	Discipline	Civil Engineering
Reviewer	Darryl Hone	Office	Sunshine Coast

1. Summary

Given the flat nature of the Stage 1 works and the locations of raised intersections which would block overland flow paths, detailed two-dimensional flood analysis was conducted to ensure that the proposed road and internal drainage design would be sufficient to convey stormwater flows during major flood events. The purpose of this analysis was to:

- > Determine the 100 year ARI local flood levels throughout Stage 1 and the corresponding floor levels for each lot.
- > Determine the impact of complete blockage of stormwater gully and field inlets to ensure that the freeboard provided to minimum floor levels was sufficient.
- > Determine whether the peak depths within the road reserve during major flood events complied with the requirements of QUDM.
- > Determine if any areas required additional drainage infrastructure.

The proposed stormwater drainage has been designed to have 5% Annual Exceedance Probability (AEP) capacity using 12d. This drainage design was then transferred into TUFLOW for analysis of the major 1% AEP storm event.

2. Methodology

The TUFLOW model was set up using the following methodology:

- > The 1% AEP rainfall was increased by 20% to account for the potential impact of climate change.
- > The Duration Independent Storm (DIS) was used, with a time step of 5 minutes. The DIS method converts peak rainfall intensities from various storm duration into the one temporal pattern.
- > A 0.5m grid size was adopted so that the road reserve was captured in sufficient detail.
- > The road reserve areas were modelled using rainfall on grid. No rainfall losses were assumed.
- > The runoff from the surrounding lots was directed towards the underground drainage network. As the roof drainage is likely to have 5% AEP capacity, flows in excess of this capacity were directed as inflows onto the road surface. No rainfall losses were assumed.
- > The tailwater level in the canal was assumed to be 2.35m AHD. This is the 1% AEP storm tide level with potential climate change included. Storm tide levels are to be used in preference to

storm surge levels as wave runup is not included as it is not a factor in protected waterways such as Maud Canal.

- > The tailwater level for the existing northern drainage system was assumed to be equal to the obvert of the existing pipe.
- > The road reserve was modelled with a Manning's roughness of 0.02.
- > For the design scenario the blockage factors for field and gully inlets as specified by QUDM were assumed.
- > For the blockage scenario all inlets were blocked by 100%. Roof water drainage (to 5% AEP capacity) was still assumed to be able to enter the drainage network.
- > The manhole losses were automatically calculated by TUFLOW using the Engelhund Method.

3. Results

The preliminary results of the analysis identified areas where additional inlets would be required. Once these modifications were made to the design the results showed that:

- > The depth of flooding in the 1% AEP climate change design event was less than 250mm in all areas of the proposed development.
- > Once complete blockage of inlets was included the increase in peak water levels was less than 300mm in all areas of the site. As freeboard of 300mm above the 1% AEP local flood level is required for minimum floor levels based on the requirements of QUDM, this confirmed that all lots would have sufficient flood immunity for the major local flood event. For the majority of the site the increase was less than 100mm, with 95% of impacts being less than 200mm.
- > The peak depth-velocity (dV) product for the 1% AEP design flood event was extremely low in all areas, with a maximum of around 0.05m²/s. This indicates that flood hazards to motorists and pedestrians will be minimal.

The preliminary proposal for drainage design within Stage 1 nominated that areas where overland flow paths were blocked would have a duplicate drainage network with 1% AEP capacity. The results of this analysis have shown that even if all inlets are completely blocked that the peak water levels will not be increased by more than the specified minimum freeboard of 300mm. This is because there are some alternate flow paths available for areas around the raised intersections. It has therefore been deemed not necessary to provide a dual drainage network for these areas.

The results of the TUFLOW modelling are shown in the attached figures.

The minimum floor level for each lot, as specified by the manhole number relating to the roof drainage inlet point, is summarised in Table 1. A freeboard of 300mm above the 1% AEP flood level with climate change has been specified to comply with QUDM. The minimum floor levels required are all higher than those obtained using the 1% AEP climate change storm surge level, i.e. 3.32m AHD. The minimum floor levels in Table 1 were obtained by adding 300mm to the maximum design flood level along the street frontage of each lot.

Addendum to Table 1 in Maroochydore City Centre Stage 1 Local Flooding Technical Memo 2015

Table 1 Minimum Floor Levels for each lot

LOT No.	PIT No.	MINIMUM FLOOR LEVEL (mAHD)	FREEBOARD WITH COMPLETE BLOCKAGE (mm)	LOT No.	PIT No.	MINIMUM FLOOR LEVEL (mAHD)	FREEBOARD WITH COMPLETE BLOCKAGE (mm)
A1	1-64	3.89	299	G2	1-55	3.86	292
A2	1-60	3.89	299	G2	1-58	3.87	300
A3	1-26	3.74	248	G3	1-30	3.85	397
A4	1-25	3.70	222	G3	1-53	3.90	300
A5	1-24	3.70	244	H1	1-45	3.86	290
A6	1-22	3.66	248	H1	1-48	3.89	285
B1	1-23	3.69	206	H2	1-50	3.88	294
B1	1-27	3.69	203	H2	1-57	3.87	300
B2	1-15	3.60	179	H3	1-59	3.92	300
B2	1-18	3.68	213	H3	1-61	3.87	284
C1	1-12	3.67	258	I1	1-49	3.88	296
C2	1-12A	3.56	159	I1	1-65	3.32*	590
C3	1-3	3.71	300	I1	1-66	3.79	294
D1	1-11	3.60	187	I2	1-52	3.74	300
D1	1-16	3.59	175	I3	1-51	3.97	300
D2	1-6	3.58	237	J1	1-75	3.80	215
D2	1-7	3.52	263	J1	1-91	3.97	300
D3	1-17	3.66	238	J2	1-90	3.78	267
D3	1-8	3.67	257	J2	1-92	3.70	186
E1	1-31	3.66	215	K1	1-81	3.77	245
E1	1-33	3.60	184	K1	1-85	3.63	118
E2	1-35	3.63	162	K2	1-80	3.70	175
E2	1-39	3.70	227	K2	1-83	3.63	180
F1	1-38	3.69	210	L1	1-32	3.60	182
F1	1-41	3.70	226	L1	1-84	3.63	180
F2	1-37	3.70	199	L2	1-34	3.74	254
F2	1-42	3.72	217	L2	1-86	3.72	209
G1	1-54	3.74	245	N	1-76	3.77	247
G1	1-56	3.82	297	N	1-79	3.67	147

* Based on 1% AEP Storm Surge Level

[illegible]



REFER DWG CI-1304 FOR CONTINUATION

PLAN
SCALE $A1 - 1:500$
 $A3 - 1:1000$

[illegible]

SunCentral®
Maroochydore

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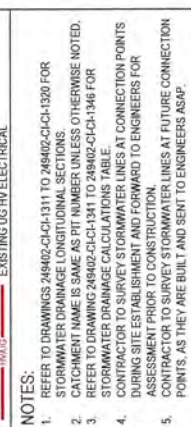
 **Cardno**
Shaping the Future

Cardno (UK) Pty Ltd (A/N S' 05) 071 992
Level 1, 9 Maud Street
Manurewa, Auckland 650
Tel: 07 543 2550 Fax: 07 543 5042
Web: www.cardno.com.au

Drawn	Checked	Scale	Status	
7/10/2015	7/10/2015	1:1	FOR CONSTRUCTION	
Prepared	Approved	DATE	By	For
7/10/2015	7/10/2015	21/11/2016	AHD	A1
Designed	Checked	DATE	By	For
7/10/2015	7/10/2015	21/11/2016	AHD	A1
Revised	Checked	DATE	By	For
7/10/2015	7/10/2015	21/11/2016	AHD	A1
Revised	Checked	DATE	By	For
7/10/2015	7/10/2015	21/11/2016	AHD	A1
STORMWATER DRAINAGE PLAN - SHEET 2		249402-CH-1302		
DATE		A		
16/05/2017				

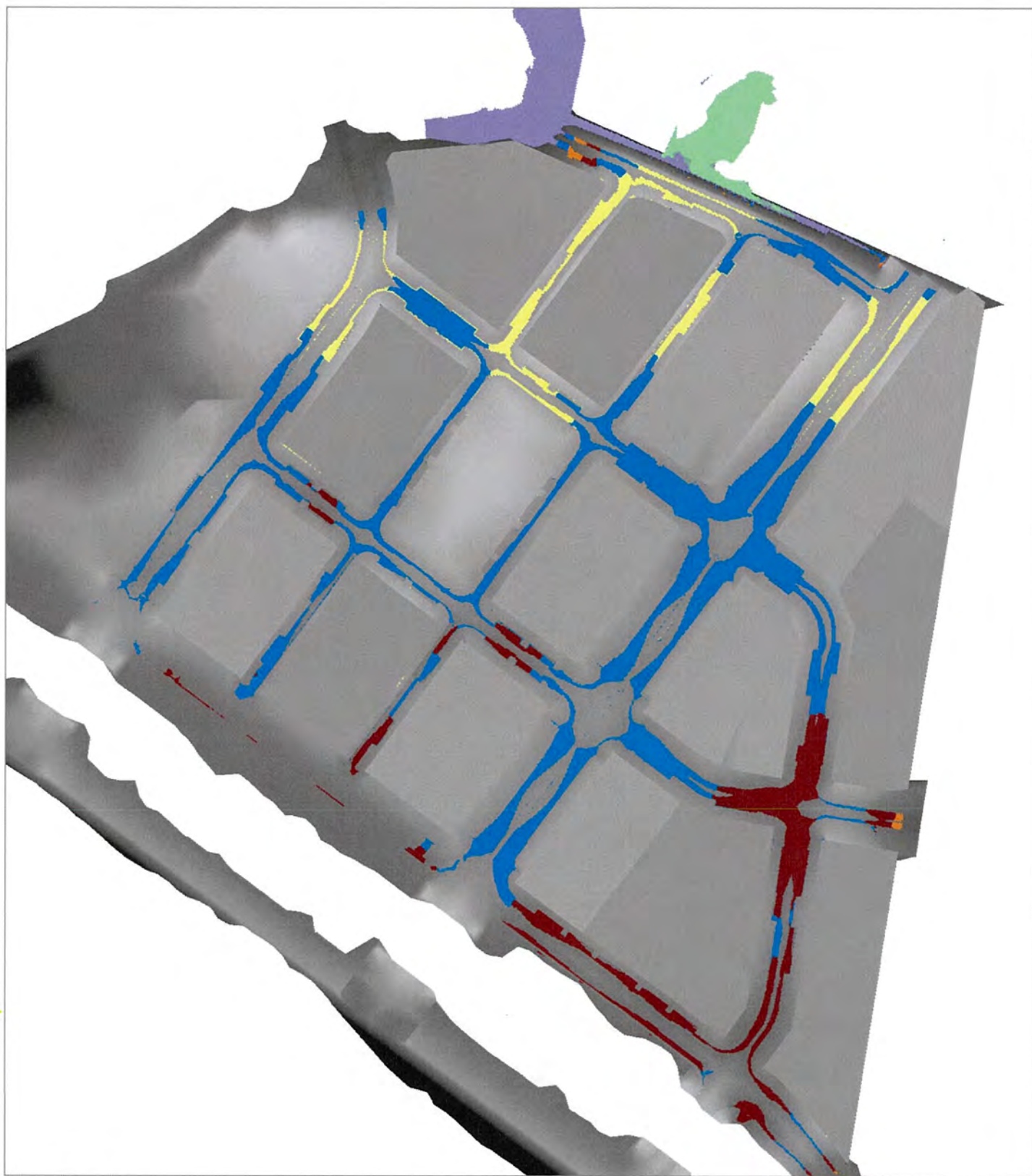


NOTE:
SPEL STORMSACK 200 MICRON LITTER BASKETS
(OR APPROVED EQUIVALENT) ARE TO BE
PROVIDED ON ALL FIELD & GULLY INLETS.



