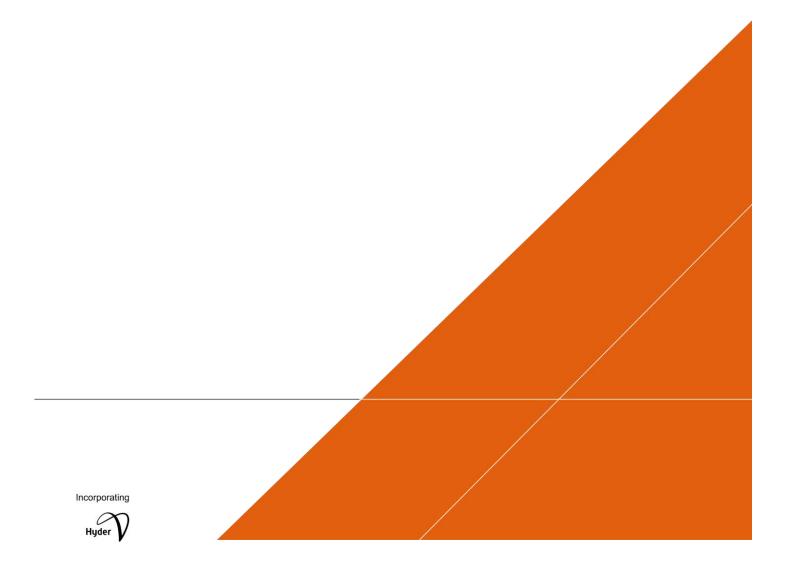


Item 3 - Attachment L - Due Diligence

CONCORD WEST PRECINCT

Due Diligence Report

26 MARCH 2021



CONCORD WEST PRECINCT

Due Diligence Report

Author Anna Zolotukhina

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Approver Tim Fitzhardinge

Report No R-0001-10019736-AAR-01

Date 26 March 2021
Revision Text Revision 02

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REVISIONS

Revision	Date	Description	Prepared by	Approved by
01	13/09/2016	For Information	AZ	TF
02	26/03/2021	For Information - Reissued	MG	MG

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APPENDICES

APPENDIX A

Existing Infrastructure Services

1 EXECUTIVE SUMMARY

Arcadis has undertaken a due diligence investigation of a Concord West Precinct.

This initial investigation has been conducted as a desktop study. Our key findings are summarised below.

Utilities

 Potable water, sewer, gas, electricity and telecommunication services do exist in the immediate vicinity. Connections appear feasible.

Stormwater

- City of Canada Bay Council's Development Control Plan requires the future development needs to comply with flood controls.
- Per City of Canada Bay Council's Stormwater Management Design Guidelines, an on-site detention system will be required for the developments.
- City of Canada Bay Council standards also require water quality treatment systems of stormwater to be installed.

Other consideration

- No bushfire or native vegetation constraints apply to the precinct as per the NSW Rural Fire Service search.
- The western boundary of the precinct and eastern boundary along the Concord West train station are within a Heritage Listed Wetland Item and this should be investigated further if the client wishes to develop up to those boundaries.

2 INTRODUCTION

Arcadis has been engaged to provide engineering due diligence investigations for prospective development precinct located in Concord West, NSW in support to a Planning Proposal (rezoning application).

This Due Diligence Report will outline and address the following components for this prospective development precinct:

- The findings of a Dial Before You Dig (DBYD) search are presented, in order to identify existing utility service assets for potable water, sewer, electricity, gas and telecommunications within and around the proposed location. This report also specifies the relevant owner and authority for each utility, and provides preliminary advice on the Feasibility of connecting to existing utilities to service the site.
- This report also identifies other general findings related to the specific site, such as bushfire and heritage considerations.
- **Recommendations** are presented for further investigations and actions, should the client be prepared to continue investigations into this particular site.

This report is to be read in conjunction with the drawings and maps located in the appendixes.

The information used in this report is based on:

- Dial Before You Dig from 28/08/2018, refer to appendix A;
- NSW Planning Portal;
- Google Maps, Google Street View and SIX maps 2018;
- City of Canada Bay Stormwater guidelines.
- NSW Rural Fire Service

3 PROJECT DESCRIPTION

The land to which this report applies (herein referred to as 'the precinct) is shown in Figure 1 and 2. The precinct is located in proximity to Concord West train station.

Table 1 Key Data for Concord West Precinct

GSK Consumer Healthcare Ermington Manufacturing Facility Redvelopment		
LGA	City of Canada Bay Council	
Location	Concord West, NSW, 2318	
Area	Approx. 7.6ha	
Current land owner	Various land owners	
	IN1 General Industrial	
Current land zoning	R2 Low Density Residential	
Current land zoning	R3 Medium Density Residential	
	B1 Neighbourhood Centre	



Figure 1 Concord West Precinct (SIX maps 2018)



Figure 2 Zoning map (NSW Planning Portal)

4 STORMWATER AND WATER QUALITY

Based on the results of the DBYD and Google maps review there is 375-1200mm existing City of Canada Bay Council stormwater network provided within roads of the precinct site.

This precinct is mainly subject to overland flow flooding from the local catchment. Water tends to pond in the low-lying area along the Homebush Bay Drive. The low-lying area extends from Victoria Avenue to Concord Avenue. Water from the east concentrates before the embankment of Homebush Bay Drive. The local stormwater network and the 2.1m x 0.9m box culvert under the embankment, which discharges into the mangroves to the west of Homebush Bay Drive, does not have capacity to drain out water and thus water ponds in the precinct.

According to City of Canada Bay Council's Development Control Plan, part of the land in the precinct site is subject to flood controls. The floor level of the future development will need to comply with the flood planning level. The future development cannot impose any adverse flood impact out of the precinct site.

On-Site Detention

Based on the City of Canada Bay Council's Stormwater Policy, On-site Stormwater Detention (OSD) is required with the site storage requirement (SSR) of 200 m3 per hectare of the single residential developments and 300 m3 per hectare of commercial, industrial, mixed, dual occupancy and residential flat buildings. However, further investigation of the specific circumstances applicable to this development and further stormwater modelling could potentially impact the OSD storage requirements.

Water Quality Requirements

With respect to water quality, City of Canada Bay Council Engineering Specification outlines that stormwater treatment is required for residential, commercial and mixed developments types. The minimum percentage reduction of the post development average annual load of pollutants is presented in Table 2.

Table 2 Required Pollutant reduction targets

Pollutant	Pollutant Load Reduction
Total Gross Litter	All Litter - 70%
Total Gloss Elitor	Material (>50mm) – 70%
Total Suspended Solids	80%
Total Phosphorus	45%
Total Nitrogen	45%

Modelling for the determination of the mean annual loads of land use must be undertaken in MUSIC and in accordance with the associated WSUD Technical Guidelines.

Integrated stormwater management systems can be provided to incorporate stormwater detention, retention, re-use and water efficiency whilst addressing issues such as protection from pollution of the receiving waterways.

Arcadis recommends discussions take place with Council also to confirm the water quality requirements.

5 EXISTING UTILITIES REVIEW

Arcadis has investigated the in ground utilities and services located in the vicinity of the precinct. As part of these investigations Arcadis has completed a DBYD review. The following sections summarise the findings of these investigations. The complete findings of the DBYD search have been included in Appendix A.

5.1 Potable Water

Based on the results of the DBYD there are a following Sydney Water assets:

 The precinct is serviced through the reticulation of 100-200mm potable water service.

While some upgrades to the existing Sydney Water network may be necessary, it is likely that the existing water network would have sufficient capacity to service the rezoned precinct. However, we recommend that a Feasibility Application is lodged with Sydney Water to confirm any upgrades to the existing network that may be required.

5.2 Sewer

Based on the results of the DBYD there are a following Sydney Water assets in the vicinity of the sites:

- 150-300mm sewer mains service the precinct properties and gravitate to a Sydney Water pump station SP0091 located on 75A Victoria Ave.
- 600mm sewer rising main runs on the southern side of Victoria Ave from the sewer pump station. No house connections will be allowed to this service.

It is likely that the existing sewer network has sufficient capacity to service the existing site, connections appear feasible. Arcadis recommends that a Feasibility Application is lodged with Sydney Water to confirm viable sewer servicing options. The Feasibility Application will give details on the existing and remaining capacities of the sewer main. Additionally, approval must be obtained on Sydney Water if the client chooses the build over or next to the existing Sydney water easement.

