



CONSULTING CIVIL & TRAFFIC ENGINEERS, RISK MANAGERS.



Project: Local Structure Plan – Rowley Road Industrial Precinct,
Forrestdale
Servicing Report

Client: Turner Master Planners and Gray and Lewis for the
landowners

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1. Introduction and Background

Shawmac was commissioned by Turner Master Planners Australia and Gray & Lewis on behalf of the landowners to prepare a preliminary servicing report associated with the proposed rezoning to industrial use of Lots 5, 7 and 9 Oxley Road, Lots 6, 8, 10 & 200 Rowley Road, part of Lot 12 Rowley Road and 5066 Kargotich Road.

Lots 5, 7 & 9 are owned by RE & LJ Roney, C & F Valentino and N D'Orazio, M Jabado and G Di Flori respectively. Existing Lots 6, 8 and 200 Rowley Road are managed by Maddestra Group and Lot 10 Rowley Road is managed by Gray & Lewis. Lot 12 Rowley Road is owned by SM Catelloni and Lot 5066 is owned by DM Kendrick.

1.1 Purpose

The purpose of this report is to detail existing infrastructure within the immediate area of the proposed development and identify any deficiencies, necessary improvements/upgrades to existing or new services and to identify whether there are any constraints to the development with respect to the required servicing infrastructure.

2. Site Location

The subject land area is located between Rowley Road, Oxley Road and to the west of Tonkin Hwy in Forrestdale, approximately 25km south-east of the Perth CBD and is approximately 290ha in area. Figure 1 shows the site location.