PLAN
SCALE A1 - 1:50
A3 - 1:10

[illegible]



Scale: 1:1,500

15 0 15 30 45

Metres



SHEET A3
Project No. 2492-02
Date 30 October 2015
Revision Number
Designed by
Client Name: SunCentral Maroochydore

Peak Water Level (mAHD)

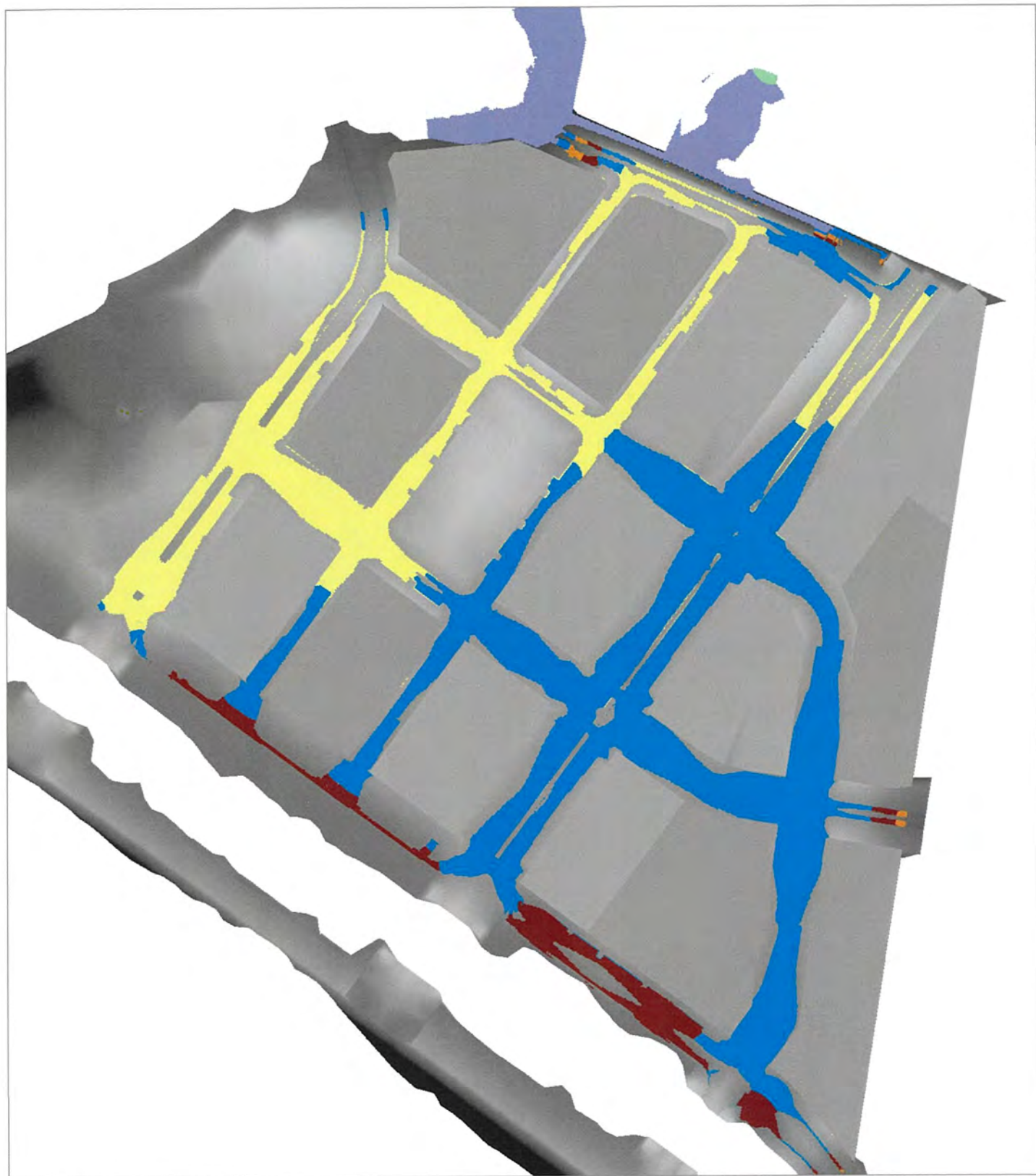
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- 2.25 to 2.50
- 2.50 to 2.75
- 2.75 to 3.00
- 3.00 to 3.25
- 3.25 to 3.50
- 3.50 to 3.75

Figure 1

**1% AEP Design
Peak Flood Level
with Climate Change**

Stage 1 Internal Drainage





Scale: 1:1,500

15 0 15 30 45

Metres



SHEET

A3

Project No

2492-02

Date

30 October 2015

Revision Number

Designed by

SunCentral Maroochydore

Peak Water Level (mAHD)

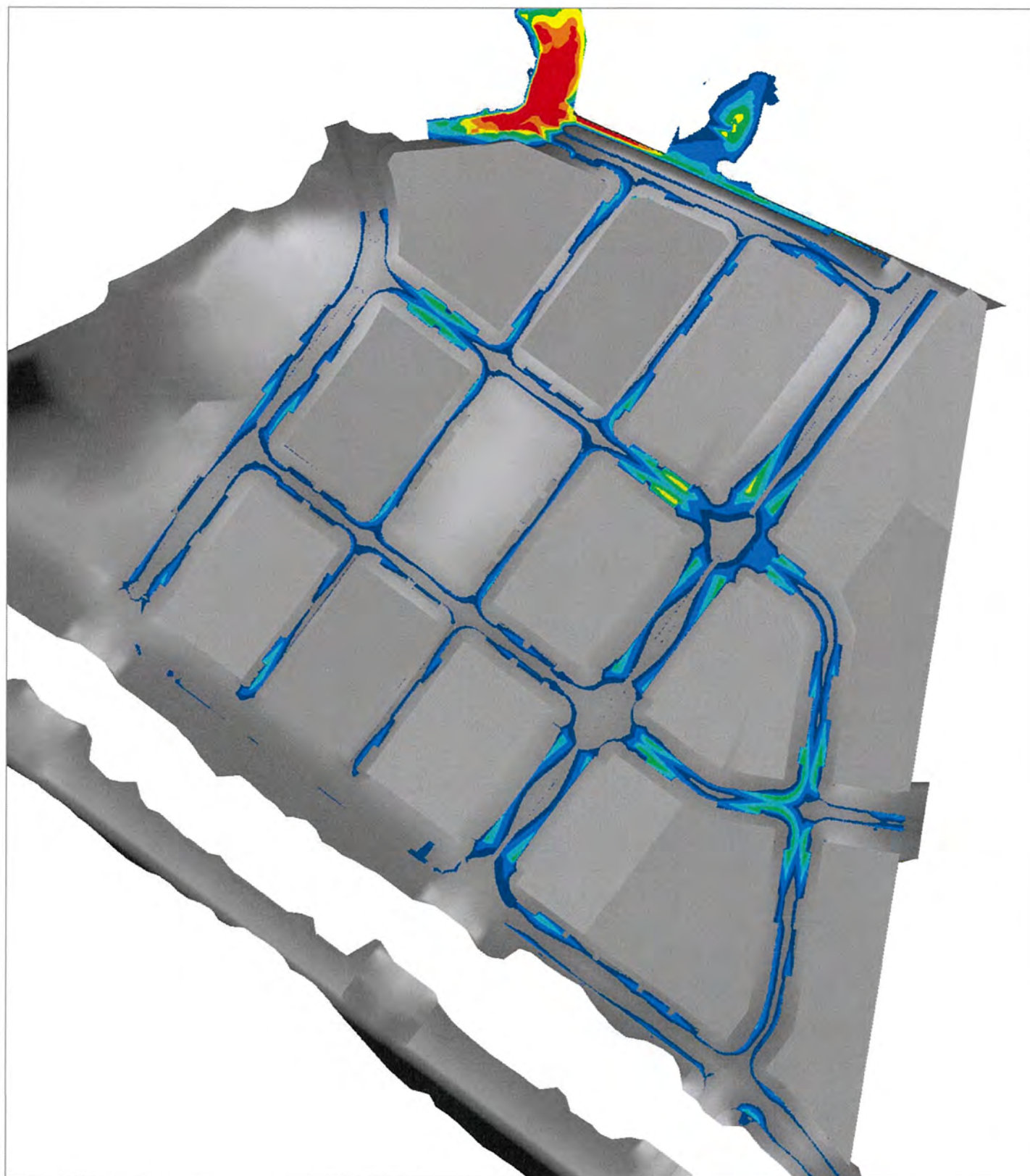
2.00 to 2.25
2.25 to 2.50
2.50 to 2.75
2.75 to 3.00
3.00 to 3.25
3.25 to 3.50
3.50 to 3.75

Figure 2

**1% AEP Peak Flood Level
with Climate Change
and Complete Inlet Blockage**

Stage 1 Internal Drainage





Scale: 1:1,500

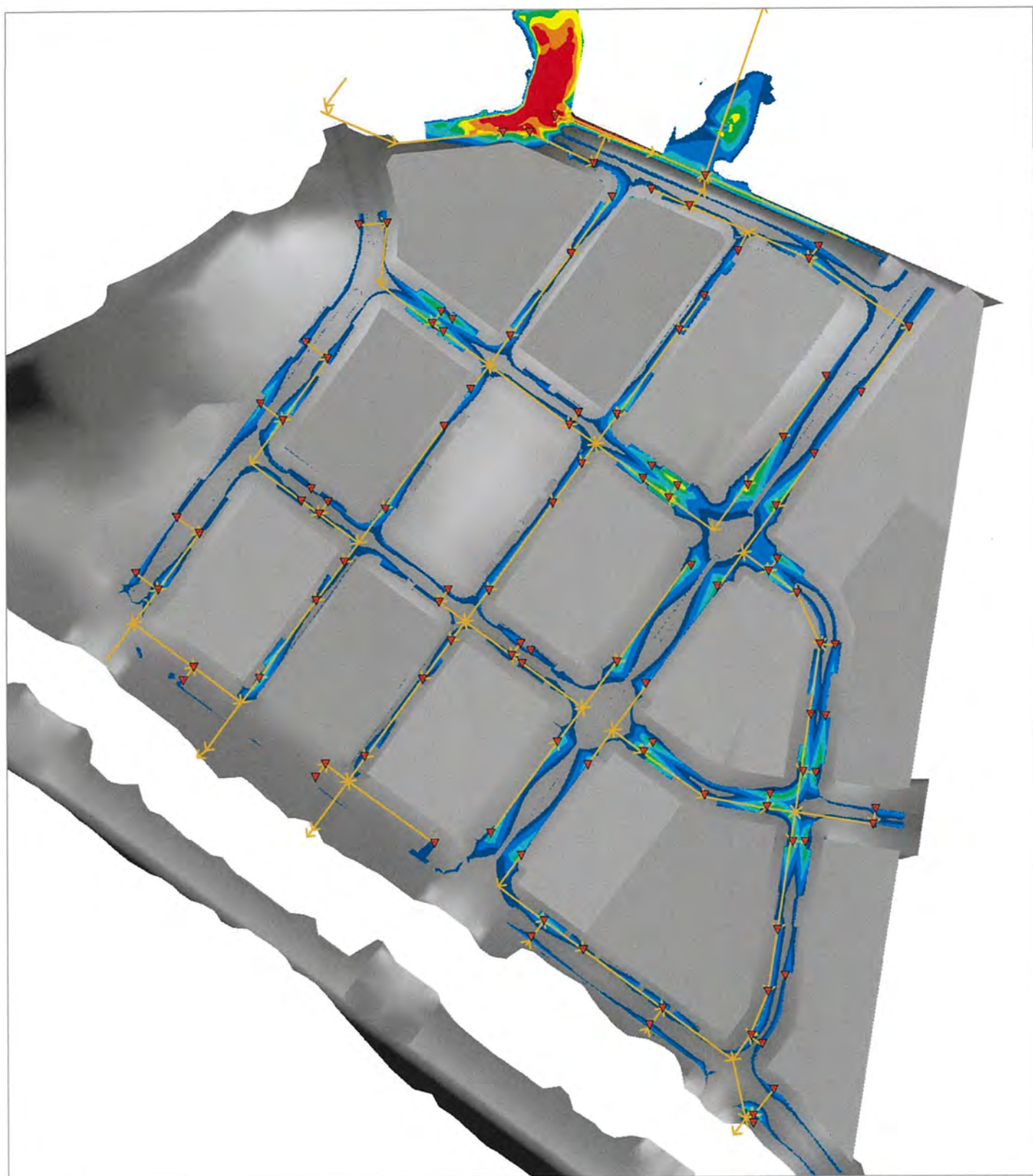
15 0 15 30 45
Metres

SHEET A3
Project No. 2492-02
Date 30 October 2015
Revision Number:
Designed by:
Client Name: SunCentral Maroochydore

Depth (m)

□	0.00 to 0.01
■	0.01 to 0.05
■	0.05 to 0.10
■	0.10 to 0.15
■	0.15 to 0.20
■	0.20 to 0.25
■	0.25 to 0.30
■	0.30 to 0.50

Figure 3**1% AEP Design Peak Depth
with Climate Change****Stage 1 Internal Drainage**



Scale: 1:1,500

15 0 15 30 45

Metres

N
W E
S

SHEET A3
Project No. 2492-02
Date: 30 October 2015
Revision Number:
Designed by:
Client Name: SunCentral Maroochydore

Depth (m)

0.00 to 0.01
0.01 to 0.05
0.05 to 0.10
0.10 to 0.15
0.15 to 0.20
0.20 to 0.25
0.25 to 0.30
0.30 to 0.50

▼ Inlet Pits
→ Stormwater Drainage

Figure 4

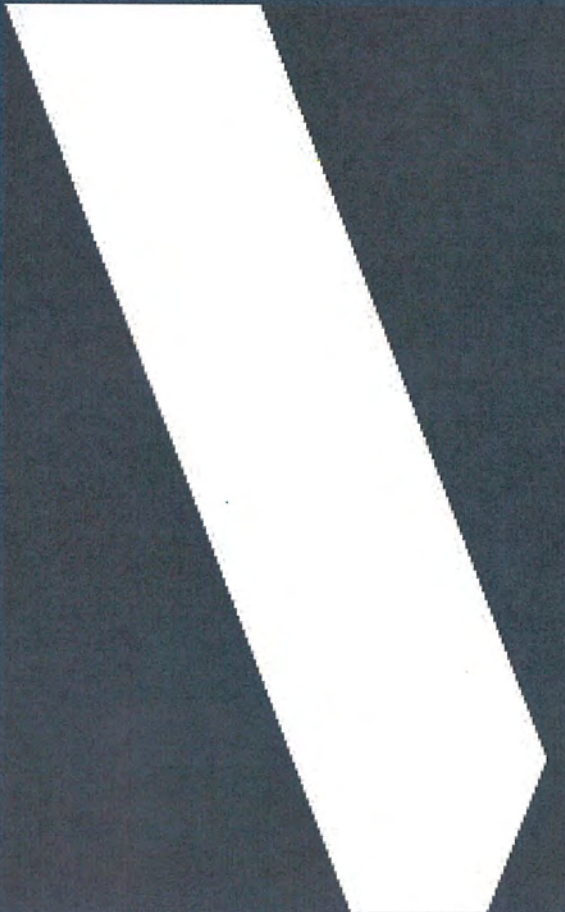
**1% AEP Design Peak Depth
with Climate Change**

Stage 1 Internal Drainage



APPENDIX J

DIAL BEFORE YOU DIG





Job No 30265184

Phone: 1100
www.1100.com.au

Caller Details

Contact: Jared Falkenhagen

Caller Id: 3056573

Phone: 0433 013 006

Company: WSP

Address: 900 Ann Street
Fortitude Valley QLD 4006

Email: jared.falkenhagen@wsp.com

Dig Site and Enquiry Details

WARNING: The map below only displays the location of the proposed dig 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.



