

Precinct 15 – Altona North

Infrastructure Servicing Report

23rd March 2015



EXECUTIVE SUMMARY

Based on the feedback, information provided from the authorities and our investigations, there are no major prohibitive servicing constraints to prevent the subject site from being redeveloped.

Several infrastructure assets will need to be considered in the final development plan including:

- Brooklyn Branch Sewer located within Property 2 & 12.
- Land owned by AusNet Services known as Property 16 including the drainage outfall through this property for the Brooklyn Terminal Station.
- Optus telecommunication tower and associated underground fibre cable located within Property 5.
- High pressure gas transmission pipeline opposite Property 13.
- Mobil jet fuel pipeline opposite Property 13.
- BP pipeline located on Blackshaws Road.
- Suitability of surrounding road infrastructure.

There are opportunities to develop individual parcels in isolation from the balance development, however, each circumstance will require a separate assessment to determine 'external' infrastructure and any upgrades required.

NBN Co currently have a policy update in circulation for comment and the future requirements and responsibilities for fibre supply are currently unknown. At the time of finalising this report NBN have provided limited comment.

As a whole, the precinct can be serviced to cater for residential development.

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1 INTRODUCTION

SMEC has been engaged by Mirvac to prepare an engineering services appraisal on behalf of the Precinct 15 Landowners for the proposed Precinct 15 Development in Altona North.

1.1 Scope of Works

The agreed scope of our works is:

- Review previous investigations completed on the site from an engineering perspective.
- Review the concept plans provided from an engineering perspective and identify any existing servicing/physical constraints which may influence development of the subject site.
- Obtain MOCS information to identify service authorities and preliminary service information.
- Obtain Preliminary Service Advice from relevant authorities to identify and locate all existing services which extend to/and within the subject property.
- Highlight any infrastructure risks associated with development of the site and measures to mitigate if applicable.
- Discuss with Authorities the potential for the site to be developed and any impediments, risks or opportunities.

1.2 Development Proposal

A Land Use Plan has been prepared by Tract Consultants. This plan details a master planned residential development including the following elements:

- Approximately 3,000 residential dwellings.
- A Mixed Use Zone (MUZ) fronting Blackshaws Road.
- Community Facilities centrally located within the precinct.
- A large central open space precinct.
- Several local open space reserves scattered throughout the site.
- A functional and efficient road network.
- Pedestrian and cycle links throughout the site.



Land Use Plan – Tract 20/03/2015 – Refer Appendix A.

The Brooklyn Terminal Station located in the north west corner of the precinct on Kyle Road, is excluded from this investigation.

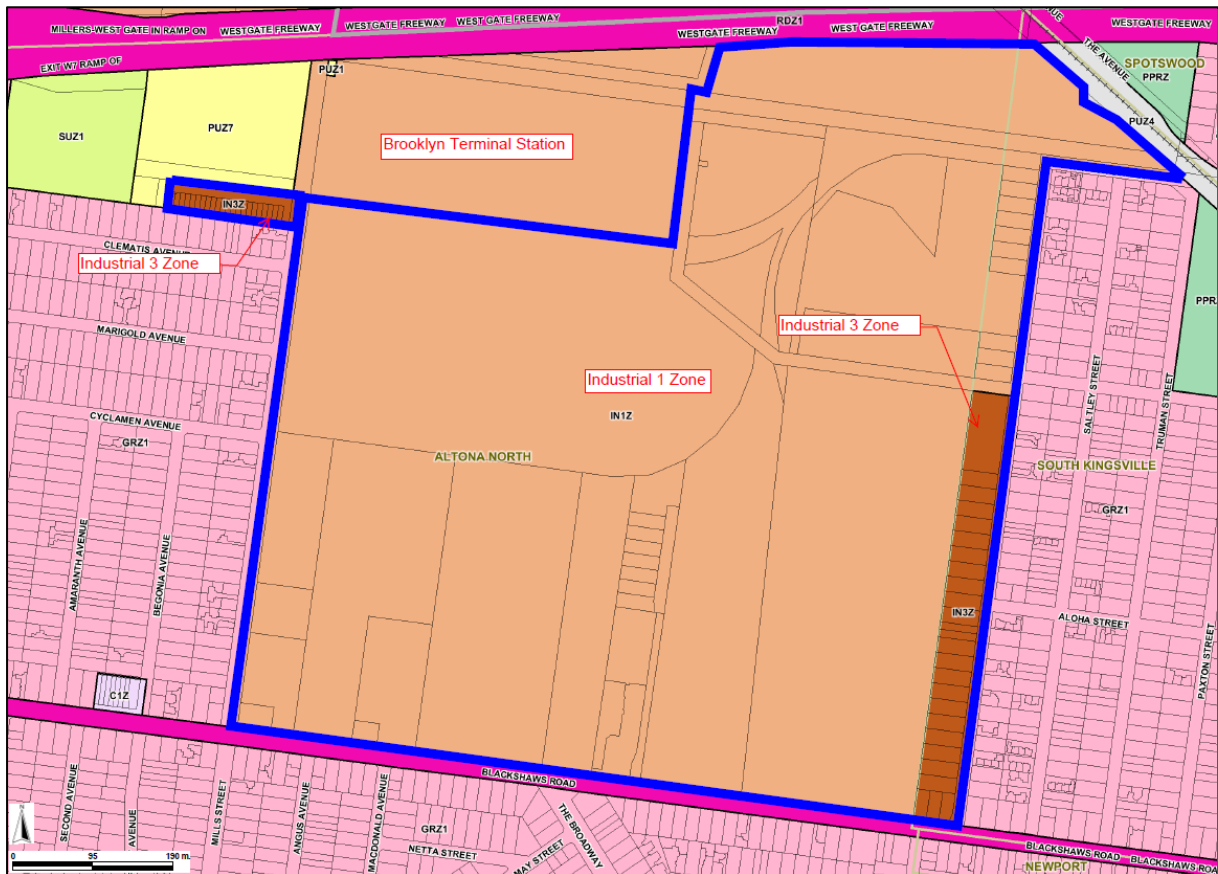
A copy of the Land Use Plan is provided in Appendix A.



2.1 Current Zoning

The precinct is identified as a Strategic Redevelopment Area (SRA) in the Hobsons Bay Industrial Land Management Strategy 2008. This strategy highlights numerous industrial sites that are considered suitable for redevelopment.

Currently the majority of the subject site is zoned Industrial 1 with two small parcels; Property 15 (part) located on New Street and Property 1 west of Kyle Road being zoned Industrial 3. Refer planning map below.



Planning Zoning Map courtesy of land.vic.gov.au

Currently investigations required to facilitate the rezoning application are underway.

The purpose of this report is to highlight any servicing implications associated with the proposed development.

3 INFRASTRUCTURE REVIEW

3.1 Servicing Authorities

The following servicing authorities are applicable to the subject site:

Authority	Infrastructure
Hobsons Bay City Council	Local Roads & Drainage
Melbourne Water	Main Drainage
City West Water	Sewer & Water/ Recycled Water
National Broadband Network (NBN) / Optus	Telecommunications
Powercor / Jemena / AusNet Services	Electricity
APA / AusNet Services	Gas
Exxon Mobile / BP	Licensed Pipelines

3.2 Roads

Hobsons Bay City Council is the responsible authority for local road works within the subdivision. Internal road works shall be designed and constructed in accordance with Council's Guidelines, Specifications and Standard Drawings for the Design & Construction of Roads & Drainage Works.

The site is bordered by Blackshaws Road to the south, Kyle Road to the west and New Street to the east.

We understand that a detailed traffic assessment has been completed and this makes reference to potential impacts on the current road network and recommendations resulting from the development.



New Street looking south - subject site to the right.



Kyle Road looking north – subject site to the right.



Blackshaws Road looking east subject site to the right and looking west subject site to the left.

3.3 Drainage & Storm Water Management

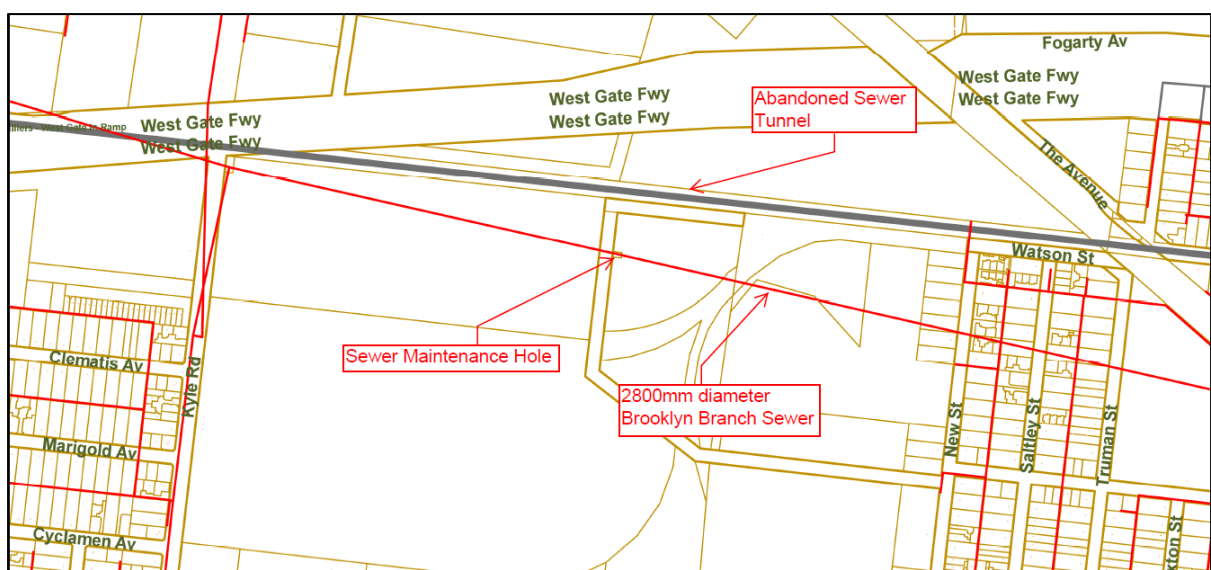
Hobsons Bay City Council is the responsible authority for minor local drainage while Melbourne Water is the responsible authority for the provision of major drainage facilities and regional drainage networks with catchments greater than 60 hectares.

An appraisal of the drainage strategy and management options for the precinct will be dealt with specifically in the SMEC Drainage Strategy Report.

3.4 Melbourne Water Sewer

Melbourne Water have provided informal advice regarding their sewer assets located in the north east corner of the site; refer plan below.

There are two Melbourne Water sewers located within the subject site as detailed below. One of these sewers is a redundant and abandoned sewer tunnel while the other is the large 2800mm diameter Brooklyn Branch Sewer.



Melbourne Water Sewer Assets

The active Brooklyn Trunk Sewer Main was installed in 1959 and traverses Property 2 & 12. Melbourne Water has confirmed that this sewer is approximately 35 metres deep and that deep excavation, deep piling or excessive vibration activities should not occur above this structure.

A maintenance hole located within Property 2 will require access via an easement in favour of the Melbourne Water. Access to this structure will be required at all times and a 'buffer' of two metres around the structure is required.

Melbourne Water does not envisage these assets will be a constraint to residential development.

The maintenance structure currently located in Property 2 will require access and this will need to be incorporated into the final development plan.

3.5 Sewer, Potable and Recycled Water

City West Water (CWW) is the responsible regulatory authority for the provision of sewer, potable and recycled water facilities to service this site.

The demands on CWW's system, including those from other new developments can change rapidly, and while CWW will not make any binding representations or commitments until a formal development agreement is executed it does not currently foresee any impediment to the site's ability to be serviced by the existing sewer and water network.

The developer will be required to enter into an agreement with CWW for the design, construction, survey and supply of the as-constructed details of works necessary to supply each lot within the precinct. The developer will be liable for payment of New Customer Contributions (NCCs) based on a per lot rate for the each service. Payment of the NCC is required prior to CWW providing consent to a Statement of Compliance for a particular stage.

The current NCC rate for the subject site is:

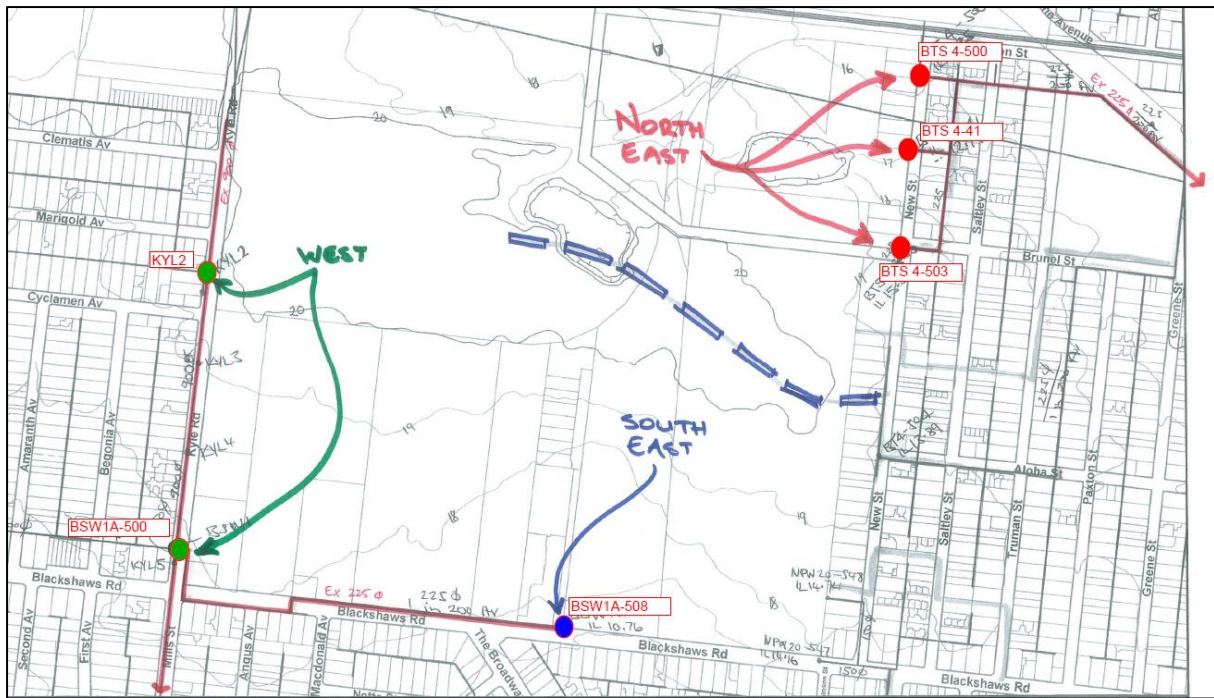
- Sewer \$ 659.40 per lot
- Water \$ 659.40 per lot
- Recycled Water*
 - \$ 1,319.05 per lot less than 450m²
 - \$ 2,269.25 per lot greater than 450m²

* if the developer implements recycled water within the development.

Refer to Appendix B for servicing advice provided by CWW.

3.5.1 Sewer

The subject site falls across three sewerage catchments and there are several sewer mains located within the surrounding road network that have capacity to service the proposed development. With numerous connection points available, and a surrounding network with sufficient capacity, the site can be developed in an efficient manner and potentially via several 'fronts'. Most parcels within the precinct have nearby access to a sewer and connection point and therefore a 'standalone' parcel can be developed in an isolated manner and will not rely on significant external infrastructure, upgrades or surrounding development sequencing.



Sewer Catchment Plan & Proposed Connection Points

The north-eastern catchment can be serviced by the existing 225mm diameter reticulation network located within New Street. Connection can be made at a number of locations as highlighted above; maintenance holes; BTS4-503, BTS4-41 and BTS4-500.

The south-eastern area can be serviced by the existing 225mm diameter sewer in Blackshaws Road and a suitable connection is at manhole BSW1A-508.

The western area can be serviced by connecting to the existing connection points out of KYL2 sewer network. Currently the condition of these maintenance structures is unknown and prior to detailed design confirmation that these are structurally sound will be required. If deemed unsuitable for connection, the existing manholes KYL2-500 or KYL2-532 on the west side of Kyle Road or to manhole BSW1A-500 located on the east side of Kyle Road at the south-west corner of the site can be utilised.

The site has good access to the surrounding existing sewer network with multiple connection points available providing opportunities for individual parcels to be serviced from a sewer perspective in isolation from the overall precinct.

CWW have advised that the current system has capacity to service the proposed development.

3.5.2 Potable Water

CWW have advised that the proposed development can be serviced with water supply from the existing 300mm diameter main in Blackshaws Road to the south of the site.

The existing 100/150mm diameter mains in Kyle and New Street do not have capacity to supply the expected demands from the entire development, therefore, a new 225mm diameter main will need to be extended into the development from the Blackshaws Road 300mm diameter main. The location of any new water main will be determined when more information on the development and staging is known.

There is potential for some small catchments or parcels to utilise the surrounding Kyle and New Street mains, however, the capacity of these mains is limited.



Potable Water Supply Plan

There may be opportunities for individual parcels, if constructed out of sequence and not as part of the overall development to connect into the surrounding 150mm diameter mains. These mains have limited capacity and confirmation will be required at the detailed design phase.

3.5.3 Recycled Water

The subject site is currently not within a mandated recycled water area, therefore, there is currently no requirement to provide recycled water infrastructure to the development. CWW has, however, completed some initial investigations into providing recycled water for this area and would welcome an opportunity to partner with the owners to deliver this service to the proposed development.

CWW have advised that payment of the recycled water new customer contribution would be the only additional payment and that this would fund the extension of external recycled water infrastructure to the site.

Further cost benefit analysis should be undertaken prior to committing to this service.

3.6 Telecommunications

3.6.1 National Broadband Network (NBN Co)

The Federal Government is currently reviewing the way that fibre is delivered to new developments. The proposed policy document is currently available for comment and can be found at: www.communications.gov.au/policy_and_legislation/fibre_in_new_developments/proposed_approach_to_new_developments

The stated purpose of the proposed change in policy is to provide more competition to NBN in providing fibre in new developments.

