City of Port Lincoln

Strategic Urban Planning Review

SERVICES INFRASTRUCTURE MASTERPLANNING

WGA242687

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17 October 2025

Revision History

REV	DATE	ISSUE	ORIGINATOR	CHECKER	APPROVER
A	6/06/2025	Draft for Comment	JPH	JPB	JPB
B	22/08/2025	Issue to Council	JPH	JPB	JPB
C	17/10/2025	Final Issue to Council	JPH	JPB	JPB

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1 INTRODUCTION

1.1 Background

WGA has been engaged to undertake stormwater and services investigations in support of the Strategic Urban Planning Review being undertaken by the City of Port Lincoln. The intention of the study is to inform Council of future infrastructure requirements arising from potential growth areas within the City of Port Lincoln.

Three primary growth areas have been identified as part of the Strategic Review. In total, it is anticipated that the future development of these areas could accommodate up to 900 additional residential allotments. With reference to Figure 1-1, the areas of investigation are described in terms of yield and area in Table 1-1. Transport investigations to support the Strategic Urban Planning Review have been undertaken by CIRQA.

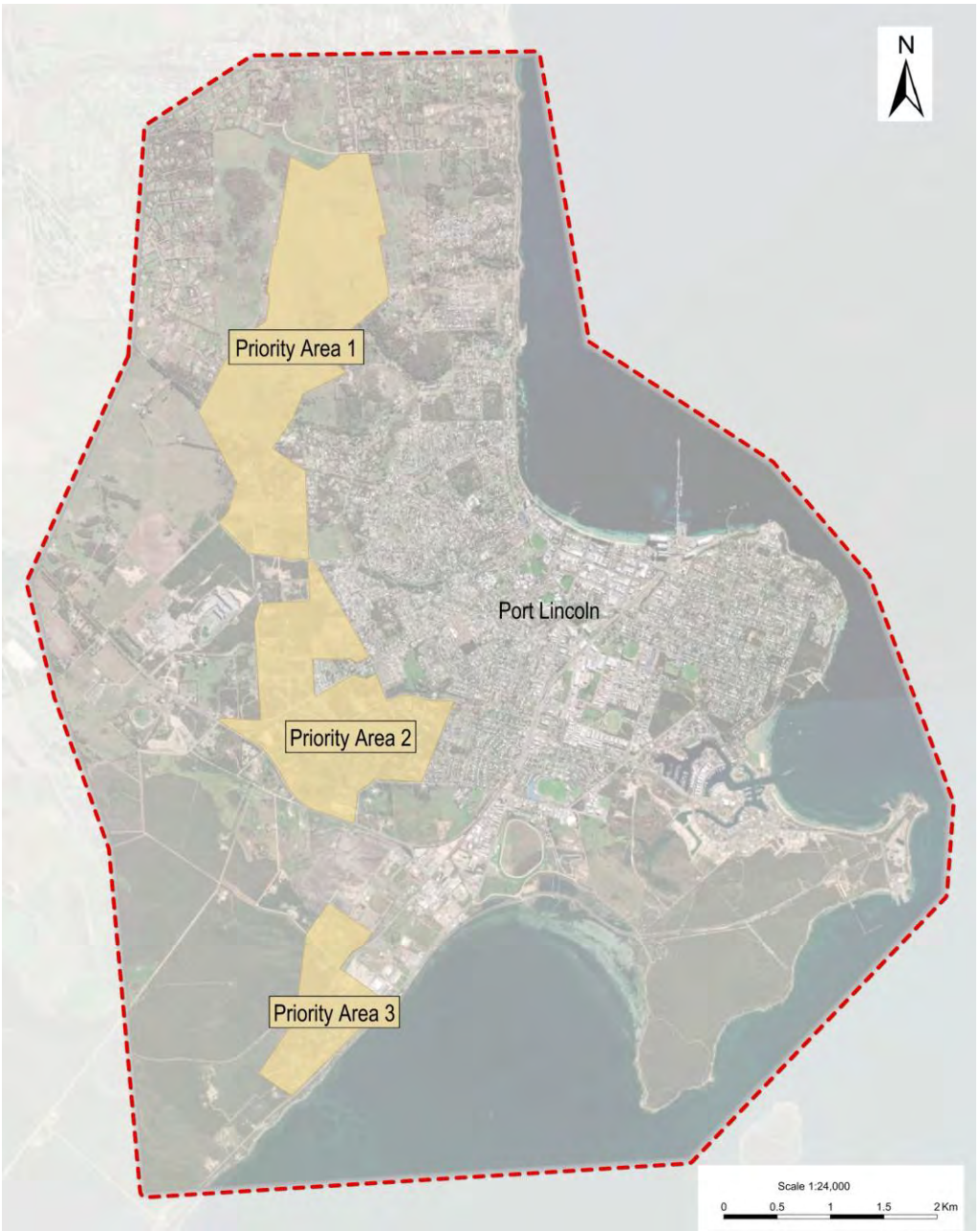

Figure 1-1: Site Locality

Given this is a strategic urban planning review and the project is at the pre-code amendment phase, the arrangement of the developments are yet to be determined. Preliminary indicative road layouts have been provided by CIRQA for the purpose of this masterplanning assessment, noting these layouts are conceptual and subject to change.

Table 1-1: Proposed Growth Areas as Planning and Design Continues to Progress

ZONE	TYPE	YIELD	AREA (HECTARES)
Zone 1	Residential	150-200 Dwellings	320
Zone 2	Residential	250-600 Dwellings	235
Zone 3	Residential	20-40 Dwellings	88

1.2 Scope and Purpose

This Report is intended to support the strategic urban planning review of Port Lincoln. This review has been undertaken as a high-level pre-code amendment investigation, which includes the assessment of the zones highlighted in Table 1-1.

1.2.1 Stormwater

This strategy addresses the stormwater management requirements defined by the City of Port Lincoln (Council) and by the Environment Protection Authority (EPA). These requirements apply to:

- Stormwater peak flow management
- Quality of stormwater discharged

The intent of this report is to provide the strategic basis for the management of stormwater for the proposed growth areas based on the following:

- Reduction in peak discharge and flow management through on-site or downstream detention/retention.
- Reduction in pollutants through the implementation of WSUD practices where achievable.

1.2.2 Services Infrastructure