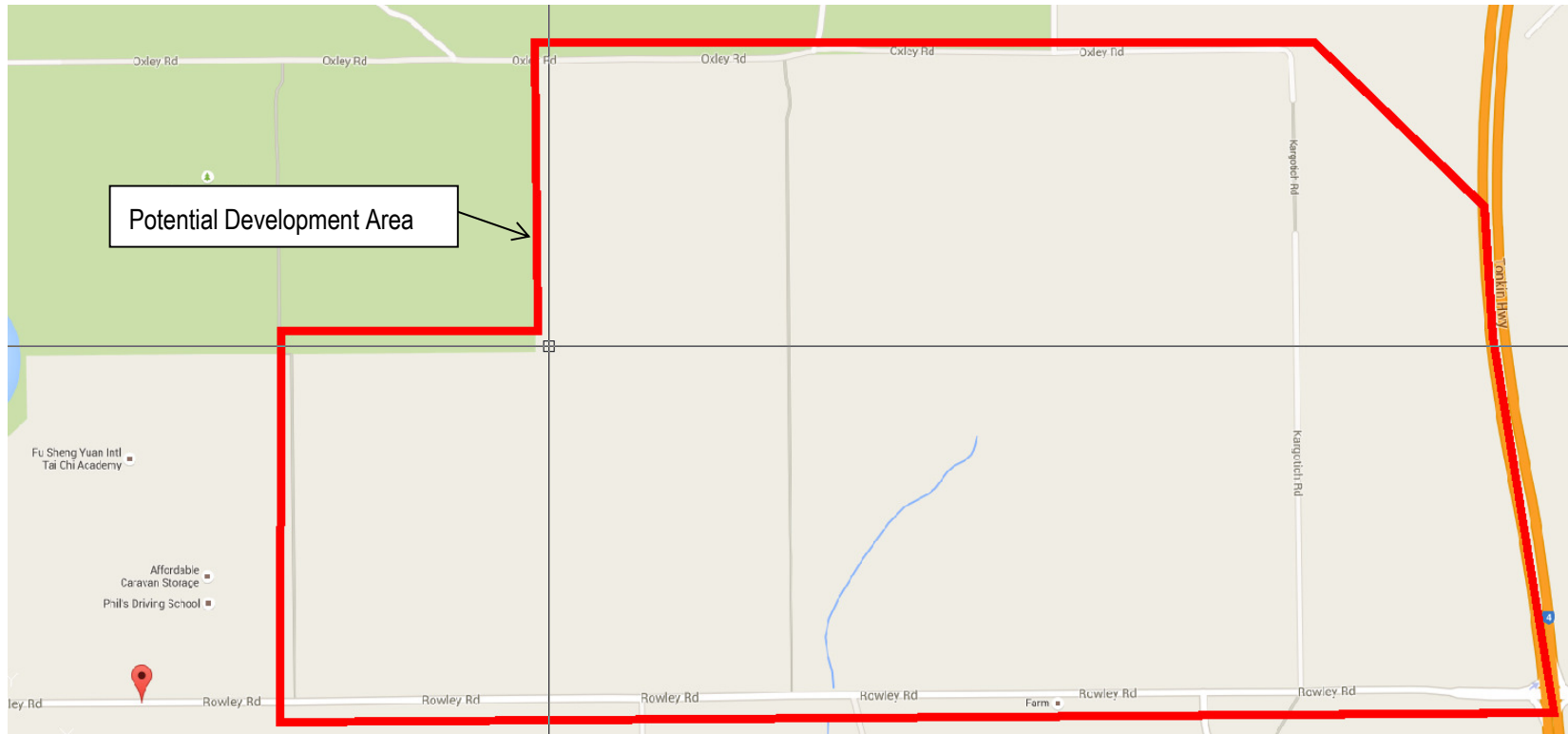


Figure 1. Site Location

3. Services Assessment

3.1 Water Reticulation

Currently there is no service network or formal water scheme future planning for the subject land. The Water Corporation has advised the area could be served through the Armadale-Kelmscott scheme subject to supply being via 5.8km extension from the DN760 on Armadale Road. The size of supply mains or route has not been considered in any detail. Preliminary advice indicated that a DN300 main would be required as a minimum, though it is likely a greater size would be needed to in order to achieve flows sufficient for fire fighting. An indicative potential alignment for the water main extension is shown in Figure 2 below and is approximately 5.8km in length. All mains extensions to serve the industrial area will be at the developers' cost.

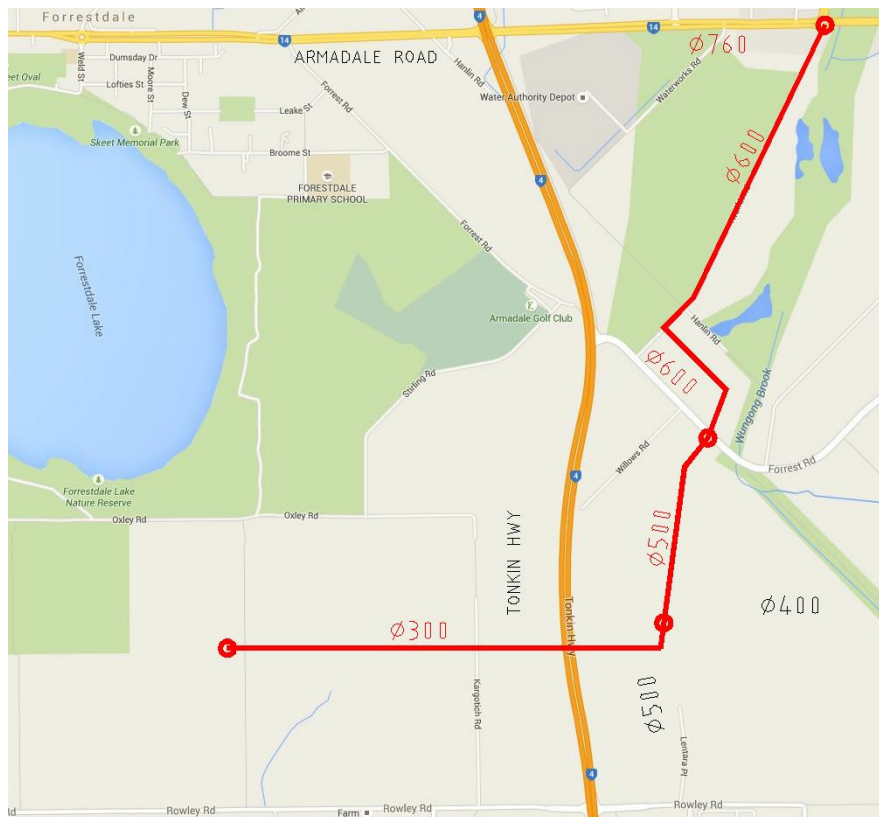


Figure 2. Potential Water Supply Strategy

3.2 Drainage

The Water Corporation has advised that it is premature to assume that drainage discharge to existing rural drains in the area would be permitted. The subject land falls largely within the within Peel-Harvey Catchment but a small area also drains towards 2 other locations within the Forrestdale Main Drain catchment, and the Department of Water's *Forrestdale Main Drain Arterial Drainage Study (FMDADS)* has assumed rural land use for the subject land. The rezoning of this land to industrial would necessitate a review of the FMDADS in order for Water Corporation to be able to comment.