If adopted, the main impacts to the developer will be as follows (if NBN is chosen as the service provider):

- A new Deployment charge will apply on a per lot basis
 - \$600 per lot for standard residential lots.
 - \$400 per lot for Medium Density lots.
- The developer will be required to contribute towards the cost of backhaul to bring fibre to the development.
 - Where backhaul costs are up to \$1,000 per lot, the developer will be required to contribute to 50% of this cost.
 - Any costs higher than \$1,000 per lot for backhaul will be payable by the developer.
 - NBN will not charge for backhaul if the length required is less than one kilometre from an existing NBN development or transit infrastructure.

The developer will also continue to pay for the pit and pipe infrastructure.

In addition, the roles in relation to the areas that NBN will be the 'Infrastructure Provider of Last Resort' are proposed to change. For new developments of fewer than 100 lots there will be circumstances where NBN will service these developments. The developer will also be free to choose any other telecommunication provider on a commercial basis, so long as the infrastructure provided meets NBN requirements.

Informal discussions with NBN have confirmed that:

- The subject site is within the NBN footprint
- Fibre can be supplied via the Telstra duct network.
- There are current or proposed NBN assets:
 - north of the subject site at the Bradmill site, however NBN were unable to confirm if a connection beneath the West Gate Freeway was available.
 - Approximately 5 kilometres south east of the subject site at Nelson Place.

At this point in time, the best case scenario is that a connection (Telstra duct) is located beneath the West Gate Freeway and that this can be utilised to connect into the Bradmill site and provide fibre to Precinct 15. The worst case is that this connection is unavailable and an extension from Nelson Place is required. Based on the draft policy that is currently out for comment a portion of the costs of this backhaul would be the responsibility of the developer.

Nonetheless, telecommunication services can be provided to the subject site and it will be the responsibility of the developer to provide pit and pipe infrastructure to ensure that the development is 'fibre ready'.

3.6.2 Optus

An Optus mobile tower is located within the subject site on the northern boundary of Property 5. An underground cable servicing this tower runs south through adjacent landholdings as detailed in the asset recording advice provided by Optus below.

Advice received during the investigation period has confirmed that this asset is under lease to Optus until 2018. The future options available are to incorporate this tower and underground cable into the future development or relocate elsewhere.



Figure 3 Existing Optus Fibre Optic Cable & Tower

3.7 Gas

APA Group is the principal authority responsible for the gas transmission and AusNet Gas Services is the responsible authority for the provision of gas reticulation to service the development.

3.7.1 AusNet Services

With reference to the service plan below, AusNet services have confirmed that the subject site has a High Pressure Network to the east and south (Blue) with a large diameter 150mm 'S4' main in Blackshaws Road. AusNet have confirmed that the 150mm service in Blackshaws Road has sufficient capacity to service the proposed development.

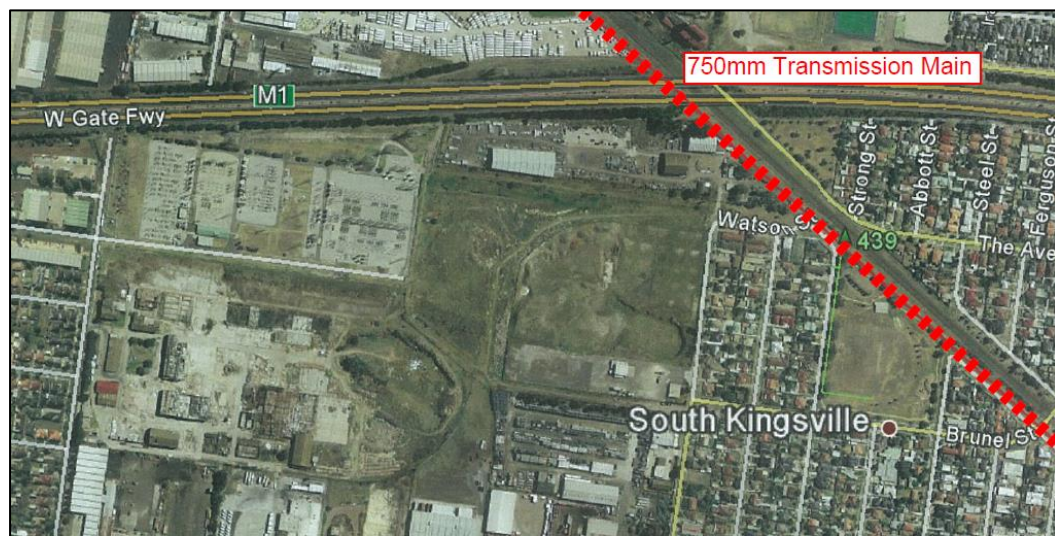
A Medium Pressure Network (Green) is located west of the site and this network has limited capacity. Although not preferred, there may be potential to connect a small catchment or isolated parcel to this service. Currently the capacity is unknown and the authority will not assess this until a formal application has been made.

Under current supply policy, gas mains are normally installed to residential developments at no cost to the developer. The developer is required to undertake trenching and backfill for the gas mains and installation of conduits under roads.

Existing Reticulated Gas Mains (AusNet)

3.7.2 APA Group

The South Melbourne to Brooklyn transmission gas main, being a significant 750mm high pressure main is located adjacent to the boundary of the north eastern section of the precinct, opposite Property 13 as per the plan below.



Existing Transmission Gas Main (APA Group)

This is a significant asset that will need to be considered in any future development plan. APA require that this asset be 'proved' to determine the exact position, including depth, prior to any works. There are strict guidelines as to how these assets are proved and communication with APA will be required at this time.

APA also require engineering designs surrounding this asset to be provided and these plans will need to detail the exact asset location and provide adequate clearances to this asset. Further information regarding these guidelines is provided in Appendix B.

It is our understanding that a separate report has been completed addressing this pipeline in more detail, however, the advice received from APA does not detail any particular constraint to development in the vicinity of the gas transmission main.

3.8 Electricity

3.8.1 Brooklyn Terminal Station (BLTS)

The BLTS is located in the north east corner of the site between property no.2 and the West Gate Freeway. The BLTS was established to provide the western suburbs with a reliable electricity supply and contains significant infrastructure.

The BLTS is a shared utility service between AusNet Services, Powercor and Jemena distributions companies and consists of four separate titles as shown in the plan below.



Location of the BLTS and title alignment.

3.8.2 AusNet Services

AusNet Services have provided preliminary comment and indicated that the formal advice provided to Council in August 2011 remains consistent with their current position. A copy of this correspondence is provided in Appendix B.

Part of the land owned by AusNet Services contains the abandoned Melbourne Outfall sewer tunnel. This asset is located within the 20 metre wide strip that runs between the Sunshine railway line and

Kyle Road. This piece of land also provides a drainage outfall for the BLTS and its existing drainage function will need to be considered as part of the precinct's overall drainage strategy.

AusNet Services provided the following additional comments:

- There are no works required external to the Terminal Station in the foreseeable future.
- There may be internal upgrade works to take place in 5 to 10 years and this may cause noise issues in the immediate surrounding areas.
- A buffer around the boundary of the BLTS of at least 2 metres is required where buildings would not be permitted. If landscaping in the 2 metre buffer zone is proposed approval by AusNet Services will be required.
- The 20 metre strip of land that runs between the Sunshine railway line and Kyle Road is currently utilised as a drainage outfall for the BLTS. This needs to be retained or an alternative drainage outfall provided.

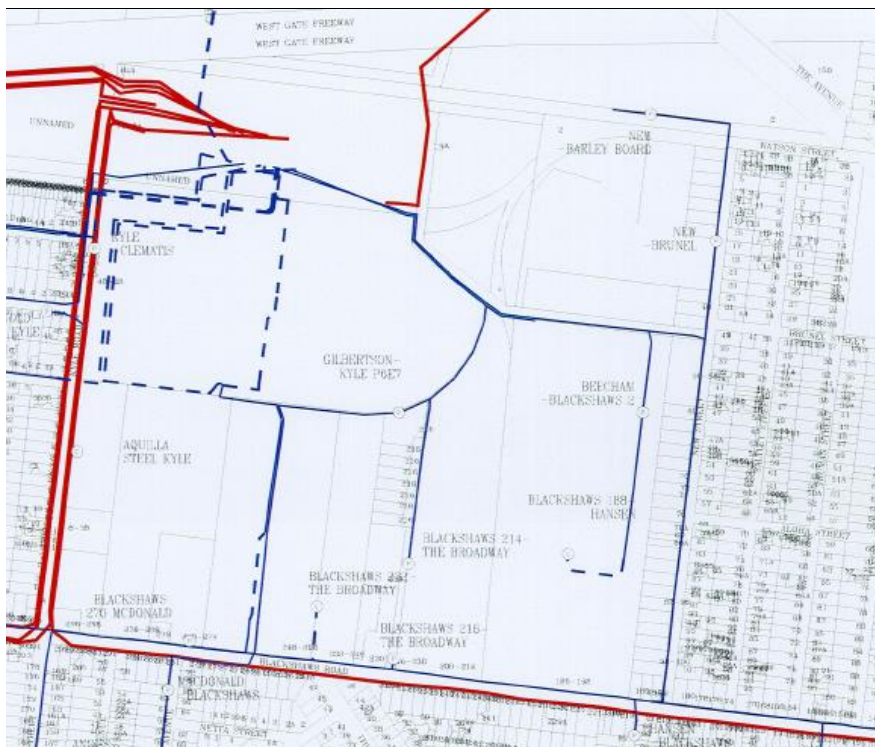
3.8.3 Powercor

Powercor is the responsible authority for the electricity facilities to supply this development and have advised that supply to the development is available from the adjacent BLTS. 'Feeders' from this asset along with new switchgear inside the terminal station will be required.

The backup for these new feeders can be organised from the existing network by establishing tie-ins at appropriate locations surrounding the subject site.

Currently there are a number of electrical assets located within and surrounding the site required to service the current and previous land uses. The plan below details this infrastructure; high voltage (red) and low voltage (blue). Retirement of assets located within the site, including removal of associated easements can occur systematically as development progresses. The costs associated with these retirement works will be the responsibility of the developer.

If individual parcels are developed in isolation to the broader development there may be opportunities to connect into the surrounding network subject to capacity.



Existing Electrical infrastructure

Powercor will develop a detailed network planning strategy for the site after a formal application from the developer. This master plan will typically extend high voltage infrastructure from the BLTS throughout the site to several kiosks that will service the development.

Electricity supply is available to the subject site and the developer will be required to enter into an agreement with Powercor in accordance with the retailer's terms and conditions for land development.



Overhead electrical infrastructure in Kyle Road.



Overhead electrical infrastructure in New Street.

3.8.4 Jemena

At the time of writing this report Jemena have not provided servicing advice, however, we do not envisage any issues or development impediments. We believe that the advice to be provided by Jemena will reflect that already provided by AusNet Services.

3.9 Licenced Pipelines

3.9.1 Mobil Oil Australia Pipeline

An Exxon Mobil Jet Fuel Pipeline is located adjacent to the APA gas transmission main on the sites north eastern boundary, opposite Property 13 as per the plan below.



Existing Mobil Oil Australia Pipeline

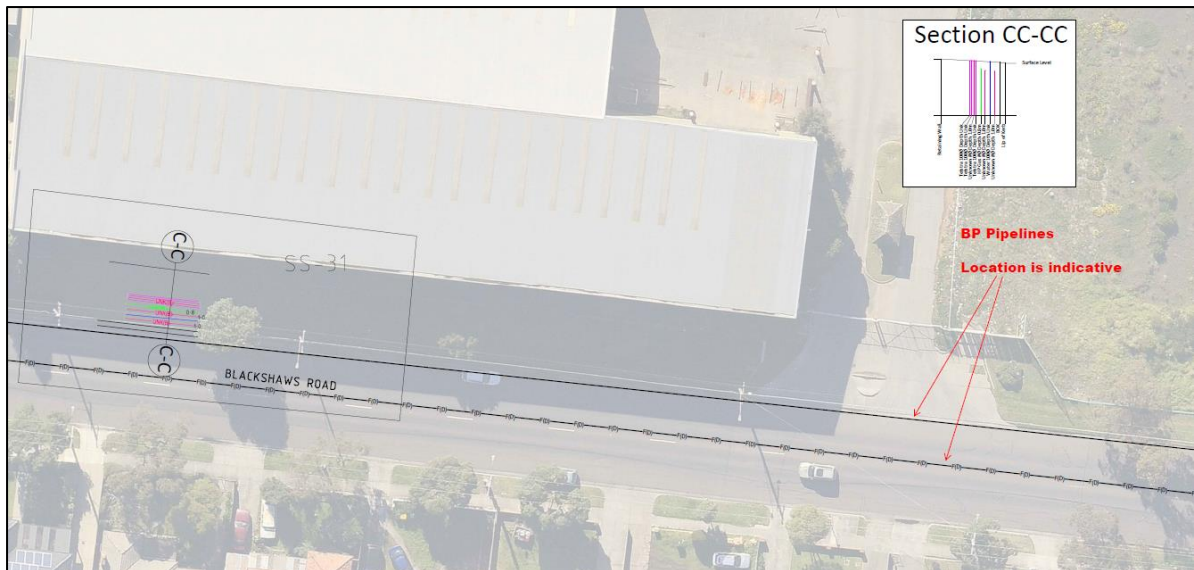
A minimum 3.1 metre clearance from the boundary of the development area to the closest edge of the pipeline must be maintained and any sub-surface or excavation works within 3 metres of the pipeline will require a Mobil Oil Australia (MOA) representative be present for the duration of the works. The cost of MOA “standby” will be borne by the developer.

Any proposed works in the vicinity to this pipeline should make provision for appropriate clearances and also make an allowance for the APA Gas Transmission Pipeline. Consultation with MOA and APA representatives will be required throughout the master planning, design and construction of this site.

It is our understanding that a report has been completed which addresses this pipeline in more detail.

3.9.2 BP Australia

BP has advised that there are two pipelines sized 100 & 150mm (nominal bore) located adjacent to the sites southern boundary within Blackshaws Road. Both of these pipelines are believed to be located beneath the pavement of Blackshaws Road as per the plan provided by BP below.



Existing BP Pipelines at 239 Blackshaws Road, Altona North

These assets were installed many years ago (year unknown) and have not been active since 1970, therefore, the exact location is unknown and will need to be proved on site. BP have advised that recent works in the vicinity of the site at 149 Blackshaws Road have been undertaken and no assets were found at depths of around one metre. Typically the pipeline should be between 1 - 1.5 metres deep.

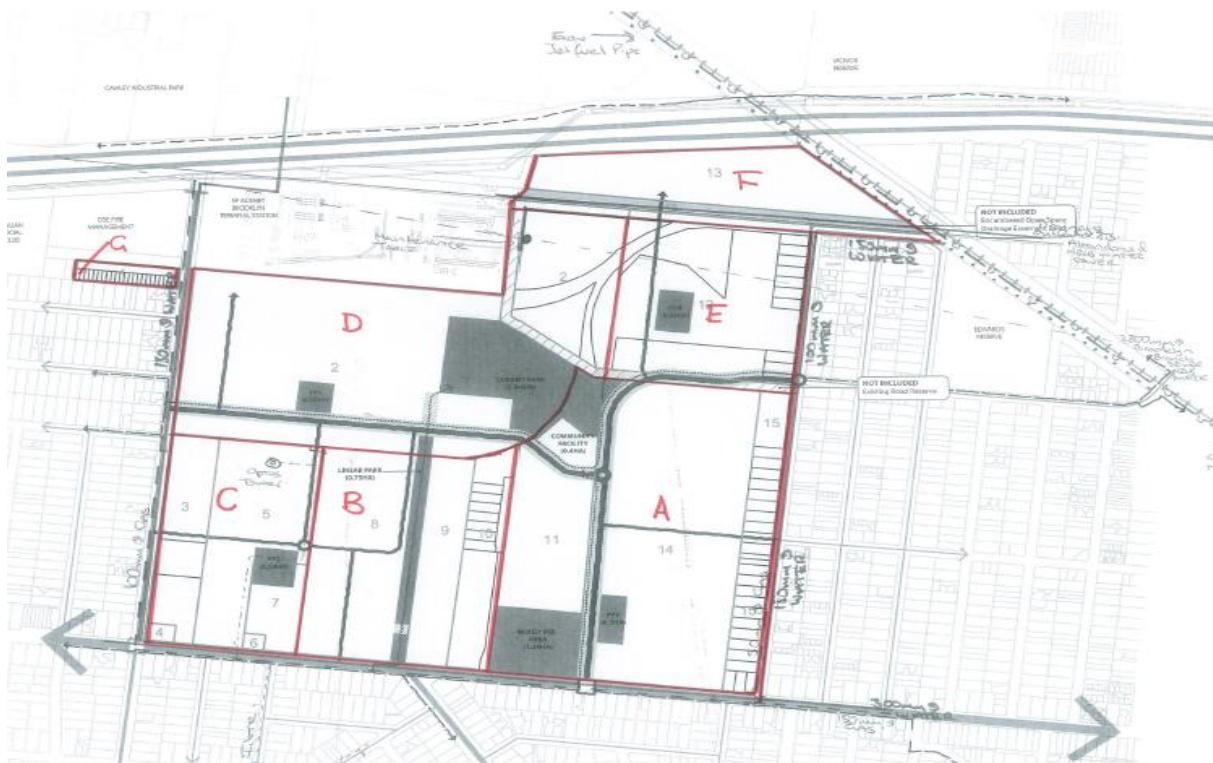
BP advised that any construction or excavation work within 5 metres of the pipeline will require a BP representative to be present on site.

4 SERVICING INDIVIDUAL LAND PARCELS

The subject site, considered as one development parcel has good availability to essential services and has several options with respect to efficient staging and development precincts. If considered as one development site, it is more efficient to commence development from the south and extend services into the site from Blackshaws Road. Several 'development fronts' are available.