Services infrastructure coordination and investigations to support the re-zoning by undertaking the following:

- Complete an investigation into the infrastructure currently in the vicinity to the proposed site, assessing the existing infrastructure availability and capacity.
- Attain an appreciation of the requirement for augmentation or upgrade works that may be associated with development of each site.
- Consolidate investigations to provide supporting information and justification for development of the site.

Services investigations have been carried out in consideration of the proposed yields for the growth areas identified in Table 1-1.

This report presents the proposed strategy only; detailed design of stormwater elements and services infrastructure will be undertaken as this project progresses to more detailed planning and design phases.

2 EXISTING SITE CONDITIONS

2.1 Proposed Growth Areas Overview

The proposed residential growth areas noted in Table 1-1 are expected to comprise of:

- Residential lots with varying yields and sizes
- Reserve/landscape areas
- Roadways

Preliminary site layouts have yet to be developed at this stage of the investigation, given the project is currently within the planning phase. High-level structure plans have been developed for the three Priority Growth Areas and it is expected that a code amendment(s) will be pursued over these areas. The structure plans will be subject to ongoing change as the development moves into detailed design stages.

The following section describes each of the proposed priority areas and their existing conditions.

2.1.1 Priority Area 1

The land, approximately 320 hectares and has been identified for possible rezoning to a combination of Rural Living Hills, Neighbourhood and Suburban Neighbourhood zones of approximately 150-200 residential lots with internal roads and open spaces. To assist the assessment of these areas, these are broken into three precincts.

Flinders Highway separates the Priority Area into a north (240 hectares) and south (80 hectares) portion. It is envisaged that main access to the site will be via Flinders Highway. Additional access points will likely be via Boundary Road to the north, or Sarah Cresent and Garrett Road to the east.

The site is generally undeveloped and is currently classified/zoned as Rural, however, there are scattered residential buildings in the northern zone, and some light industrial developments in the south precinct. The north precinct is not bounded by any roads except for Flinders Highway, however, there are some minor streets to the eastern boundary, which may provide additional access points. The southern portion is bounded by Whillas Road to the east, and Robertson Road to the south.