User Reference: PS125923

Working on Behalf of: Private

Enquiry Date: 08/08/2021

Start Date: 31/08/2021

End Date: 11/09/2021

Address:

Lot 120 Islander Way
Maroochydore QLD 4558

Job Purpose:

Excavation

Onsite Activities:

Non-Destructive Digging

Location of Workplace:

Both

Location in Road:

Road, Nature Strip, Footpath

- Check that the location of the dig site is correct. If not you must submit a new enquiry.
- Should 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 do not understand the plans or how to proceed safely, please contact the relevant asset owners.

Notes/Description of Works:

Not supplied

Your Responsibilities and Duty of Care

- The lodgement of an enquiry does not authorise the project to commence. You must obtain all necessary information from any and all likely impacted asset owners prior to excavation.
- If plans are not received within 2 working days, contact the asset owners directly & quote their Sequence No.
- ALWAYS perform an onsite inspection for the presence of assets. Should you require an onsite location, contact the asset owners directly. Please remember, plans do not detail the exact location of assets.
- Pothole to establish the exact location of all underground assets using a hand shovel, before using heavy machinery.
- Ensure you adhere to any State legislative requirements regarding Duty of Care and safe digging requirements.
- If you damage an underground asset you MUST advise the asset owner immediately.
- By using this service, you agree to Privacy Policy and the terms and disclaimers set out at www.1100.com.au
- For more information on safe excavation practices, visit www.1100.com.au

Asset Owner Details

The assets owners listed below have been requested to contact you with information about their asset locations within 2 working days.

Additional time should be allowed for information issued by post. It is **your responsibility** to identify the presence of any underground assets in and around your proposed dig site. Please be aware, that not all asset owners are registered with the Dial Before You Dig service, so it is **your responsibility** to identify and contact any asset owners not listed here directly.

** Asset owners highlighted by asterisks ** require that you visit their offices to collect plans.

Asset owners highlighted with a hash # require that you call them to discuss your enquiry or to obtain plans.

Seq. No.	Authority Name	Phone	Status
201539400	Energex	13 12 53	NOTIFIED
201539402	Energex QLD	13 12 53	NOTIFIED
201539403	NBN Co Qld	1800 687 626	NOTIFIED
201539401	Sunshine Coast Regional Council	(07) 5475 8719	NOTIFIED
201539405	Telstra QLD South East	1800 653 935	NOTIFIED
201539404	Unitywater North	1300 086 489	NOTIFIED

END OF UTILITIES LIST

Lodge Your Free Enquiry Online – 24 Hours a Day, Seven Days a Week

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: 201539402

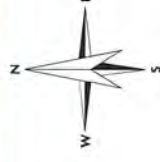
Date: 09/08/2021

Scale: 1:1025

OVERVIEW

- Cross Bonding Link Box
- Disconnect Box
- Ring Main Unit
- Distribution Pad Substation
- Distribution Ground Substation
- Earth
- Remote Earth
- Underground Warning Post
- Fibre Patch Panel/Pilot Cubicle
- Commercial Industrial Pillar
- Distribution Cabinet
- Link Pillar
- Service Pillar
- Pole
- Manhole
- Streetlight
- Handhole
- Communication Pillar
- Underground Cable below 33KV
- Underground Cable 33KV and above
- Pit
- Communication Boundary
- Red halo denotes "Proposed" Network

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: 201539402

Date: 09/08/2021

Scale: 1:500

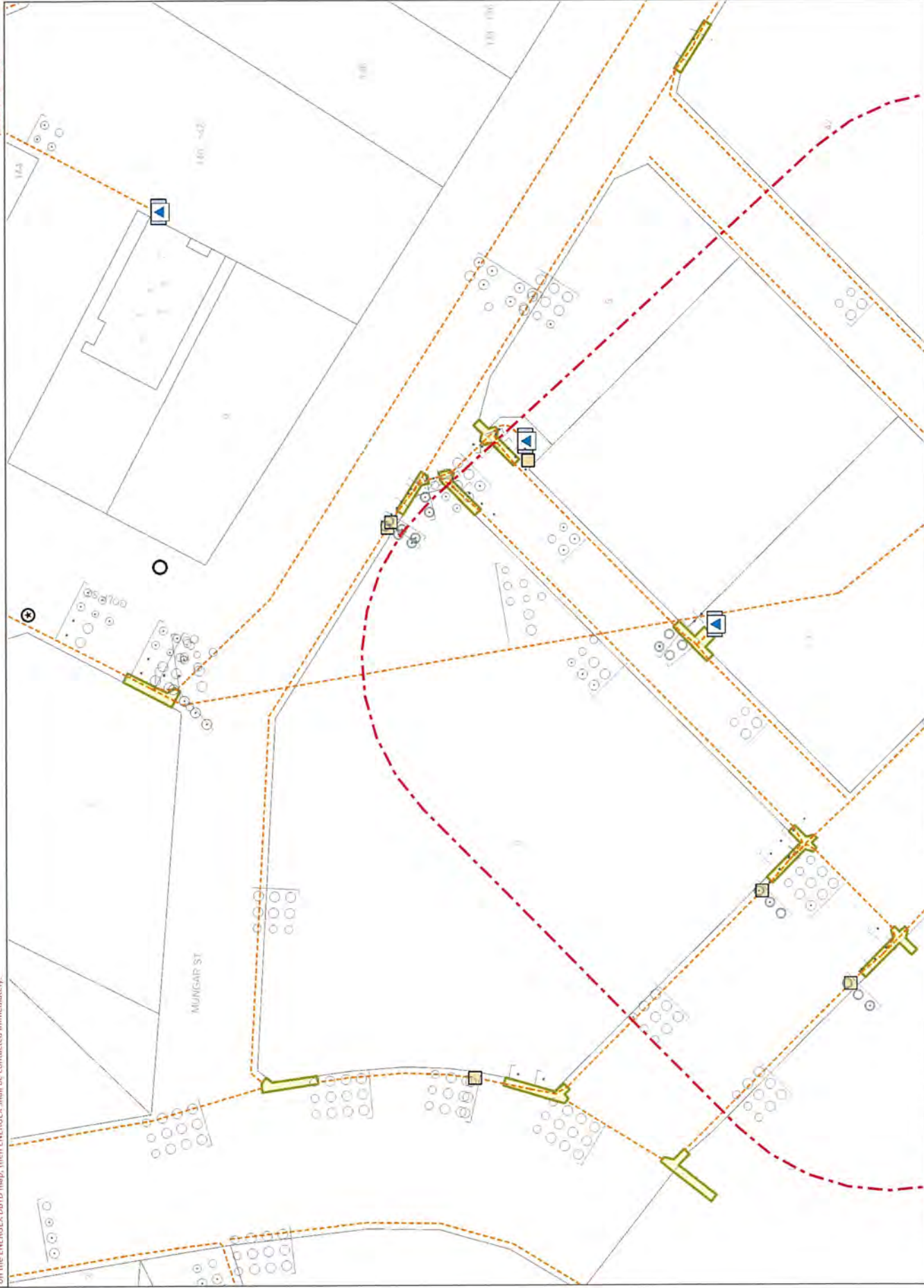
Title No: 1

- Cross Bonding Link Box
- Disconnect Box
- Ring Main Unit
- Distribution Pad Substation
- Distribution Ground Substation
- Earth
- Remote Earth
- Underground Warning Post
- Fibre Patch Panel/Pilot Cubicle
- Commercial Industrial Pillar
- Distribution Cabinet
- Link Pillar
- Service Pillar
- Pole
- Manhole
- Streetlight
- Handhole
- Communication Pillar
- Underground Cable below 33KV
- Underground Cable 33KV and above
- Pit
- Communication Boundary
- Red halo denotes "Proposed" Network

ASS488 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 DBVD map, then ENERGEX shall be contacted immediately.

For Emergency Situations
please call 13 19 62



DBVD

Sequence: 201539402

Date: 09/08/2021

Scale: 1:500

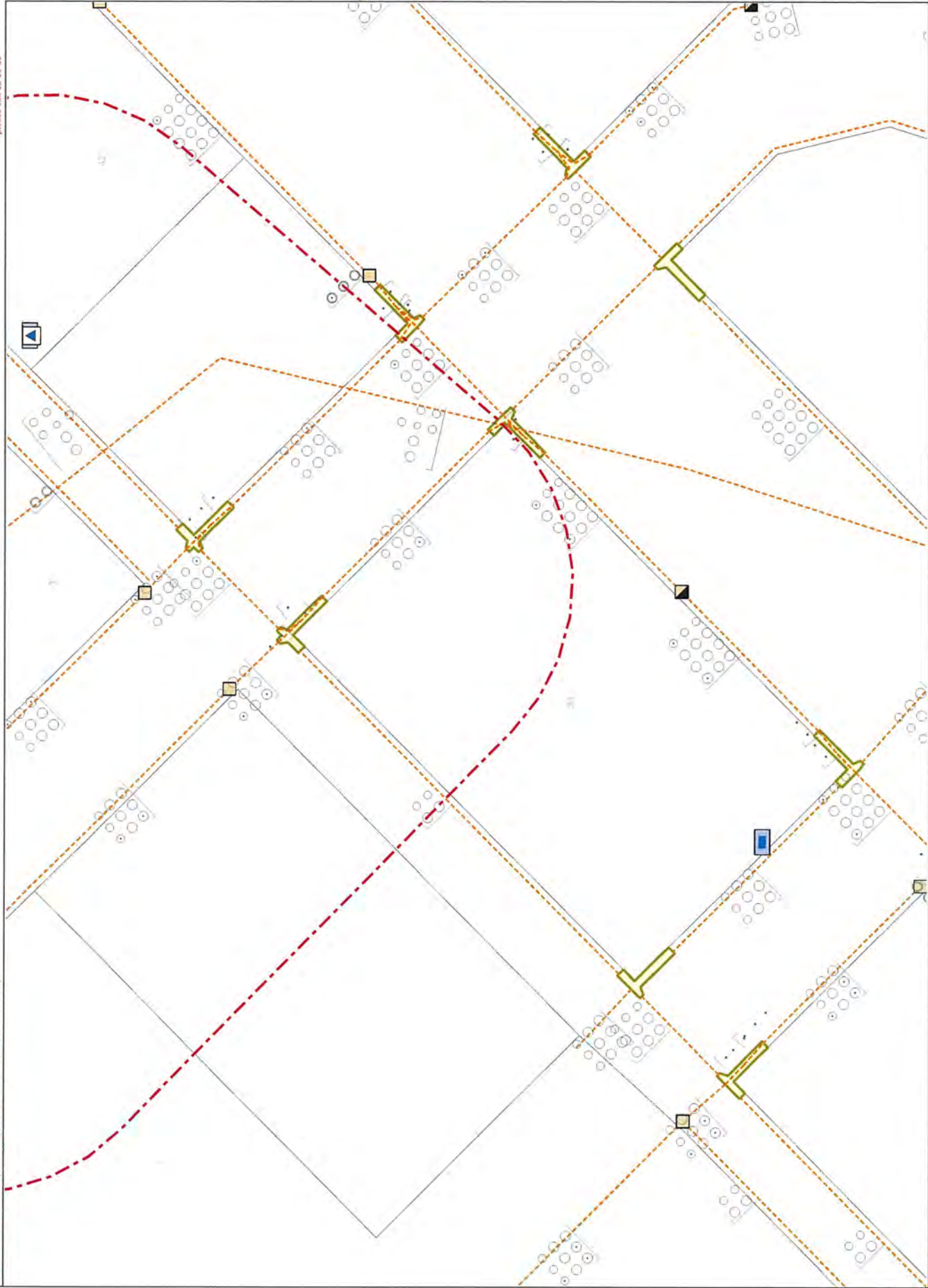
Title No: 2

- Cross Bonding Link Box
- Disconnect Box
- Ring Main Unit
- Distribution Pad Substation
- Distribution Ground Substation
- Earth
- Remote Earth
- Underground Warning Post
- Flare Patch Panel/Pilot Cubicle
- Commercial Industrial Pillar
- Distribution Cabinet
- Link Pillar
- Service Pillar
- Pole
- Manhole
- Streetlight
- Handhole
- Communication Pillar
- Underground Cable below 33KV
- Underground Cable 33KV and above
- Pit
- Communication Boundary
- Red halo denotes "Proposed" Network

ASS488 Category "D" Plan



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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.

DBYD terms and conditions

Duty of care for everyone



Responsibilities – (When Working in the Vicinity of Energex Electrical Equipment)

Extreme care must be taken during non-mechanical or mechanical excavation as damage to Energex underground electrical equipment can lead to injury or death of workers or members of the public. Electrical equipment includes underground cables, conduits and other associated underground electrical equipment used for controlling, generating, supplying, transforming or transmitting electricity.

A person conducting a business or undertaking (PCBU) must ensure the person's business or undertaking is conducted in a way that is electrically safe. This includes:

- a) ensuring that all electrical equipment used in the conduct of the person's business or undertaking is electrically safe;
- b) if the person's business or undertaking includes the performance of electrical work, ensuring the electrical safety of all persons and property likely to be affected by the electrical work; and
- c) if the person's business or undertaking includes the performance of work, whether or not electrical work, involving contact with, or being near to, exposed parts, ensuring persons performing the work are electrically safe.

In addition, a PCBU at a workplace must ensure, so far as is reasonably practicable, that no person, plant or thing at the workplace comes within an unsafe distance of an underground electric line.

