

DPT Operator Pty Ltd & DPPT
Operator Pty Ltd
Cockle Bay Park Development
Preliminary Utility Services
Infrastructure Assessment

238566-00

Issue | 31 October 2017

This report takes into account the particular instructions and requirements of our client.

It is not intended for and should not be relied upon by any third party and no responsibility is undertaken to any third party.

Job number 238566-00

Arup
Arup Pty Ltd ABN 18 000 966 165



Arup
Level 10 201 Kent Street
PO Box 76 Millers Point
Sydney 2000
Australia
www.arup.com

ARUP

Contents

	Page
1 Introduction	1
1.1 Background	1
1.2 Site Description	2
1.3 Overview of Proposed Development	5
2 Report Intent	7
3 Utility Services Infrastructure	8
4 Protection and Relocation Strategies for Infrastructure Assets	11

Appendices

Appendix A

Ground Floor Plan Sketch

1 Introduction

This report supports the Response to Submissions and amended Concept Proposal associated with a State Significant Development Application (SSDA 7684) submitted to the Minister for Planning and Infrastructure pursuant to Part 4 of the Environmental Planning and Assessment Act 1979 (EP&A Act).

DPT Operator Pty Ltd and DPPT Operator Pty Ltd (the Proponent) is seeking to secure approval to establish concept proposal details for the redevelopment of the Cockle Bay Wharf Building and surrounding area to create a new area of open space and commercial, retail and tourist precinct in the heart of the CBD (now referred to as Cockle Bay Park). The amended concept plan includes:

- A large area of publicly accessible open space;
- New retail outlets, including new food and beverage destinations;
- New cultural and entertainment destinations; and
- A new commercial office tower.

The project will add new open space to the Sydney CBD and help to reconnect the city to the Darling Harbour waterfront. Cockle Bay Park will take its place in a revitalised Sydney CBD and speaks directly to local government objectives to create a ‘Green, Global and Connected City’ (City of Sydney) as well as the strategic vision outlined in ‘Towards Greater Sydney 2056’ to grow the “developing central city”. The vision for this project was developed with consideration for the NSW Government objectives to support and “grow the knowledge industry”, double tourism expenditure and “strengthen our local environment and communities” as outlined in ‘NSW 2021: A Plan to Make NSW Number One’.

1.1 Background

The Proponent controls the lease of the site, and also of the adjacent Darling Park site. The Darling Park site is a successful premium grade office precinct located on the west of the Sydney CBD, the associated Crescent Garden, located to the west of the three existing Darling Park towers, is a key area of open space in this part of the city.

The Proponent has recognised a number key issues with the existing layout of the Darling Park and Cockle Bay precinct, these being:

- The existing Cockle Bay Wharf building is not well integrated with the city, the Western Distributor freeway currently acts as a barrier to separate this area from the CBD;
- Publicly accessible open space is limited to the existing Crescent Garden in Darling Park; and
- The existing Cockle Bay Wharf building is outdated and is not in keeping with the future of Darling Harbour area as a vibrant entertainment and tourist destination.

The Cockle Bay precinct is at risk of being left behind and undermining the significant investment being made in Darling Harbour that will see it return to the world stage as a destination for events and entertainment. Accordingly, the Proponent is taking a carefully considered and staged approach to the complete revitalisation of the site and its surrounds. The envisaged development, which will be facilitated by the proposed building envelopes will:

- Reconnect the city with the Darling Harbour waterfront;
- Create new publicly accessible open space in the heart of the Sydney CBD;
- Create new public land above the Western Distributor;
- Provide new access routes between the city and the ICC Sydney / Darling Harbour Live precinct;
- Support the Sydney economy by providing a new premium commercial building; and
- Refresh and renew an existing entertainment and tourist destination.

1.2 Site Description

The Site is located within Darling Harbour. Darling Harbour is a 60 hectare waterfront precinct on the south-western edge of the Sydney Central Business District that provides a mix of functions including recreational, tourist, entertainment and business.

The Site is located to the immediate south of Pyrmont Bridge, within the Sydney CBD on the eastern side of the Darling Harbour precinct. The Site is located within the City of Sydney local government area (LGA). A locational context area plan and location plan are provided at Figure 1 below.

The project area has been slightly amended by this Response to Submissions, a comparison of the exhibited and now-proposed site area is provided as Figure 2, and the now proposed site area is shown below as Figure 3.

The Darling Harbour precinct is undergoing significant redevelopment as part of the SICEEP, Darling Square, and IMAX renewal projects. The urban, built form and public transport / pedestrian context for Harbourside will fundamentally change as these developments are progressively completed.