If the site is considered from an individual parcel perspective there will be some landholdings that may have restricted access to services or require development of a neighbouring parcel or delivery of external infrastructure. There may be an interim servicing solution required prior to the ultimate being delivered.

To highlight any parcel specific servicing constraints, we have split the site into several parcels as detailed below:



Development Parcels

When considering staging from an individual parcel perspective there may be opportunities to connect directly into the surrounding existing infrastructure. This would be subject to an assessment of each individual parcels impact on the surrounding system and approval from the relevant authorities.

If capacity was limited and could not cater for the development of the parcel, or approval was not available, there may be a requirement to extend services to the applicable parcel. This extension may be required through an adjacent landholding or within the existing road network.

A site by site review with each of the responsible authorities would be required to confirm capacity and requirements.

The below information is purely based on servicing and makes no allowance for other factors such as marketing factors and the like.

4.1 Parcels A, B & C

Sewer

- Available from Blackshaws Road, New Street and Kyle Road.

Water

- Available from Blackshaws Road and should be extended into the site and will ultimately provide water to the surrounding parcels.

Gas

- Available from Blackshaws Road and should be extended into the site and will ultimately provide reticulated gas to the surrounding parcels.

Electricity

- Ultimately will be extended from the BLTS through neighbouring parcels.
- Potential to extend into these parcels from the existing network on Blackshaws Road with connection into the broader electrical network to be made following development of the broader precinct.

NBN

- Will need to be extended to the subject site. Pending further information.

Drainage

- Outfall into Blackshaws Road.

Sequencing

- Development should proceed south to north.

Commentary

Parcels A, B & C have good access to essential services and these can be extended from Blackshaws Road. Confirmation on ultimate electrical connection and potential to extend from Blackshaws Road will be required.

4.2 Parcel D

Sewer

- The western portion of the site can be serviced via existing infrastructure in Kyle Road.
- The eastern portion would be serviced via the New Street system and would need to extend through adjacent properties to this asset.

Water

- The western portion of the site can potentially be serviced via existing infrastructure in Kyle Road.
- The eastern portion of the site can potentially be serviced via the existing water service located on the northern boundary of this parcel.
- There may be limited capacity within these services and connection will be subject to confirmation from CWW.

Gas

- Potentially available from Kyle Road subject to capacity.
- If the Kyle Road main cannot be utilised an extension from the Blackshaw Road main will be required.

Electricity

- To be extended from the BLTS adjacent to this parcel and will ultimately provide electricity to the surrounding parcels.

NBN

- Will need to be extended to the subject site. Pending further information.

Drainage

- Several outfalls required due to slope of the land. Potential to provide temporary measures in the interim prior to the ultimate solution being adopted by the precinct.

Sequencing

- Development should proceed west to east with potential to commence from dual fronts.

Commentary

Parcel D is a large parcel that has access to most services. There is potential for the existing surrounding water and gas services to have limited capacity and therefore an alternate supply from Blackshaws Road may need to be extended to the site.

4.3 Parcels E & F

Sewer

- Available from New Street.

Water

- Potential capacity within the service in New Street and also that which is located along the northern boundary of Property 12.
- There may be limited capacity within these services and connection will be subject to confirmation from CWW.

Gas

- Potentially available from New Street subject to capacity.
- If the New Street main cannot be utilised an extension from the Blackshaw Road main will be required.

Electricity

- Potentially available from the existing services within New Street or can be extended from the BLTS through adjacent properties or AusNet land.

NBN

- Will need to be extended to the subject site. Pending further information.

Drainage

- Outfall towards AusNet land between the two parcels to be utilised.

Sequencing

- Development should proceed south to north for Parcel E and east to west for Parcel F.

Commentary

There is potential for the existing surrounding water and gas services to have limited capacity and therefore an alternate supply from Blackshaws Road may need to be extended to the site.

4.4 Parcel G

Parcel G, being only 0.49 hectare, and somewhat isolated from the remainder of the precinct, has access to all essential services and can be developed in isolation.

5 CONCLUSION

Based on the feedback, information provided from the authorities and our investigations, there are no major prohibitive servicing constraints to prevent the subject site from being redeveloped.

Several infrastructure assets will need to be considered in the final development plan including:

- Brooklyn Branch Sewer located within Property 2 & 12.
- Land owned by AusNet Services known as Property 16 including the drainage outfall through this property for the Brooklyn Terminal Station.
- Optus telecommunication tower and associated underground fibre cable located within Property 5.
- High pressure gas transmission pipeline opposite Property 13.
- Mobil jet fuel pipeline opposite Property 13.
- BP pipeline located on Blackshaws Road.

The above elements do not prevent the site from being developed, however, will need to be considered in any future development plan.

There are opportunities to develop individual parcels in isolation from the balance development, however, each circumstance will require a separate assessment to determine 'external' infrastructure and any upgrades required.

As a whole, the precinct can be serviced to cater for residential development.

5.1 Limitations

The information outlined in this report has been obtained from both formal advice and informal discussions with officers from the relevant authorities and may differ at some future date when development conditions are officially requested.

The information supplied by SMEC is subject to change pending official advice, detailed property investigation, detailed design and survey. The information is current to the report date, however, SMEC cannot accept responsibility if any Authority changes its requirements after the date of this report.

APPENDIX A LAND USE PLAN



- P15 Boundary
- Property Boundary
- Mixed Use Area
- Residential
- Residential (Existing Road Reserve - Council Land Swap Opportunity)
- Community Facility
- Open Space**
- Encumbered Open Space
- Landscape Link / Laneway Access
- Railway
- Connector Street
- Access 2 Street *
- Signalised Intersection
- Roundabout
- Existing Signalised Intersection
- Off Road Bicycle Path
- External Pedestrian and Bicycle Link
- Existing Large Scale Power Lines & Towers

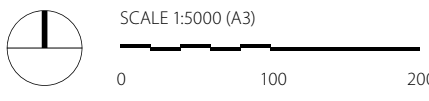
NOTE:

* Access 2 Streets nominated on the plan are indicative only, subject to future conceptual design investigations and traffic engineering assessment.

** Shape and locations of parks are indicative, subject to detailed concept design development, however they are to be generally in accordance with the requirements of this development plan.

DISCLAIMER:

The Land Use Plan is based on Brown Consulting Feature Level Survey, Reference M140666 Version C, Dated 2/12/14. As per this feature level survey, we note that the position of boundaries and easements shown are only approximate and have been derived from VICMAP digital property data (They have not been verified by this survey). As such, any area calculations are approximate only.



Land Use Plan
Precinct 15, Altona North

APPENDIX B AUTHORITY SERVICING ADVICE

City West Water



City West Water Corporation

ABN: 70 066 902 467

1 McNab Avenue
Footscray Vic 3011 Australia

Locked Bag 350 Sunshine Vic 3020
DX 30311 Sunshine

citywestwater.com.au

Telephone (03) 9313 8422

Facsimile (03) 9313 8417

31 October 2014

SMEC AUSTRALIA
LEVEL 10/71 QUEENS RD
MELBOURNE VIC 3000

Attention: Mr Hakan Girgin

Dear Mr Girgin,

Property: BLACKSHAWS RD ALTONA – PRECINCT 15
Our Reference: FEA/14/00166

I refer to your correspondence dated 09 October 2014 regarding the provision of water supply and sewerage facilities to the above property and advise as follows:

Water Supply

The proposed development can be serviced with water supply from the existing 300mm main in Blackshaws Road to the south of the site.

However the existing mains in Kyle Street (100mm) do not have the capacity to supply the expected demands. Therefore a new main (likely to be 225mm) will need to be extended into the development from the Blackshaws Road 300mm main. The location of any new water main will be determined when more information on the development and staging is known.

Sewerage

The proposed development falls across three sewerage catchments. Please refer to the attached plan indicating the location and probable connection points for the developments.

The north-eastern part can be serviced by connecting to the existing 225mm diameter BTS4 reticulation network. Suitable connection points comprise BTS4-503, BTS4-41 and BTS4-500 all of which are located in New Street.

The south-eastern part can be serviced by connecting to the existing 225mm diameters in Blackshaws Road at manhole BSW1A-508.

The western part can be serviced by connecting to the existing KYL2 catchment. Connection made to the existing connections out of KYL2 subject to these being verified of a suitable diameter and

structurally sound. Alternatively connection may be made to manhole KYL2-500 or KYL2-532 on the west side of Kyle Road, or to manhole BSW1A-500 located on the east side of Kyle Road at the south-west corner of the site.

Alternative Water Supply

City West Water welcomes the opportunity to partner with developers to deliver fit for purpose alternative water into this area. As this area is not yet a mandated area, an agreement between City West Water and the developer will be required in order for alternative water to be provided. City West Water has completed some initial investigations into providing this alternative water. Please advise if you wish to pursue these opportunities further with City West Water.

Greening the West

Greening the West is a regional initiative aiming to deliver positive health and social outcomes for Melbourne's west through urban greening. Greening the West is facilitated by City West Water and involves a partnership of local councils, water utilities, government agencies, industry and community groups. Urban greening encompasses all activities designed to enhance the quantity and quality of vegetation in the urban environment including parks, street trees, active and passive recreation reserves and the built form.

For further information visit <http://healthyurbanhabitat.com.au/category/in-my-community/> or contact Darren Coughlan – Healthy Urban Habitat Project Manager on 9313 8739 or 0400 557 139.

Environmental & Cultural Heritage Considerations

City West Water notes that the proposed development may be located near a sensitive flora and fauna environment and therefore may require Department of Environment and Primary Industries (DEPI) approval.

City West Water also notes that the proposed development may be located near a sensitive culture heritage site. Under relevant legislation a cultural heritage assessment and a Cultural Heritage Management Plan (CHMP) may be required.

General

The demands on City West Water's system - including those from other new developments - can change rapidly. Although City West Water has taken all reasonable care in preparing the information and conclusions set out in this letter, it reserves the right to alter any of them at any time and without giving you notice of the fact.

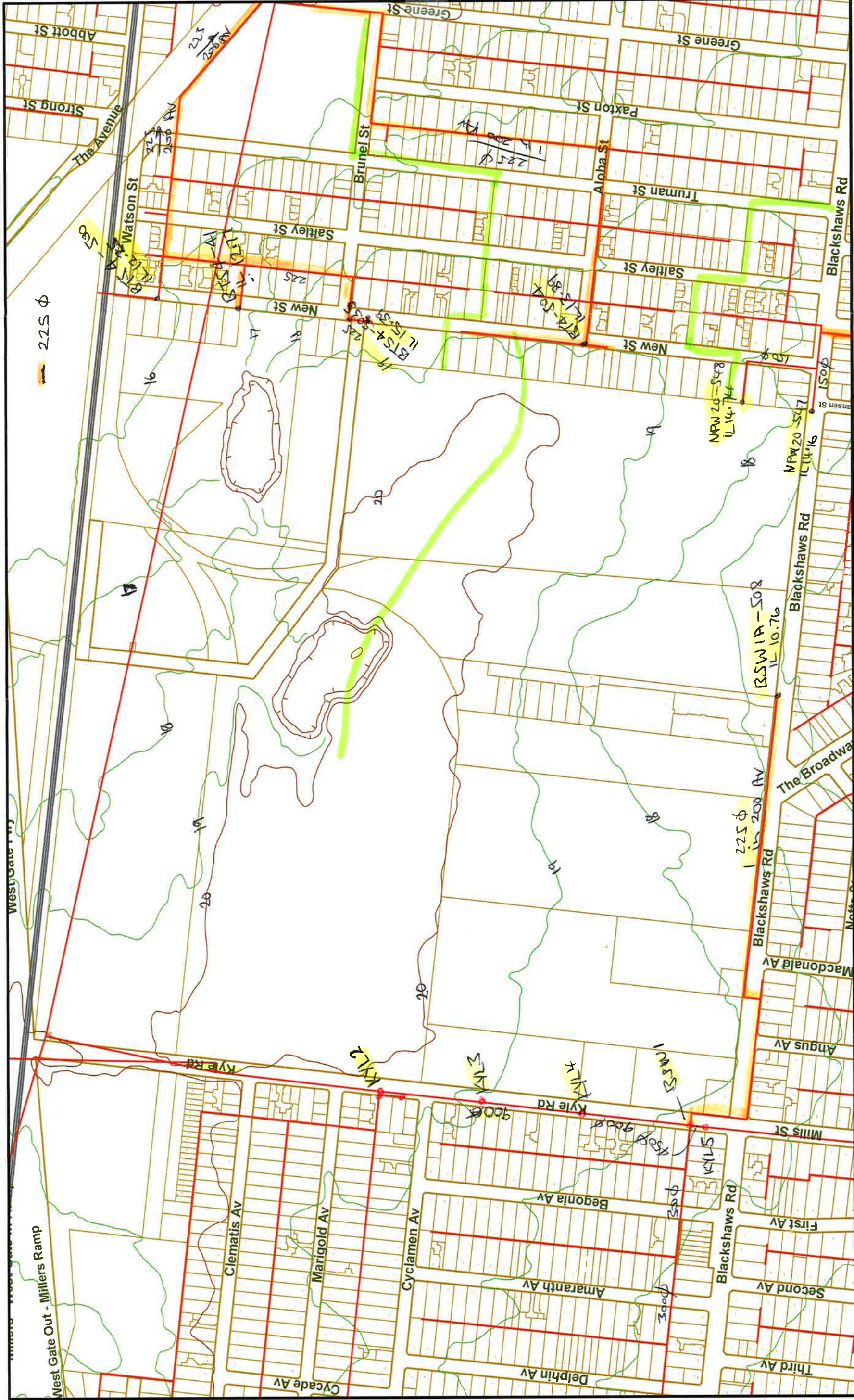
City West Water will not make any binding representations or commitments until a formal development agreement is executed with you. Before then, you cannot assume the above information or conclusions to be binding on City West Water or make any commitments based on that assumption.

If further information is required, please contact Jacob Green on 9313 8738.

Yours faithfully

A handwritten signature in black ink, appearing to read 'S Webb', with a stylized flourish at the end.

Steve Webb
Manager Land Development
Water Solutions



Scale: 1:4000

NOTES :

Compiled by: JDK

Melway Reference: 41E12

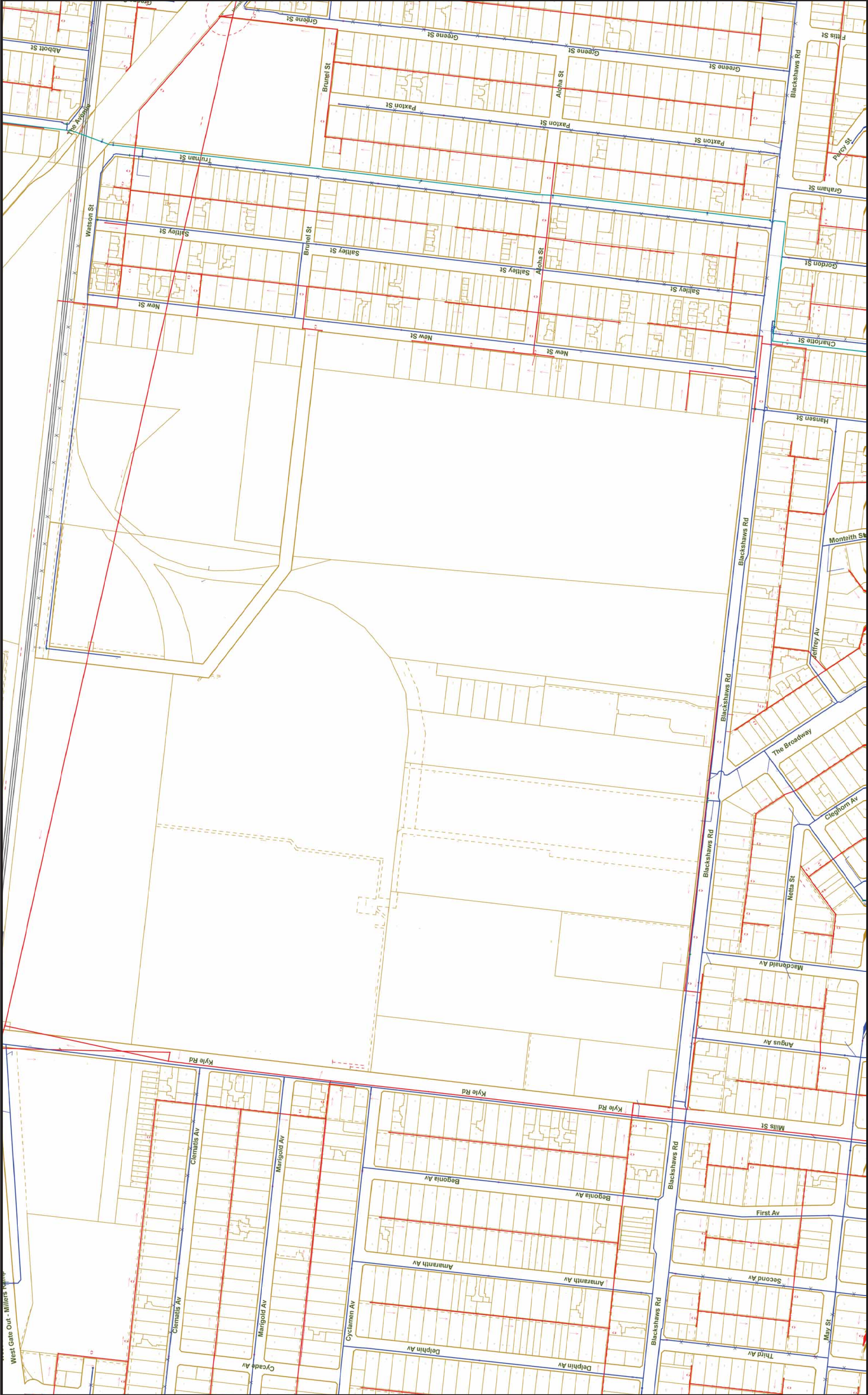
Date: 13/10/2014

Blackshaws Road - Precinct 15 Sewer Servicing



City West Water

Assets labelled AC may contain asbestos material and therefore works on these assets must be undertaken in accordance with OHS Regulations 2007 (Part 4.3).
Disclaimer : The location of assets must be proved in the field by the applicant prior to the commencement of work. These plans do not indicate private services. City West Water Corporation does not guarantee and makes no representation or warranty as to the accuracy or scale of this plan. This company accepts no liability for any loss, damage or injury by any person as a result of any inaccuracy in this plan.