Workers and other persons must also take reasonable care for their own and other person's electrical safety. This includes complying, so far as is reasonably able, with any reasonable instructions given by Energex to ensure compliance with the [Electrical Safety Act 2002](#)

DBYD terms and conditions

Duty of care for everyone

The following matters must be considered when working near Energex electrical equipment:

The PCBU must ensure, so far as is reasonably practicable, that no person, plant or thing at the workplace comes within an unsafe distance of an underground electric line (see section 68 of the [Electrical Safety Regulation 2013](#))

1. It is the responsibility of the architect, consulting engineer, developer, and head contractor in the project planning stages to design for minimal impact and protection of Energex electrical equipment.
2. It is the constructor's responsibility to:
 - a) Anticipate and request plans of Energex electrical equipment for a location at a reasonable time before construction begins.
 - b) Visually locate Energex electrical equipment by hand or vacuum excavation where construction activities may damage or interfere with Energex electrical equipment.
 - c) To notify Energex if the information provided is found to be not accurate or assets are found on site that are not recorded on the Energex DBYD plans.
 - d) Read and understand all the information and disclaimers provided.

Note: A constructor may include but not limited to a PCBU, Designer, Project Manager, Installer, Contractor or a Civil Contractor

3. Comply with applicable work health and safety and electrical safety codes of practice including but not limited to:
 - a) Working near overhead and underground electric lines – [Electrical safety codes of practice 2020](#)
 - b) Managing electrical risk in the workplace – [Electrical safety code of practice 2013](#)
 - c) Managing the risks of plant in the workplace – [Electrical safety code of practice 2013](#)
 - d) Excavation work – [Electrical safety code of practice 2013](#)

IMPORTANT NOTES:

- As the alignment and boundaries of roadways with other properties (and roads within roadways) frequently change, the alignments and boundaries contained within Energex plans and maps will frequently differ from present alignments and boundaries "on the ground". Accordingly, in every case where it appears that alignments and boundaries have shifted, or new roadways have been added, the constructor should obtain confirmation of the actual position of Energex cables and pipelines under the roadways. In no case should the constructor rely on statements of third parties in relation to the position of Energex cables and pipelines. It is the applicant's responsibility to accurately locate all services as part of the design and/or prior to excavation.
- Energex does not provide information on private underground installations, including consumers' mains that may run from Energex mains onto private property. Assets located on private property are the responsibility of the owner for identification and location.
- Energex plans are circuit diagrams or 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.
- All underground conduits are presumed to contain asbestos. Refer to "Code of Practice for the Management and Control of Asbestos in Workplaces [NOHSC: 2018 (2005)]" - https://www.safeworkaustralia.gov.au/system/files/documents/1702/codeofpracticeformanagementcontrolofasbestosintheworkplace_nohsc2018-2005
- Plans provided by Energex do not show the presence of any Overhead Network
- In addition to underground cables marked on attached plan there maybe underground Earth Conductors in the vicinity of the nominated work area(s) that are not marked on the plans.
- There may also be other buried assets such as tanks for fluid filled cables that do not appear on GIS plots but are shown on detailed as constructed drawings.
- Being aware of your obligations in [s 304] Excavation work— underground essential services information under the [Work Health and Safety Regulation 2011](#), Chapter 6 Construction work, Part 6.3 Duties of person conducting business or undertaking. This includes but is not limited to taking reasonable steps to obtain the current information & providing this information to persons engaged to carry out the excavation work. For further information please refer to: - <http://www.legislation.qld.gov.au/LEGISLTN/SLS/2011/11SL240.pdf>
- Energex plans are designed to be printed in colour and as an A4 Landscape orientation

DBYD terms and conditions

Duty of care for everyone

Conditions – (When Working in the Vicinity of Energex Electrical Equipment)

Records:

The first step before any excavation commences is to obtain records of Energex plant in the vicinity of the work. For new work, records should be obtained during the planning and design stage. The records provided by Energex must be made available to all construction groups on site. Where plant information is transferred to plans for the proposed work, care must be exercised to ensure that important detail is not lost in the process.

Plans and or details provided by Energex are current for four weeks from the date of dispatch and should be disposed of by shredding or any other secure disposal method after use. A new DBYD enquiry must be made for proposed works/activities to be undertaken outside of the four-week period.

Energex retains copyright of all plans and details provided in connection with your request. Energex plans or other details are provided for the use of the applicant, its servants, or agents, and shall not be used for any unauthorised purpose. On receipt of DBYD plans and before commencing excavation work or similar activities near Energex's plant, check to see that it relates to the area you have requested and carefully locate this plant first to avoid damage. If you are unclear about any information contained in the plan, please contact Energex on the General Enquiries number listed above for further advice.

Energex, its servants 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, its servants and agents, and the applicant agrees to indemnify Energex against any claim or demand for any such loss or damage.

The constructor is responsible for all plant damages when works commence prior to obtaining Energex plans, or failure to follow agreed instructions, or failure to demonstrate all reasonable measures were taken to prevent the damage once plans were received from Energex. Energex reserves all rights to recover compensation for loss or damage caused by interference or damage, including consequential loss and damages to its cable network, or other property.

NOTE: Where your proposed work location contains Energex 33kV or greater Underground cables please access the [Energex Working Near Underground Cables 33kV or Higher web page](#) for more information.

Location of Cables:

Examining the records is not sufficient, as reference points may change from the time of installation. Records must also be physically proven when working in close proximity to them. The exact location of plant likely to be affected shall be confirmed by use of an electronic cable and pipe locator followed by **careful hand or vacuum excavation to the level of cable protection cover strips or conduits**. When conducting locations, please be aware that **no** unauthorised access is permitted to Energex Assets– including Pits, Low Voltage Disconnection Boxes, Low Voltage Pillars or High Voltage Link Boxes.

Hand or vacuum excavation must be used in advance of excavators. In any case, where any doubt exists with respect to interpretation of cable records, contact Energex on the General Enquires number listed above for further advice.

If the constructor is unable to locate Energex underground assets within 5 metres of nominal plan locations, they should contact the Energex General Enquires number listed above for further advice.

If unknown cables or conduits (i.e. not shown on issued DBYD plans) are located during excavation:

1. Call the ELECTRICITY EMERGENCIES number listed above
2. Treat cables as if alive, post a person to keep all others clear of the excavation until Energex crew attend to make safe.
3. All work in the vicinity of damaged plant should cease and the area should be vacated until a clearance to continue work has been obtained from an Energex officer.

Electrical Cable Installation Methods:

Energex cables are installed with a variety of protection devices including:

- | | |
|---|---------------------------------------|
| 1. Clay paving bricks or tiles marked "Electricity" or similar (also unmarked) | 2. Concrete or PVC cover slabs |
| 3. PVC, A/C or fibro conduit, fibre reinforced concrete, iron or steel pipe | 4. Concrete encased PVC or steel pipe |
| 5. Thin plastic marker tape | 6. Large pipes housing multiple ducts |
| 7. Multiple duct systems, including earthenware or concrete 2-, 4-, and 6-way ducts and shamrocks | |

Note: Some cables are known to be buried without covers and cables may change depth or alignment along the route.

Excavating Near Cables:

For all work within 2.5 m of nominal location, the constructor is required to hand or vacuum excavate (pothole) and expose the plant, hence proving its exact location before work can commence.

Cable protection cover strips shall not be disturbed. Excavation below these cover strips, or into the surrounding backfill material is not permitted.

DBYD terms and conditions

Duty of care for everyone

Excavating Parallel to Cables:

If construction work is parallel to Energex cables, then hand or vacuum excavation (potholing) at least every 4 m is required to establish the location of all cables, hence confirming nominal locations before work can commence. *Generally, there is no restriction to excavations parallel to Energex cables to a depth not exceeding that of the cable. Note: Cable depths & alignment may change suddenly.*

Separation from Cables:

Any service(s) must be located at the minimum separation as per the tables below:

Table 1. Minimum Separation Requirements for Underground Services Running Parallel with Energex Assets

(Minimum Separation required in mm)							
Voltage Level	Gas	Communication or TV	Water		Sanitary drainage		Storm Water
			≤DN 200	>DN200	≤DN 200	>DN 200	
LV	250	100	500	*1000	500	1000	500
HV		300					
*Contact Energex/council to obtain specific separation distances							

Table 2. Minimum Separation Requirements for Underground Services Crossing Energex Assets

(Minimum Separation required in mm)					
Voltage Level	Gas	Communication or TV	Water	Sanitary drainage	Storm Water
LV & HV	100	100	300	300	100

Where the above table does not list a separation requirement for a particular underground service then 300mm shall be used.

Excavating Across Cables:

The standard clearance between services shall be maintained as set down in Table 2 above. If the width or depth of the excavation is such that the cables will be exposed or unsupported, then Energex shall be contacted to determine whether the cables should be taken out of service, or whether they need to be protected or supported. In no case shall a cable cover be removed without approval. A cable cover may only be removed under the supervision of an Energex authorised representative. Protective cover strips when removed must be replaced under Energex supervision. Under no circumstances shall they be omitted to allow separation between Energex cables and other services.

Heavy Machinery Operation Over Cables:

Where heavy "Crawler" or "Vibration" type machinery is operated over the top of cables, a minimum cover of 450 mm to the cable protective cover mains must be maintained using load bearing protection whilst the machinery is in operation. For sensitive cables (i.e. 33 and 110kV fluid and gas filled cables), there may be additional constraints placed on vibration and settlement by Energex.

Directional Boring Near Cables:

When boring parallel to cables, it is essential that trial holes are carefully hand or vacuum excavated at regular intervals to prove the actual location of the conduits/cables before using boring machinery. Where it is required to bore across the line of cables, the actual location of the cables shall first be proven by hand or vacuum excavation. A trench shall be excavated one metre from the side of the cables where the auger will approach to ensure a minimum clearance of 500mm above and below all LV, 11kV, 33kV & 110/132kV cables shall be maintained.

Explosives:

Explosives must not be used within 10 metres of cables, unless an engineering report is provided indicating that no damage will be sustained. Clearances should be obtained from Energex's Planning Engineer for use of explosives in the vicinity of Energex cables.

Damage Reporting:

All damage to cables, conduits and pipes must be reported no matter how insignificant the damage appears to be. Even very minor damage to cable protective coverings can lead to eventual failure of cables through corrosion of metal sheaths and moisture ingress.

If any Damaged conductor is found:

1. Call the ELECTRICITY EMERGENCIES number listed above
2. Treat cables as if alive, post a person to keep all others clear of the excavation until Energex crew attend to make safe.
3. All work in the vicinity of damaged plant should cease and the area should be vacated until a clearance to continue work has been obtained from an Energex officer.

DBYD terms and conditions

Duty of care for everyone

Plant Solutions and Assistance:

If plant location plans or visual location of Energex plant by hand or vacuum excavation reveals that the location of Energex plant is situated wholly or partly where the developer or constructor plans to work, then Energex shall be contacted to assist with your development of possible engineering solutions.

If Energex relocation or protection works are part of the agreed solution, then payment to Energex for the cost of this work shall be the responsibility of the principal developer or constructor. Energex will provide an estimated quotation for work on receipt of the developer's or constructor's order number before work proceeds.

It will be necessary for the developer or constructor to provide Energex with a written Work Method Statement for all works in the vicinity of or involving Energex plant. This Work Method Statement should form part of the tendering documentation and work instruction.

Vacuum Excavations (Hydro Vac)

When operating hydro vac equipment to excavate in vicinity of underground electrical assets (cables/conduits):

Fitted with:

- Nonconductive (neoprene rubber or equivalent) vacuum (suction) hose.
- Oscillating nozzle on pressure wand with water pressure adjusted to not exceeding 2000 psi.

Maintain a minimum distance of 200mm between end of pressure wand and underground electrical assets. DO NOT insert the pressure wand jet directly into subsoil.

Ensure pressure wand is not directly aimed at underground electrical assets (cables/conduits).

Safety Notices (Underground Work)

There is no exclusion zone applicable for underground electrical assets – conduits, cables (unless cable is damaged, or conductors or terminations have been exposed) therefore there is **no requirement for a written Safety Advice** to be obtained provided the work location does not contain overhead electric lines or other exposed live parts.

Further information on Working Safely around Energex assets:

https://www.energex.com.au/_data/assets/pdf_file/0010/211231/Working-near-OH-UG-lines-BS001405R107ver2.pdf

Thank you for your interest in maintaining a safe and secure Electricity Distribution network. Energex welcomes your feedback on this document via email to dbyd@energex.com.au.

General enquiries (7:00am - 5:30pm Mon to Fri)	13 12 53
DBYD enquiries (7:00am - 3:30pm Mon to Fri)	(07) 3664 5400
Life threatening emergencies only triple zero (000) or	13 19 62

E: custserve@energex.com.au
E: dbyd@energex.com.au

W: energex.com.au/lualmap
ABN: 40 078 849 055

To re-submit or change the nominated search area please visit www.1100.com.au



To: Jared Falkenhagen
Phone: Not Supplied
Fax: Not Supplied
Email: jared.falkenhagen@wsp.com

Dial before you dig Job #:	30265184	
Sequence #	201539403	
Issue Date:	08/08/2021	
Location:	Lot 120 Islander Way , Maroochydore , QLD , 4558	

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

We thank you for your enquiry. In relation to your enquiry at the above address:

- nbn's records indicate that there **ARE** nbn™ Facilities in the vicinity of the location identified above ("Location").
- nbn indicative plan/s are attached with this notice ("Indicative Plans").
- The Indicative Plan/s show general depth and alignment information only and are not an exact, scale or accurate depiction of the location, depth and alignment of nbn™ Facilities shown on the Plan/s.
- In particular, the fact that the Indicative Plans show that a facility is installed in a straight line, or at uniform depth along its length cannot be relied upon as evidence that the facility is, in fact, installed in a straight line or at uniform depth.
- You should read the Indicative Plans in conjunction with this notice and in particular, the notes below.
- You should note that, at the present time, the Indicative Plans are likely to be more accurate in showing location of fibre optics and telecommunications cables than power cables. There may be a variation between the line depicted on the Indicative Plans and the location of any power cables. As such, consistent with the notes below, particular care must be taken by you to make your own enquiries and investigations to precisely locate any power cables and manage the risk arising from such cables accordingly.
- The information contained in the Indicative Plan/s is valid for 28 days from the date of issue set out above. You are expected to make your own inquiries and perform your own investigations (including engaging appropriately qualified plant locators, e.g DBYD Certified Locators, at your cost to locate nbn™

Facilities during any activities you carry out on site).