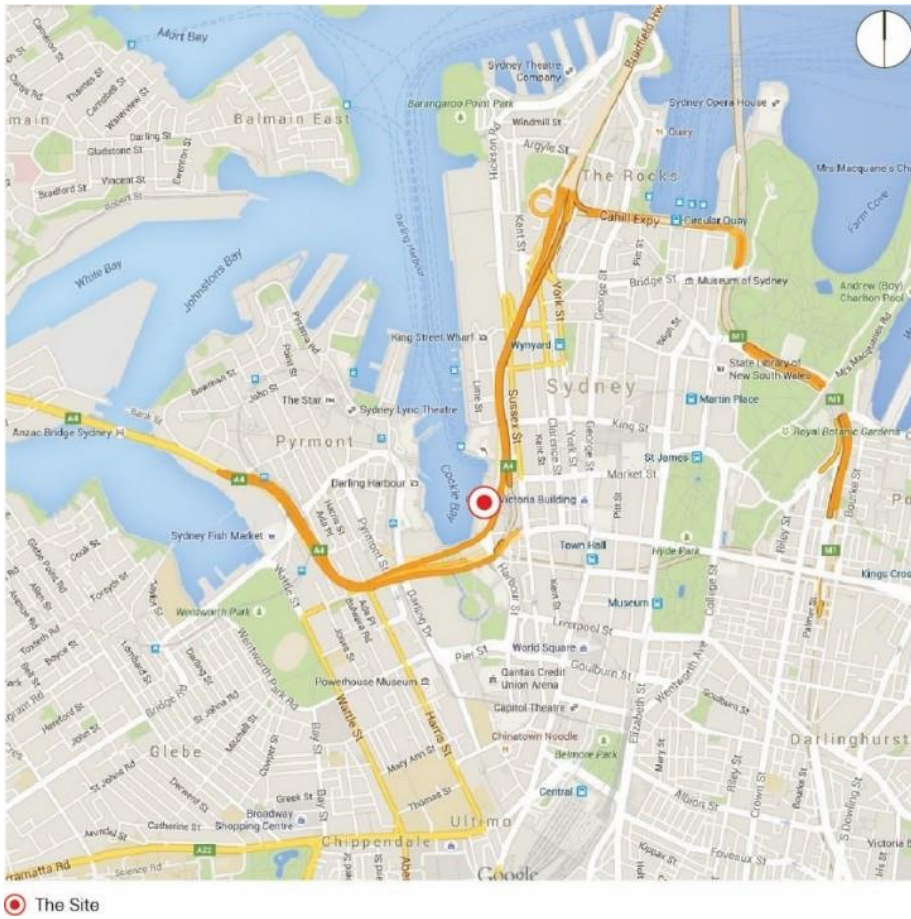


Figure 1 – Location Context Area Plan



- Exhibited Site Area
- Amended Site Area

Figure 2 – Location Plan (revised site area in yellow)



Amended Site Area

Figure 3 – Amended Location Plan

1.3 Overview of Proposed Development

The proposal relates to a staged development application and seeks to establish concept proposal details for the renewal and re-imagining of Cockle Bay Park. The concept proposal establishes the vision, planning and development framework which will be the basis for the consent authority to assess future detailed development proposals. The Cockle Bay Park site is to be developed for a mix of Retail, Cultural and Commercial (Office) uses, including retail and restaurants, commercial offices, and open space.

The Concept Proposal seeks approval for the following key components and development parameters:

- Demolition of existing site improvements, including the existing Cockle Bay Wharf building complex, pedestrian bridge links across the Western Distributor, and obsolete monorail infrastructure;
- Building envelopes;
- Land uses across the site;
- A maximum total Gross Floor Area (GFA) across the Cockle Bay Park of 75,000m² for commercial development and 14,000m² for retail (including food and beverage) development;
- Urban Design and Public Realm design principles to provide a Design Excellence framework; and
- Strategies for utilities and services provision, drainage and flooding, and ecological sustainable development.

2 Report Intent

Arup were commissioned to provide preliminary advice in response to the Secretary's environmental assessment requirements (SEARs) section 11 and in response to submissions received from authorities and the public at large, addressing utility infrastructure assets associated with the proposed development of Cockle Bay Park, focusing on two areas:

- Availability, capacity and location of utility services infrastructure in the vicinity;
- Protection and relocation strategies for infrastructure assets of each utility stakeholders

This report provides a record of that advice.

3 Utility Services Infrastructure

A 'dial before you dig' (DBYD) enquiry was sought (17/07/2017) and the information collated into the sketch presented at Appendix A. Initial verbal discussions were also undertaken with key utility providers. The following provides a summary by service.

In general terms much of the existing building footprint sits over the edge of the harbour and as such the in ground services infrastructure runs to the east of the site.