Blackshaws Road , Altona - Precinct 15

NOTES :



City West Water



Scale: 1:2000

Compiled by: Melway Reference: 41E12

Date: 31/10/2014

Disclaimer : The location of assets must be proved in the field by the applicant prior to the commencement of work. These plans do not indicate private services. City West Water Corporation does not guarantee and makes no representation or warranty as to the accuracy or scale of this plan. This company accepts no liability for any loss, damage or injury by any person as a result of any inaccuracy in this plan.

Assets labelled AC may contain asbestos material and therefore works on these assets must be undertaken in accordance with OHS Regulations 2007 (Part 4.3).

Melbourne Water

Hollow, Nathan

From: Con Gantonas <Con.Gantonas@melbournewater.com.au>
Sent: Thursday, 8 January 2015 9:17 AM
To: Watters, Stephen
Cc: Keith Boniface; Rhodes, Tim; Hollow, Nathan
Subject: RE: Precinct 15 Drainage Strategy

Follow Up Flag: Follow up
Flag Status: Flagged

Hi Stephen,

Thank you for your email. Melbourne Water has reviewed the submitted draft land use structure plan and can provide the following comments and advice for your consideration.

Hydraulics

Information available at Melbourne Water indicates that the property is not subject to flooding from Melbourne Water's drainage system, based on a storm event with a 1% chance of occurrence in any one year.

The proposed works are substantial and located within four Melbourne Water catchments, Francis St M.D. (4213), Schutts Estate M.D. (4212), Blenheim Rd Drain (4191) and Paisley Drain (4190). As indicated in previous discussions between Aijaz Memon and Tim Rhodes (email dated 18/12/14) Melbourne Water will accept Hobson Bay City Council (HBCC) requirements for hydraulics provided that the proposed works do not worsen the flood levels or flows for the north draining catchments, Schutts Estate M.D. (4212) and Francis St M.D. (4213). It is expected that by meeting the HBCC requirements for the south draining catchments, Blenheim Rd (4191) and Paisley Drain (4190), that the flood levels and flows in these catchments for Melbourne Water's responsible area will not increase for the 1% AEP.

Melbourne Water requires a detailed Drainage and Stormwater Management Plan to be submitted for approval which demonstrates that the above requirements will be achieved.

Stormwater Quality

Melbourne Water has no objection to the treatment and offset requirements stipulated by Council, as outlined in your email.

Asset Protection

Melbourne Water owns the abandoned Melbourne Outfall Sewer main at this location. It consists of multiple conduits (2 X 1800mm unreinforced concrete and 1 x 1200mm wrought iron circular rising mains).

It appears as though it is owned by the power station. If Melbourne Water is accountable for this asset, we will need to ensure that the construction does not impact on the asset in its current condition or pose any ongoing risk. At present, the abandoned main does not appear to be filled at these locations and was unable to be accessed for CCTV in 2001.

The live asset at this location is the Brooklyn Trunk Sewer which is a deep sewer. Impact on the conduit would be considered to be negligible unless deep foundations are required.

Melbourne Water has no objection to the proposed works from an asset protection perspective, subject to the following:

1. Any construction that may have an impact on the sewer will be required to be submitted to Melbourne Water for approval.
2. Access to manholes will be required at all times.
3. Land currently associated with manholes will be required in the future and should be allocated as such.

Regards,

Con Gantonas | Developer Services Planner, Land Development | Waterways and Land | Service Delivery Group | **Melbourne Water**
T: (03) 9679 7410 | 990 La Trobe Street, Docklands 3008 | PO Box 4342 Melbourne VIC 3001 | melbournewater.com.au

Enhancing Life and Liveability

From: Watters, Stephen [mailto:Stephen.Watters@smec.com]
Sent: Thursday, 18 December 2014 5:39 PM
To: Kerrie Homan
Cc: Keith Boniface; Rhodes, Tim; Hollow, Nathan
Subject: RE: Precinct 15 Drainage Strategy

Hi Kerrie,

We have been dealing with Aijaz Memon from your office, in relation to the drainage strategy for the above Precinct (refer to the attached draft structure plan for your information).

Aijaz has confirmed a number of issues for us mainly relating to retardation of the site (refer below), but suggested that we should be speaking to you in relation to obtaining one consolidated response from Melbourne Water in relation to the drainage strategy for the site.

We are also currently in discussions with the Hobsons Bay City Council (HBCC) in relation to the approach that they would like to take in relation to water quality for the site.

The remaining queries that we have for Melbourne Water are summarised below:

Water Quality

- With respect to water quality, HBCC has indicated that catchments draining to the south will be connected to an existing stormwater treatment and harvesting scheme and that additional water quality infrastructure is not required for drainage directed towards the south.
- HBCC have indicated that full treatment is required for stormwater runoff draining towards the north. HBCC are not well equipped to manage wetlands, however, and do not wish to have such infrastructure elements included in designs. In addition, the site is quite flat and rock is close to the surface. This makes construction of bio-retention systems problematic and furthermore, HBCC has had little success in establishing and maintaining such systems. It would appear that HBCC have a preference for a contribution being made to the water quality offset service in the case of Precinct 15. We propose that the catchment to the north would be offset as HBCC have advised that the catchment to the south does not need treatment. Would you have any reason to object to such a proposal?

Also we have had verbal discussions with members of your assets team in relation to two deep sewers that cross the precinct, and we would appreciate your confirmation in relation to any restrictions to development that may apply in the vicinity of the sewers.

We would also be happy to meet with you to discuss the above.

Thanks,
Steve.

From: Aijaz Memon [<mailto:aijaz.memon@melbournewater.com.au>]
Sent: Thursday, 18 December 2014 4:21 PM
To: Rhodes, Tim
Cc: Watters, Stephen; Keith Boniface
Subject: RE: Precinct 15 Drainage Strategy

Hi Tim,

Thank you for visiting us seeking some clarification about our previous memo.

I confirm that following discussions were made in our last meeting and I am happy with this.

Regards
Aijaz Memon

From: Rhodes, Tim [<mailto:Tim.Rhodes@smec.com>]
Sent: Thursday, 18 December 2014 12:20 PM
To: Aijaz Memon
Cc: Watters, Stephen
Subject: Precinct 15 Drainage Strategy

Aijaz

Reference is made to the precinct 15 Altona north development and our meeting yesterday.

During the course of our meeting, we discussed various aspects of the drainage strategy. Our discussions were largely confined to the retardation requirements for the development. The outcomes of our discussion were as follows:

- Precinct 15 incorporates a ridge line with part of the catchment draining to the north and the remainder draining towards the south
- We reported that Hobsons Bay City Council (HBCC) are encouraging of directing additional stormwater runoff from the north of the catchment to the south of the catchment. At this stage, however, there are no plans to redirect any stormwater runoff due to the additional expense and potential impacts on retardation requirements.
- We reported that the HBCC standard with respect to retardation is the 1 in 10 Annual Exceedance Probability (AEP) event. It is proposed that all catchments draining to the south will be designed to this standard. You indicated that Melbourne Water have no objection to this approach. You further indicated that if the strategy for south draining catchments meets HBCC requirements, Melbourne Water would have no additional comment to make with respect to retardation.
- We discussed the extent of development over the site and we highlighted the fact that the north draining catchment has been cleared relatively recently and that the proportion impervious for that catchment has historically been higher than at present. For the purposes of undertaking retardation computations, we suggested using the highest historic development circumstance to determine the 'existing' conditions. You indicated that Melbourne Water would not object to this approach.
- It was noted that the northern draining catchment eventually drains to Schutts Estate Drain under the railway line and that at present there are properties which are flooded at this location in a 1 in 100 AEP event. While Melbourne Water are accepting of HBCC drainage requirements with respect to the Precinct 15 development, the outcomes will be reviewed to ensure that the degree of flooding at the railway line is not made any worse in a 1 in 100 AEP event. To this end, it is intended that north draining catchments will be designed to ensure that 1 in 100 AEP flows from the northern portion of the catchment are not increased.

- We discussed the method by which retardation volumes are to be computed. You advised that you have not undertaken a detailed assessment of the storage volume required, but pending a review, you would accept the reported outcomes developed from an appropriate methodology such as the Boyds method.

Could you please confirm by reply email whether you consider that the above is an accurate summary of our discussions.

In addition, can you please forward the contact details for Kerri

Regards

Tim Rhodes | Technical Principal Water Resources - VIC
SMEC – Australia & New Zealand Division

Level 10, 71 Queens Road, Melbourne, VIC, 3004, Australia

(PO Box 6208, St Kilda Road Central, VIC 8008, Australia)

T +61 3 9514 1591 | **F** +61 3 9514 1502 | **M** +61 417 402 119

Tim.Rhodes@smec.com | www.smec.com | [LinkedIn](#)

SMEC SNOWY MOUNTAINS ENGINEERING CORPORATION

Local People. Global Experience

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25/09/2014

Mr David Mutton
SMEC Urban
Level 10 71 Queens Rd
Melbourne, VIC 3000

Dear Mr David Mutton,

Re: Dial Before You Dig – Sequence No. 41743351

Location Details -
Address: Blackshaws Road, Altona North, VIC 3025
Map Ref: 41D11, 41D12, 41E11, 41E12, 41F11, 41F12, 55C1, 55D1, 55E1, 55F1
Activity: Planning & Design
Commencement Date: 30/09/2014 12:00:00 AM

Attached are plans showing Melbourne Water's assets in relation to the area of your enquiry. Melbourne Water's records indicate that there ARE underground assets in the vicinity of the above enquiry area.

Please note, the attached plans do not constitute approval from Melbourne Water.

If there are **transmission problems**, please call **Colin Loft on 9679 7589**.

For **detailed asset locations**, please call **Colin Loft on 9679 7589** allowing **at least 2 business days** for detailed plans to be provided.

If planning to undertake work over, under or near any Melbourne Water asset please contact the **Asset Services team** on **9679 6614** or at <http://melbournewater.com.au/constructingnearassets> **at least 14 days prior** to the **commencement of any work**.

Melbourne Water Corporation (MWC) shall not be responsible or otherwise liable in anyway for loss of any kind including, without limiting the generality of the foregoing damages, costs, interest, loss of profits or special loss or damage arising from any error, inaccuracy, incompleteness or other defect in this information. By receiving and accepting this information the recipient acknowledges that Melbourne Water Corporation makes no representation as to the accuracy or completeness of this information. The exact location of Melbourne Water Corporation's assets as set out in this information should be confirmed on site by the recipient prior to the commencement of work.

Please Note: Due to ongoing potential asset changes the attached plan/s is/are valid for 28 days from the date of issue. After that period the plan/s should not be used, rather a new plan should be obtained. Warning: Pipelines (including coating) may contain asbestos material. Please ensure appropriate safety procedures are used.

Melbourne Water Corporation provides wholesale Water Supply and Sewerage services to City West Water, South East Water and Yarra Valley Water, who in turn provide local residents with Water Supply and Sewerage services. MWC, in conjunction with Local Government, manage Melbourne's drainage infrastructure. Local councils maintain the local drainage infrastructure, while MWC provides the major infrastructure. The attached plans only show MWC's assets and not all Water Supply, Sewerage and Drainage pipelines.

For location of local Water Supply and Sewer pipelines please contact:

City West Water **13 26 42**
South East Water **9552 3770**
Yarra Valley Water **13 16 95**

For location of local Drainage pipelines please contact the relevant Council.

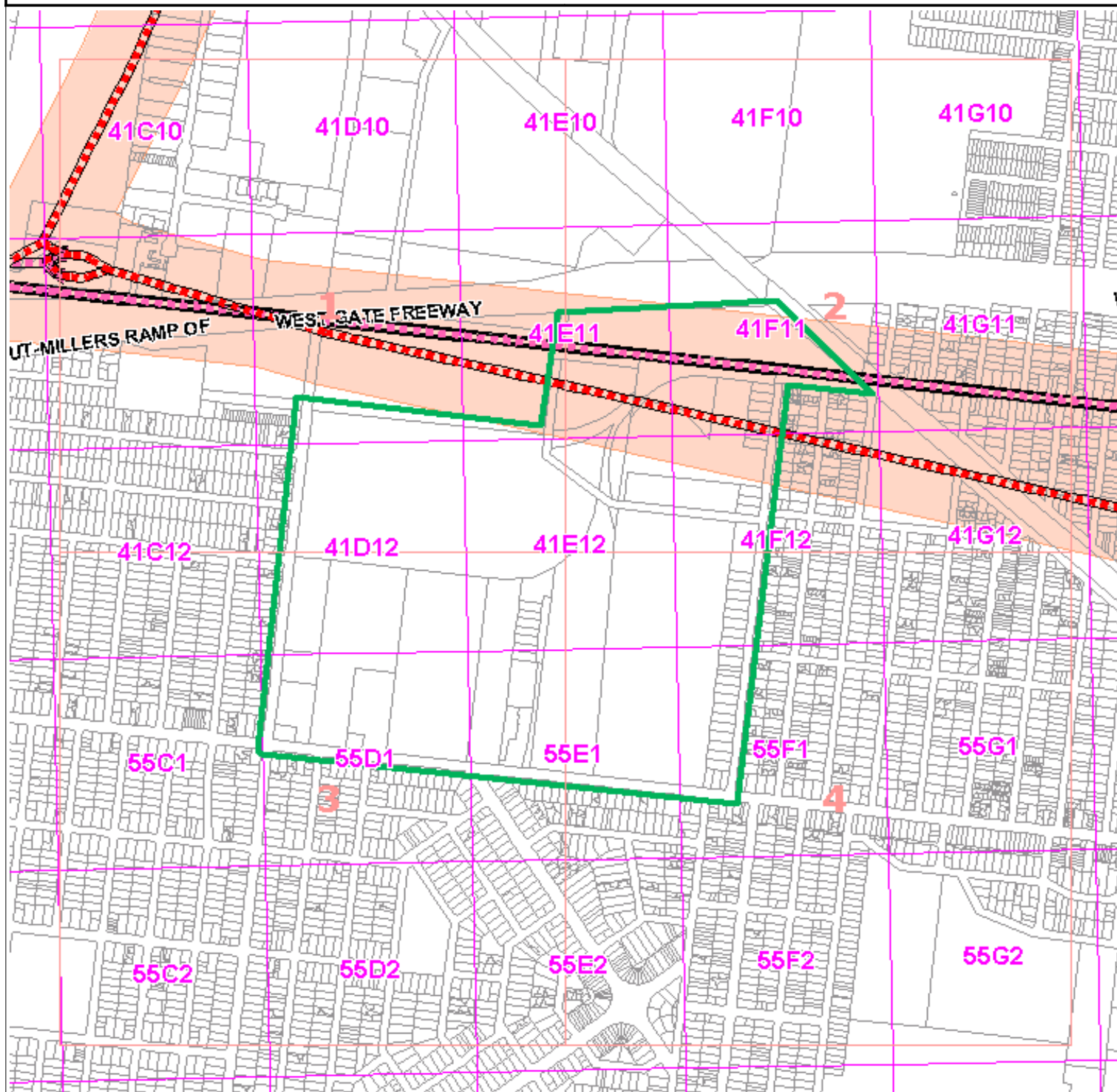


Melbourne Water Corporation
Address: 990 La Trobe Street, Docklands
Postal Address: PO Box 4342, Melbourne, VIC 3001
T (VIC): 131 722
T (AUS): (03) 9679 7100
F: (+61-3) 9679 7200

Sewer Assets Plan

DBYD Sequence Number: 41743351

DBYD Job No. 8368008



Address: Blackshaws Road, Altona North, VIC, 3025

Map Ref: Melways 41D11, 41D12, 41E11, 41E12, 41F11, 41F12, 55

Date Supplied: 25/09/2014

1:5000



Sewer main



Abandoned sewer main



Sewer buffer

Please contact the Melbourne Water Asset Services team on 9679 6614 if proposed works are to be undertaken within the shaded area