We thank you for your enquiry and appreciate your continued use of the Dial Before You Dig Service. For any enquiries related to moving assets or Planning and Design activities, please visit the [nbn Commercial Works](#) website to complete the online application form. If you are planning to excavate and require further information, please email dbyd@nbnco.com.au or call 1800 626 329.

Notes:

1. You are now aware that there are **nbn™** Facilities in the vicinity of the above property that could be damaged as a result of activities carried out (or proposed to be carried out) by you in the vicinity of the Location.
2. You should have regard to section 474.6 and 474.7 of the *Criminal Code Act 1995* (CoA) which deals with the consequences of interfering or tampering with a telecommunications facility. Only persons authorised by **nbn** can interact with **nbn's** network facilities.
3. Any information provided is valid only for **28 days** from the date of issue set out above.

Referral Conditions

The following are conditions on which **nbn** provides you with the Indicative Plans. By accepting the plans, you are agreeing to these conditions. These conditions are in addition, and not in replacement of, any duties and obligations you have under applicable law.

1. **nbn** does not accept any responsibility for any inaccuracies of its plans including the Indicative Plans. You are expected to make your own inquiries and perform your own investigations (including engaging appropriately qualified plant locators, e.g. DBYD Certified Locators, at your cost to locate **nbn™** Facilities during any activities you carry out on site).
2. You acknowledge that **nbn** has specifically notified you above that the Indicative Plans are likely to be more accurate in showing location of fibre optics and telecommunications cables than power cables. There may be a variation between the line depicted on the Indicative Plans and the location of any power cables.
3. You should not assume that **nbn™** Facilities follow straight lines or are installed at uniform depths along their lengths, even if they are indicated on plans provided to you. Careful onsite investigations are essential to locate the exact position of cables.
4. In carrying out any works in the vicinity of **nbn™** Facilities, you must maintain the following minimum clearances:
 - 300mm when laying assets inline, horizontally or vertically.
 - 500mm when operating vibrating equipment, for example: jackhammers or vibrating plates.
 - 1000mm when operating mechanical excavators.
 - Adherence to clearances as directed by other asset owner's instructions and take into account any uncertainty for power cables.
5. You are aware that there are inherent risks and dangers associated with carrying out work in the vicinity of underground facilities (such as **nbn™** fibre optic, copper and coaxial cables, and power cable feed to **nbn™** assets). Damage to underground electric cables may result in:
 - Injury from electric shock or severe burns, with the possibility of death.
 - Interruption of the electricity supply to wide areas of the city.
 - Damage to your excavating plant.
 - Responsibility for the cost of repairs.
6. You must take all reasonable precautions to avoid damaging **nbn™** Facilities. These precautions may include but not limited to the following:
 - All excavation sites should be examined for underground cables by careful hand excavation. Cable cover slabs if present must not be disturbed. Hand excavation needs to be undertaken with extreme care to minimise the likelihood of damage to the cable, for example: the blades of hand equipment should be aligned parallel to the line of the cable rather than digging across the cable.
 - If any undisclosed underground cables are located, notify **nbn** immediately.

- All personnel must be properly briefed, particularly those associated with the use of earth-moving equipment, trenching, boring and pneumatic equipment.
 - The safety of the public and other workers must be ensured.
 - All excavations must be undertaken in accordance with all relevant legislation and regulations.
7. You will be responsible for all damage to **nbn**TM Facilities that are connected whether directly, or indirectly with work you carry out (or work that is carried out for you or on your behalf) at the Location. This will include, without limitation, all losses expenses incurred by **nbn** as a result of any such damage.
 8. You must immediately report any damage to the **nbn**TM network that you are/become aware of. Notification may be by telephone - 1800 626 329.
 9. Except to the extent that liability may not be capable of lawful exclusion, **nbn** and its servants and agents and the related bodies corporate of **nbn** and their servants and agents shall be under no liability whatsoever to any person for any loss or damage (including indirect or consequential loss or damage) however caused (including, without limitation, breach of contract negligence and/or breach of statute) which may be suffered or incurred from or in connection with this information sheet or any plans (including Indicative Plans) attached hereto. Except as expressly provided to the contrary in this information sheet or the attached plans (including Indicative Plans), all terms, conditions, warranties, undertakings or representations (whether expressed or implied) are excluded to the fullest extent permitted by law.

All works undertaken shall be in accordance with all relevant legislations, acts and regulations applicable to the particular state or territory of the Location. The following table lists all relevant documents that shall be considered and adhered to.

State/Territory	Documents
National	Work Health and Safety Act 2011
	Work Health and Safety Regulations 2011
	Safe Work Australia - Working in the Vicinity of Overhead and Underground Electric Lines (Draft)
	Occupational Health and Safety Act 1991
NSW	Electricity Supply Act 1995
	Work Cover NSW - Work Near Underground Assets Guide
	Work Cover NSW - Excavation Work: Code of Practice
VIC	Electricity Safety Act 1998
	Electricity Safety (Network Asset) Regulations 1999
QLD	Electrical Safety Act 2002
	Code of Practice for Working Near Exposed Live Parts
SA	Electricity Act 1996
TAS	Tasmanian Electricity Supply Industry Act 1995
WA	Electricity Act 1945
	Electricity Regulations 1947
NT	Electricity Reform Act 2005
	Electricity Reform (Safety and Technical) Regulations 2005
ACT	Electricity Act 1971

Thank You,

nbn DBYD

Date: 08/08/2021

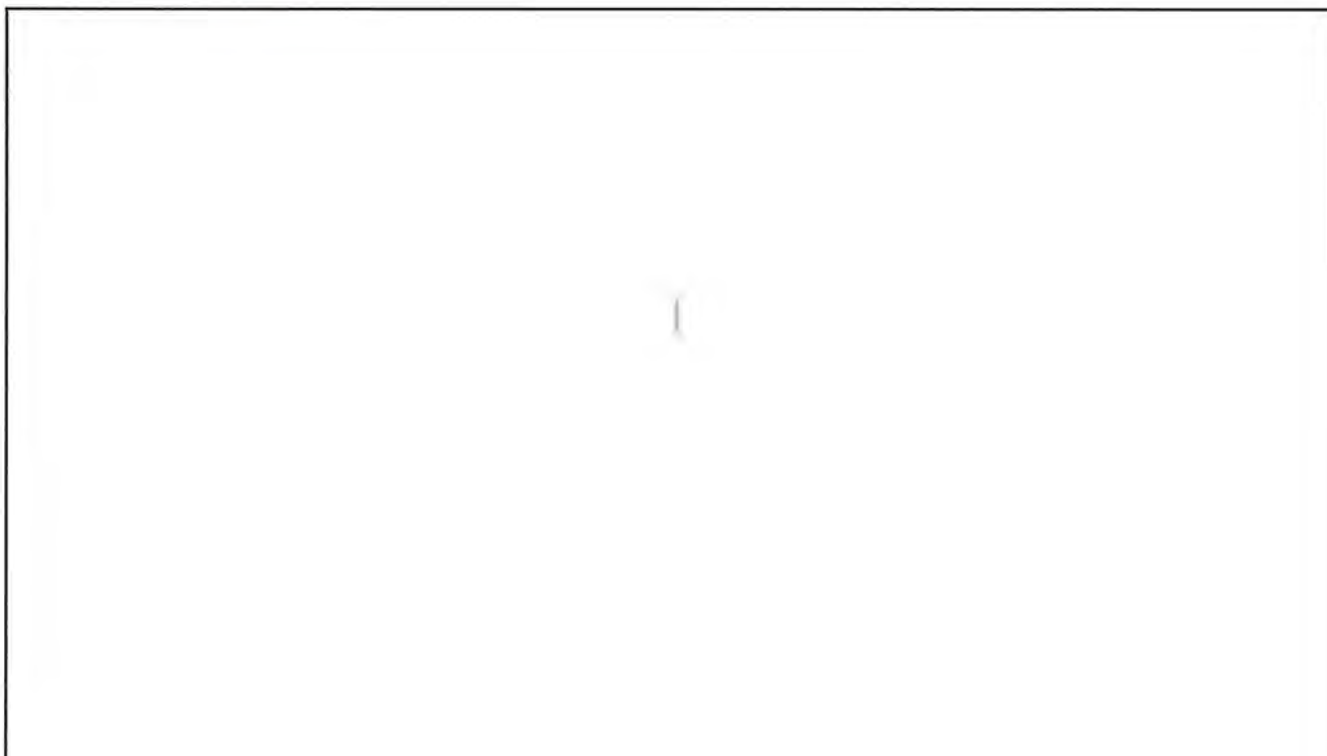
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To: Jared Falkenhagen
Phone: Not Supplied
Fax: Not Supplied
Email: jared.falkenhagen@wsp.com

Dial before you dig Job #:	30265184	 DIAL BEFORE YOU DIG www.1100.com.au
Sequence #	201539403	
Issue Date:	08/08/2021	
Location:	Lot 120 Islander Way , Maroochydore , QLD , 4558	

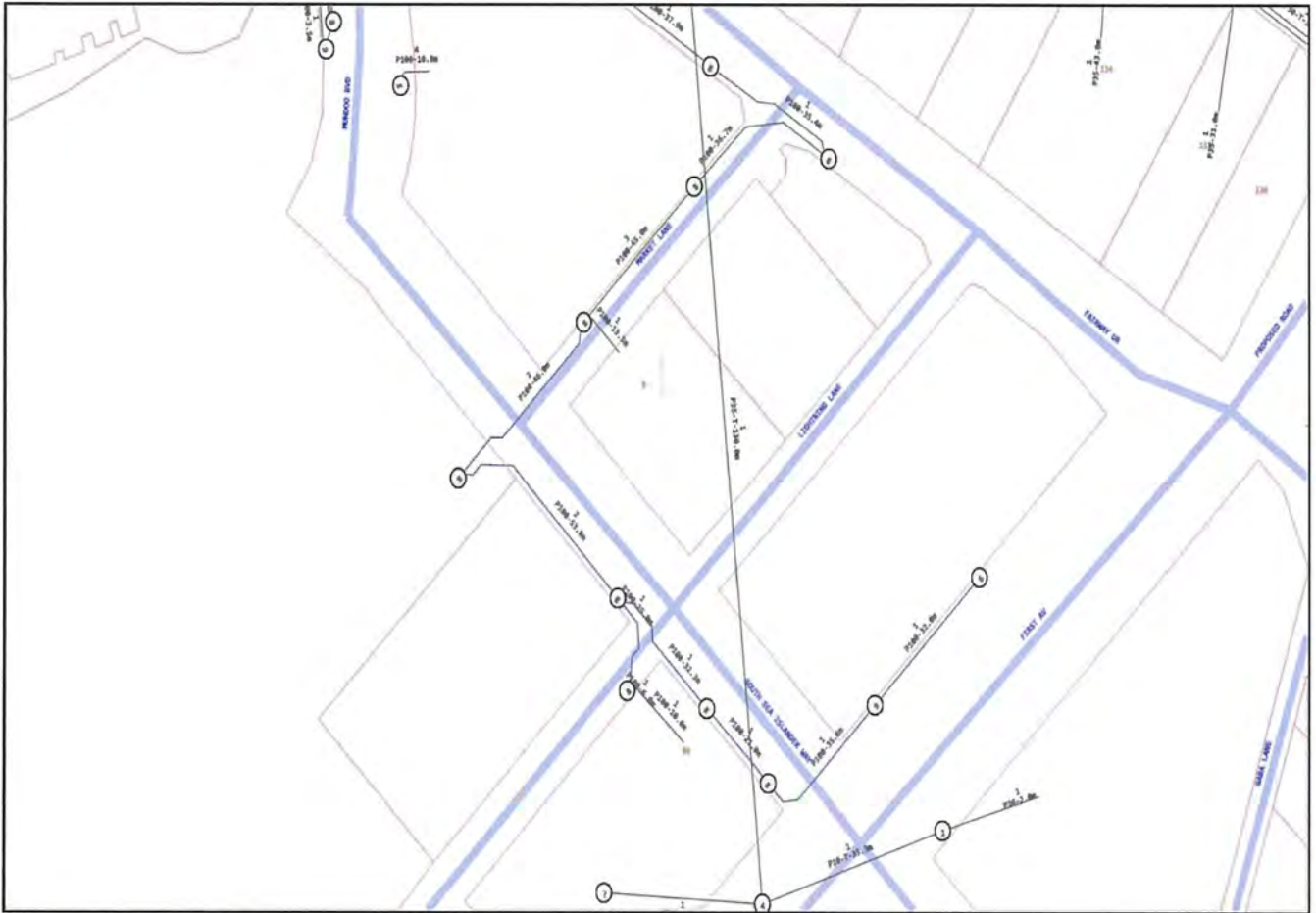
Indicative Plans





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



Emergency Contacts

You must immediately report any damage to the **nbn**™ network that you are/become aware of. Notification may be by telephone - 1800 626 329.

DUTY OF CARE

IT'S HOW
WE CONNECT



TELSTRA CORPORATION ACN 051 775 556

IMPORTANT:

When working in the vicinity of telecommunications plant you have a "Duty of Care" that must be observed. Please read and understand all the information and disclaimers provided below.

Telstra network is complex and requires expert knowledge to interpret information, to identify and locate components, to pothole underground assets for validation and to safely work around assets without causing damage. If you are not an expert and/or qualified in these areas, then you must not attempt these activities. Telstra will seek compensation for damages caused to its property and losses caused to Telstra and its customers. The 5 P's to prevent damage to Telstra assets are listed below. Construction activities and/or any activities that potentially may impact on Telstra's assets must not commence without first undertaking these steps. Construction activities can include anything that involves breaking ground, potentially affecting Telstra assets.