5.3 Gas

Jemena Gas Network distributes natural gas throughout Sydney, including the precinct site. Based on the results of the DBYD there are following Jemena assets in the vicinity of the site:

- Ø32-75mm @ 210kPA network gas main reticulated to the precinct properties.
- Ø150mm @ 1050kPa secondary main runs within Victoria Ave and George St. No house connections will be allowed to this service.
- Ø550 @3500kPa primary main runs within Victoria Ave. No house connections will be allowed to this service.
- Ø100mm Naphtha pipeline runs within Victoria Ave. No house connections will be allowed to this service.

It is likely that the existing Jemena network would have sufficient capacity to service the proposed development, subject to a Jemena commercial agreement.

5.4 Power

Based on the results of the DBYD and Google Street View Accessed on 12/09/18, Ausgrid HV and LV services reticulate within the precinct site along the roads.

Ausgrid zone substation "CONCORD" ZN847 is located at 31B George St, south of George Street/ Rothwell Avenue roundabout.

There 5 x 11kV underground feeders run along King St within the precinct (from west to east as per the Figure 3 below).

- ZN874PA15 (135A night time load recorded on 17/07/13)
- ZN874PA11 (210A (shared with PA12) night time load recorded on 17/07/13)
- ZN874PA9 (55A day time load recorded on 17/07/13)
- ZN874PA3 (90A night time load recorded on 17/07/13)
- ZN874PA10 (10A night time load recorded on 17/07/13)

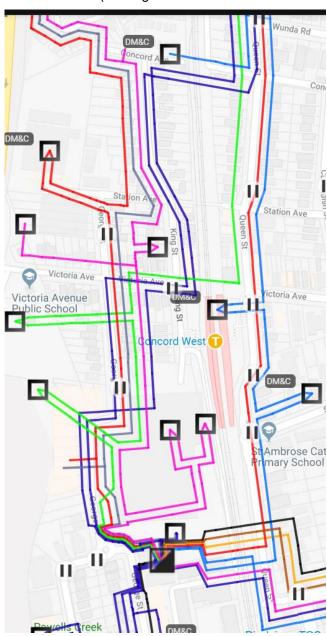


Figure 3. Electrical Services Reticulation (Ausgrid GIS)

Based on the assumption of 11kV cable rating to be 300A, PA9 to take up to 6000A LV supply; PA3 to take up to 5000A LV supply; PA10 to take up to 7000A LV supply, there could be another 2000A load left from PA15 and PA11 that we potentially can be used.

Depending on the electrical load of the development, the network will be assessed and modified/upgraded as required.

While further upgrades to the existing Ausgrid network may be necessary, it is likely that the existing electricity network would have sufficient capacity to service the rezoned development. However, we recommend that an application is lodged with Ausgrid to confirm suitable connection points and any upgrades to the existing network that may be required.

5.5 Telecommunications

The DBYD search indicates that Telstra telecommunication provider has assets reticulated within the precinct site.

Further discussions with Telstra will be required to determine their service requirements. We recommend that formal discussions begin with the providers at the start of the design stage of the project to confirm supply requirements for the development.

6 GENERAL SEARCH

6.1 Bush Fire Zones

Based on the NSW Rural Fire Service search the parcel of land selected is not identified as bush fire prone.

6.2 Heritage List

Based on Office of Environment and Heritage investigation, the following areas have been identified listed under the NSW Heritage Act:

- Powells Creek Reserve in 64-66 Victoria Avenue at the western boundary of the precinct;
- Concord Railway Station in Queen Street along the eastern boundary.

Refer to the Figure 3 below for the location of the heritage listed areas.

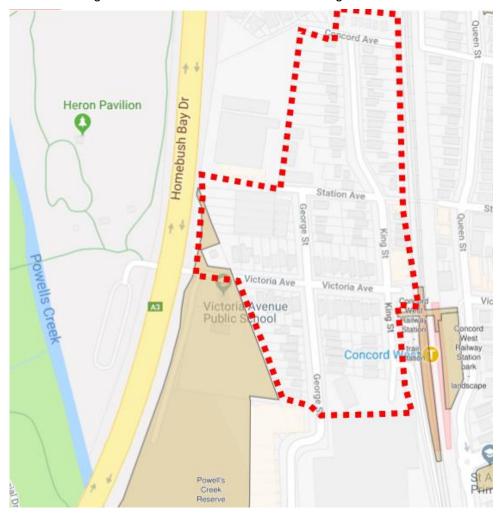
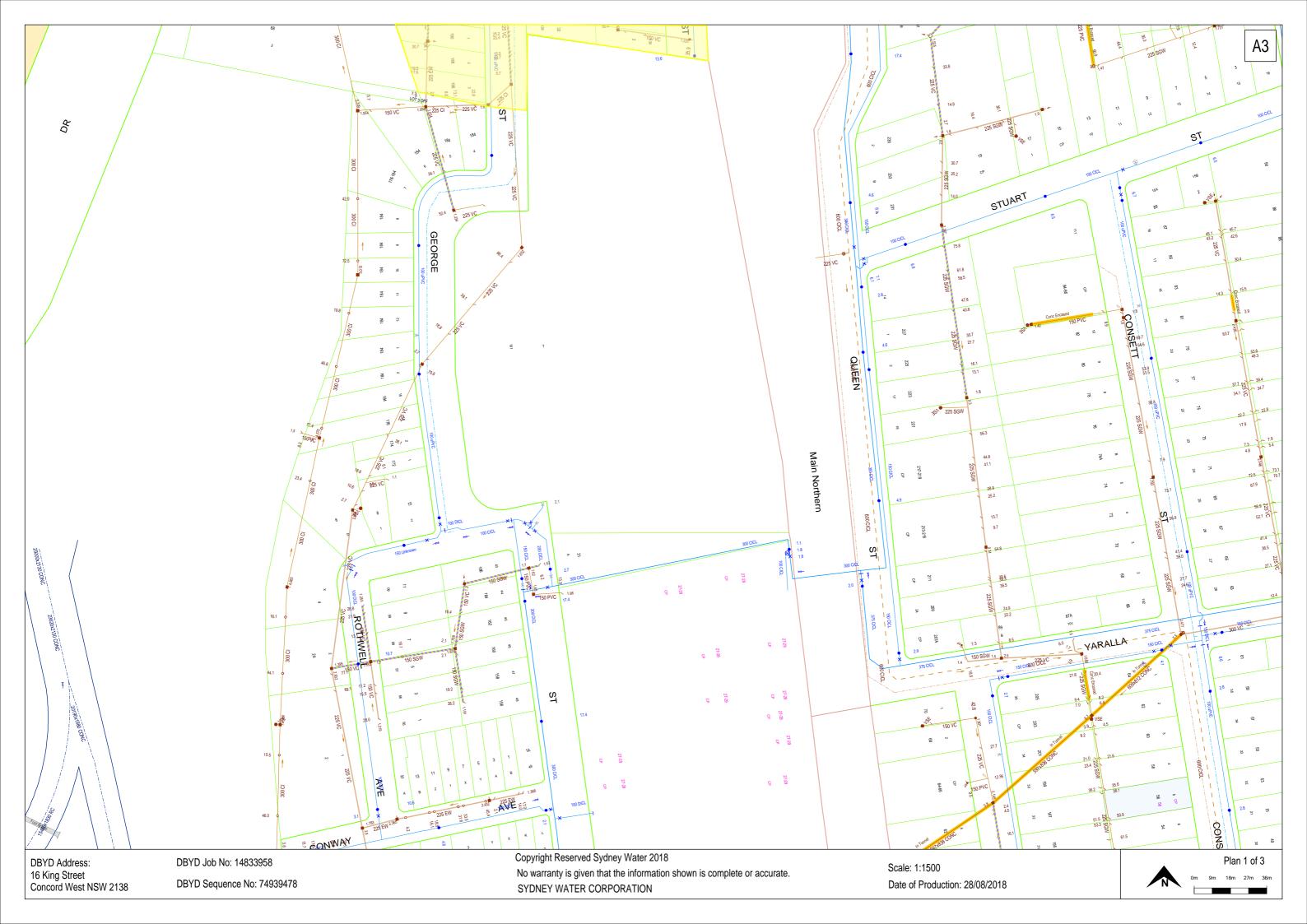
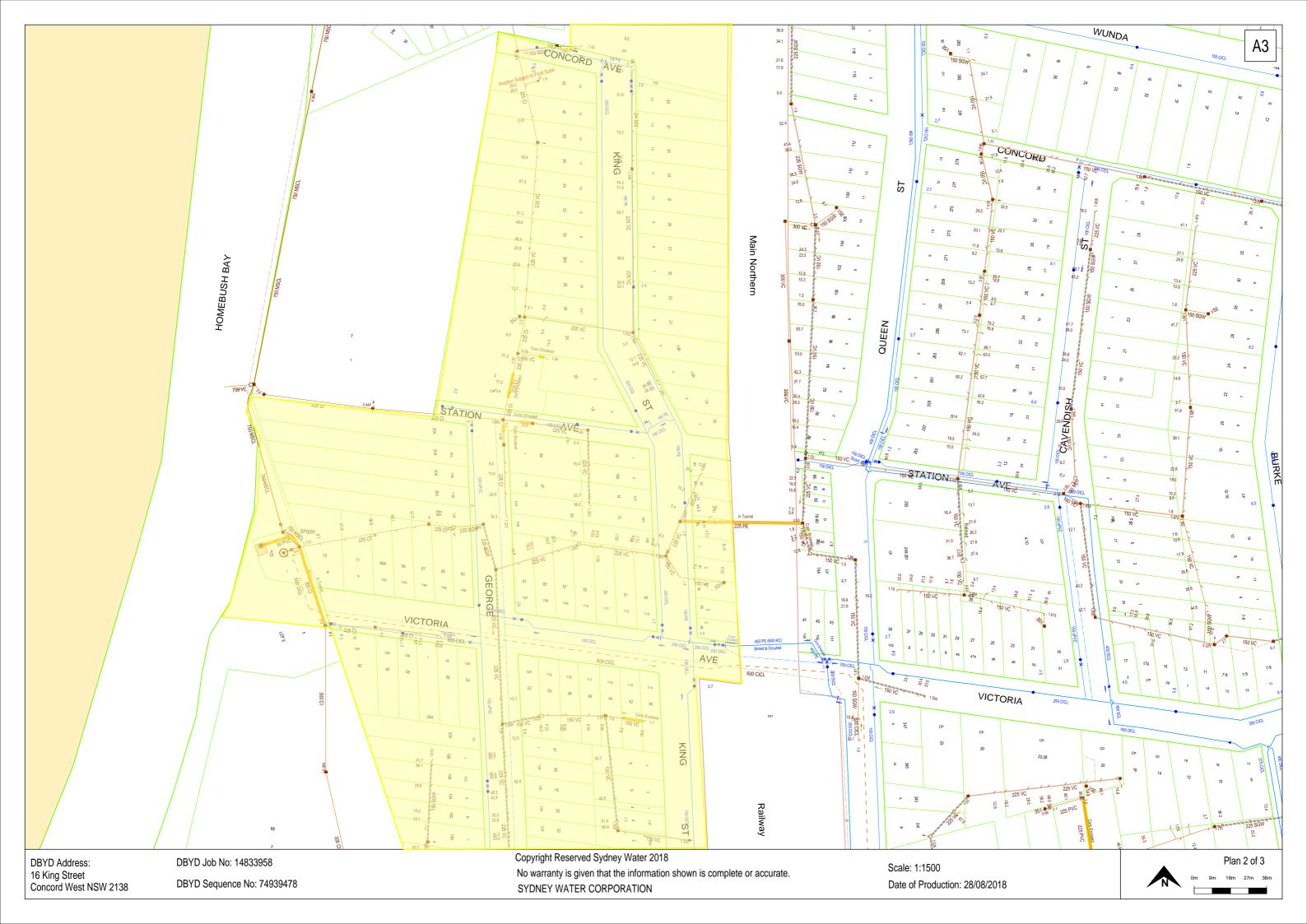