Water

From the services plan provided in the DBYD plans, the existing town main available is described below:

- Wheat Road - 150mm water main
- Sussex Street - 300mm water main

The water main size is expected to be sufficient for the proposed development.

The water main infrastructure is located within the property boundary and will need to be accommodated and/or diverted to suit the new development, along the new Wheat Road and Sussex Street, and be subject to Sydney Water's approval.

A Sydney Water accredited Water Servicing Coordinator (WSC) is required to be engaged to undertake the application to Sydney Water for the Notice of Requirements for any potential works required for the existing water infrastructure. The budget for any potential works for the existing water infrastructure will be advised by Sydney Water via the Notice of Requirements.

Gas

From the services plan provided in the DBYD plans, the existing natural gas main available is described below:

- Wheat Road – 110mm medium pressure gas main 210kPa

In terms of the existing natural gas main capacity, it appears that it is sufficient for the proposed development subject to Jemena's approval.

The gas main infrastructure is located within the property boundary, along Wheat Road. It will need to be relocated to suit the new development, subject to Jemena's approval.

Existing Sewer Services

From the services plan provided in the DBYD plans, the existing sewer mains available are described below:

- Wheat Road (north) – 225mm sewer main

- Wheat Road (south) – 300mm sewer main

In terms of the existing sewer main capacity, it appears that they are sufficient for the proposed development subject to Sydney Water's approval via Section 73 Application process.

The sewer connection from the building at the north end to the 225mm sewer main will be subject to the available invert level as the connection is more than 30m away from the building.

A Sydney Water accredited Water Servicing Coordinator (WSC) is required to be engaged to undertake the application to Sydney Water for the Notice of Requirements for any potential works required for the existing sewer infrastructure. The budget for any potential works for the existing sewer infrastructure will be advised by Sydney Water via the Notice of Requirements.

Existing Stormwater Services

From the services plan provided in the DBYD plans, the existing stormwater mains available are described below:

- Wheat Road (mid) – 1500mm stormwater main
- Wheat Road (south) – 600mm and 1800 stormwater main

In terms of the existing stormwater main capacity, it appears that they are sufficient for the proposed development subject to Sydney Water's and City of Council's approval.

The stormwater main infrastructure is located within the property boundary and will need to be accommodated and/or diverted to suit the new development.

A Sydney Water accredited Water Servicing Coordinator (WSC) is required to be engaged to undertake the application to Sydney Water for the Notice of Requirements for any potential works required for the existing stormwater infrastructure. The budget for any potential works for the existing stormwater infrastructure will be advised by Sydney Water via the Notice of Requirements.

Electrical

Estimated maximum demand will be in the order of 8 to 11.5 MVA. This will require three substations, likely to be arranged as 3No. 'triplex' chamber substations to Ausgrid standards (to be confirmed as design progresses).

Potential supplies may come from the relatively new Sydney North zone substation, or from other infrastructure as identified by Ausgrid.

Based on available information and preliminary verbal advice from Ausgrid, the Sydney North zone substation on Sussex Street is the likely source of supply for a major new development at this site; it is understood that this substation has sufficient spare capacity.

As per standard practice for new substation installations, the existing Ausgrid in-ground services will be modified in order to provide new high voltage (HV) supplies to the site.

Electrical conduits located within the property boundary may need to be relocated, and is subject to Ausgrid's approval. The extent of relocation is dependent on detailed survey information, structural design and final architectural layouts as the design is further developed.