The Water Corporation has previously advised the WAPC that it was opposed to rezoning Lots 6, 8 and 200 Rowley Road to industrial until the Department of Water had reviewed district level drainage planning for the wider area. This review is currently being progressed by the Department of Water. Notwithstanding this, the WAPC did rezone lots 6 and 8 to Industrial under the MRS, which was supported by the preparation of a District Water Management Strategy (DWMS).

Similarly, a DWMS has been prepared by Bioscience (August 2015) for the subject land which demonstrates that the drainage of the site can be appropriately managed.

The DWMS has been prepared in liaison with the Department of Water and proposes the following:

- Water sustainability measures including the installation of Waterwise fixtures and fittings, grey water recycling, rainwater harvesting, waterwise landscaping and use of groundwater for landscaping irrigation;
- Retention and/or detention of the 1 year, 1 hour ARI event at source for infiltration, slow release into system or reuse;
- The installation of vegetated swales, rain gardens and bioretention pockets to treat surface water before discharge;
- Pre-development runoff flow rates and paths to be maintained post development through the installation of stormwater compensating basins;
- Maintenance of pre-development flood storage volumes;
- Habitable floor levels set a minimum of 0.5m above natural waterway flood levels and 0.3m above 100year ARI stormwater levels; and
- Placement of fill and installation of subsoil drainage to provide a controlled groundwater level where required to provide adequate separation between lot levels and groundwater.

3.3 Sewer

The Water Corporation (WC) has previously undertaken some preliminary desktop considerations of likely servicing options for the subject land. Similarly to the water supply there is no formal wastewater scheme for the subject land, however WC suggests the land could be serviced for sewerage via a temporary pump station located at a suitable low point within the industrial area, with discharge to the east to the Armadale Pump Station 2, Hilbert Rd. The temporary pump station, pressure main and related works would be undertaken at the developers' cost. An indicative potential alignment for the sewer pressure main is shown in Figure 3 below and is approximately 4.1km in length.