Figure 3 Heritage Map (NSW Planning Portal)

APPENDIX A

Existing Infrastructure Services











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

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

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

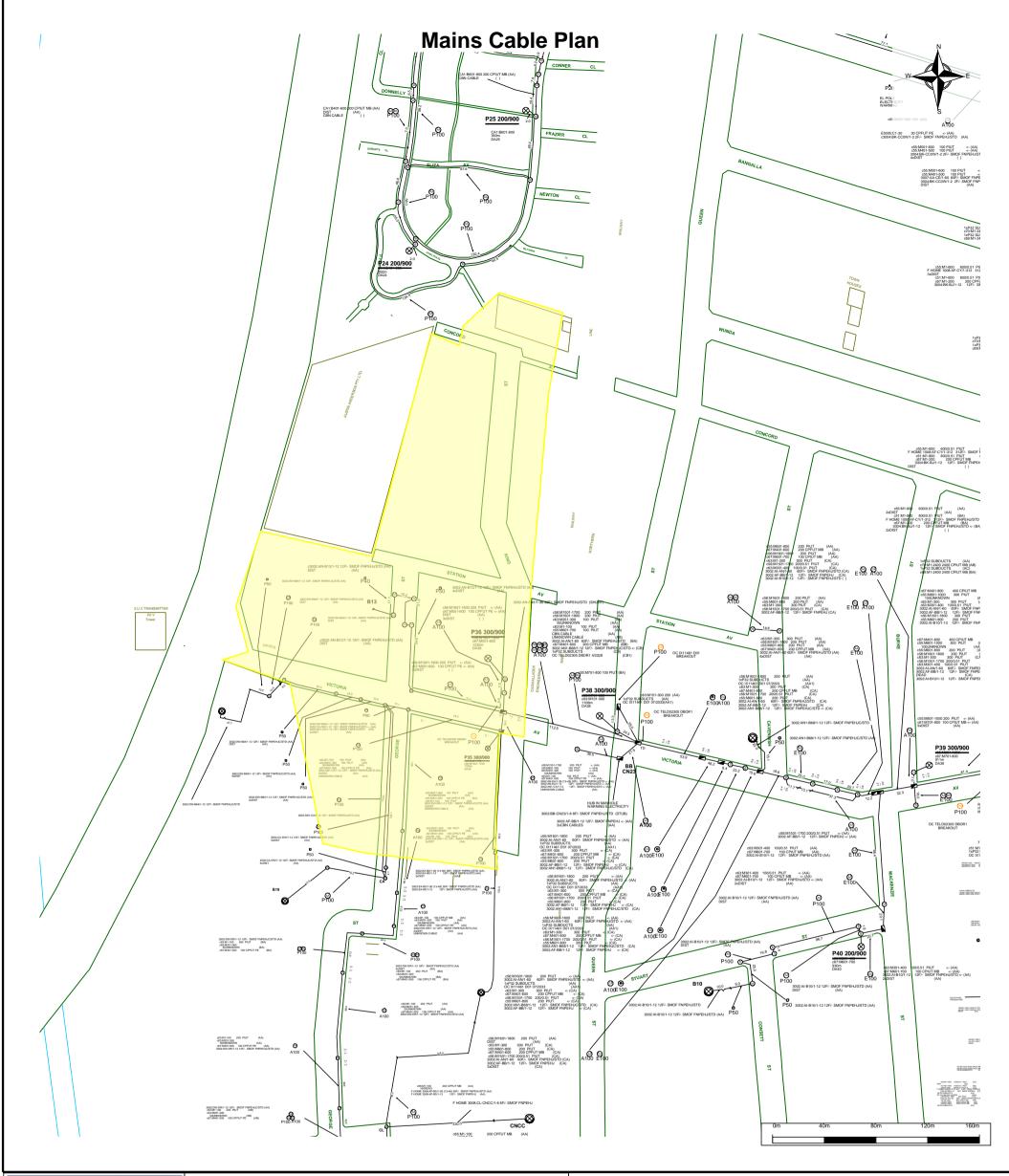
The above plan must be viewed in conjunction with the Mains Cable Plan on the following page

WARNING - 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.