4 Protection and Relocation Strategies for Infrastructure Assets

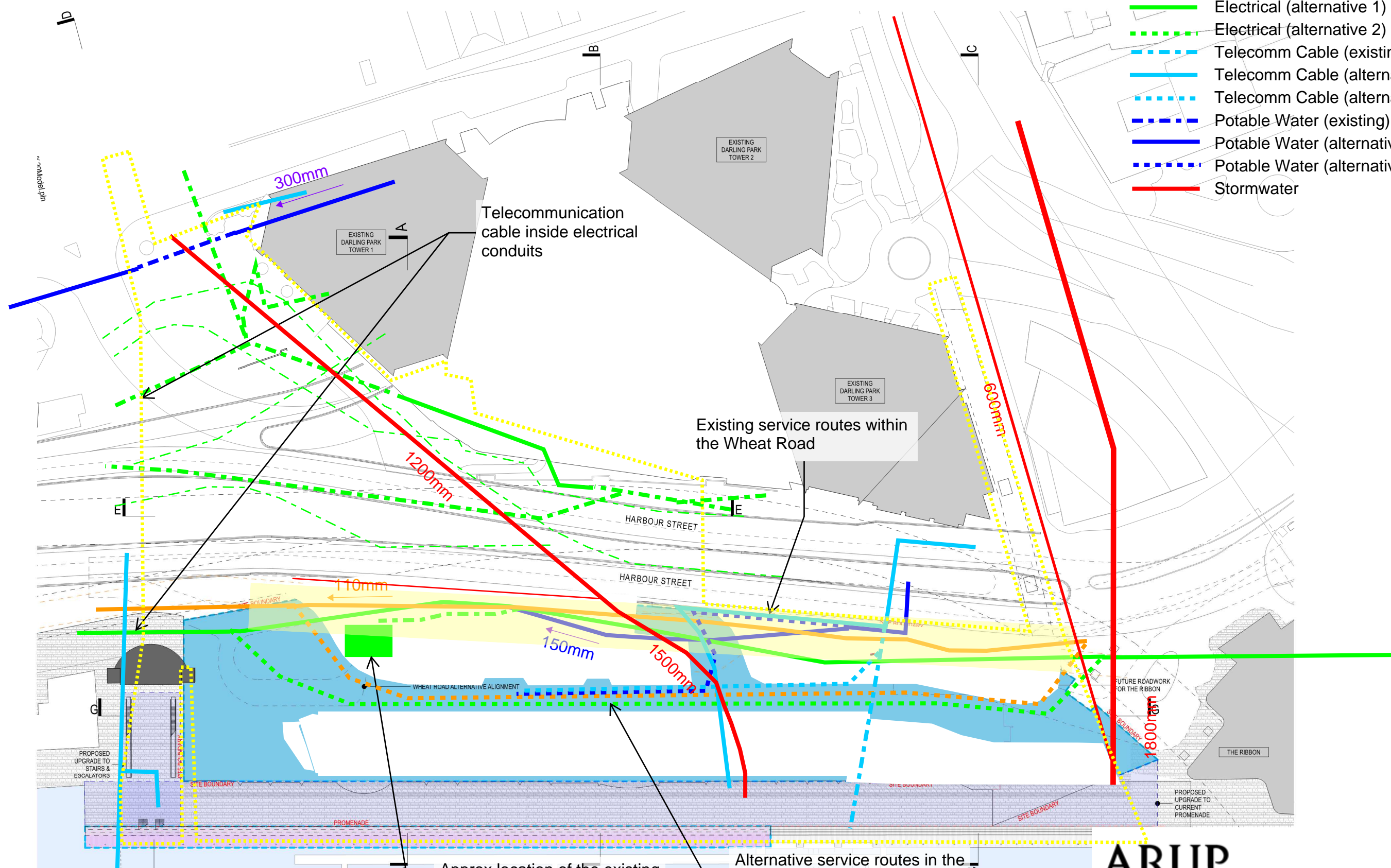
A ‘dial before you dig’ (DBYD) enquiry was sought and the information collated for proposing preliminary plan of protection and relocation strategies to allow for minimal impact and appropriate protection of infrastructure assets. The following lists strategies.

- Being aware of affected utility stakeholders, including: Ausgrid, City of Sydney, Jemena, Optus, Roads and Maritime Services, Sydney Water, and Telstra.
- Locating assets: Assets’ and permanent survey marks’ exact location and assistance will be requested from each utility stakeholders at a reasonable time before work begins. A thorough site examination will be conducted for visible structures through field survey including the use of appropriately qualified personnel and equipment.
- Acquiring approvals: Relevant approvals will be obtained prior to commencement of works on or near infrastructure assets of various utility stakeholders. And all works are undertaken in accordance with the requirements of any approval.
- Reporting damage: Damage of assets will be reported immediately to utility stakeholders any time, any day.

Appendix A

Ground Floor Plan Sketch

- Site Area
- - - Natural gas (existing)
- Natural gas (alternative 1)
- - - Electrical - Conduit (existing)
- - - Electrical - Cable (existing)
- Electrical (alternative 1)
- - - Electrical (alternative 2)
- - - Telecomm Cable (existing)
- Telecomm Cable (alternative 1)
- - - Telecomm Cable (alternative 2)
- - - Potable Water (existing)
- Potable Water (alternative 1)
- - - Potable Water (alternative 2)
- Stormwater



Notes:
 The locations of all service routes are approximate and are subject to a detailed site survey. Relocation of all service lines are diagrammatic only and all works will be subject to each utility stakeholder's approval

Approx location of the existing substation, which will be demolished;
 3 or 4 new substations will needed to be established

Alternative service routes in the new Wheat Road if divided

ARUP

Job Title:	Cockle Bay Park Development
Job No.:	238566
Sketch Title:	Existing Site Infrastructure & Upgrade Options
Sketch No.:	
Date:	31 October 2017 By: SRC