A local high point (Winter Hill Lookout) is located along the western boundary of the proposed precinct one, with an approximate elevation of 240mAHD. The site grades generally towards the east towards an elevation of approximately 90 to 120mAHD between 9-14%.

2.1.2 Identified Key Development Site

A high-level assessment indicates that this priority area is rocky, especially to the northern section of this priority area. Therefore, a portion (≈50Ha) of Priority Area 1, adjacent to Flinders Highway, is proposed to be more suitable for residential development, having more suitable development conditions, with less rock expected and an overall flatter site and is identified as Precinct 2, highlighted in Figure 2-1 below.

It is indicated that the residential property sizes in this region will range from 700-905sqm in the portion near Flinders Highway, and a minimum of 1 hectare in the northern precinct of the zone.

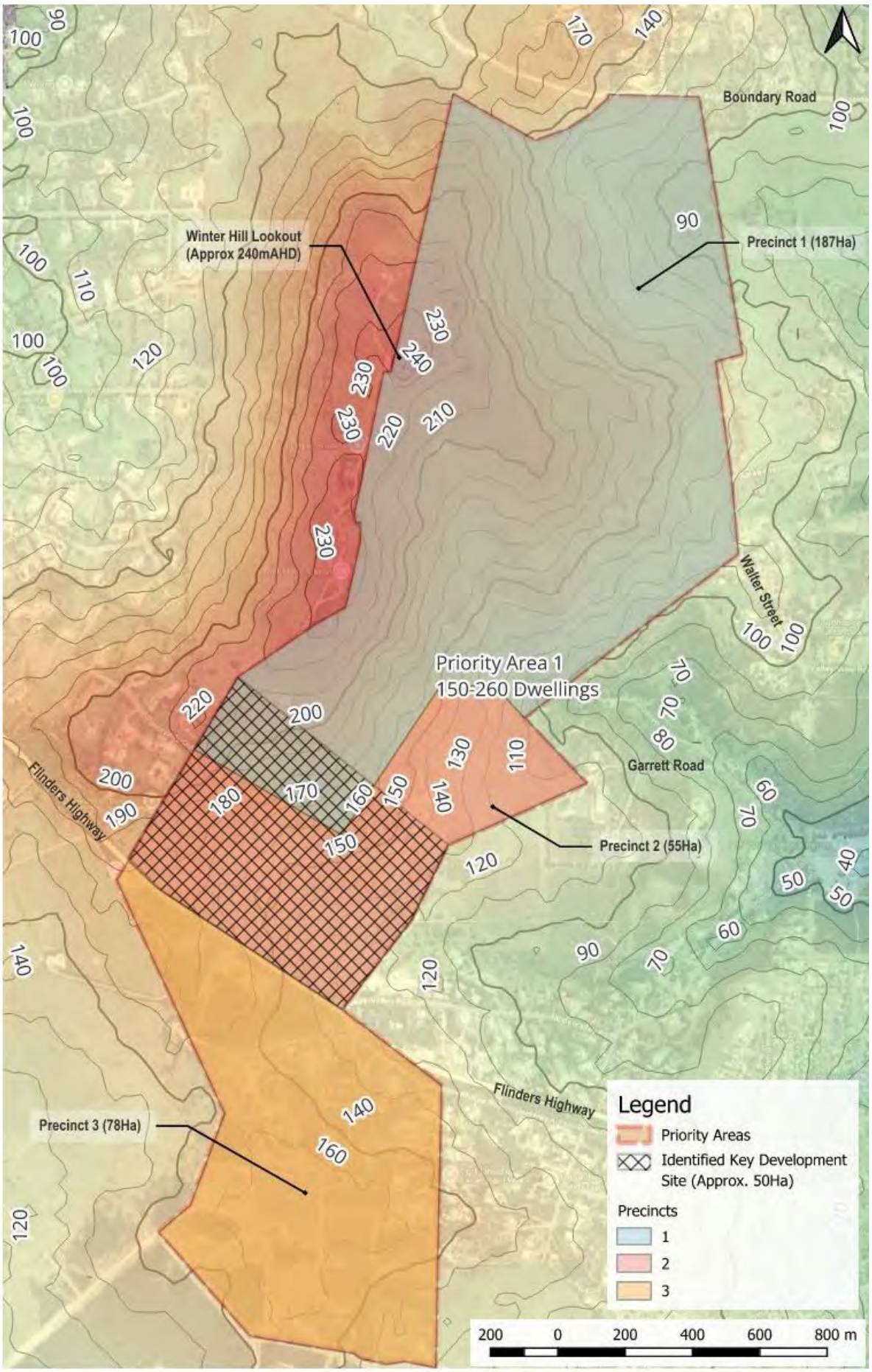

Figure 2-1: Existing Site Conditions – Priority Area 1

2.1.3 Priority Area 2

The land, approximately 325 hectares and has been identified for possible rezoning to a Suburban Neighbourhood zone and will consist of approximately 250-600 residential lots with internal roads and open spaces, refer Figure 2-2. New West Road separates the proposed zone into a north (83 hectares) and south (152 hectares) portion. It is envisaged that main access to the site will be via New West Road which runs through the centre of the site.

The site is generally undeveloped and is currently zoned Rural, however there are scattered residential buildings and farmland throughout the zone. The north zone is bounded by Robertson Road to the north, Kurara Road to the east and New West Road to the south. The southern portion is bounded by New West Road to the north, Nootina and Grantala Roads to the east, and western approach road to the southwest.

A local high point is located along to the northwest of the zone with an approximate elevation of 150mAHD. The site grades generally towards the east with an elevation differential of approximately 65 to 100 mAHD.