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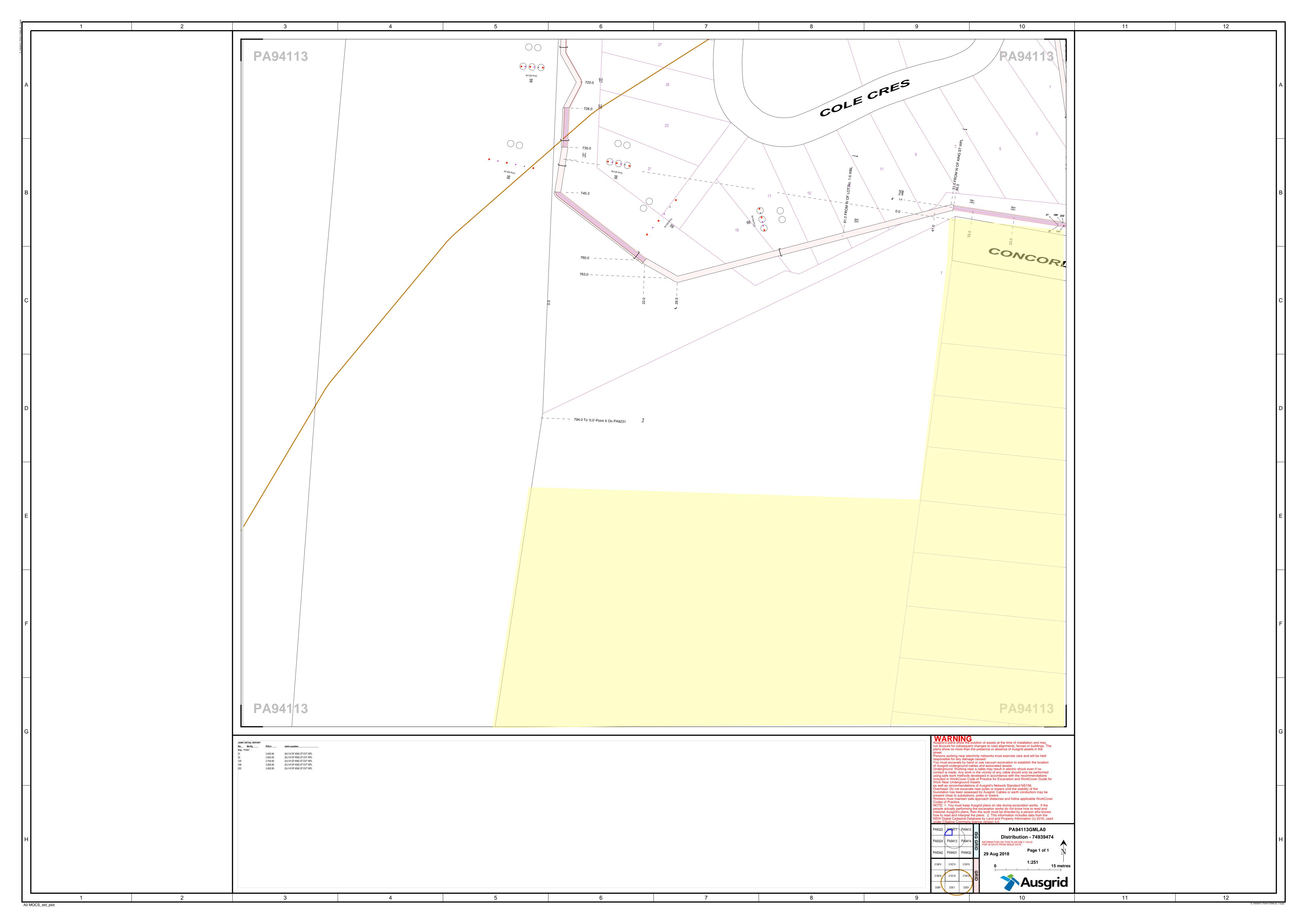
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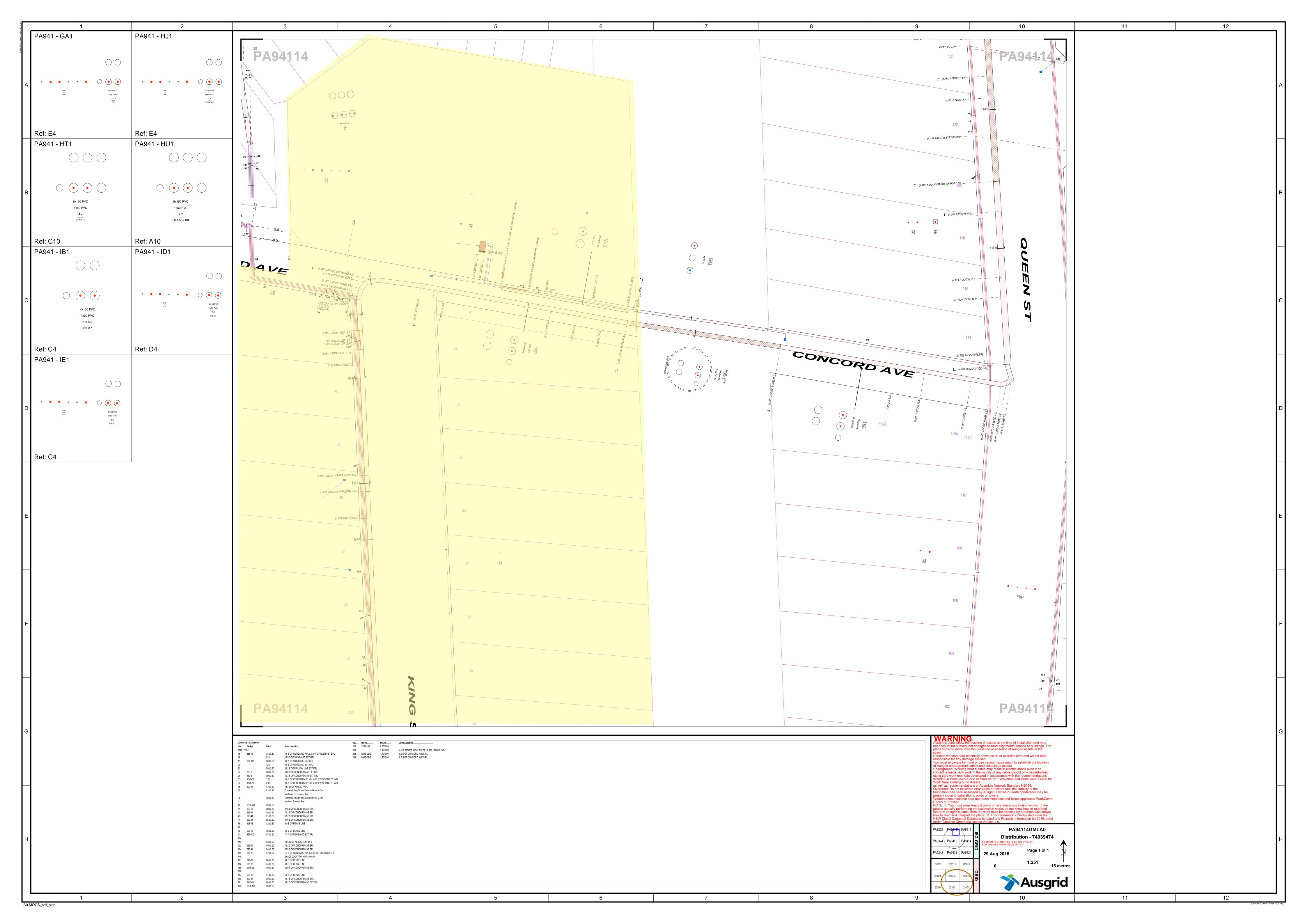