Area of interest



Easement



Property boundary



House number unknown

345F4

VicRoads map reference

27D4

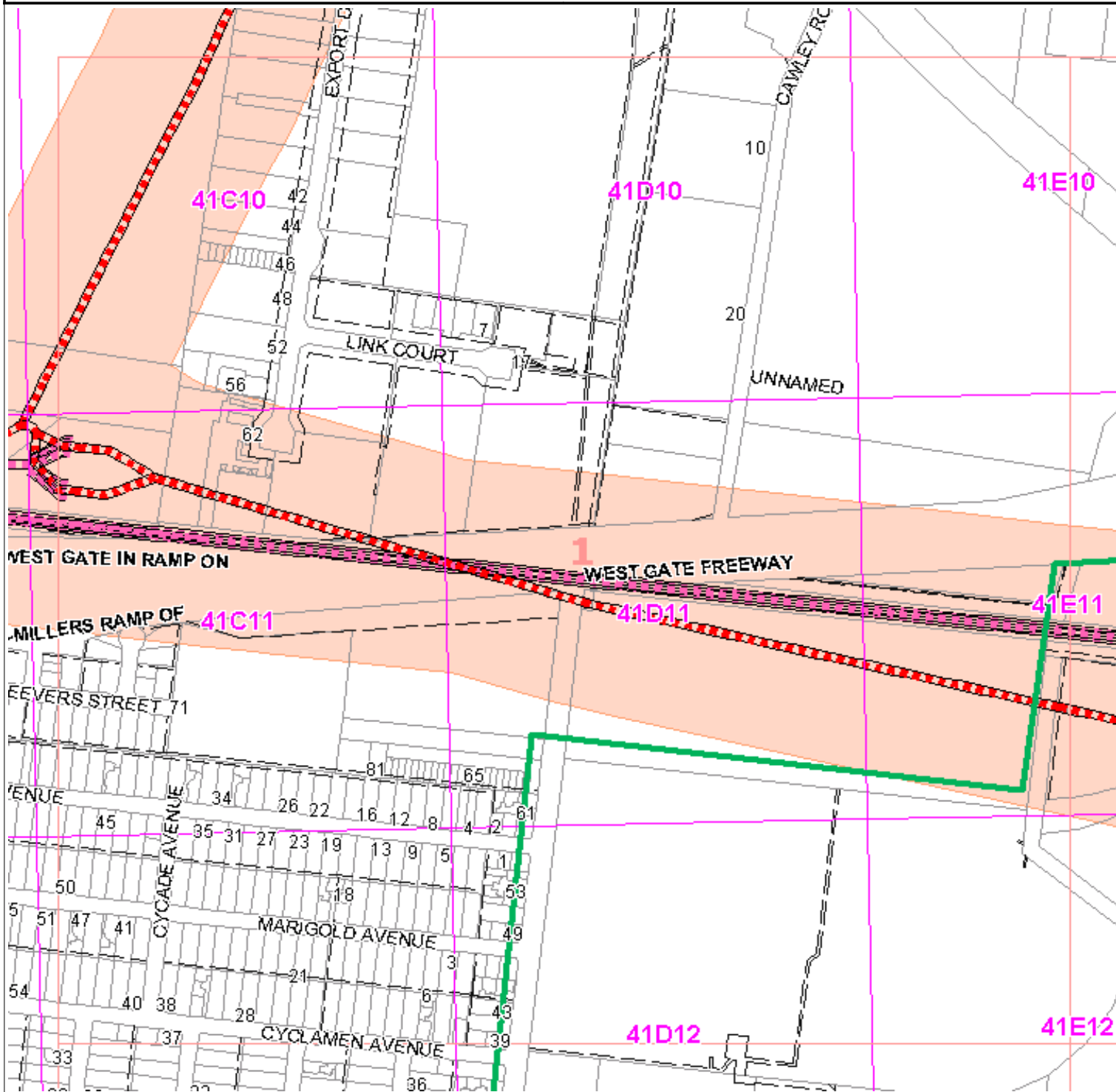
Melway map reference



Sewer Assets Plan

DBYD Sequence Number: 41743351

DBYD Job No. 8368008



Address: Blackshaws Road, Altona North, VIC, 3025

Map Ref: Melways 41D11, 41D12, 41E11, 41E12, 41F11, 41F12, 55

Date Supplied: 25/09/2014

1:5000



Sewer main

Abandoned sewer main

Sewer buffer

Please contact the Melbourne Water Asset Services team on 9679 6614 if proposed works are to be undertaken within the shaded area



Area of interest



Easement



Property boundary

House number unknown

X

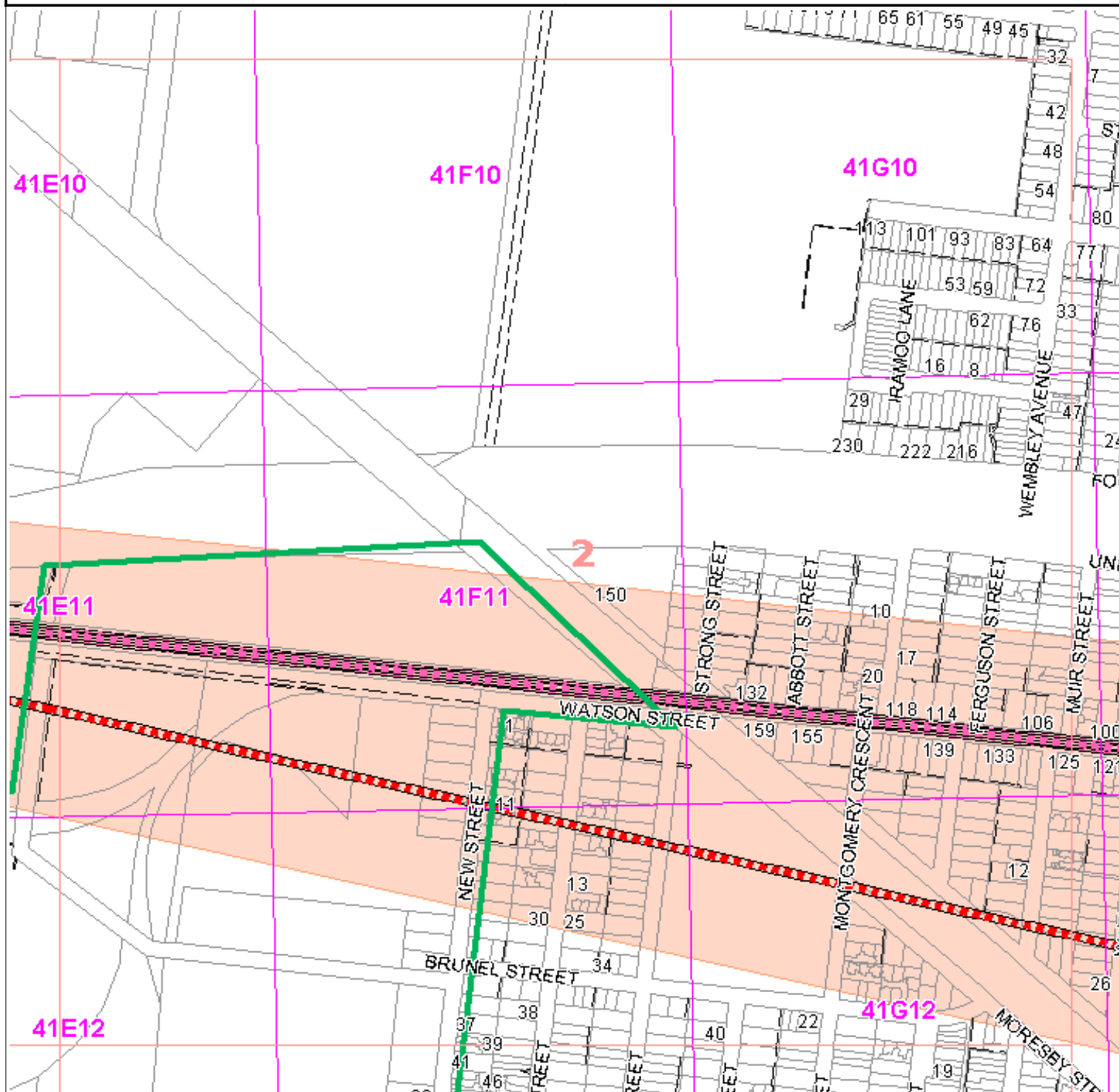
345F4

VicRoads map reference

27D4

Melway map reference





Address: Blackshaws Road, Altona North, VIC, 3025

Map Ref: Melways 41D11, 41D12, 41E11, 41E12, 41F11, 41F12, 55

Date Supplied: 25/09/2014

1:5000



Sewer main



Abandoned sewer main



Sewer buffer

Please contact the Melbourne Water Asset Services team on 9679 6614 if proposed works are to be undertaken within the shaded area



Area of interest



Easement



Property boundary



House number unknown

345F4

VicRoads map reference

27D4

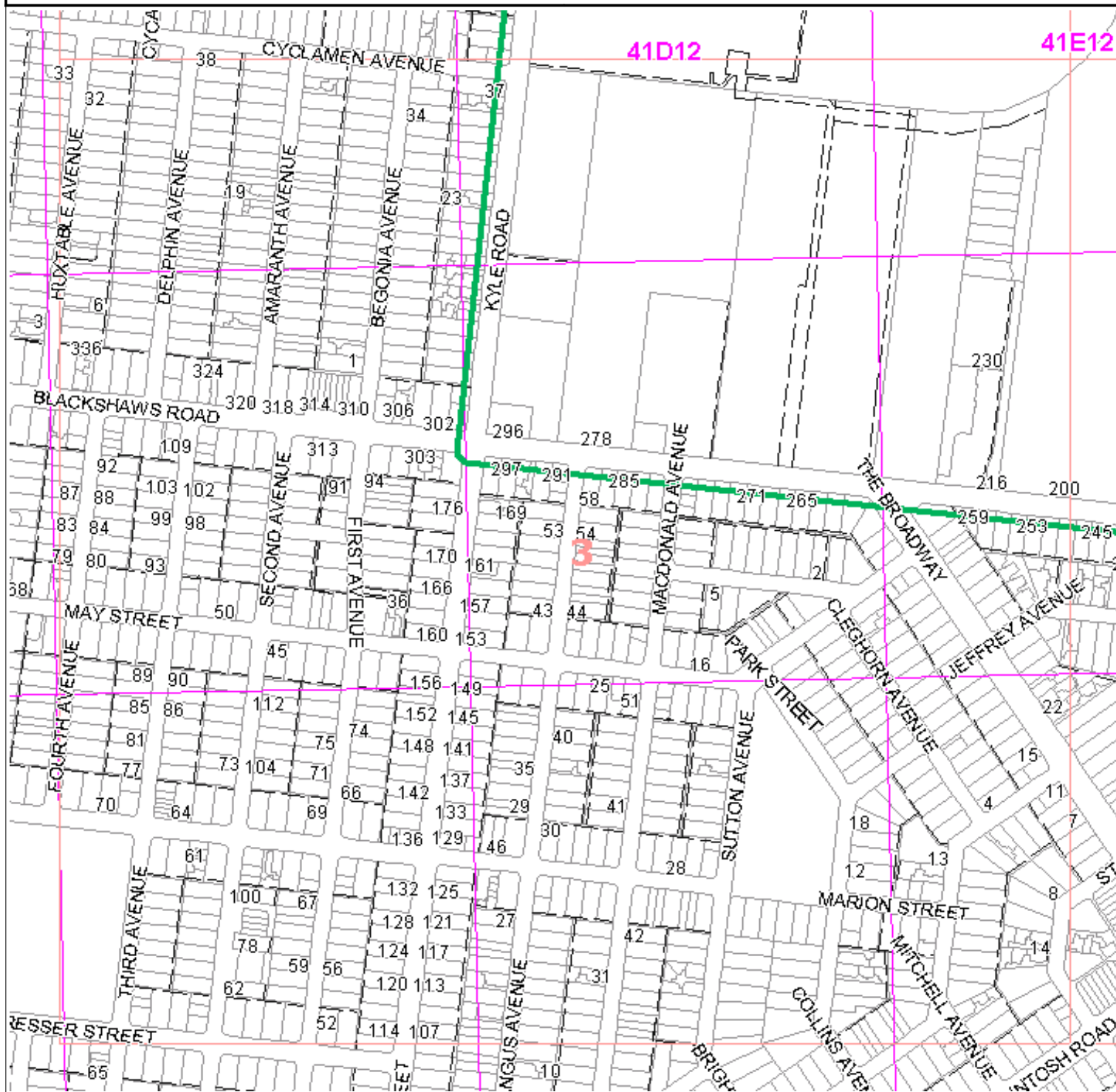
Melway map reference



Sewer Assets Plan

DBYD Sequence Number: 41743351

DBYD Job No. 8368008



Address: Blackshaws Road, Altona North, VIC, 3025

Map Ref: Melways 41D11, 41D12, 41E11, 41E12, 41F11, 41F12, 55

Date Supplied: 25/09/2014

1:5000



Sewer main



Abandoned sewer main



Sewer buffer

Please contact the Melbourne Water Asset Services team on 9679 6614 if proposed works are to be undertaken within the shaded area



Area of interest



Easement



Property boundary



House number unknown

345F4

VicRoads map reference

27D4

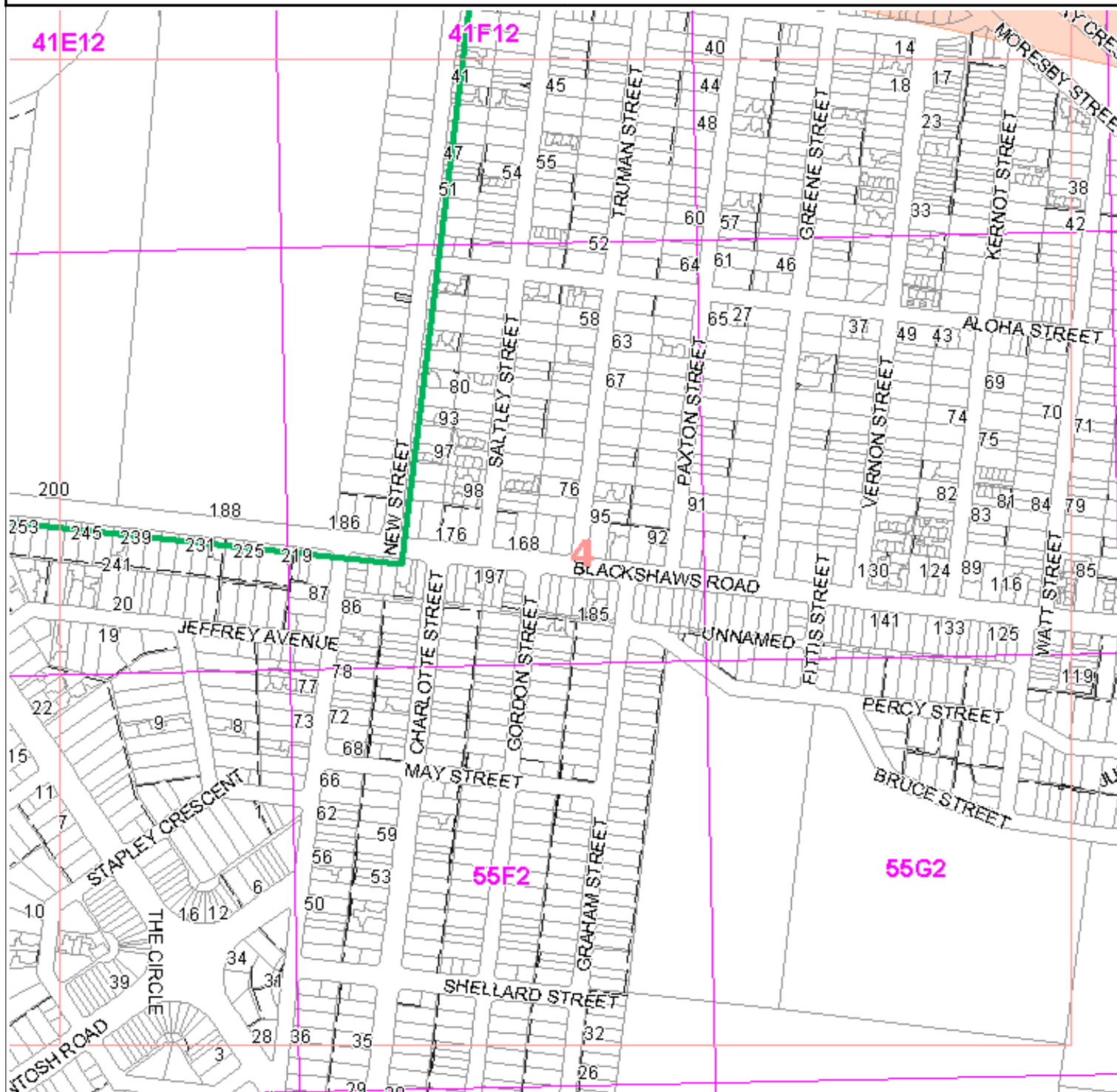
Melway map reference



Sewer Assets Plan

DBYD Sequence Number: 41743351

DBYD Job No. 8368008



Address: Blackshaws Road, Altona North, VIC, 3025

Map Ref: Melways 41D11, 41D12, 41E11, 41E12, 41F11, 41F12, 55

Date Supplied: 25/09/2014

1:5000



Sewer main



Abandoned sewer main



Sewer buffer

Please contact the Melbourne Water Asset Services team on 9679 6614 if proposed works are to be undertaken within the shaded area



Area of interest



Easement



Property boundary



House number unknown

345F4

VicRoads map reference

27D4

Melway map reference



AusNet Gas Services

Hollow, Nathan

From: Mark Baker <mark.baker@ausnetservices.com.au>
Sent: Monday, 8 December 2014 12:12 PM
To: Lam, Edmond
Cc: GLIWA Ben; Andrew RIZOUN; WONG Godwin; Zack Ilic; Myra Horomidis
Subject: RE: Re. Precinct 15 Altona North - Servicing Advice

Good Afternoon Edmond,

Provided development comes off the existing 150 mm High Pressure main in Blackshaws Road, there should not be an issue.

You can imagine, surrounding 32 mm and 50 mm mains could not support such demand.

Hope this is of assistance.

Mark Baker
Principal Engineer Network Planning - Gas



AusNet Services
Level 30, 2 Southbank Boulevard,
Southbank Victoria 3006 Australia
Tel +61 3 9695 6223 Mobile +61 (0) 409 544 783
mark.baker@ausnetservices.com.au
www.ausnetservices.com.au

From: Lam, Edmond [mailto:Edmond.Lam@smec.com]
Sent: Monday, 8 December 2014 9:18 AM
To: Mark Baker
Cc: GLIWA Ben; Andrew RIZOUN; WONG Godwin; Zack Ilic
Subject: RE: Re. Precinct 15 Altona North - Servicing Advice

Dear Mark,

Thank you for your initial advice.

Please note that the proposed land is to be rezoned from industrial to residential purpose. The precinct will be medium density development (townhouse type development).

Can you please confirm that the service network will be able to supply a minimum of 3000 lots, and also whether there is any further capacity if the density was increased beyond 3000 lots.