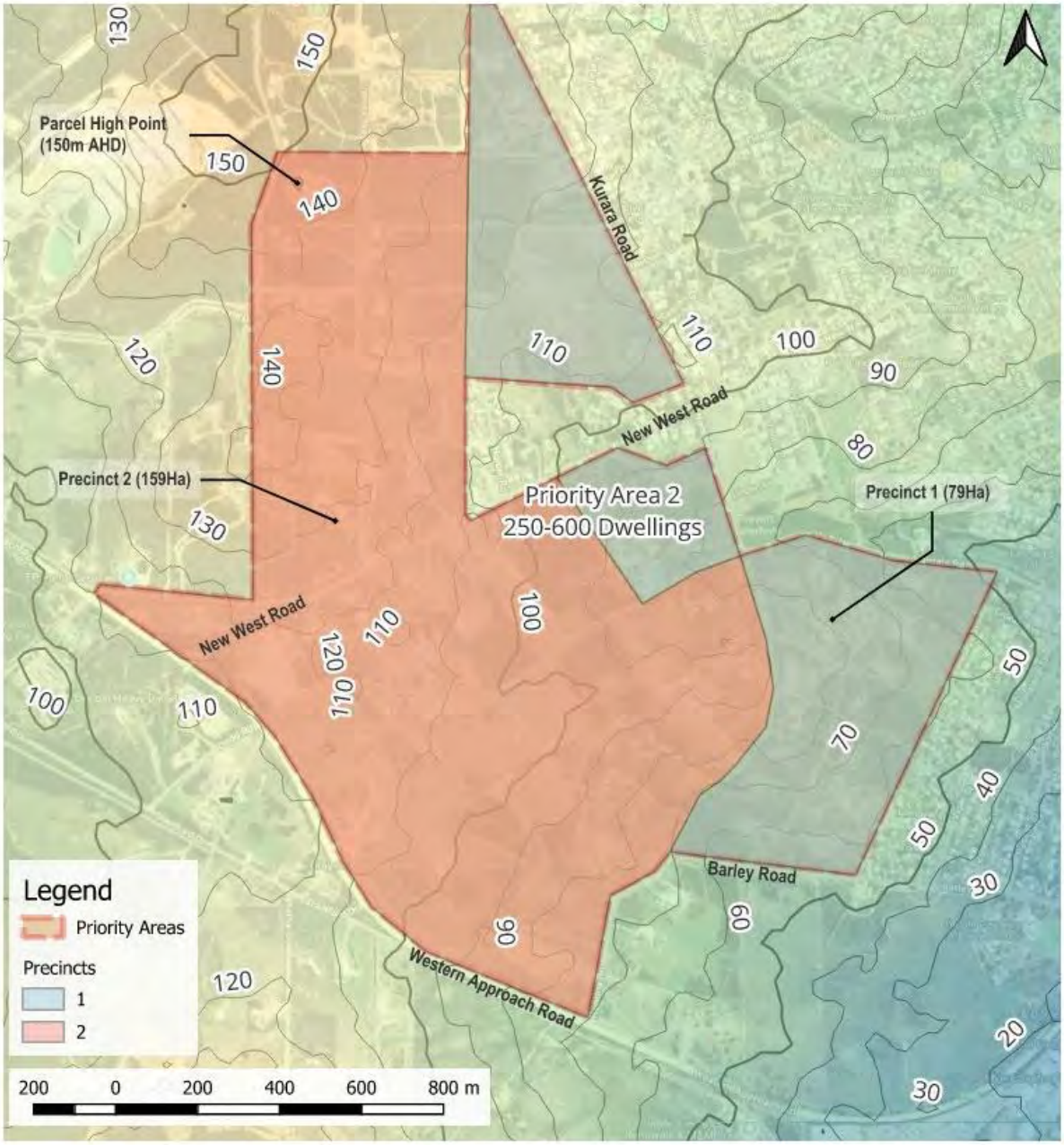

Figure 2-2: Existing Site Conditions – Priority Area 2

2.1.4 Zone 3

The land, approximately 88 hectares and has been identified for possible rezoning to the Rural Neighbourhood Zone and will consist of approximately 20-40 residential lots with internal roads, refer Figure 2-3. It is currently classified Rural. It is envisaged that main access to the site will be via Proper Bay Road. It is noted that a freight rail corridor intersects this area, separating the area into north and south portion. There are currently no rail crossings in this Priority Area, therefore the northern portion will require access via Blue Fin Road, if rezoning provided opportunity for future redevelopment.

The Priority Area is bounded by Blue Fin Road to the northeast, and Proper Bay Road to the southeast.

A local high point is located along the northwestern point of the proposed growth area, with an approximate elevation of 80mAHD. The site grades generally towards the southeast to an elevation of 10mAHD. It is noted that the southeast boundary of the Priority Area is adjacent to Blue Fin Road, which is in turn adjacent to the shorefront.

The Priority Area is relatively undeveloped, however there are scattered existing residential properties along the southeast boundary.