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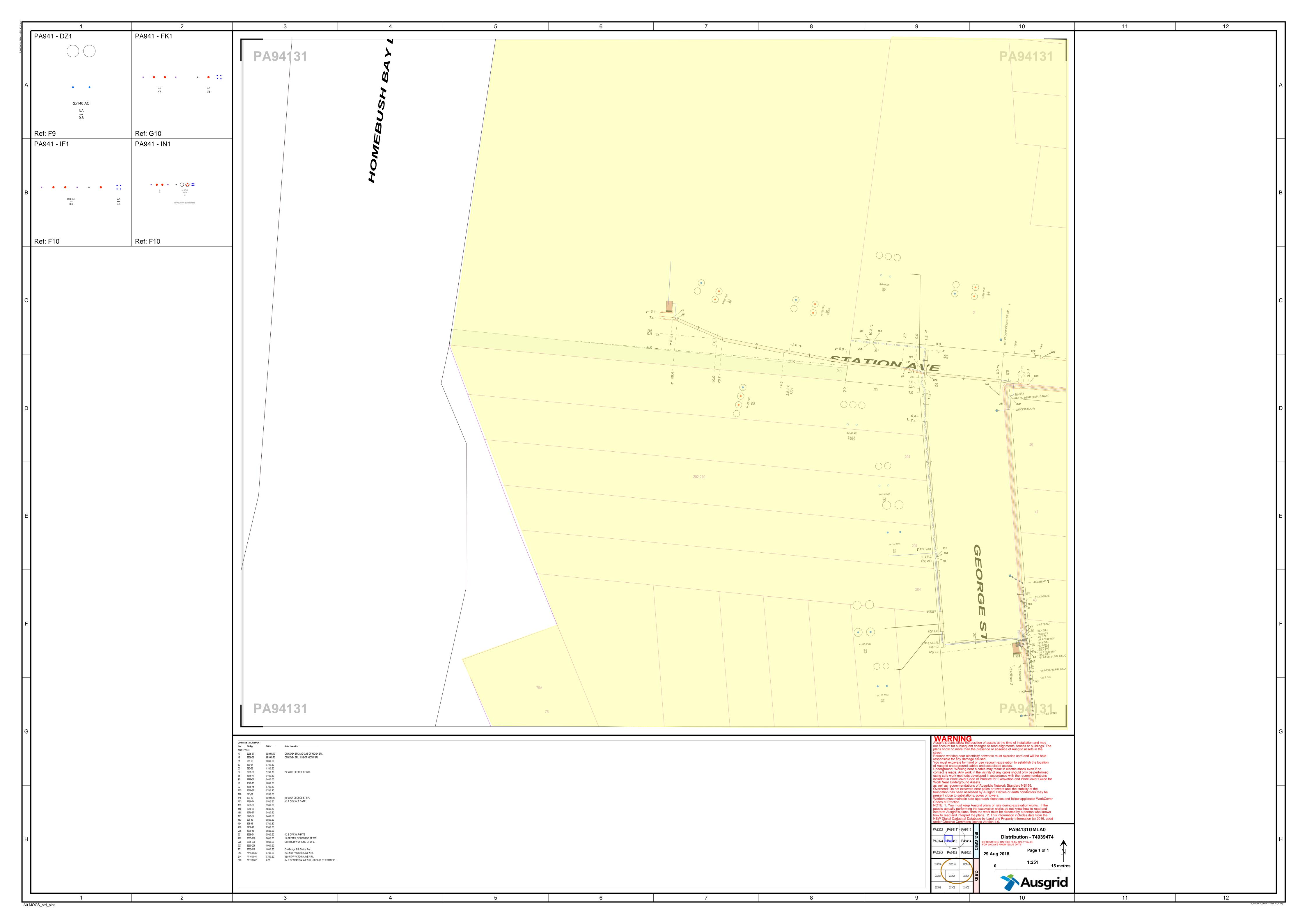
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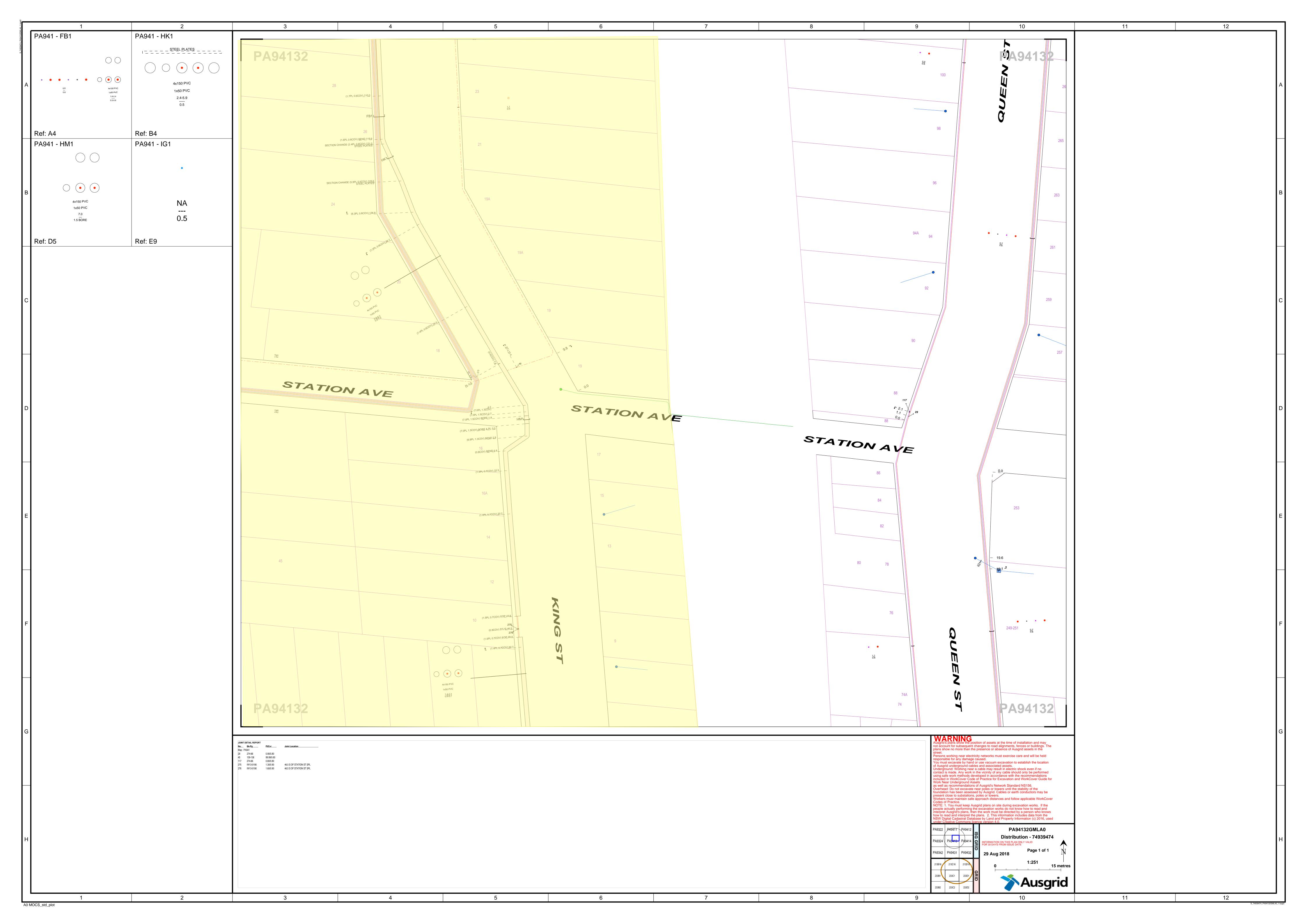