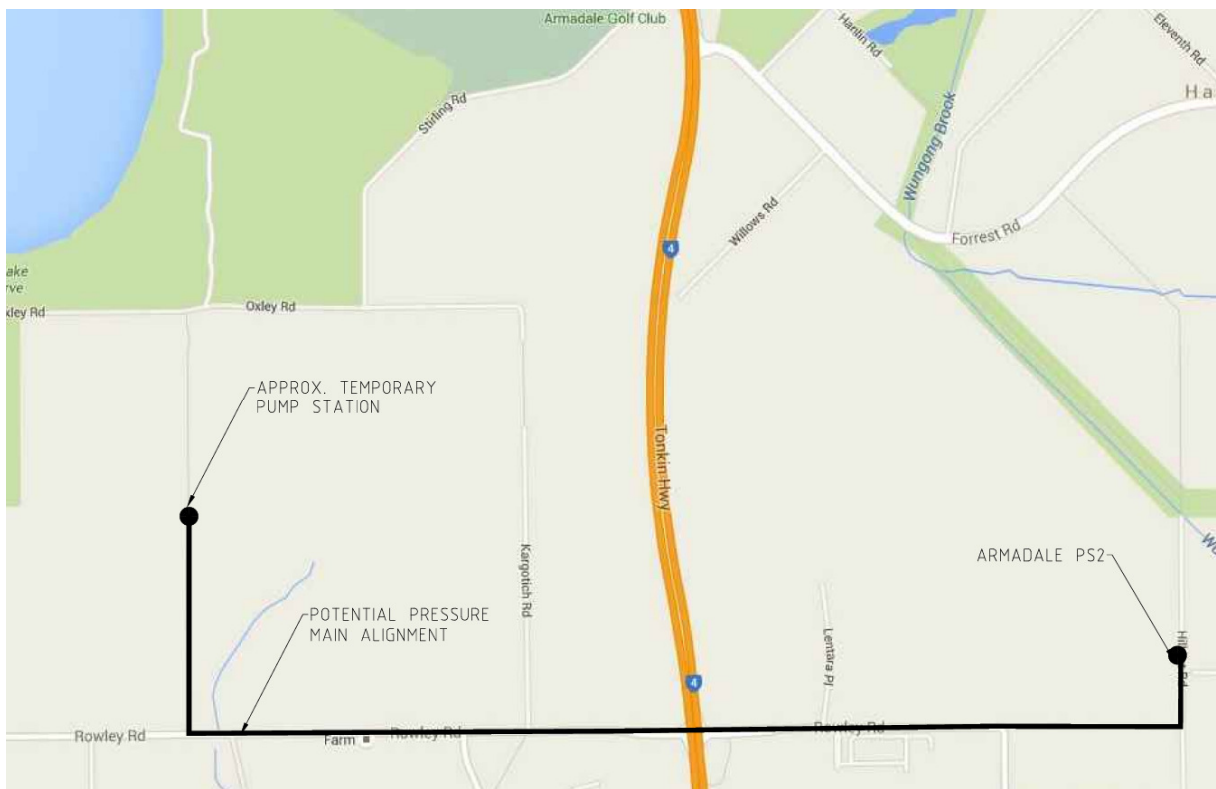


Figure 3. Potential Sewerage Strategy

3.4 Power

Western Power (WP) has indicated that there is only 1 High Voltage (HV) feeder in the vicinity of the subject land. WP strongly recommends that the subject land be serviced from the BYF527 feeder backbone located 1.2km east of the proposed land development area.

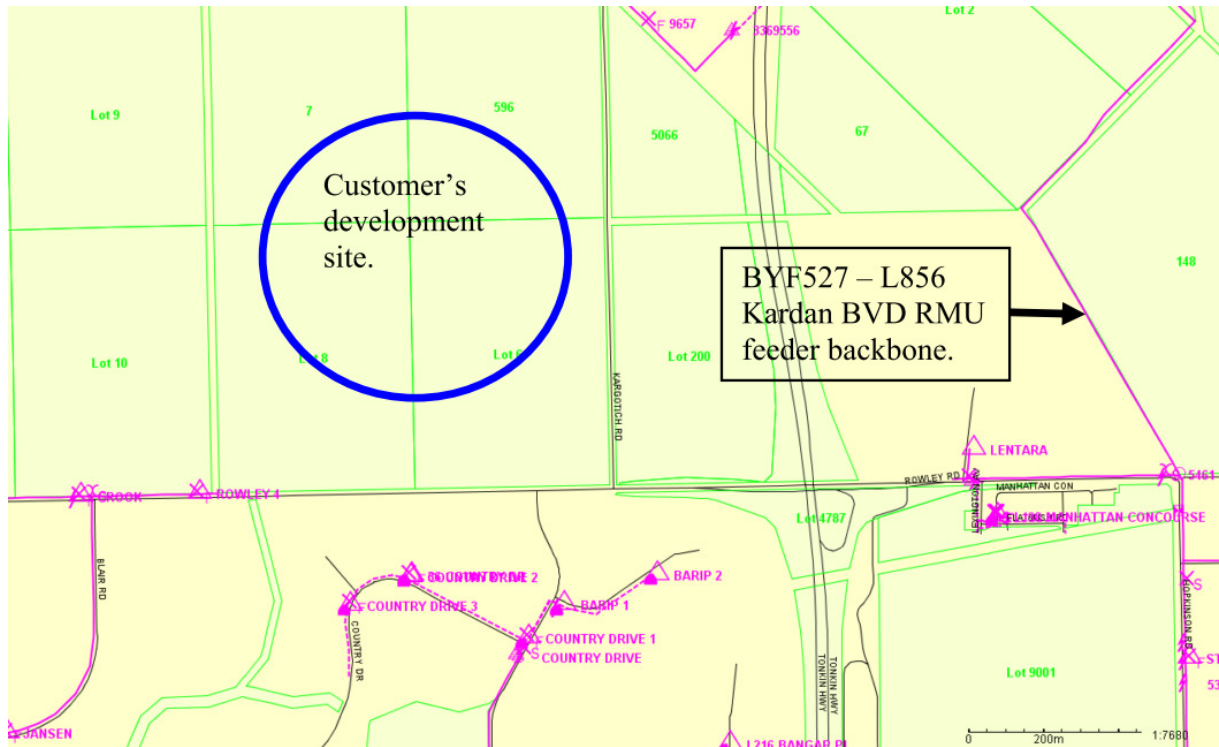


Figure 4. Potential Electricity Strategy

Subsequent stages can be connected to the same feeder until capacity is fully utilised. The final solution would depend on the network capacity available when a full application is submitted.

3.5 Gas

The existing gas network east of Tonkin Hwy has the capacity to support 850scmh. It would require an approximate 950m mains extension to bring gas to the edge of the site.

There is the possibility of increasing capacity up to 3,500scmh. However this would require additional details of exact loads and location of connection points.



Figure 5. Potential Gas Strategy

3.6 Communications

NBN build preparation has not yet commenced for the subject site and the timing for NBN installation is unknown, however it is expected that NBN's current policy of servicing larger scale new developments would remain and NBN could be provided in developer installed pit and pipe at the time of construction. Should NBN not wish to service the development, as the provider of last resort, Telstra would be required to service the development, and this would be via a connection to the existing network in Rowley Road.