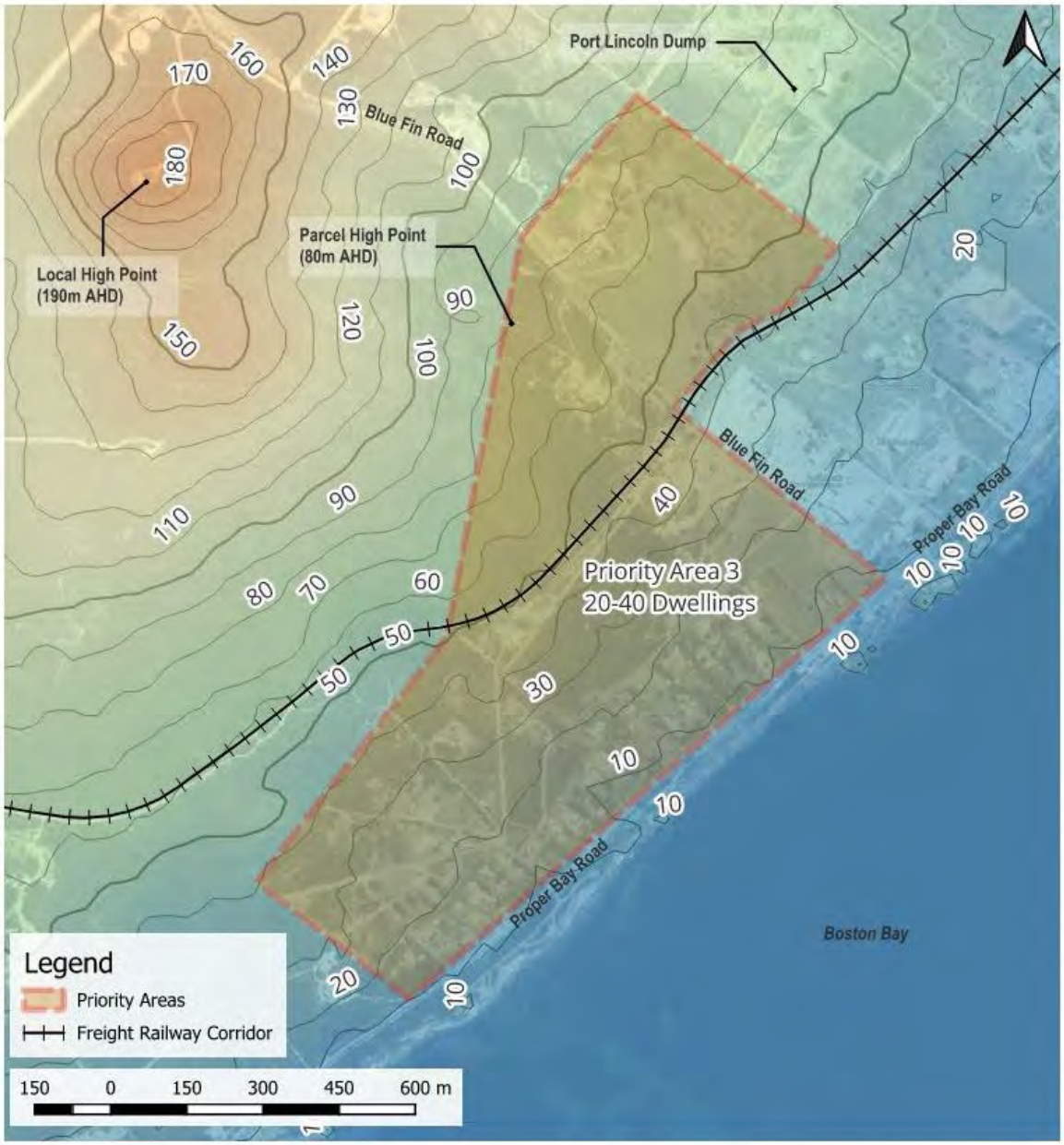

Figure 2-3: Existing Site Conditions – Priority Area 3

3 STORMWATER MANAGEMENT REQUIREMENTS

3.1 Stormwater Guidelines and Requirements

The following listed authorities have guidelines and requirements relevant to stormwater quality and treatment.

3.1.1 City of Port Lincoln

The City of Port Lincoln (Council) have indicated that they are in the process of developing the infrastructure guidelines. The following section provides draft advice only, and updated stormwater management advice should be sought from council during future detailed redevelopment.

Stormwater infrastructure is to be designed and constructed to meet the following criteria:

- Minor storm network in residential area – 20% AEP (5-year ARI).
- Minor storm network in commercial or residential area – 20% AEP (5-year ARI).
- Major storm overland flowpath provision – 1% AEP (100-year ARI).
  - Ensuring no obstruction to key overflow routes
  - Ensuring no inundation of the allotments (project site or adjacent)
- On-site Detention is to be provided
  - Post development 5% AEP (20-year ARI) restricted to 20% AEP (5-year ARI) pre-development flow rate.
  - Post development 1% AEP (100-year ARI) restricted to 1% AEP (100-year ARI) pre-development flow rate.
  - On-site detention of stormwater discharge to equivalent pre-development peak flows is required for all development unless otherwise approved.
- Water Quality design to be in accordance with EPA requirements and acts, i.e. consideration and discussion regarding:
  - Water reuse/detention.