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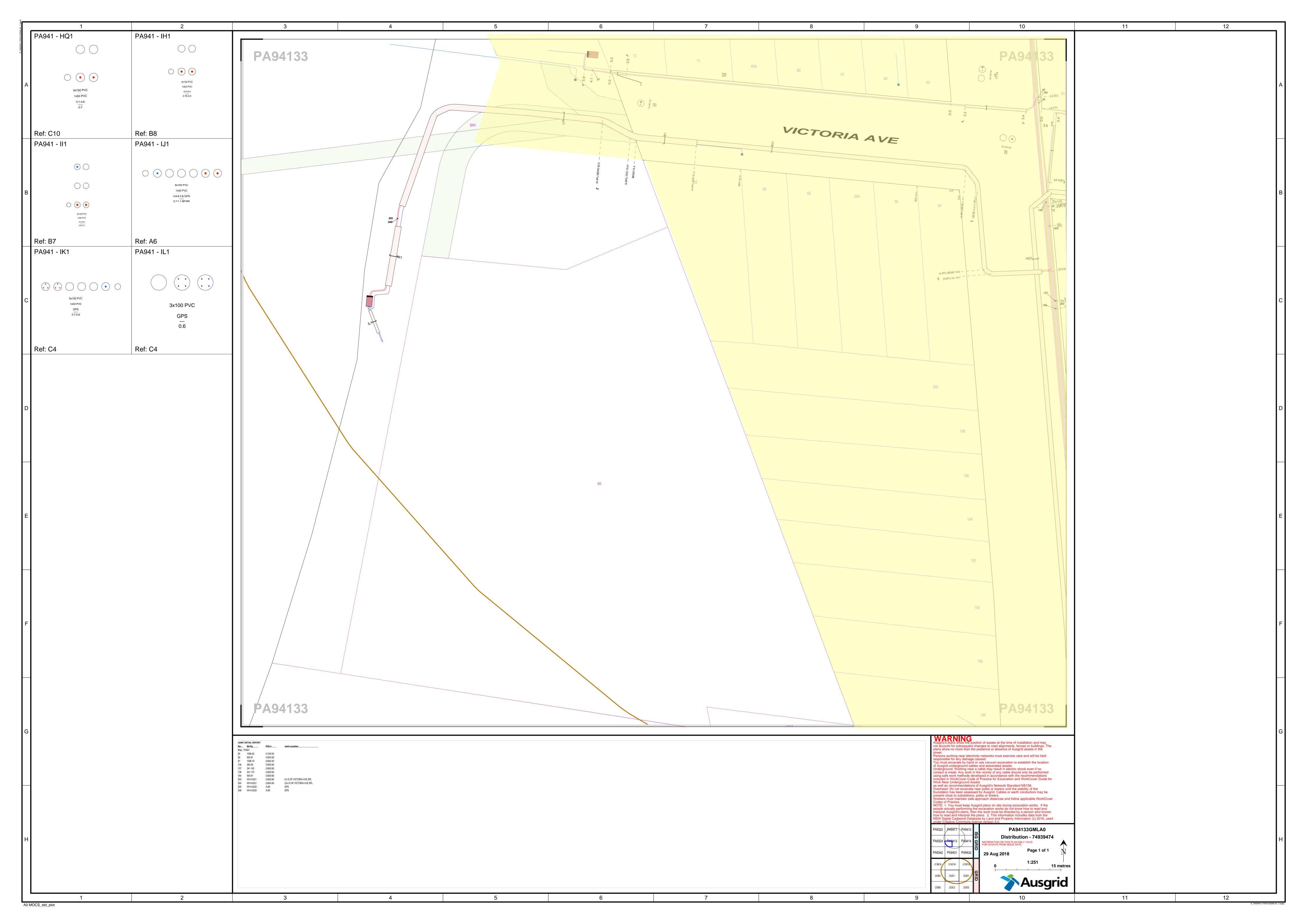
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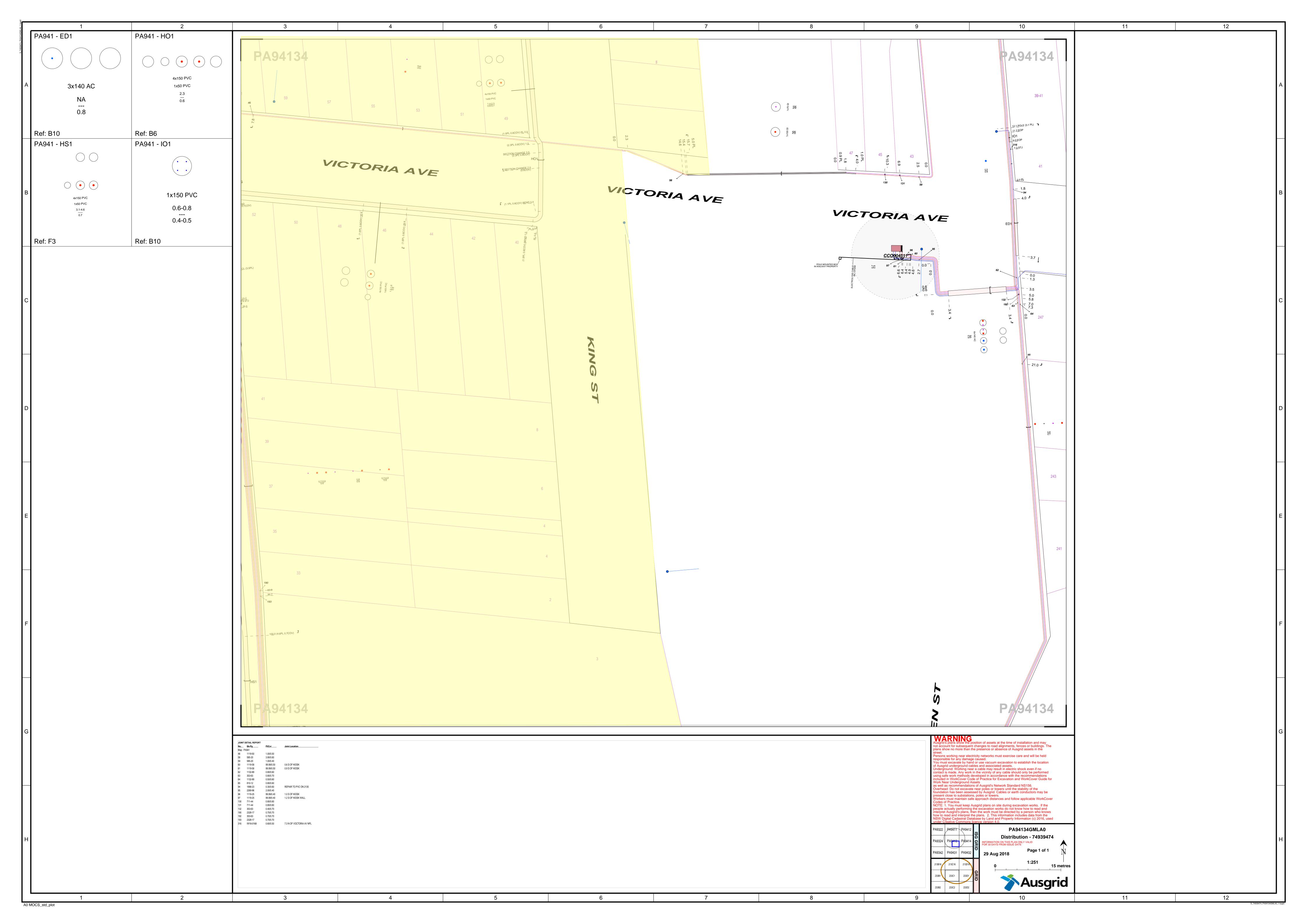