Regards

Edmond Lam | Civil Engineer
SMEC – Australia & New Zealand Division
T +61 3 9869 0800

From: Mark Baker [<mailto:mark.baker@ausnetservices.com.au>]
Sent: Wednesday, 3 December 2014 12:18 PM
To: Lam, Edmond
Cc: GLIWA Ben; Andrew RIZOUN; WONG Godwin; Zack Illic
Subject: RE: Re. Precinct 15 Altona North - Servicing Advice

Good Afternoon Edmond,

Referring to the screen shot below, your proposed development has a High Pressure Network to the east and South (Blue) with a large diameter 150 mm S4 main in Blackshaws Road which should have sufficient capacity depending on the development requirements.

To the west is a Medium Pressure Network (Green) that has limited capacity and is not preferred for commercial applications.

Hope this is of assistance.



Mark Baker
Principal Engineer Network Planning - Gas

APA Group Gas Transmission

9 December 2014

Enquiries: Mr. L Marshall
Telephone: 9797 5118

[Lam, Edmond <Edmond.Lam@smec.com>]

EMAIL OUT

SMEC Pty. Ltd.
Mr. Edmond Lam
Level 10, 71 Queens Road,
MELBOURNE VIC 3004

Dear Mr. Lam

RE: Pipeline PROVINGS- PROPOSED PRECINCT 15 BLACKSHAW RD ALTONA NORTH - ADJACENT TO APA PIPELINE

Reference is made to your email dated 16 September 2014 requesting approval and advice from APA GasNet (APA) in relation to the proposed redevelopment of the Blackshaws Road, Altona North study area in close proximity to APA infrastructure. The application was referred to APA for advice on the proposed development around known APA pipeline assets.

APA has one pipeline within the study area (see Figure 1), as shown in the following table:

Table 1. Transmission gas pipelines in the area of consideration.

Pipeline	Pipeline Licence	Easement Width (m)	Diameter (mm)
South Melbourne to Brooklyn	PL108 (T33)	N/A	750

APA would like to respond by expressing direct interests in the proposed development of Precinct 15, Blackshaws Road, Altona North (see Appendix 1). It is APA's objective to protect human life and infrastructure whilst ensuring future land use, subdivision and development will not inhibit the potential of an existing high pressure pipeline to be able to provide capacity required to meet the needs for natural gas in Victoria.

It is understood that the developer Mirvac Pty. Ltd. Has requested GHD Pty. Ltd to carry out an infrastructure servicing investigation for the proposed development in Altona North. In this instance APA's South Melbourne to Brooklyn pipeline traverses the boundary of the north eastern section of the study area.

From the information supplied the proposed development and construction has the potential to impact on APA assets due to it running adjacent in close proximity to the South Melbourne to Brooklyn pipeline, which increases the risk of our pipeline being detrimentally impacted upon.

Approval for the proposed development plan is approved in principle pending the results of the proving of APA assets adjacent. Approval for the proposed proving works is given, provided all the conditions and precautions are complied with in relation to working in the vicinity of **GAS TRANSMISSION PRESSURE PIPELINES**. These conditions and precautions are set out in appendix 2, "**Conditions for Works near GasNet Australia Gas Transmission Pipelines**" and it is essential for your **safety** and the **safety** of others that they are stringently complied.

APA GasNet has completed an assessment for the works and in this instance your attention is particularly drawn to the following points in relation to the project:



- Final design and engineering plans for the development must be sent through the APA GasNet for assessment
- Prior to final design plans being approved, the APA pipeline must be proved for its depth and location; and
- An APA Pipeline Operator must be present during the works to prove the APA pipeline.

Your attention is particularly drawn to the mandatory requirement that a minimum of 5 day's notice of proving and /or intended constructions must be given to an **APA Group lands officer on 1800 103 452** in order that arrangements can be made to have an APA Group pipelines operator on site during this work.

Yours faithfully,

LACHLAN MARSHALL
LAND AGENT- VICTORIA

enclosed. Cc file: S. Sinclair, R. Fuller

- Figure 1: APA GasNet Pipeline Assets within Study Area
- Appendix 1: Tract Development Plan 3011-0087
- Appendix 2: Conditions for works near APA Group gas transmission pipelines

Damage to a Transmission Pipeline could result in:

- ## 1 Conditions

- Page 5

- 1.8 APA Group must be notified at least 1 week prior to any proposed blasting. All blasting shall be in accordance with SAA Explosives Code 2187, and APA Group's "Conditions for use of Explosives near APA Group Transmission Pipelines". Restrictions can only be modified after explicit agreement with an APA Group engineer. Any blasting shall be carried with extreme caution and only in the presence of an APA Group Inspector.
- 1.9 It is essential that prior to any work being carried out, detailed design plans of proposed construction work in the vicinity of gas transmission pipelines are forwarded to the Transmission Operations Department, at the address above

Minimum Clearances For Design Purposes And/Or Construction

- 1.10 300mm from the top of the pipeline to the underside of road pavement boxing.
- 1.11 300mm between the pipeline and any installation up to 1.5 metres wide which is crossing the pipeline.
- 1.12 500mm between the pipeline and any installation over 1.5 metres wide which is crossing the pipeline.
- 1.13 500mm between the pipeline and an installation laid parallel to the pipeline.
- 1.14 3 metres between the pipeline and an installation that could add excessive loads to the pipeline or restrict access to the pipeline.
- 1.15 3 metres between the pipeline and an installation that could require underpinning should APA Group need to expose the pipeline
- 1.16 Separation distances from electrical installations apply and are assessed individually.
- 1.17 Protective concrete slabbing may be required.
- 1.18 Easement conditions may apply.

Figure 1: APA GasNet Pipeline Assets within Study Area



AusNet Services – Electricity

Hollow, Nathan

From: Peter Congerton <peter.congerton@ausnetservices.com.au>
Sent: Monday, 15 December 2014 10:39 AM
To: Lam, Edmond
Cc: Neil McLeod
Subject: RE: Re. Precinct 15 Altona North - Servicing Advice
Attachments: Precinct 15 development.pdf

Hi Edmond

I refer to your email to Neil McLeod and I respond as I have had previous involvement with this matter and Neil has gone on Annual leave.

I am happy to discuss the matter with you, but in the meantime attach previous correspondence we addressed to Hobsons Bay council back in 2011. The situation has not materially changed since then. But I comment further as follows:

1. There are no works required external to the Terminal Station in the foreseeable future.
2. There may be internal upgrade works to take place in 5 to 10 years, and this may cause noise issues in the immediate surrounding areas.
3. We would require a buffer zone around the external boundary of at least 2 meters where buildings would not be allowed. If there is landscaping in the 2 meter buffer zone, we need to be consulted and approve the landscaping proposal.
4. There needs to be incorporated in the development the disused underground brick sewer main / drainage overflow running between the railway and Kyle Road which presently provides drainage outfall for the terminal station.

Regards

Peter Congerton
Senior Property Officer



AusNet Services

Level 31, 2 Southbank Boulevard,
Southbank Victoria 3006 Australia
Tel +61 3 9695 6164 Fax 8635 7634
Mobile +61 (0) 0438 550 769
peter.congerton@ausnetservices.com.au
www.ausnetservices.com.au

From: Neil McLeod
Sent: Friday, 12 December 2014 2:39 PM
To: Peter Congerton
Cc: Edmond.Lam@smec.com
Subject: FW: Re. Precinct 15 Altona North - Servicing Advice

Hi Peter

As discussed. Would appreciate if you could contact Edmond re his enquiry. Mark Baker has already responded re gas easement (see attached).

Kathleen McClusky
Coordinator Strategic Planning
Hobsons Bay City Council
PO Box 21
ALTONA 3018

2 August 2011

Our Ref: 4729413
Tel: 9695 6164
Fax: 8635 7634

Dear Ms McClusky

PRECINCT 15 – INDUSTRIAL LAND BOUNDED BY KYLE ROAD, BLACKSHAW'S ROAD, NEW STREET AND THE WEST GATE FREEWAY, ALTONA NORTH.

We acknowledge receipt of your letter dated 3 May 2011 requesting comments from SPI PowerNet Pty Ltd ("SPI") regarding the potential future rezoning of former industrial parcels of land to allow a residential use outcome in the area noted as Precinct 15 on the plan enclosed with your letter.

SPI owns land at 70 – 84 Kyle Road, Altona North known as the Brooklyn Terminal Station (BLTS), being to the north in the Precinct area shown on the attached aerial photograph and comprising 4 separate land titles. The land is zoned Industrial 1 Zone under the Hobsons Bay Planning Scheme.

BLTS was established to secure the reliable supply of electricity to the west of Melbourne. There are two high voltage transmission lines that connect supply to the station, one for Keilor and the other from Newport. Established uses of the site include 220Kv to 66Kv transformers and 220Kv to 22Kv transformers. Primary plant contained in two 220Kv switchyards, a 66Kv switchyard and a 22Kv switchyard including circuit breakers and various protection and control equipment. There is also a control building housing essential relay and protection equipment.

BLTS is also a shared utility service between Powercor and Jemena distribution companies. I understand that Powercor has written to you with comments on the proposed rezoning.

Part of the land owned by SPI contains the abandoned original Melbourne outfall sewer tunnel. This land is a strip approximately 20 meters in width running between the Sunshine railway line and Kyle Road and presently provides drainage outfall for BLTS. The future drainage needs at BLTS will require careful consideration and planning should the surrounding land be developed.

We note from the Hobsons Bay Planning Scheme that the purpose of land zoned as residential is to encourage residential development that respects the neighbourhood character and to allow for educational, recreational, religious, community and a limited range of other non-residential uses to serve the local community.

SPI takes the view that rezoning the land immediately surrounding BLTS to residential is inconsistent with the planning scheme and would conflict with existing land use. Should rezoning take place, there could be residences in close proximity to a high voltage electricity facility that does not lend itself to be compatible.

A residence in close proximity to terminal stations is inappropriate and can create many issues relating to loss of residential amenity, reduce security for the terminal station and difficulties in providing continued maintenance and augmentation of the facility.

Should dwellings be allowed in the area, there would need to be extensive buffer zones established and setbacks of development around BLTS to encourage open spaces or land use that discourages residential development.

From the outset, it is SPI's recommendation that the BLTS site is rezoned to Special Use in keeping with the Victorian Planning Provisions that specify this zoning for privately owned utility installations.

Furthermore, we envisage there may be a need for further development of our site which would require easements on adjacent land to cater for additional power line assets, but this is difficult to assess at this time until future planning requirements are known.

Accordingly, SPI would request to be closely involved in any proposed Precinct 15 consulting team established to make recommendations on the future zoning of this area.

Yours sincerely

Peter Congerton
Senior Property officer
SPI PowerNet Pty Ltd



LEGEND

- FENCE
- FENCE ON TITLE
- TITLE BOUNDARY



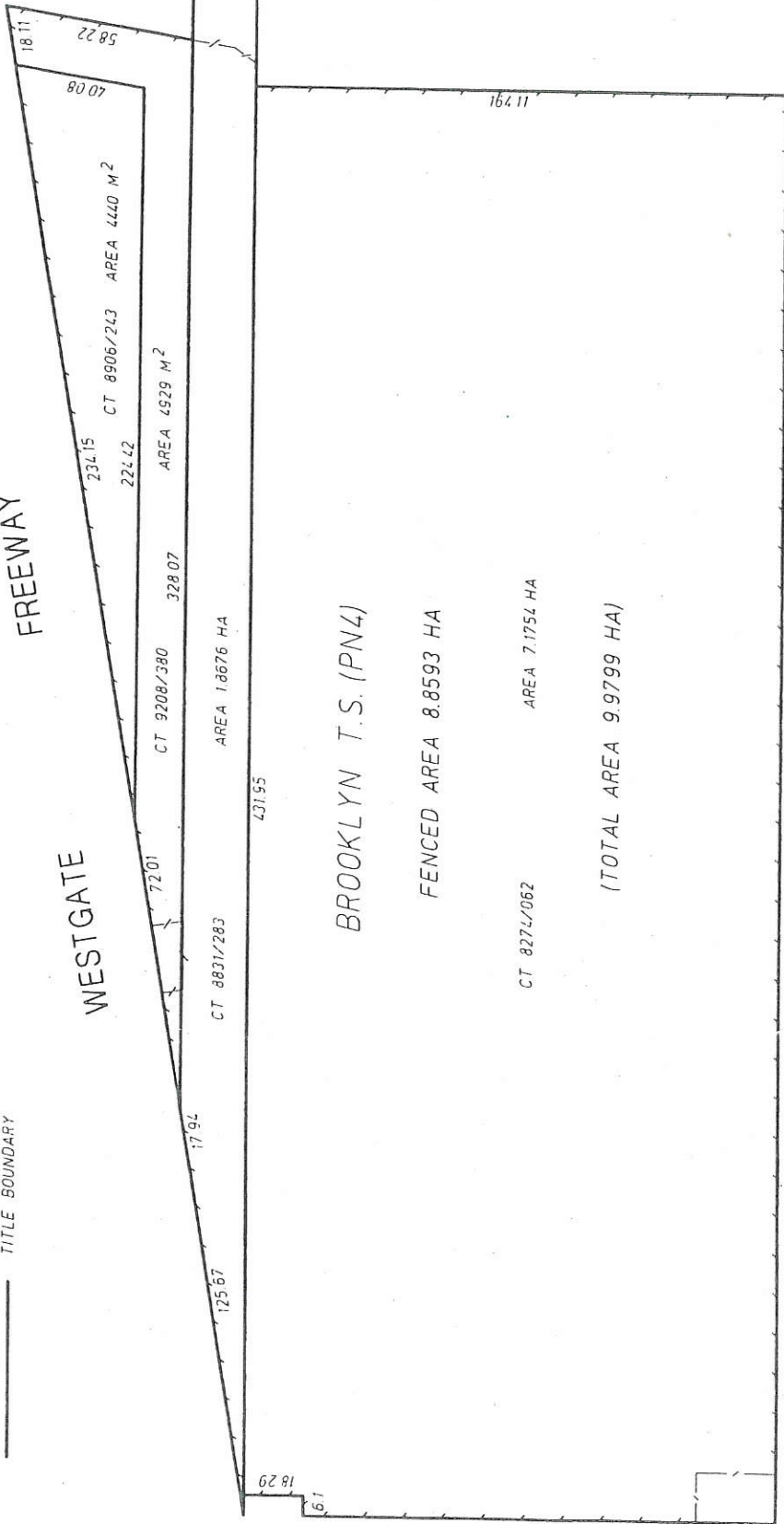
FREEWAY

WESTGATE

RAILWAY

ROAD

KYLE



REVISION

PowerNet		ASSET MANAGEMENT	
ORIGINAL SCALE		1 : 1500	
BROOKLYN TERMINAL STATION (PN04)		DRG. No. PN04	
PROPERTY ASSESSMENT PLAN			
DRAWN		J McINDOE 6/11/96	
CHECKED		P NIXON 6/11/96	
PREPARED BY		P NIXON	
MANAGER ASSETS			

MELWAY 470117

Powercor

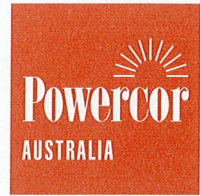
Powercor Australia Ltd
ABN 89 064 651 109

Postal Address: Locked Bag 6
Sunshine Victoria 3020 Australia

www.powercor.com.au

Ardeer Business Centre
740 - 742 Ballarat Road
Ardeer Victoria

Powercor General Enquiries: 13 22 06
Service Difficulties & Faults: 13 24 12
Facsimile: (03) 8363 8201



12 November 2014

Our Reference: 500000206665

Hakan Girgin
SMEC
10/71 Queens Road
Melbourne VIC 3004

Dear Hakan,

**RE: PROPOSED DEVELOPMENT AT BLACKSHAW'S RD (PRECINCT 15),
ALTONA NORTH**

Our System Planning group has reviewed your application and request for preliminary servicing advice, and we can advise the following with respect to the above mentioned site.

The development site is situated behind the existing Brooklyn Terminal Station (BLTS). This Terminal Station was recently rebuilt and expanded to cater for potential load growth in this region.

Considering your development inquiry, there will be a requirement to build at least one and may be more new feeders from BLTS 22kV along with new 22kV switchgear inside BLTS. These feeders can have backup from the existing Network by establishing tie-ins at appropriate locations.

A clear buffer zone area is required around the Terminal Station and development area to cater for any future electrical network installation out of the Terminal Station. The buffer zone shall be liberally designed for proximity of the electrical services including overhead lines along the Terminal Station boundary.

Since the Terminal Station is shared assets, the developer will need to contact Ausnet and Jemena for their requirements in addition to Powercor requirements.

There are existing electrical easements within the proposed development area which are in service. The details are attached for reference. These easements have to be maintained with access for Powercor use.

A more detailed Network Planning strategy for the area will be developed when we receive a detailed overall plan and application request from the developer for the initial staged works.

If you require any further information in relation to this matter, please contact me on the number provided below.