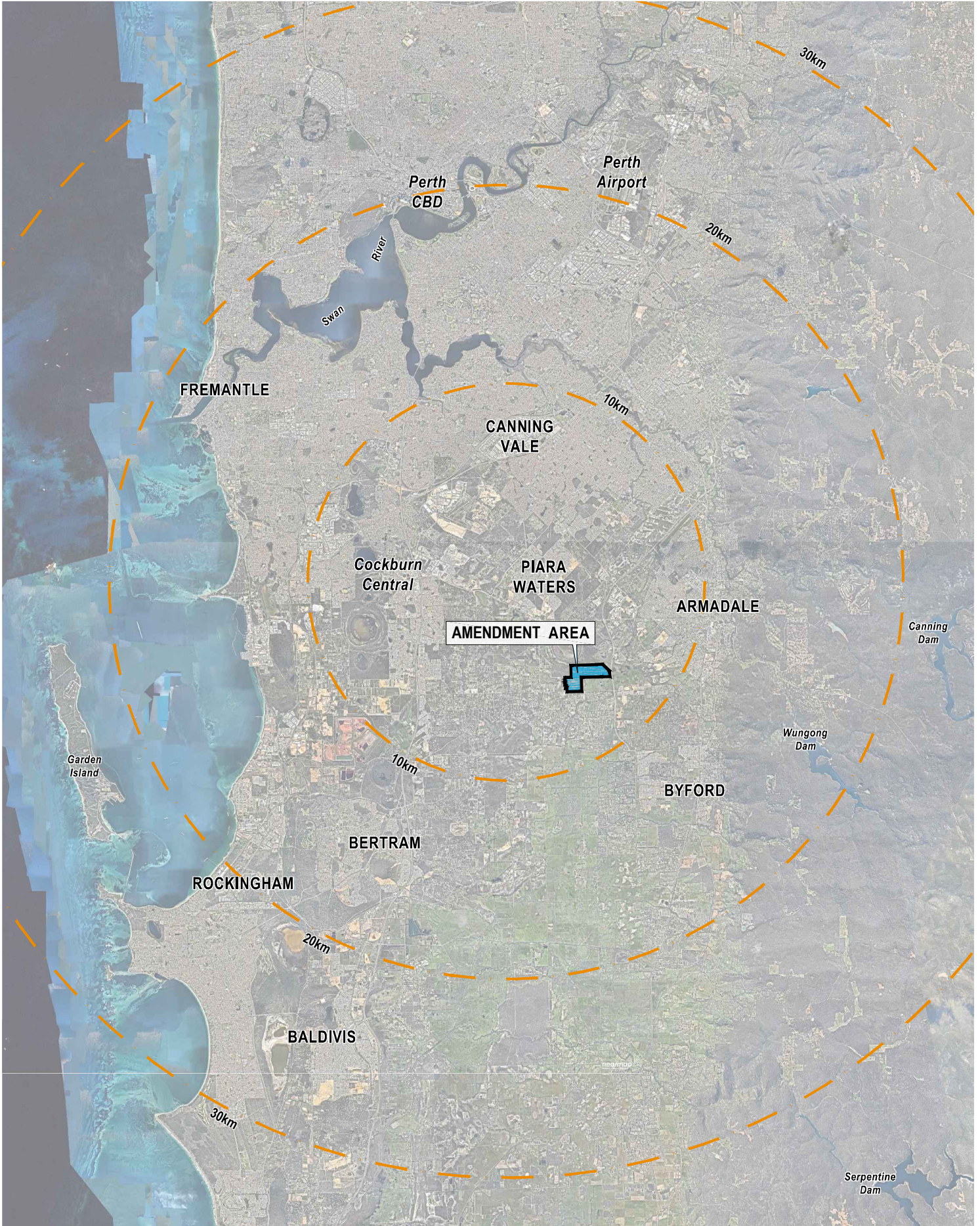
4. Conclusion

The report confirms that there are no unmanageable impediments to development in terms of the available utility infrastructure. The likely required utility upgrades to service the development include:

- Construction of a water main extension from Armadale Road, in the order of 6km in length;
- Construction of a sewer pump station and an approximately 4.1km long pressure main;
- Construction of a 1.2km extension to Western Powers electrical supply network;
- Construction of a 950m gas main extension;
- Implementation of recommendations contained in Bioscience DWMS for drainage management.

Attachment 6

Location Plan



Source: Nearmap