  - Pollutants/spills and the need for water quality treatment devices, noting the site will remove pervious area for paved/rooved area.
  - Impact to, and sensitivity of, downstream network (the creek) to the development outcomes.
  - Any construction risks/mitigations/outcomes relating to water quality that should be noted.

In addition to the above requirements, Water Sensitive Urban Design methods, suited to the City of Port Lincoln approach to stormwater management, are to be utilised wherever possible and water quality objectives are to be in line with Water Sensitive Urban Design Principles. Where detention basins are located in reserves, the reserve and basin must be designed to maximise usable open space.

Council currently has a 10-year Stormwater Management Plan (SMP) for the City of Port Lincoln. This was adopted by Council in 2024, with several projects currently underway. Updates on the progress of the program as per the SMP are as follows:

- Walter Street Stormwater Works are complete (as of May 2025)
- Paringa Avenue is **not** complete as per the SMP (due to DRF funding)
- Flaxman Street upgrade is due to be delivered in 2026

As part of Council's stormwater management for the wider City of Port Lincoln, a Hydrologic and Hydraulic Modelling Report has been developed by Tonkin, refer to report 20150098R001A, dated May 2017. This report highlights where flooding issues are expected in Port Lincoln and where upgrades to infrastructure are required. The flood modelling report does not cover the extent of the proposed growth areas highlighted within this document.