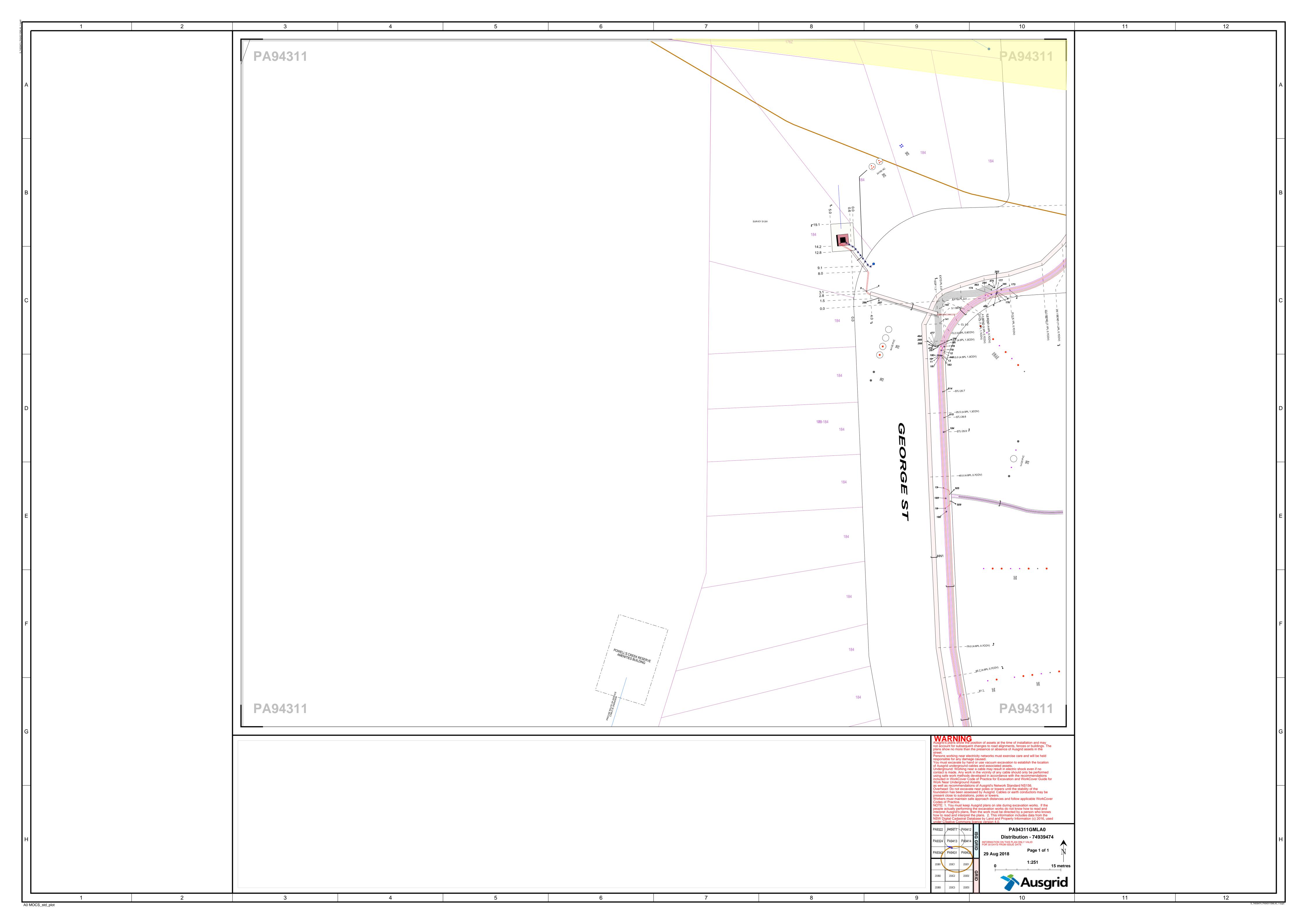


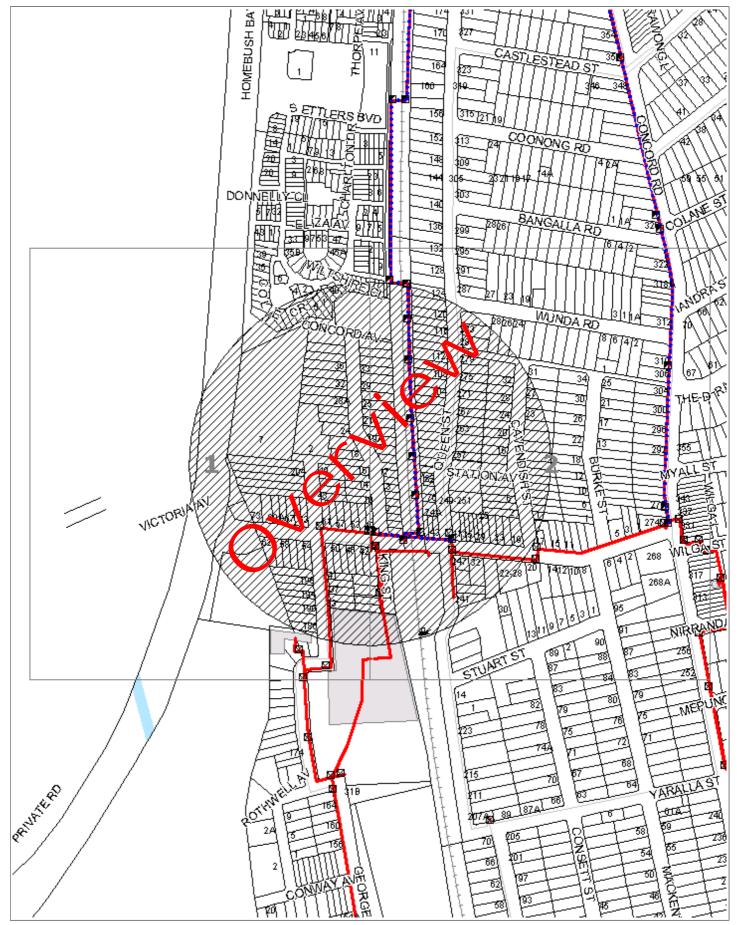












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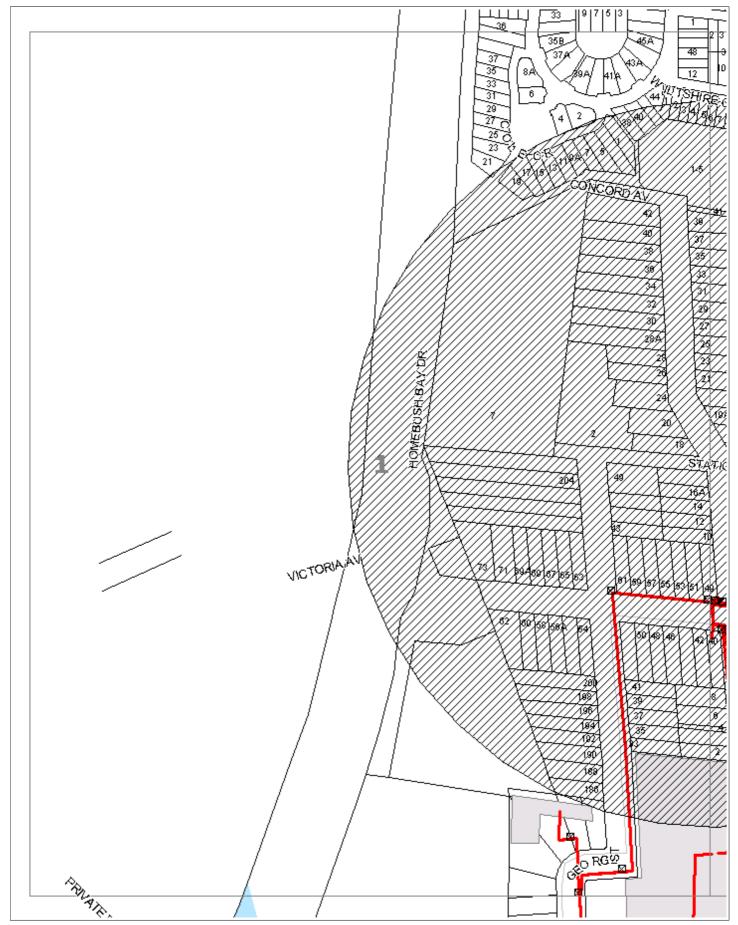
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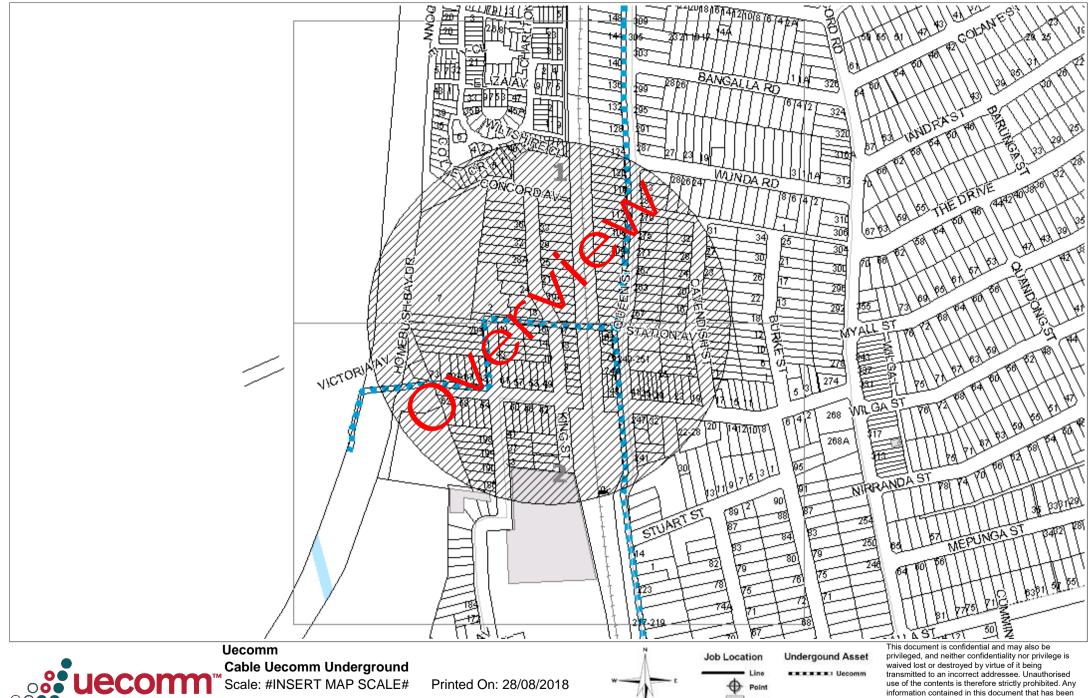
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Cable Uecomm Underground

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Job Location
Line
Point

Undergound Asset

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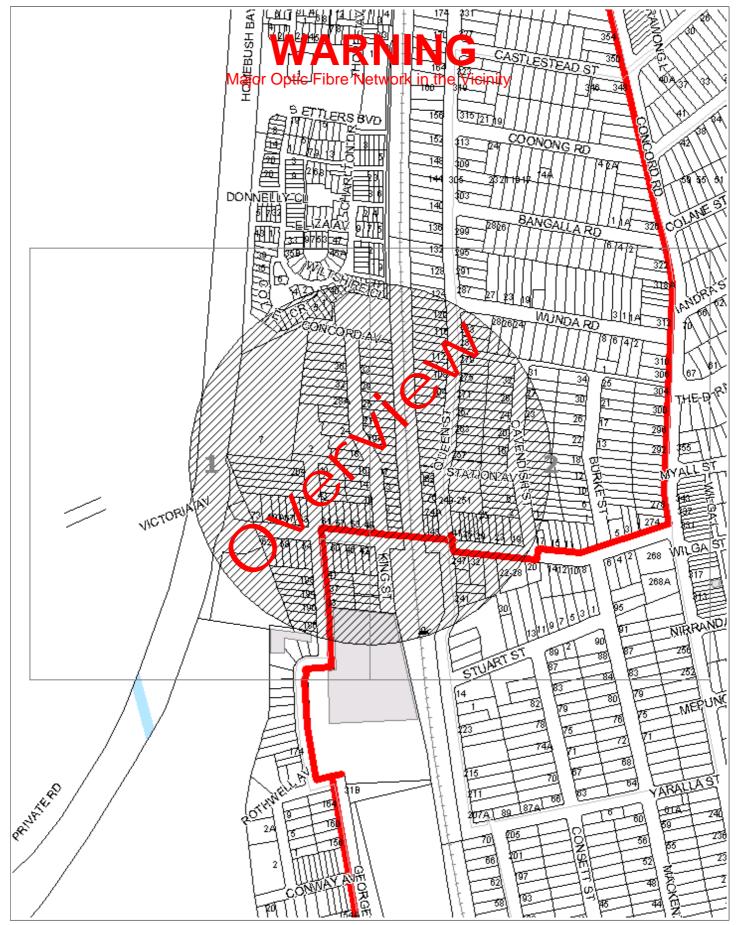
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Job Location
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Undergound Asset