If you are designing a project it is recommended that you also undertake these steps to validate underground assets prior to committing to your design.

All damages to Telstra Network must be reported immediately

- Call **13 22 03** Say "Damages" at the voice prompt, then press 1 to speak to an Operator
- Or report online
<https://service.telstra.com.au/customer/general/forms/report-damage-to-telstra-equipment>

(The following pages contain more detail on each step below and the contact details to seek further advice. AS5488-2013 is the Australian Standard for the Classification of Subsurface Utility Information.)

1 PLAN:

The essential first step in preventing damage -

You must have current Telstra plans via the DBYD process. Telstra advises that the accuracy of the information provided by Telstra conforms to Quality Level D as defined in AS5488-2013. This means the information is indicative only, not a precise location. **The actual location may differ substantially from that shown on the plans** - refer to steps 2 & 3 to determine actual location prior to proceeding with construction.

2 PREPARE:

The essential second step in preventing damage -

Engage a Telstra Accredited Plant Locator. To be able to trace and identify individual subsurface cables and ducts requires access to Telstra pits and manholes. Only a Telstra Accredited Plant Locator (TAPL) is authorised to access Telstra network for locating purposes. A TAPL can interpret plans, validate visible assets and access pits and manholes to undertake electronic detection of underground assets prior to further validation. All Telstra assets must be located, validated and protected prior to commencing construction. **If you are not authorised to do so by Telstra, you must not access Telstra network or locate Telstra network.** All Telstra Accredited Plant Locators are required to have DBYD Locator Certification.

3 POTHOLE:

The essential third step in preventing damage -

All Telstra assets must be positively identified (i.e. validated), by physically sighting them. For underground assets this can be done by potholing by hand or using non-destructive vacuum extraction methods (Refer to 'validation' as defined in AS5488-2013 QL-A). **Underground assets located by electronic detection alone (step 2), are not deemed to be 'validated' and must not be used for construction purposes.** Some TAPL's can assist with non-destructive potholing for validation purposes. **If you cannot validate the Telstra network, you must not proceed with construction.** Telstra will seek compensation for damages caused to its property and losses caused to Telstra and its customers.

4 PROTECT:

The essential fourth step in preventing damage -

Telstra assets must be protected to avoid damage from construction activities. Minimum working distances around Telstra network must be maintained. These distances are provided in this document. Telstra can also provide advice and assistance in regards to protection – refer to the following pages.

5 PROCEED:

Only proceed when the above steps have been completed.

STEP 1 - PLAN

Dial Before You Dig / Telstra Plans

The actual location of Telstra assets may differ substantially from that shown on the plans. Telstra does not warrant or hold out that its plans are accurate and accepts no responsibility for the accuracy shown on the plans. Steps 2 and 3 must also be undertaken to determine actual location of network.

- Telstra DBYD plans are not suitable for displaying Telstra network within a Telstra exchange site. For advice on Telstra network within a Telstra exchange site contact Telstra Plan Service on 1800 653 935.
- Telstra owns and retains the copyright in all plans and details provided in conjunction with the applicant's request. The applicant is authorised to use the plans and details only for the purpose indicated in the applicant's request. The applicant must not use the plans or details for any other purpose.
- Telstra plans or other details are provided only for the use of the applicant, its servants, agents or Telstra Accredited Plant Locators. The applicant must not give the plans or details to any parties other than these, and must not generate profit from commercialising the plans or details.
- Please contact Telstra Plan Services immediately should you locate Telstra assets not indicated on these plans.
- Telstra, its servants 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, its servants and agents, and the applicant agrees to indemnify Telstra against any claim or demand for any such loss or damage.
- Please ensure Telstra plans and information provided remains on-site at all times throughout the inspection, location and construction phase of any works.
- Telstra plans are valid for 60 days after issue and must be replaced if required after the 60 days.
- **Emergency situations - receiving Telstra plans** Telstra's automated mapping system (TAMS) will provide a fast response for emergency situations (faster than an operator can provide manually via a phone call - see below for fast response requirements). Automated responses are normally available 24/7.

To receive a fast automated response from Telstra your request must -

- Be a web request lodged at DBYD (www.1100.com.au). The request will be then forwarded to Telstra.
 - Contain your current email address so you can receive the automated email response.
 - Be for the purposes of 'mechanical excavation' or other ground breaking DBYD activity. (Requests with activity types such as conveyancing, planning & design or other non-digging activities may not be responded to until the next business day).
 - Be for an area less than 350 metres in size to obtain a PDF map (over 350 metres will default to DWF due to size) this does not include congested CBD areas where only DWF may be supplied.
 - Be for an area less than 2500 metres in size to obtain a DWF map (CBD's less)
- **Data Extraction Fees.** In some instances a data extraction fee may be applicable for the supply of Telstra information. Typically a data extraction fee may apply to large projects, planning and design requests or requests to be supplied in non-standard formats. For further details contact Telstra Plan Services.
 - **Electronic plans - PDF and DWF maps** If you have received Telstra maps via email you will have received the maps as either a PDF file (for smaller areas) or DWF file (for larger area requests). All requests over approximately *350m or in congested CBD areas can only be supplied in DWF format. There are size limits on what can be provided. (* actual size depends on geographic location of requested area). If you are unable to launch any one of the softcopy files for viewing and printing, you may need to download and install one or more of the free viewing and printing products such as Adobe Acrobat Reader (for PDF files) or Autodesk Design Review (for DWF files) available from the internet

- **Pdf files** - PDF is the default softcopy format for all requests for areas up to approx 350m in length. (*depends on geographic location of request). The PDF file is nominally formatted to A3 portrait sheet however it can be printed on any size sheet that your printer supports, e.g. either as the full sheet or selected areas to suit needs and legibility. (to print a selected area zoom up and print 'current view') If there are multiple layers of Telstra network you may receive up to 2 sheets in the single PDF file attachment supplied. There are three types or layers of network normally recorded - local network, mains cables or a combined layer of local and mains (usually displayed for rural or semi-rural areas). If mains cable network is present in addition to local cables (i.e. as separate layer in a particular area), the mains will be shown on a separate sheet. The mains cable information should be read in conjunction with the local cable information.
- **DWF files** – DWF is the default softcopy format for all requests for areas that are over 350m in length. Maximum length for a DWF automated response is approx 2500m – depending on geographic location of request (manually-processed plans may provide larger coverage). The DWF files differ from PDF in that DWF are vector files made up of layers that can be turned on or off and are not formatted to a specific sheet size. This makes them ideal for larger areas and for transmitting electronically.
 - **How to view Telstra DWF files –**
Telstra DWF files come with all layers turned on. You may need to turn individual layers on or off for viewing and printing clarity. Individual layer names are CC (main cable/conduit), DA (distribution area network) and sometimes a combined layer - CAC. Layer details can be viewed by either picking off the side menu or by selecting 'window' then 'layers' off the top menu bar. Use 'layers' to turn individual layers off or on (double click or right click on layer icon).
 - **How to print Telstra DWF files –**
DWF files can be printed on any size sheet – either their entirety or by selected areas of interest. Some DWF coverage areas are large and are not suited to printing legibly on a single A4 sheet - you may need several prints if you only have an A4 printer. Alternatively, an A3, A1 or larger printer could be used. To print, zoom in or out and then, by changing the 'print range' settings, you can print what is displayed on your screen to suit your paper size. If you only have a small printer, e.g. A4, you may need to zoom until the text is legible for printing (which is why you may need several prints). To print what is displayed on your screen the 'view' setting should be changed from 'full page' to 'current view'. The 'current sheet' setting should also be selected. You may need to print layers separately for clarity and legibility. (Details above on how to turn layers on or off)
 - **How to change the background colour from white to black (when viewing) Telstra DWF files –**
If using Autodesk Design Review the background colour can be changed by selecting 'Tools' then 'options' then 'sheet'. Tick the box 'override published paper colours' and select the colour required using the tab provided.

STEP 2 – PREPARE

Telstra Accredited Plant Locator (TAPL):

Utilising a TAPL is an essential part of the process to identify network and to trace subsurface network prior to validating. A TAPL can provide plan interpretation, identification and electronic detection. This will assist in determining the position of subsurface assets prior to potholing (validating). Some TAPL's can also assist in validating underground detected network. Electronic detection is only an indication of the existence of underground network and can be subject to interference from other services and local conditions. Electronic detection must not be used solely to determine location for construction purposes. The electronic (indicative) subsurface measurements must be proven by physically sighting the asset (see step 3 – Pothole).

- All TAPL's locating Telstra network must be able to produce a current photo ID card issued by Telstra. A list of TAPL's is provided with the Telstra Dial Before You Dig plans.
- All TAPL's in addition to the Telstra photo ID card must also have current DBYD Locator Certification with ID card.

- Telstra does not permit external parties (non-Telstra) to access or conduct work on Telstra network. Only Telstra staff, Telstra contractors or locators whom are correctly accredited are authorised to work on or access Telstra manholes, pits, ducts, cables etc. This is for safety as well as for legal reasons.
- The details of any contract, agreement or retainer for site assistance to locate telecommunications plant shall be for you to decide and agree with the Telstra Accredited Plant Locator engaged. Telstra is not a party to any contract entered into between you and a Telstra Accredited Plant Locator.
- Payment for the site assistance will be your responsibility and payment details must be agreed before the engagement is confirmed.
- Telstra does not accept any liability or responsibility for the performance of or advice given by a Telstra Accredited Plant Locator. Accreditation is an initiative taken by Telstra towards the establishment and maintenance of competency standards. However, performance and the advice given will always depend on the nature of the individual engagement.
- Neither the Telstra Accredited Plant Locator nor any of its employees are an employee or agent for Telstra. Telstra is not liable for any damage or loss caused by the Telstra Accredited Plant Locator or its employees.

• **Electronically derived subsurface measurements (e.g. depths/alignments by locating devices)**

All locator provided measurements for Telstra assets must have the AS5488-2013 quality level specified - (e.g. QL-A, B, C or D). These quality levels define the accuracy of subsurface information and are critical for determining how the information is later used – for example if suitable for excavation purposes.

1) **An example of a subsurface measurement with no quality level specified – (i.e. not to be used)**

Telstra cover - 0.9m

*The measurement above has no AS5488-2013 quality level specified and **must not be provided by a locator or used for design or construction.** This is because it is not known whether the measurement is actual or derived (where 'actual' means validated and 'derived' means assumed and not validated, e.g. electronic or other). Typically damages occur by constructors incorrectly using unvalidated measurements as actual measurements.*

2) **An example of a subsurface measurement with quality level B specified –**

Telstra cover - 0.9m (QL-B)

Where (QL-B) complies with AS5488-2013 QL-B (for example an electronic location that complies with QL-B)

(Note QL-B means it has not been validated and must not be used for construction purposes around Telstra network, however it would assist further investigation to determine the actual location)

3) **An example of a subsurface measurement with the quality level A specified –**

Telstra cover - 0.6m (QL-A)

Where (QL-A) complies with AS5488-2013 QL-A (and is deemed suitable for excavation purposes). In this example the asset has been electronically located first, (QL-B) and then physically exposed (QL-A).

Note -Telstra will seek compensation for damages caused to it its property and losses caused to Telstra and its customers if unvalidated subsurface measurements are used for construction and subsequently result in damage to Telstra assets. Only measurements conforming to AS5488-2013 (QL-A) are deemed by Telstra to be validated measurements.

- **Rural landowners - Rural Locations Subsidy Scheme** Where Telstra-owned cable crosses agricultural land, Telstra may provide on-site assistance with cable location. **You must contact Telstra Plan Services to determine eligibility and to request the service.**

Please note the following –

- If eligible, the location assistance must be approved and organised by Telstra. Telstra will not pay for a location that has not been approved and facilitated by Telstra (Telstra is not responsible for payment assistance when a customer engages a locator directly).
- Telstra will only "subsidise" the location up to \$330 (Incl. GST). This will cover one hour on-site location only, private lead-in locations are for lead-ins 100m or longer. Any time required in addition to Telstra-funded time can be purchased directly from the assigned Telstra Accredited Plant Locator.
- This service does NOT include the use Mechanical Aids or Hydro Excavation (Vac Trucks) to locate and should be discussed between the Accredited Plant Locator and the private rural landowner
- The exact location, including depth of cables, must be validated by potholing, which may not be covered by this service.

- This service is nominally only available to assist private rural land owners.
- This service nominally covers one hour on-site only, private lead-in locations are for lead-ins 100m or longer. Any time required in addition to Telstra-funded time can be purchased directly from the assigned Telstra Accredited Plant Locator.
- This service does not apply to previously located network at the same location (i.e. it is a once off).
- This service does not apply to other carriers' cables (marked as 'OC' on Telstra plans).

STEP 3 – POTHOLE

Validation as defined in AS5488-2013 (QL-A).

After utilising a Telstra Accredited Plant Locator and prior to commencing construction, any electronically detected underground network must be positively identified (validated) by physically sighting it. This can be done by careful hand digging or using non-destructive water jet methods to expose the network.

Manual potholing needs to be undertaken with extreme care and by employing techniques least likely to damage cables. For example, align shovel blades and trowels parallel to the cable rather than digging across the cable. Some Telstra Accredited Plant Locators are able to provide or assist with non-destructive potholing methods to enable validation of underground cables and ducts.

If you cannot validate the underground network then you must not proceed with construction. Telstra will seek compensation for damages caused to its property and losses caused to Telstra and its customers.

Important note: *The construction of Telstra's network dates back over many years. Some of Telstra's pits and ducts were manufactured from asbestos-containing cement. You must take care in conducting any works in the vicinity of Telstra's pits and ducts. You must refrain from in any way disturbing or damaging Telstra's network infrastructure when conducting your works. We recommend that before you conduct any works in the vicinity of Telstra infrastructure that you ensure your processes and procedures eliminate any possibility of disturbing, damaging or interfering in any way with Telstra's infrastructure. Your processes and procedures should incorporate appropriate measures having regard to the nature of this risk. For further information -*

<https://www.telstra.com.au/consumer-advice/digging-construction/relocating-network-assets>

STEP 4 – Protect:

You must maintain the following minimum clearance distances between construction activity and the validated position of Telstra plant.