Consideration to Council's 10-year Stormwater Management Plan and Flood Mitigation report is given, and recommendations and findings are summarised within this report. However, it is noted that the growth areas are typically located upstream of the stormwater projects identified in the SMP and will therefore unlikely be impacted by any upgrade works. It is envisioned that with adequate stormwater design and the inclusion of on-site detention as per Council's requirements, the development zones will have little to no impact on the downstream system.

3.1.2 Environment Protection Authority (EPA)

The EPA adopts the WSUD management approach which essentially define their requirements, which relate to management of both stormwater quantity and quality.

The EPA's minimum requirements are as follows:

- Run-off rates should not exceed the rate of discharge from the site that existed pre-development.
- Water quality treatment reduction targets of the typical urban average annual load as follows:
  - Total Suspended Solids (TSS) 80%
  - Total Phosphorus (TP) 60%
  - Total Nitrogen (TN) 45%
  - Retention of litter greater than 50mm for flows up to a 90% AEP peak flow
  - No visible oils for flows up to a 90% AEP peak flow
- Environment Protection Policy (Water Quality) 2015, under the Environment Protection Act, 1993.

3.2 Reference Documents

The stormwater management strategy is developed to encompass the design criteria in accordance with the following recognised references:

- EPA Environment Protection Act 1993, (Water Quality) Policy 2015 (WQ EPP 2015).
- WSUD Engineering Procedures – Stormwater (2005).
- Australian Runoff Quality, Engineers Australia (2006) water sensitive.
- Water Sensitive Urban Design - Greater Adelaide Region Technical Manual (Dec 2010).
- City of Port Lincoln – 10 Year Stormwater Management Program (June 2024) – Ref No. 32375.
- City of Port Lincoln – Port Lincoln Stormwater Management Plan (Mar 2019) – Ref No. 20070307RA2J.
- City of Port Lincoln – Mortlock Terrace Catchment Study Flood Mitigation Options Report (Jul 2017) – Ref No. 20160179R001B.

These handbooks and guidelines are considered Australian and South Australian practice standards and cover all aspects of stormwater management. This includes the design for major and minor storm flow and stormwater quality improvement. The Stormwater Management Strategy adopts the design standards, principles and practices covered by the handbooks.

4 CATCHMENT OVERVIEWS

4.1 General

Table 4-1 provides a summary of the existing infrastructure for each Priority Area, with commentary on anticipated flooding.

Table 4-1: Existing Stormwater Asset Summary

ZONE	EXISTING INFRASTRUCTURE	FLOODING
Priority Area 1	No current stormwater infrastructure within the site. Discharge points will vary throughout the zone, likely utilising natural valleys/streams which utilise existing stormwater infrastructure further downstream. The roadside swale/stormwater system along Flinders Highway may be utilised.	Flood depth results are not available in this area. It is envisaged that minimal flooding will occur due to minimal upstream or external catchments, the catchment consists of rural development, and has a high elevation. Any flooding will be localised and restricted to the natural valleys and low points.
Priority Area 2	No current stormwater infrastructure within the growth area. Discharge points will vary throughout the area, likely utilising natural valleys which utilise existing stormwater infrastructure further downstream. The northern portion of this area may utilise some existing drainage corridors which connect into Lincoln Gardens Reserve. The southern portion may utilise the existing drainage network along Grantala Rd, which ultimately utilises the Mortlock Terrace drainage corridor. There is an option to connect into the Barley Road drainage network which ultimately discharges into the ocean.	Flood depth results are not available in this area. However, the results border the growth area. It is envisaged that minimal flooding will occur due to minimal upstream or external catchments, the catchment consists of rural development and has a high elevation. Any flooding will be localised and restricted to the natural valleys and low points.
Priority Area 3	No current stormwater infrastructure within the growth area. Discharge zone is expected to be along the southeastern boundary along Proper Bay Road.	Flood depth results are not available in this area. There are external catchment which will need to be considered in design. Consideration will also be required for ocean storm surges in this growth area.