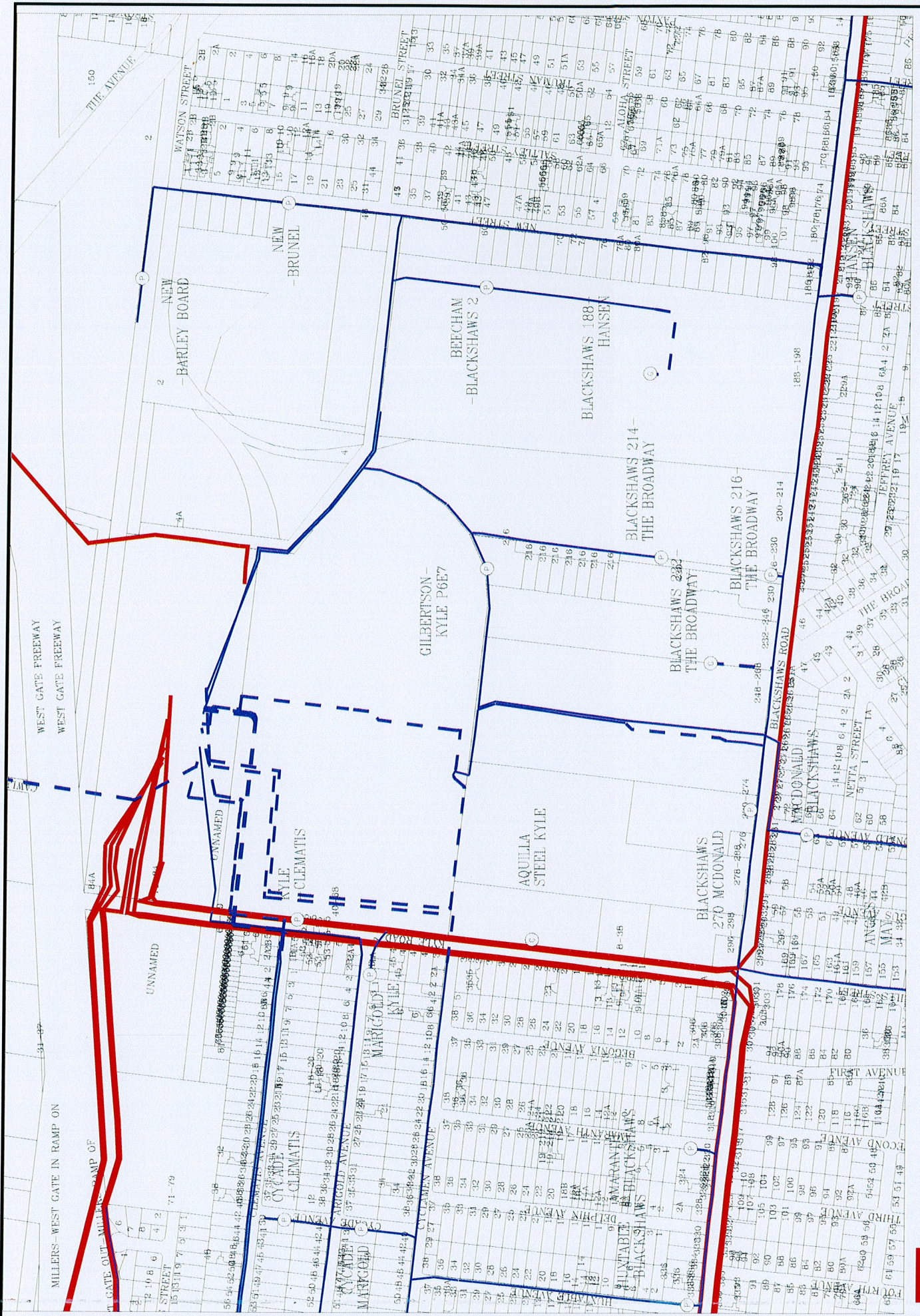
Yours faithfully

A handwritten signature in black ink, appearing to read 'Glenn Hauber', with a stylized, flowing script.

Glenn Hauber
Senior Customer Projects Advisor

Telephone: (03) 8363 8240

(Office Use Only: CR 304961418)



Network Operations– Asset Analysis
Unit 9, 677 Springvale Road
Mulgrave, Victoria, 3178

Date: 25/09/2014
To: Mr David Mutton
Company: SMEC Urban
Address: Level 10 71 Queens Rd
Melbourne, VIC 3000

ENQUIRY DETAILS

Location: Blackshaws Road, Altona North, VIC 3025
Sequence No.: 41743346
DBYD Reference: 8368008

In relation to your enquiry of the above address, Optus advises as follows:

The records of Optus disclose that there ARE underground FIBRE OPTIC TELECOMMUNICATIONS cables in the vicinity of the above enquiry as per the attached plan(s). This reply is valid for a period of 30 days from the date above.

IMPORTANT INFORMATION

Drawings and Plans provided by Optus are reference diagrams which were correct at the time the asset was built. Exact ground cover and alignments cannot be provided with any certainty as these may alter over time. Depths of Telecommunications plant vary considerably as do alignments. It is essential to uncover the asset and positively identify the assets exact location.

Optus plans are provided as a guide only and the completeness of the information cannot be guaranteed.

“DUTY OF CARE”

When working in the vicinity of Telecommunications plant you have a legal “Duty of Care” that must be observed.

It is the responsibility of the owner and any consultant engaged by the owner, including an architect, consulting engineer, developer and head contractor to design for minimal impact to Optus plant. Optus will provide assistance at this design stage through the provision of plans and sketches or consultation.

It is the owner’s (or constructor’s) responsibility to:-

- a) Request plans of Optus plant for a particular location at a reasonable time before construction begins. If you have doubts about the presence of Optus assets we strongly recommend that you engage an Optus Accredited plant locator.
- b) Visually locate Optus plant by hand digging or using non-destructive water jet method where construction activities may damage or interfere with Optus plant
- c) Contact Optus Network Operations – Asset Analyst (details below) if Optus plant is wholly or partly located near construction activities

CRIMINAL CODE ACT 1995

The following is an extract from the Criminal Code Act 1995 and is applicable to Optus plant

Chapter 10 National infrastructure

Part 10.6 Telecommunications Services

Division 474 Telecommunications offences

Sect 474.6 Interference with facilities

- 1) A person is guilty of an offence if the person tampers with, or interferes with, a facility owned or operated by:
 - (a) a carrier; or
 - (b) a carriage service provider; or
 - (c) a nominated carrier.

Penalty: Imprisonment for 1 year.

- 2) For the purposes of an offence against subsection (1), absolute liability applies to the physical element of circumstance of the offence, that the facility is owned or operated by a carrier, a carriage service provider or a nominated carrier.
- 3) A person is guilty of an offence if:
 - (a) the person tampers with, or interferes with, a facility owned or operated by:
 - i.a carrier; or
 - ii.a carriage service provider; or
 - iii.a nominated carrier; and
 - (b) this conduct results in hindering the normal operation of a carriage service supplied by a carriage service provider.

Penalty: Imprisonment for 2 years.

- 4) For the purposes of an offence against subsection (3), absolute liability applies to the following physical elements of circumstance of the offence:
 - (a) that the facility is owned or operated by a carrier, a carriage service provider or a nominated carrier;
 - (b) that the carriage service is supplied by a carriage service provider.
- 5) A person is guilty of an offence if:
 - (a) the person uses or operates any apparatus or device (whether or not it is comprised in, connected to or used in connection with a telecommunications network); and
 - (b) this conduct results in hindering the normal operation of a carriage service supplied by a carriage service provider.

Penalty: Imprisonment for 2 years.

DAMAGE

ANY DAMAGE TO OPTUS NETWORK MUST BE REPORTED TO 1800 500 253 IMMEDIATELY

The owner is responsible for all plant damage when works commence prior to obtaining Optus Drawings, or failure to follow instructions.

Optus reserves the right to recover compensation for loss or damage to its cable network and other property including consequential loss

ASSET RELOCATIONS

You are not permitted to relocate or alter any Optus assets or network under any circumstance.

For all enquiries relating to the relocation of Optus assets please email Fibre.Locations@optus.net.au

ESSENTIAL PRECAUTIONS AND APPROACH DISTANCES

Note: If the following clearances cannot be maintained, please contact Optus Network Operations Asset Analysis Team for advice on how to resolve the situation.

1. On receipt of plans and before commencing excavation work or similar activities near Optus plant, carefully locate the plant first to avoid damage. Engage an Optus accredited locator to undertake exposure of the Optus plant when working within the following approach distances.

Where Optus plant is in an area where road and footpaths are well defined by kerbs or other features a minimum clear distance of 1.0m must be maintained from where it could be reasonably presumed that plant would reside.

In non established or unformed reserves this distance must be at least 3 metres.

In country or rural areas which may have wider variations in reasonably presumed plant presence, the following minimum approach distance applies:

- a) Parallel to plant: 5 metres

Note: Indicated depths may vary significantly and pot-holing needs to be undertaken within extreme care, commonsense and using techniques least likely to damage cables. Potholing is only to be undertaken by an Optus accredited plant location contractor.

If construction work is parallel to Optus plant, then careful hand digging or using non destructive water jet method (pot holing) at least every 5m is required to establish the location of the plant, confirming the location of the plant prior to work commencing.

Under no circumstances is crossing of Optus plant to be performed without first exposing the Optus plant and having an Optus representative present onsite.

2. Maintain the following minimum clearance between construction activity and the actual location of Optus plant.

Jackhammers / Pneumatic Breakers	Not within 1.0m of actual location
Vibrating Plate or Wacker Packer Compactor	Not within 0.5m of actual location 300mm compact clearance before compactor can be used across Optus ducts 750mm compact clearance cover before compactor can be used across Optus <i>Direct Buried</i> cable
Boring Equipment (in-line, horizontal and vertical)	Not within 5.0m of actual location without Optus representative onsite Constructor to hand dig or non-destructive water jet method (pot holing) and expose the Optus plant Not to cross the Optus plant without first exposing the plant at the crossing point and without Optus representative onsite
Heavy vehicle Traffic (over 3 tonnes)	Not to be driven across Optus ducts or plant with less than 600mm of cover Depth to be verified via hand digging
Mechanical Excavators, Farm ploughing, Boring, Tree removal, fencing	Not within 1.0m of actual location Constructor to hand dig or use non-destructive water jet method (pot holing) and expose plant

All Optus pits and manholes should be a minimum of 1.0m in from the back of kerb or within 15m of street intersection after the completion of your work.

All Optus conduit should have the following minimum depth of cover **after the completion of your work:-**

- **Footway 600mm**
- **Roadway 1000mm at drain invert and at road centre crown**

In cases where it is considered that these clearances cannot be maintained at the completion of works advice is to be sought from the Optus Damages and Relocations Team

FURTHER ASSISTANCE

Assistance can be obtained by contacting Optus Network Operations Asset Analysis on **1800 505 777**

Where an on-site location is provided, the owner is responsible for all costs associated with hand digging or use of non-destructive water jet method (pot holing) to visually locate and expose Optus plant.

If plant location drawings or visual location of Optus plant by digging reveals that the location of Optus plant is situated wholly or partly where the owner plans to work, then Optus Damages and Relocates Team must be contacted through Optus Network Operations Asset Locations to discuss possible engineering solutions.

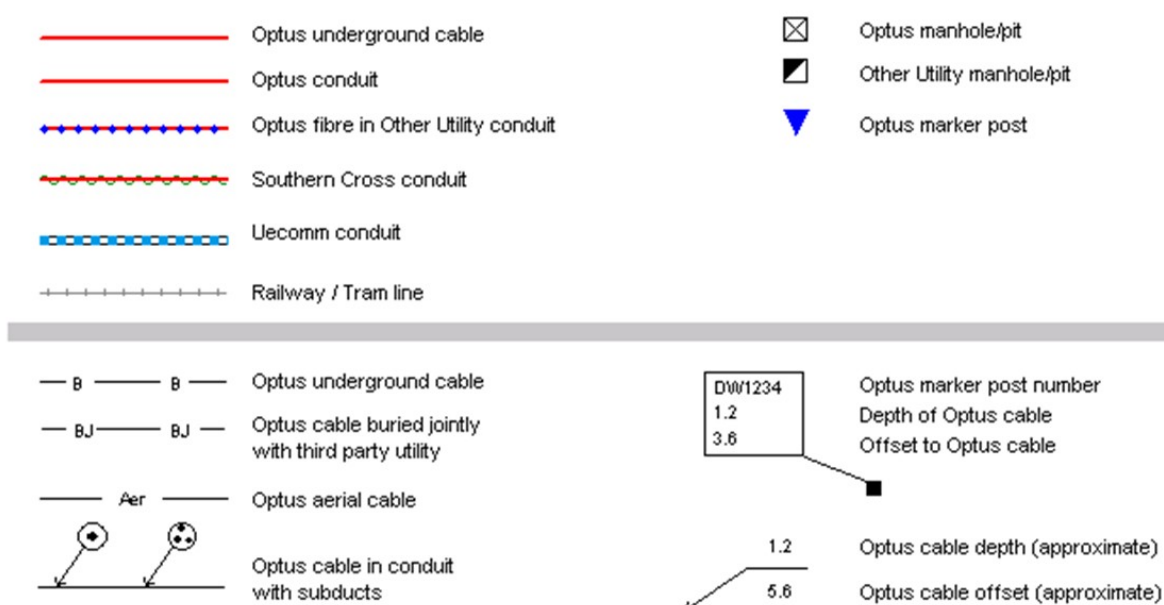
PRIVATE RESIDENTIAL LANDOWNERS and RURAL LANDOWNERS

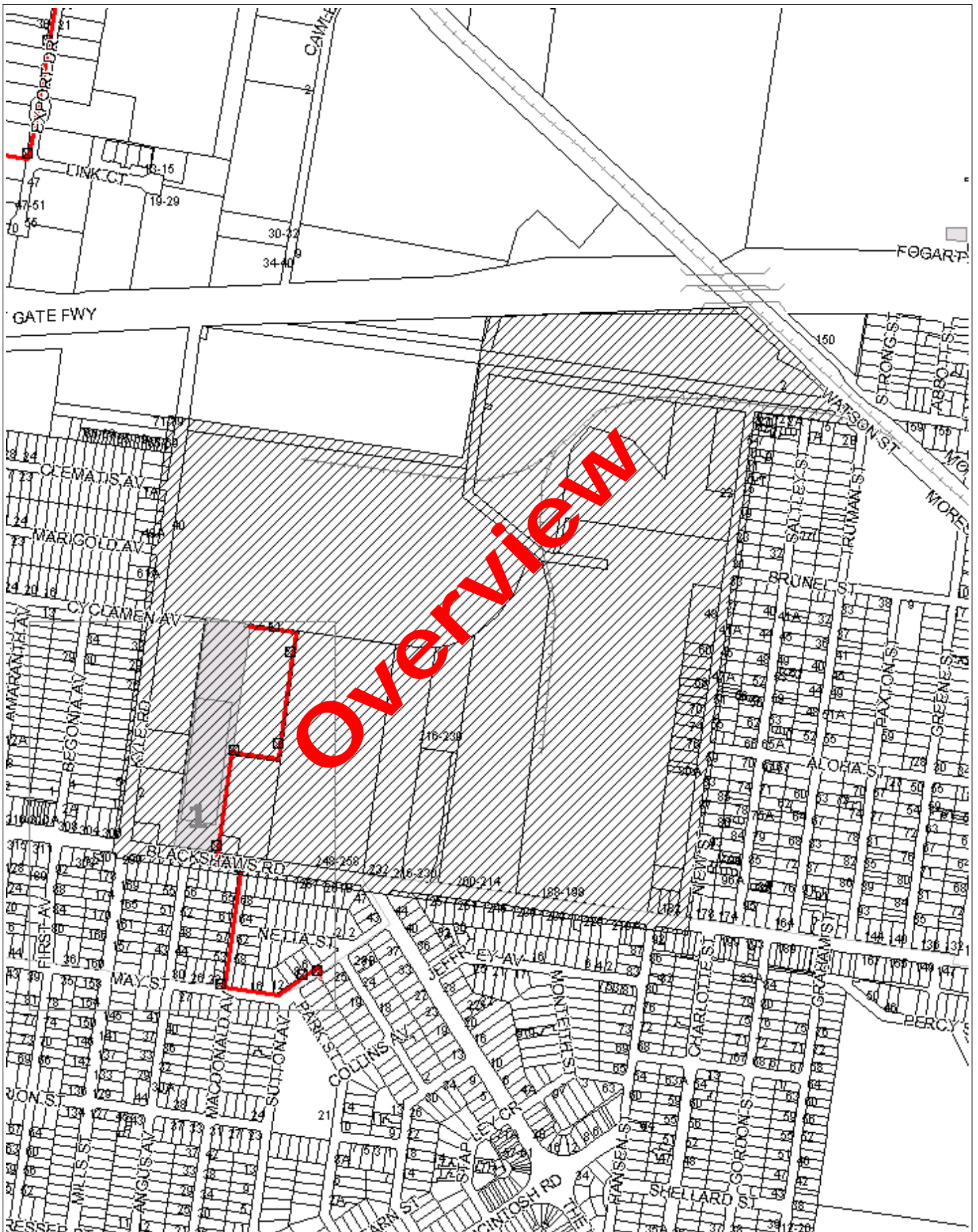
Where Optus owned cable crosses private residential property or agricultural land, Optus may provide a once off free onsite electronic cable location. Optus Network Operations Asset Analyst will provide assistance in determining whether a free on-site location is required.

Please note:

- The exact location, including depth of cables can only be verified by pot holing which is not covered under this service
- This service is only available to assist private residential land owners and rural land owners
- The service covers one hour onsite only. Additional time will be charged at the current nominal rate.

OPTUS ENGINEERING DRAWING SYMBOLS





WARNING: This document is confidential and may also be privileged. Confidentiality nor privilege is not waived or destroyed by virtue of it being transmitted to an incorrect addressee. Unauthorised use of the contents is therefore strictly prohibited. Any information contained in this document that has been extracted from our records is believed to be accurate, but no responsibility is assumed for any error or omission. Optus Plans and information supplied are valid for 30 days from the date of issue. If this timeline has elapsed please raise a new enquiry.

Sequence Number: 41743346

Date Generated: 25/09/2014



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





Mobil Oil Australia

Sequence No. 41743352		Customer ID No. 344517	
Phone: 0398690843 Fax: 0398690902	Contact: Mr David Mutton Company: SMEC Urban Address: Level 10 71 Queens Rd Melbourne, VIC, 3000		
From: Mobil Oil Australia Pty. Limited			
Contacts: Mr. Eamon Miremadi Office – 03 8346 6945 Mobile – 0402 760 165 Email – eamon.miremadi@exxonmobil.com Mr. John Waters Mobile – 0409 006 109		Postal Contact: Mobil Oil Australia Pty. Ltd. P.O. Box 1095 Tullamarine Vic 3043 Attention: Mr. Eamon Miremadi	

REGARDING:

Proposed works in the vicinity of Licensed Pipelines 118 or 119. Melway Map Reference: 41D11,41D12,41E11,41E12,41F11,41F12,55C1,55D1,55E1,55F1

RESPONSE

We have assessed the proposed works identified, and **BASED ON THE SUPPLIED DATA**, believe that they **MAY HAVE AN IMPACT** on Licensed Pipelines 118 or 119. Refer attached Melway drawing as a guide only.