Jackhammers/Pneumatic Breakers	<i>Not within 1.0m of actual validated location.</i>
Vibrating Plate or Wacker Packer Compactor	<i>Not within 0.5m of actual validated location of Telstra ducts. 300mm compact clearance cover before compactor can be used across Telstra ducts.</i>
Boring Equipment (in-line, horizontal and vertical)	<i>Not within 2.0m of actual validated location. Constructor to hand dig or use non-destructive water jet method (pothole) and expose plant.</i>
Heavy Vehicle Traffic (over 3 tonnes)	<i>Not to be driven across Telstra ducts (or plant) with less than 600mm cover. Constructor to check actual depth via hand digging.</i>
Mechanical Excavators, Farm ploughing and Tree Removal	<i>Not within 1.0m of actual validated location. Constructor to hand dig or use non-destructive water jet method (pot-hole) and expose plant.</i>

- For blasting or controlled fire burning please contact Telstra Plan Services.
- If conducting roadworks all existing Telstra pits and manholes must be a minimum of 1.2m in from the back of kerb after the completion of your work.
- After the completion of any ground work in footways or roadway whereby the existing levels are being changed the depth of cover of the existing Telstra asset at the completion of work must not be less than the existing level before work commenced.

Regardless of whether the surface is being raised or lowered, any work impacting the depth of cover of Telstra underground assets should not commence before consultation with Telstra Network Integrity representatives, to discuss the possibility of 'protection' or relocation (including lowering of the asset)".

- For clearance distances relating to Telstra pillars, cabinets and RIMs/RCMs please contact Telstra Plan Services.
- If Telstra plant is situated wholly or partly where you plan to work (i.e. in conflict, where a pit or manhole would be in a driveway or other vehicle thoroughfare), then Telstra's Network Integrity Group must be contacted to discuss possible engineering solutions to protect Telstra assets. Please phone **1800 810 443** or email NetworkIntegrity@team.telstra.com
- You are not permitted to relocate or alter or repair any Telstra assets or network under any circumstances.

It is a criminal offence under the *Criminal Code Act 1995 (Cth)* to tamper or interfere with communication facilities owned by a carrier. Heavy penalties may apply for breach of this prohibition, and any damages suffered, or costs incurred by Telstra as a result of any such unauthorised works may be claimed against you.

Only Telstra and its contractors may access and conduct works on Telstra's network (including its plant and assets). This requirement is to ensure that Telstra can protect the integrity of its network, avoid disruption to services and ensure that the relocation meets Telstra's requirements.

- If Telstra relocation or protection works are part of the agreed solution, then payment to Telstra for the cost of this work shall be the responsibility of the principal developer, constructor or person for whom the work is performed. The principal developer or constructor will be required to provide Telstra with the details of their proposed work showing how Telstra's plant is to be accommodated and these details must be approved by the Regional Network Integrity Manager prior to the commencement of site works. Please phone **1800 810 443** or email NetworkIntegrity@team.telstra.com
Further information - <https://www.telstra.com.au/consumer-advice/digging-construction/relocating-network-assets>

Damage to Telstra's network must be reported immediately -

132 203 Say "Damages" at the voice prompt, then press 1 to speak to an Operator

Or report online:

<https://service.telstra.com.au/customer/general/forms/report-damage-to-telstra-equipment>

- You will be held responsible for all plant damage that occurs or any impacts to Telstra's network as a result of your construction activities. This includes interfering with plant, conducting unauthorised modification works and interfering with Telstra's assets in a way that prevents Telstra from accessing or using its assets in the future.
- Telstra reserves all rights to recover compensation for loss or damage to its cable network or other property including consequential losses.

FURTHER INFORMATION - CONTACTS

NATURAL DISASTERS

Natural Disasters include (amongst other things) earthquakes, cyclones, floods and tsunamis. In the case of such events, urgent requests for plans or information relating to the location of Telstra network can be made directly to Telstra Network Integrity Team Managers as follows:

NSW –	John McInerney	0419 485 795
NT/WA/QLD –	Glenn Swift	0419 660 147
SA/VIC/TAS -	David Povazan	0417 300 947

TELSTRA PLAN SERVICES

- for all Telstra Dial Before You Dig related enquiries

Email - Telstra.Plans@team.telstra.com

Phone - 1800 653 935 (general enquiries, business hours only)

Accredited plant locator enquiries - Glen	(07)34551011
Telstra easements - Glen	(07)34551011

**Please note - to make a Telstra plan enquiry the plans must be current (within 60 days of issue). If your plans have expired you will need to submit a new request via DBYD prior to contacting Telstra Plan Services.*

Information for new developments (developers, builders, home owners)

Telstra Smart Communities - <https://www.telstra.com.au/smart-community>

Asset relocations

Please phone 1800 810 443 or email NetworkIntegrity@team.telstra.com

<https://www.telstra.com.au/consumer-advice/digging-construction/relocating-network-assets>

Telstra offers free Cable Awareness Presentations, if you believe you or your company would benefit from this offer please contact Network Integrity on 1800 810 443 or NetworkIntegrity@team.telstra.com

PRIVACY NOTE

Your information has been provided to Telstra by DBYD to enable Telstra to respond to your DBYD request. Telstra keeps your information in accordance with its privacy statement entitled "Protecting Your Privacy" which can be obtained from Telstra either by calling 1800 039 059 or visiting our website at www.telstra.com.au/privacy

Search for the closest Certified Locating Organisation (CLO) to your work-site at the following website: <https://dbydlocator.com/certified-locating-organisation/>

Read the terms of use - Click accept.

A national map and an A-Z list of all Certified Locating Organisations is now available.

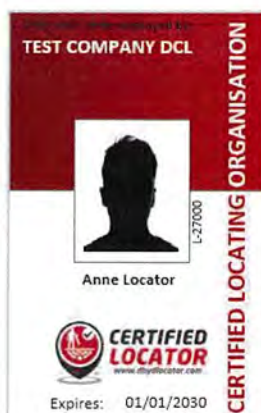
Use the map to zoom to your work area and then choose the closest  Locator indicated.
OR SEARCH BY POSTCODE OF YOUR WORK AREA

1. Enter the postcode
2. Choose your search radius
3. Click Filter

If there is no result, you may have to increase the search radius



Chose the closest  Locator indicated OR scroll down to see all search results.

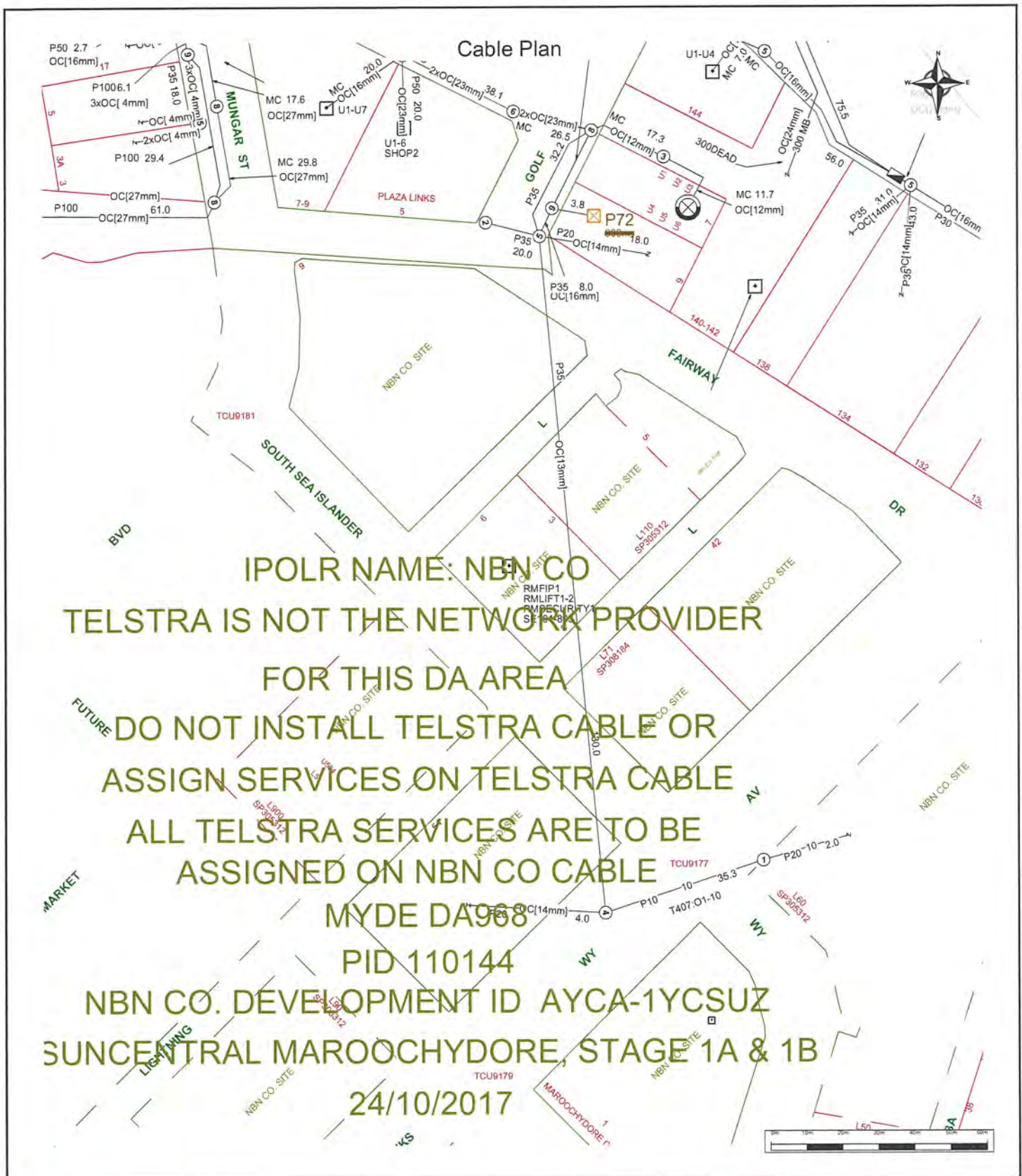


Telstra is aware of each Certified Locating Organisation **and** their employee locators.

Locator skills have been tested, and the Organisation has calibrated location and safety equipment.

Each Certified Locator working for a CLO is issued with a photo ID Card, authorising them to access Telstra pits and manholes for the purpose of cable and plant locations.

Please ask to see your Locators' CLO ID Card.



For all Telstra DBYD plan enquiries -
email - Telstra.Plans@team.telstra.com
For urgent onsite contact only - ph 1800 653 935 (bus hrs)

TELSTRA CORPORATION LIMITED A.C.N. 051 775 556

Generated On 09/08/2021 08:53:28

Sequence Number: 201539405

**CAUTION: Critical Network Route in plot area.
DO NOT PROCEED** with any excavation prior to
seeking advice from Telstra Plan Services on :
1800 653 935

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.



	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: 201539405
TELSTRA CORPORATION LIMITED A.C.N. 051 775 556 Generated On 09/08/2021 08:53:31		
CAUTION: Critical Network Route in plot area. DO NOT PROCEED with any excavation prior to seeking advice from Telstra Plan Services on : 1800 653 935		

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.

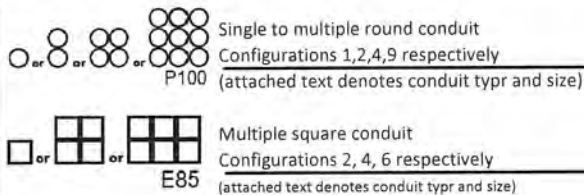
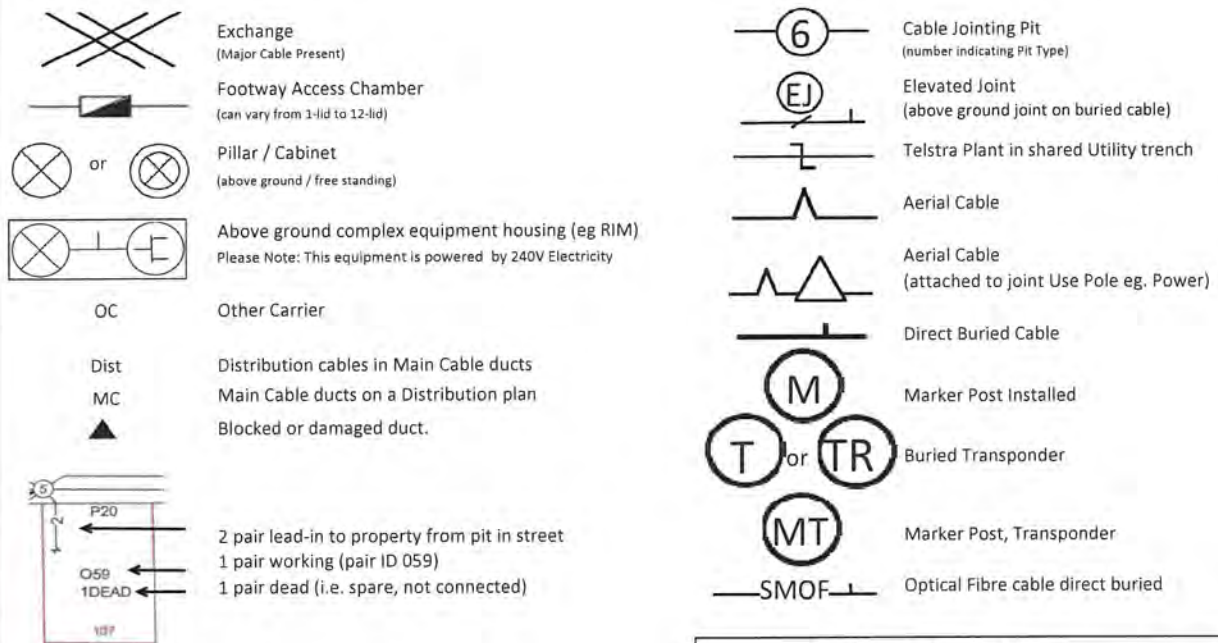
Telstra plans and information supplied are valid for 60 days from the date of issue. If this timeframe has elapsed, please reapply for plans.