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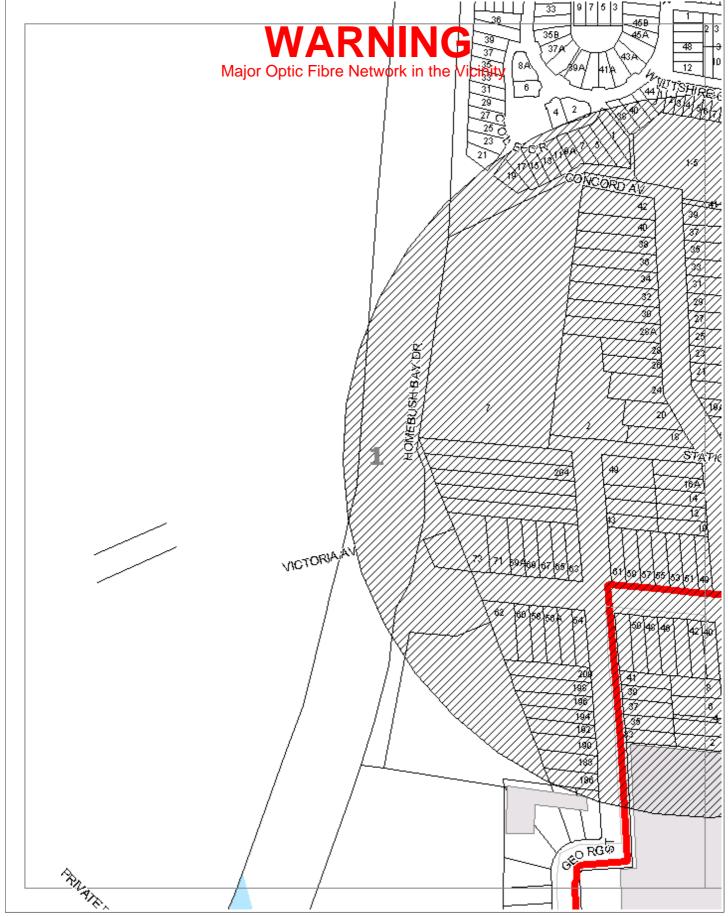
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Date Generated: 28/08/2018

Job No: 14833958

Email: anna.zolotukhina@hyderconsulting.com Location: 16 King Street, Concord West, NSW 2138









WARNING!!

The City of Canada Bay does not accept liability for the accuracy or completeness or otherwise of this plan. This plan does or absence of Council assets.

Care should be exercised when excavating. Attention is drawn to Council's powers under the Roads Act. required for excavations in roads or footpaths.

Council owns a small number of lighting no more than indicate the likely presence and electrical systems in roadways. Most are controlled by Energy Australia.

> For further information contact Brian Woolley on 02 9911 6339



Stormwater Pipe Stormwater Pipe (Not Council Controlled) Easment Pit



Non Potable Water Council Light Council Electricity Council Boundary ---- DBYD Object

Job No: 14833958

Email: anna.zolotukhina@hyderconsulting.com Location: 16 King Street, Concord West, NSW 2138









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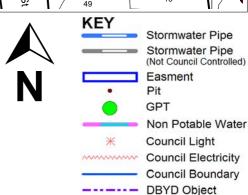
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Stormwater Pipe Stormwater Pipe (Not Council Controlled)

Easment Pit **GPT**

Non Potable Water Council Light Council Electricity Council Boundary

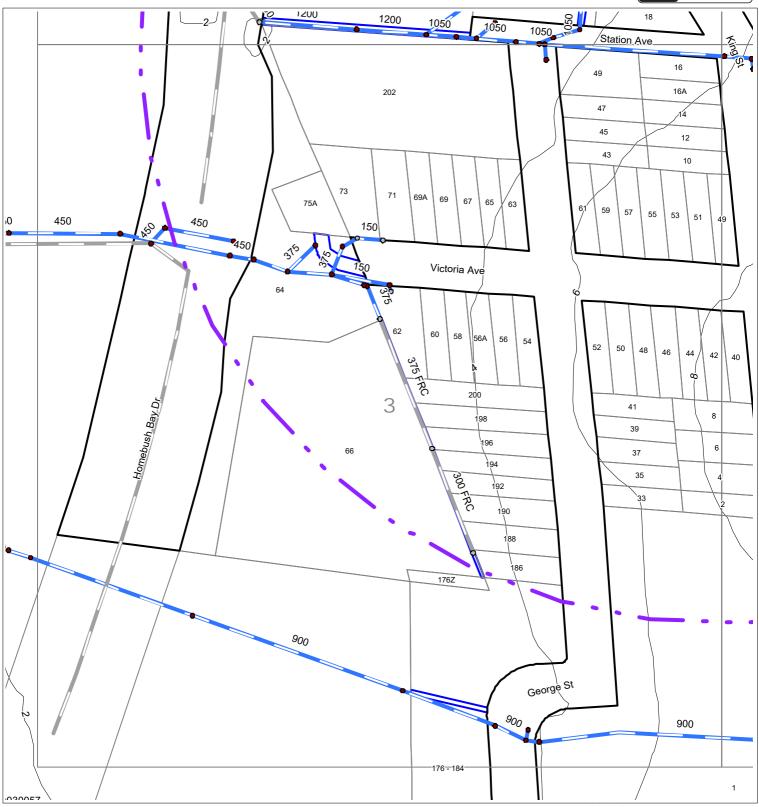
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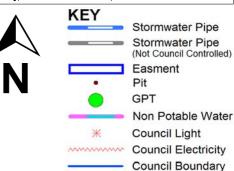
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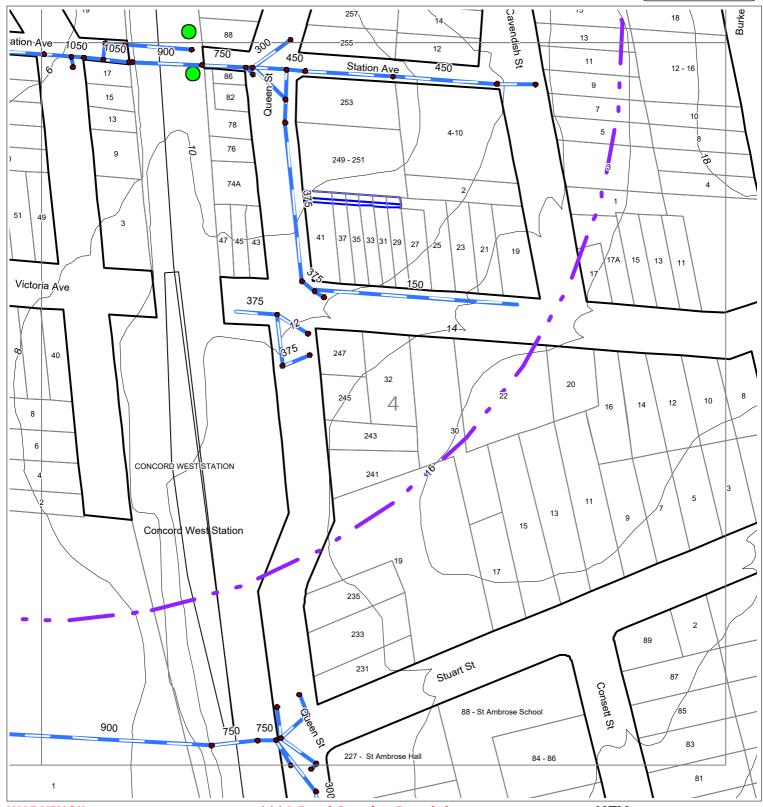
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Stormwater Pipe Stormwater Pipe (Not Council Controlled)

Easment Pit

GPT Non Potable Water Council Light

Council Electricity Council Boundary

To: Mrs Anna Zolotukhina Sequence No: 74939471 Job No: 14833958

Email: anna.zolotukhina@hyderconsulting.com



Location: 16 King Street, Concord West, NSW 2138

DIAL BEFORE YOU DIG 1100 REPOSNSE





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Pit

Stormwater Pipe Stormwater Pipe (Not Council Controlled) Easment

GPT

Non Potable Water Council Light ····· Council Electricity Council Boundary

Job No: 14833958

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Stormwater Pipe Stormwater Pipe (Not Council Controlled) Easment

Pit **GPT**

Non Potable Water Council Light Council Electricity Council Boundary