We request that you DO NOT proceed with the proposed works.
Please contact Mobil Oil Australia Pty. Ltd. for further instructions.

IMPORTANT

- Please read and understand all the information and disclaimers provided below.
- Sketches, Plans and Descriptions provided are only a general indication of pipeline location. If works are being carried out in the vicinity of the pipeline or elements of the pipeline system, then activity must cease, immediate contact should be made with our representative and on site location of the pipeline will be carried out where appropriate.
- Whilst information provided is as accurate as possible, it is impossible to ascertain the location of all elements of the pipeline system and therefore appropriate precautions must be taken.

DUTY OF CARE

When working in the vicinity of the pipeline you have a legal "Duty of Care" that must be observed. The following points shall be considered:

1. It is the responsibility of the owner or any consultant or contractor engaged by the owner to ensure that works in the vicinity of the pipeline are carried out in accordance with The Pipelines Act and Mobil Specification No. MES – 410 Rev2 "Protection Of Pipelines For Works Near Licensed Pipelines 118 & 119".
2. It is the owners or constructors responsibility to:
 - Request plans for the pipeline at a reasonable time before construction begins.
 - When in the vicinity of the pipeline request on site location of the pipeline be performed.
 - Contact our representative immediately if the pipeline or elements of the pipeline system are found in vicinity of construction activities and cease such activities.

DAMAGE

Any damage to the pipeline must be reported to the pipeline control room immediately on 03 9338 2114.

- The owner is responsible for all plant damage when works are commenced prior to obtaining pipeline plans or failure to follow Mobil's instructions.
- Mobil Oil Australia Pty Limited reserves all rights to recover compensation for loss or damage to Licensed Pipelines 118 & 119 including consequential losses.



BP Australia



Dial Before You Dig (DBYD) Pipeline Location Information

BP Australia Pty Ltd
717 Bourke Street
Docklands, VIC 3008

To: ('Enquirer')
SMEC Urban - Mr David Mutton
Level 10 71 Queens Rd
Melbourne VIC 3000

Enquiry Details

Utility ID	90307
Sequence Number	41743353
Enquiry Date	25/09/2014 14:54
Response	AFFECTED
Address	Blackshaws Road Altona North
Location in Road	CarriageWay, Footpath, Nature Strip
Activity	Planning & Design

Enquirer Details

Customer ID	344517		
Contact	Mr David Mutton		
Company	SMEC Urban		
Email	david.mutton@smec.com		
Phone	0398690843	Mobile	0407315601

Enquirer Responsibilities

This pipeline location information must be read in conjunction with the DBYD Response Form provided to you (the enquirer) by Mipela GeoSolutions on behalf of BP Australia. (FRM ANZ 43-01 09_DBYD.pdf)

When working in the vicinity of a pipeline you have certain legal obligations with which you must comply. The purpose of these obligations is to ensure safe work.

In commencing work in the vicinity of a pipeline following receipt of this DBYD Response Form, you are deemed to have accepted the terms and conditions attached.



Overview Map

Sequence No: 41743353

Blackshaws Road Altona North



BP Australia makes every effort that the information contained on this map is up to date and correct but accepts no responsibility for this information.

The information is provided as a guide only.



0 0.1km

Imagery sourced from Open StreetMaps

LEGEND:

1

Detail Map

BP Newport Asset



Affected DBYD Work



Map 1

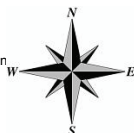
Sequence No: 41743353

Blackshaws Road Altona North



BP Australia makes every effort that the information contained on this map is up to date and correct but accepts no responsibility for this information.

The information is provided as a guide only.



0 0.02km

Imagery sourced from Open StreetMaps

LEGEND:

BP Newport Asset

Property Boundary

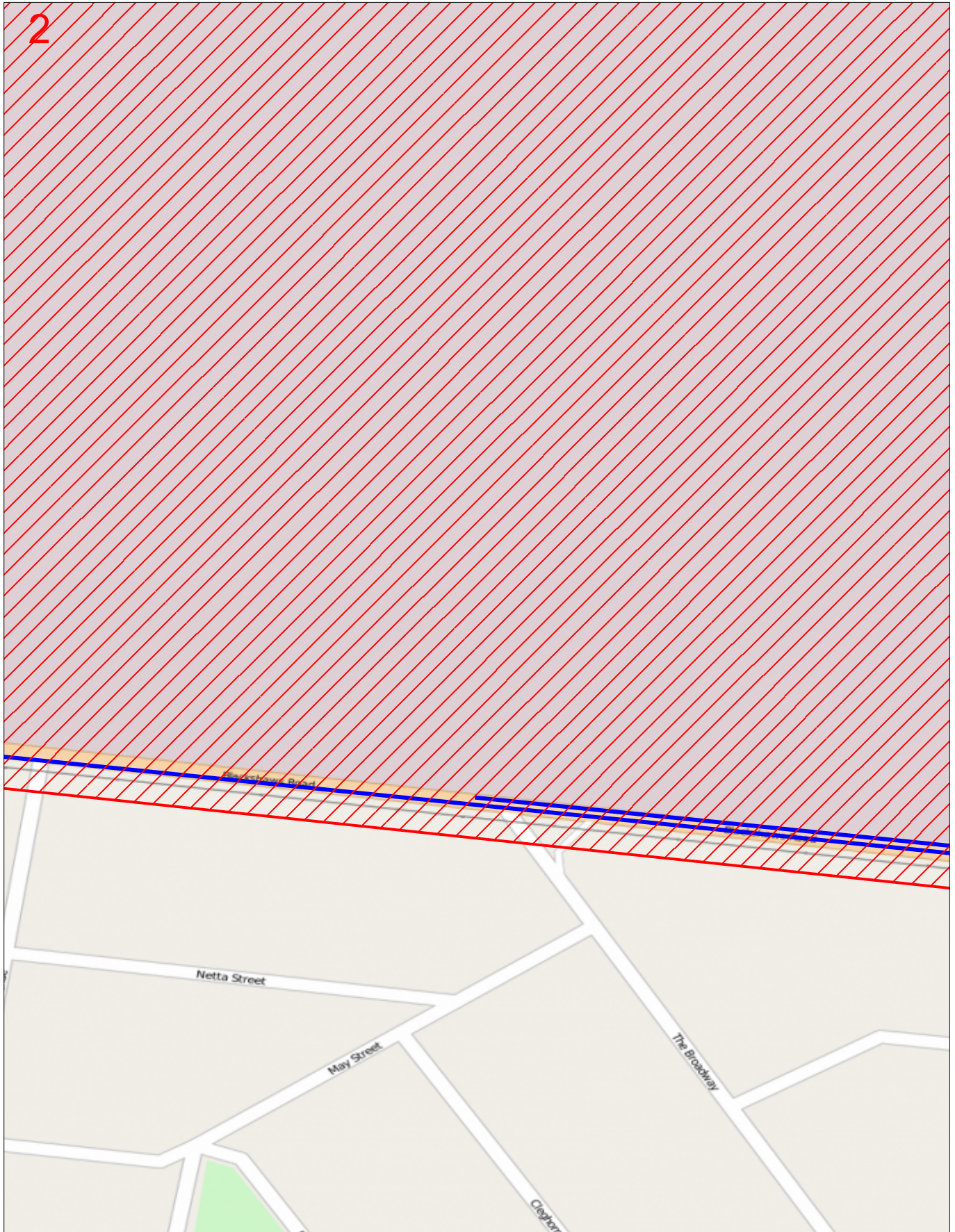
Affected DBYD Work Area



Map 2

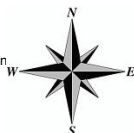
Sequence No: 41743353

Blackshaws Road Altona North



BP Australia makes every effort that the information contained on this map is up to date and correct but accepts no responsibility for this information.



The information is provided as a guide only.





0 0.02km

Imagery sourced from Open StreetMaps

LEGEND:

-  BP Newport Asset
-  Property Boundary

-  Affected DBYD Work Area
-  Work Area



Map 3

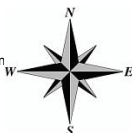
Sequence No: 41743353

Blackshaws Road Altona North



BP Australia makes every effort that the information contained on this map is up to date and correct but accepts no responsibility for this information.

The information is provided as a guide only.



0 0.02km

Imagery sourced from Open StreetMaps

LEGEND:

 BP Newport Asset

 Property Boundary

 Affected DBYD Work Area

Dial Before You Dig (DBYD) Response Form



This DBYD Response Form must be read in conjunction with the pipeline location information provided to you (the enquirer) by Mipela GeoSolutions on behalf of BP Australia Pty Ltd.

When working in the vicinity of a pipeline you have certain legal obligations with which you must comply. The purpose of these obligations is to ensure safe work.

In commencing work in the vicinity of a pipeline following receipt of this DBYD Response Form, you are deemed to have accepted the terms and conditions below.

Terms and Conditions

1. It is the responsibility of the DBYD enquirer or any contractor engaged by the DBYD enquirer to perform the construction or excavation to ensure that works in the vicinity of the pipeline are carried out in accordance with the relevant State Act and / or Regulation that deals with pipelines. These obligations include, but are not limited to; not to obstruct the operation of a pipeline, not to tamper with a pipeline, not to dig near a pipeline and not to build near a pipeline.
2. Any construction or excavation work within **5 metres of any above - or below - ground BP Pipeline** requires a BP representative to be present. All requests for BP representation shall be made during normal business hours (9am-5pm AEST) by contacting the relevant Terminal or Facility as listed below. A minimum of 2 (two) business days notice must be provided.
3. It is the responsibility of the DBYD enquirer or any contractor engaged by the DBYD enquirer performing the works to:
 - Request plans for the pipeline within a reasonable timeframe before construction is scheduled to commence,
 - Request BP personnel attend site to discuss work to be undertaken with a minimum of 2 (two) business days notice,
 - Together with the BP representative, confirm the pipeline location on site,
4. The excavator or constructor engaged by the DBYD enquirer shall ensure:
 - No mechanical equipment shall be used within 1m of the pipeline in any radial direction, even after the pipeline location has been proved, except when approved by, and under explicit "on-site" written direction from a BP representative,
 - Under no circumstances is mechanical equipment to be used closer than 0.3m to the pipeline. Exposure of a buried pipeline shall be performed by hand digging to minimise the risk of pipeline or coating damage,
 - The minimum clearance from a buried BP pipeline for any buried structure shall be no less than 0.3m,
 - The minimum clearance from a buried BP pipeline for parallel installations shall be no less than 0.5m,
 - Should the BP pipeline be exposed, all backfill within 150mm around the pipeline shall be clean sand in accordance with AS 2885.1,
 - Where boring is to take place under or over the BP pipeline, BP approved measures shall be employed to ensure that the BP pipeline and coating will not be damaged and a separation of at least 0.3m between the pipeline and bore is maintained,
 - Time allowance shall be made for BP to conduct Pipeline coating tests prior to backfilling to ensure that no coating damage has occurred due to the excavation works.

The enquirer who performs, or subcontracts the performance of, the work activity is responsible for any damage to BP owned or operated pipelines caused by the activity. BP reserves the right to recover compensation for damage and or loss caused by the damage and failure to follow the terms and conditions above.

Dial Before You Dig (DBYD) Response Form

Damage

Should any damage to the BP pipeline occur or be suspected to have occurred:

Immediately contact BP Emergency Hotline on 1800 182 727

1. Report Emergency as a Pipeline Incident
2. Give your name and your contact number
3. Give exact location of the incident
4. Describe the extent of the incident

In the event of pipeline damage or suspected damage, and if safe to do so:

- Remove all ignition sources from the area, including mobile phones and other portable electronic devices
- Switch off any motor vehicles or generators
- Establish an exclusion zone and control any entry into that zone until relieved by suitable emergency personnel

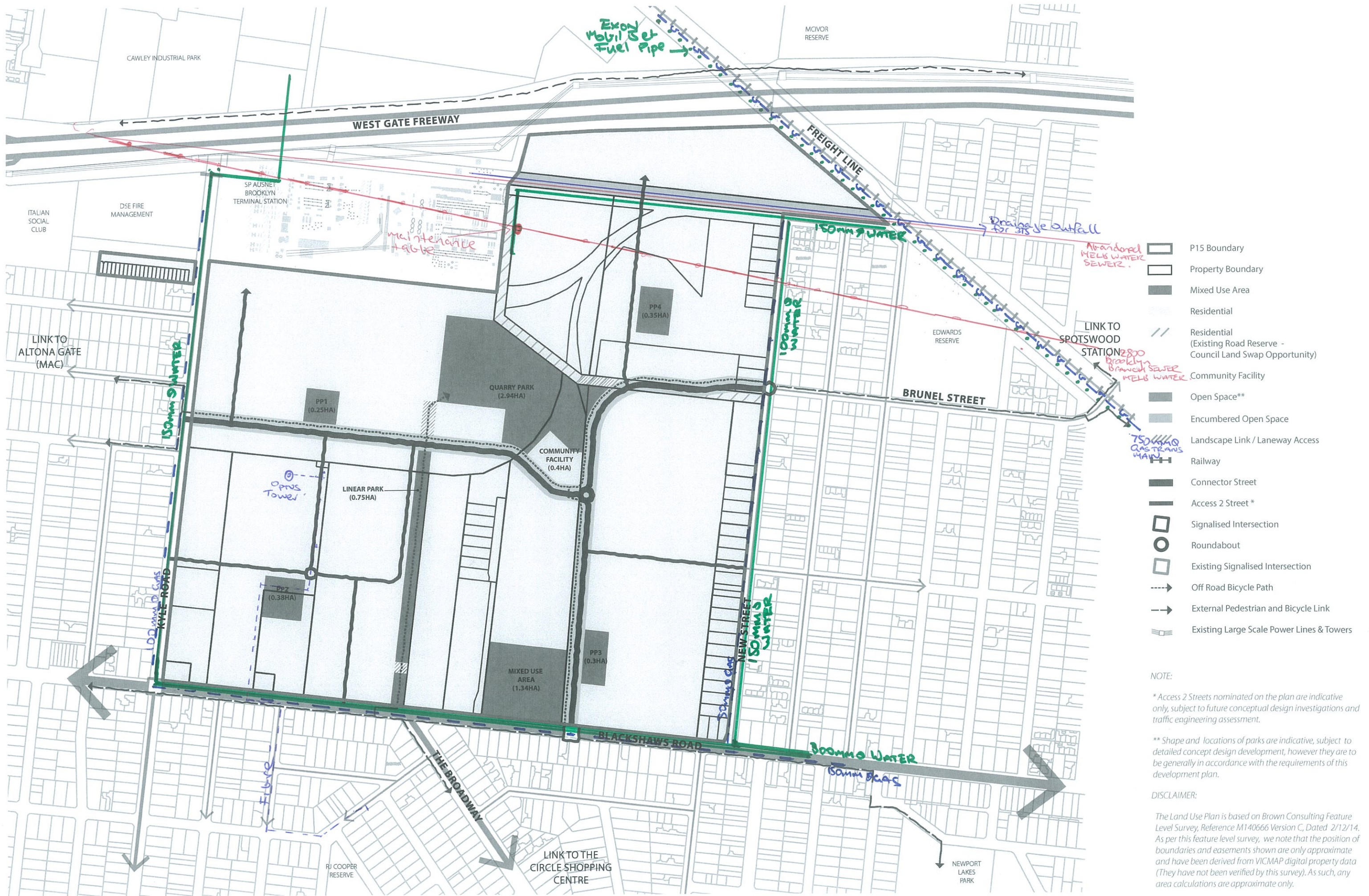
BP Contact

Queensland	Contact Number
Cairns	(07) 4051 5155
Townsville	(07) 4721 1595
Cloncurry	(07) 4742 0402
Mackay	(07) 4955 6873
Gladstone	(07) 4972 6817
Whinstanes	(07) 3364 7234
Townsville Bitumen	(07) 4724 9501
Bulwer Kirra Street Bitumen	(07) 3633 9581
Bulwer Island Refinery	(07) 3633 9500
New South Wales	Contact Number
Newcastle	(02) 4961 8433
Victoria	Contact Number
Newport <i>Please contact all three numbers listed</i>	(03) 9268 4573 (BP) (03) 9392 1236 (Shell) (03) 92 87 9569 (Caltex)
Tasmania	Contact Number
Burnie	(03) 6431 4744
Hobart	(03) 6228 8651
South Australia	Contact Number
Largs North	(08) 8242 8201

Dial Before You Dig (DBYD) Response Form

Western Australia	Contact Number
Broome	(08) 9192 8005
Port Hedland	(08) 9140 5800
Geraldton	(08) 9921 1266
Kewdale	(08) 9268 9135
Kalgoorlie	(08) 9091 8950
North Fremantle	(08) 9336 0873
Esperance	(08) 9071 3696

APPENDIX C EXISTING SERVICES SKETCH PLAN



SCALE 1:5000 (A3)

0 100 200

Land Use Plan

Precinct 15, Altona North

PROJ_DRG NO 0314-0167-10 D011

REV 02 DRWN EF

CHKD JM

DATE 20.03.2015

Tract

DOCUMENT / REPORT CONTROL FORM

File Location Name:	L:\Work\FEAS\Paid\30048005F.00_Altona North - Precinct 15\Docs\Reports
Project Name:	Precinct 15 – Altona North
Project Number:	30048005F.00
Revision Number:	D

Revision History

Revision #	Date	Prepared by	Reviewed by
A	17.12.2014	Nathan Hollow	Stephen Watters
B	19.12.2014	Nathan Hollow	Stephen Watters
C	16.01.2015	Nathan Hollow	Stephen Watters
D	23.03.2015	Nathan Hollow	Stephen Watters

Issue Register

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