LEGEND

IT'S HOW
WE CONNECT



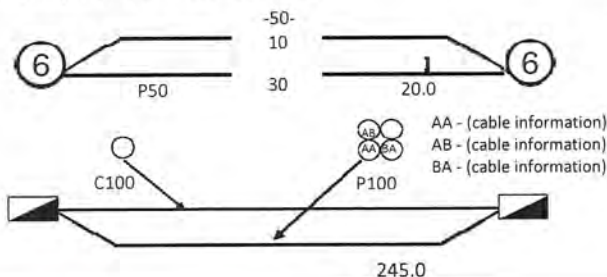
For more info contact a Certified Location Organisation or Telstra Plan Services 1800 653 935



Some examples of conduit type and size:

A - Asbestos cement, P - PVC / Plastic, C - Concrete,
GI - Galvanised iron, E - Earthenware
Conduit sizes *nominally* range from 20mm to 100mm
P50 50mm PVC conduit
P100 100mm PVC conduit
A100 100mm asbestos cement conduit

Some Examples of how to read Telstra Plans



One 50mm PVC conduit (P50) containing a 50-pair and a 10-pair cable between two 6-pits. 20.0m apart, with a direct buried 30-pair cable along the same route

Two separate conduit runs between two footway access chambers (manholes) 245m apart A nest of four 100mm PVC conduits (P100) containing assorted cables in three ducts (one being empty) and one empty 100mm concrete duct (C100) along

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. Telstra does not warrant or hold out that its plans are accurate and accepts no responsibility for any inaccuracy shown on the plans. **FURTHER ON SITE INVESTIGATION IS REQUIRED TO VALIDATE THE EXACT LOCATION OF TELSTRA PLANT PRIOR TO COMMENCING CONSTRUCTION WORK.** A plant location service 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. The exact position of Telstra assets can only be validated by physically exposing it. Telstra will seek compensation for damages caused to its property and losses caused to Telstra and its customers.

Jared Falkenhagen
WSP
900 Ann Street
Fortitude Valley QLD 4006

9 August 2021

Dear Jared Falkenhagen

RESPONSE TO RECENT DBYD ENQUIRY
Lot 120 Islander Way Maroochydore QLD 4558
SEQ: 201539401

Please find attached As Constructed Stormwater, Electrical and Communication Infrastructure as requested. This map expires 30 days from Sunshine Coast Councils plan print date.

Any damages to Council's Infrastructure must be reported immediately by calling Sunshine Coast Council Customer Service on (07) 5475 7272.

If you require drainage plans that may show the drains/pipes within the building/property and where they connect to the mains, please contact Sunshine Coast Council Customer Service on (07) 5475 7272 or mail@sunshinecoast.qld.gov.au.

IMPORTANT NOTICE

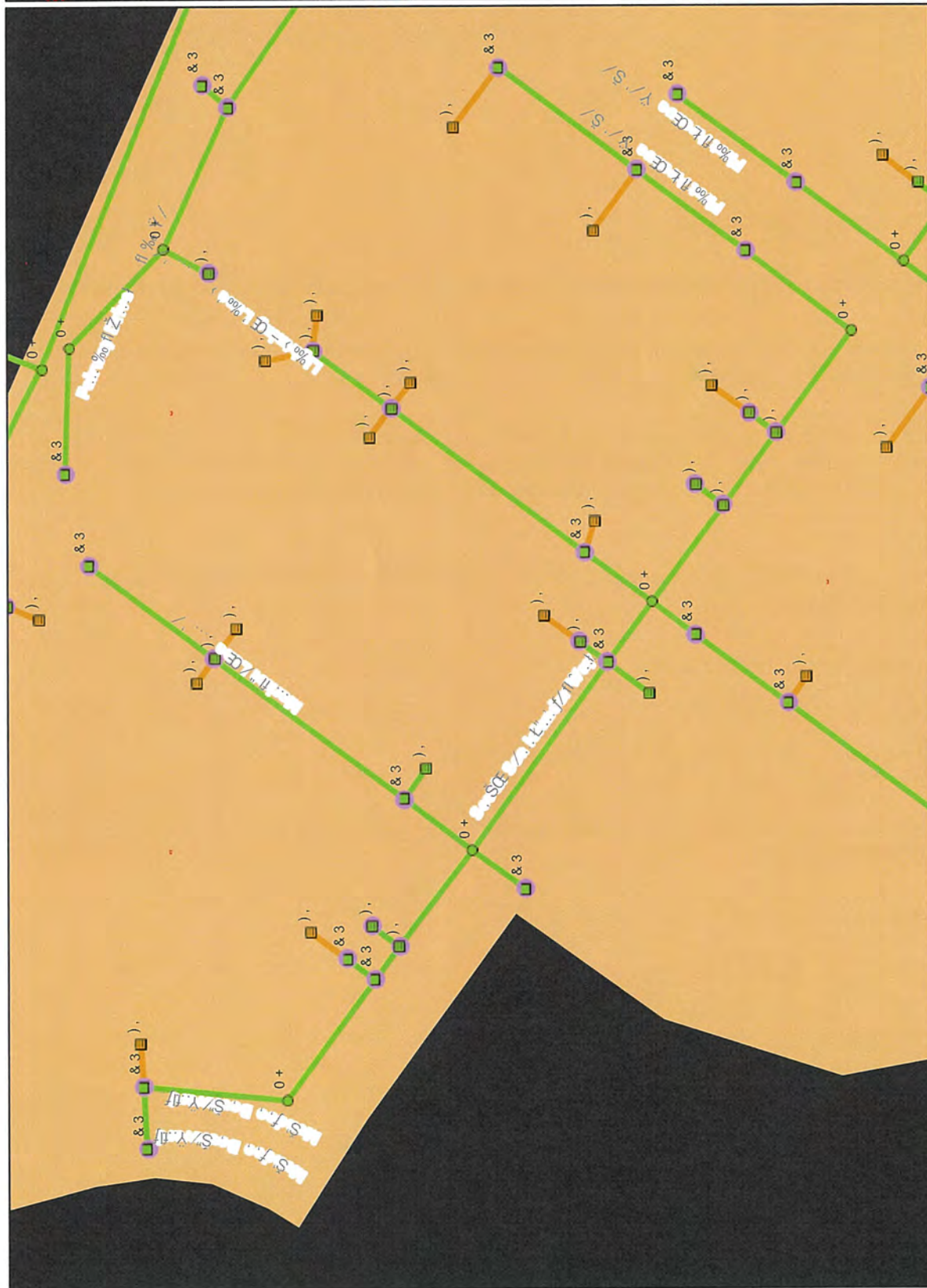
This enquiry response, including any associated documentation, has been assessed and compiled from the information detailed within the DBYD enquiry outlined above. Please ensure that the DBYD enquiry details and this response accurately reflect your proposed works.

DISCLAIMER

While every care is taken to ensure the accuracy of this product, neither the Sunshine Coast Regional Council nor the State of Queensland make any representations or warranties about the accuracy, reliability, completeness or suitability for any particular purpose and disclaims all responsibility and all liability (including without limitation, liability in negligence) for all expenses, losses, damages including indirect or consequential damage) and costs that may occur as a result of the product being inaccurate or incomplete in any way or for any reason.

The applicant should rely on field investigation in order to validate information shown on this plan.
Crown Copyright Reserved, Council Copyright Reserved.





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QRU WKH 6WDWH RI 4XHHQVOD
UHSUHVHQWDLRQV RU ZDUUD
DFFXUDF' UHODELOLW'
FRPSOHWHQV RU VXLWD ELOLV
XSUSRVH DQG GLVFOOLPV DDO
DOO ODELOLW'
LQFOXGLQJ ZLWKRXU OLPWD
QHJOLJHQFH IRU DDO H[SHQ
GDPDJHV LQFOXGLQJ LGLUHFUW
RU FRQVHTXHQWLDO GDPDJH DQ
RFFXU DV D UHVXOW RI WKH
LQDFFXUDWH RU LQFRPSOHWH
QDQ' ZD' RU IRU DQ' UHJVRQ

&URZQ &RXQFLO &RS\ULJKW 5H\

Jared Falkenhagen
WSP
900 Ann Street
Fortitude Valley QLD 4006

9/08/2021



Dear Jared Falkenhagen

Response to your recent enquiry: Unitywater infrastructure is located on the property

Your recent Dial Before You Dig enquiry about the location of water and sewerage assets on your property of interest has been sent to Unitywater.

Unitywater has located water and/or sewerage infrastructure on the property. Attached is a map locating the infrastructure and identifying the type of infrastructure that has been identified. The map and information contained on this map is valid for 30 days from Unitywater plan print date.

Also attached to this letter is additional information about your responsibilities in relation to our infrastructure.

Sequence No: 201539404

Job No: 30265184

Location: Lot 120 Islander Way Maroochydore

If you have further questions, please call the Customer Service Centre on 1300 0 UNITY (1300 086 489).

Yours sincerely



Ivan Beirne
Head of Asset Management



Page 1 of 2



Unitywater
Serving you today, investing in tomorrow.

Important Information

Disclaimer

All Unitywater's records, data and information supplied via DBYD are indicative only. You agree that any plans supplied to you has been or will be provided only for your convenience and has not been and will not be relied upon by you for any purpose.

You also agree that Unitywater does not assume any responsibility or duty of care in respect of, or warrant, guarantee or make any representation as to the Data (including its accuracy, reliability, currency or suitability).

Unitywater's plans only indicates the general vicinity of infrastructure in a geographic area and does not state the depths at which infrastructure could be buried. You must first physically locate the infrastructure by utilising relevant site detection methodologies prior to performing any works or undertaking any activities near or adjacent to our infrastructure. You are solely responsible for the selection of appropriate site detection methodologies at all times.

To the fullest extent permitted by law, Unitywater will not be liable to you in contract, tort, equity, under statute or otherwise arising from or in connection with the provision of any plans to you via DBYD.

Compliance with laws

There may be both indicated and unmarked hazards, dangers or encumbrances, including underground asbestos pipes and abandoned mains within your nominated search area. 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 in relation to workplace health and safety.

Damaged Infrastructure

Please note that it is an offence under Section 192 of the *Water Supply (Safety and Reliability) Act 2008* to interfere with our infrastructure without Unitywater's written consent.

You may be liable to Unitywater for any loss of or damage to our infrastructure, together with any consequential or indirect loss or damage (including without limitation, loss of use, loss of profits or loss of revenue) arising from or in connection with any interference with Unitywater's infrastructure by you or any other person for which you are legally responsible.

Any damage to Unitywater's Infrastructure must be reported immediately to the (24 Hours) Faults and Emergencies contact number on **1300 0 UNITY** (1300 086 489).

Copyright

All Data is copyright.

Notes

If you require further details on sewerage and water infrastructure, Detailed Infrastructure Plans are available for purchase. A request form is available through Unitywater's website <http://www.unitywater.com> or by contacting the Customer Service Centre on 1300 0 UNITY (1300 086 489).

Unitywater water and sewerage infrastructure is located across Moreton Bay, Sunshine Coast and Noosa local government areas. For information outside these areas you will need to contact the relevant authority.

UNITYWATER DBYD MAP

Sequence Number: 201539404

Job Number: 30265184

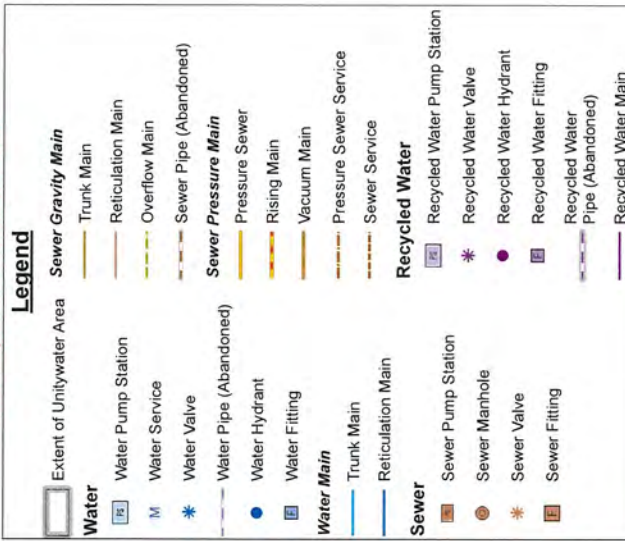
Printed On: 9/08/2021

Emergency Situations

Call Unitywater:

1300 086 489

This information on this plan is valid for 30 days from "Printed On" date.



Map Title: 1

Scale: 1:1000

(If printed at 100% on A3 size paper)



Unitywater

Dial Before You Dig

Geospatial Information Systems

Ground Floor, 33 King St

Caboolture QLD 4510

Inquiries: 1300 0 Unity (1300 086 489)

Email: dbyd@unitywater.com

Disclaimer

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ABOUT US

WSP is one of the world's leading engineering professional services consulting firms. We are dedicated to our local communities and propelled by international brainpower. We are technical experts and strategic advisors including engineers, technicians, scientists, planners, surveyors, environmental specialists, as well as other design, program and construction management professionals. We design lasting Property & Buildings, Transportation & Infrastructure, Resources (including Mining and Industry), Water, Power and Environmental solutions, as well as provide project delivery and strategic consulting services. With approximately 50,000 talented people globally, we engineer projects that will help societies grow for lifetimes to come.