Refer to Figure 4-1 and Figure 4-2 for the 1% AEP flood extent maps from the Tonkin report, with pipe infrastructure overlaid. For more detailed mapping, refer Appendix C.

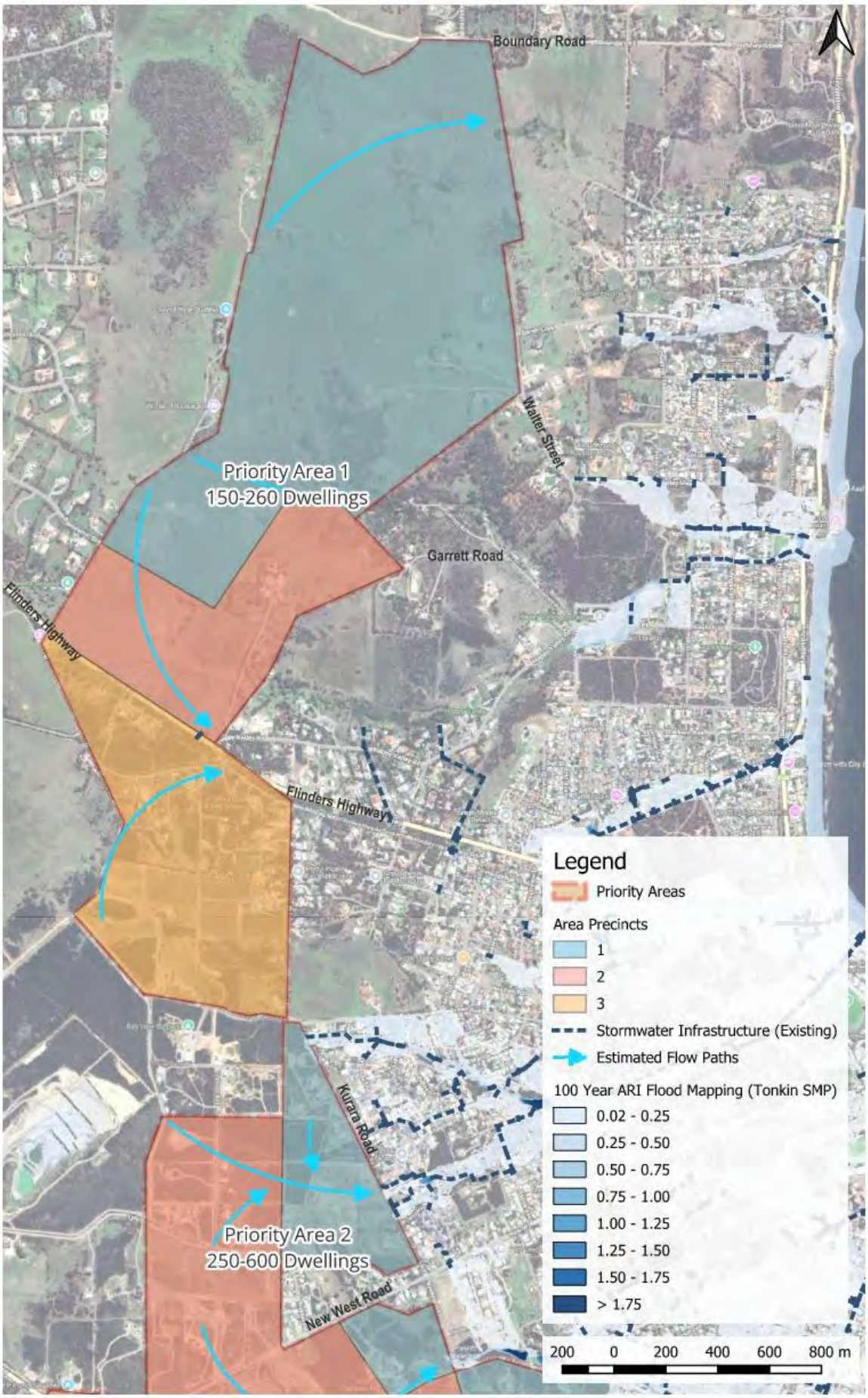

Figure 4-1: Priority Area 1 Flooding Extent

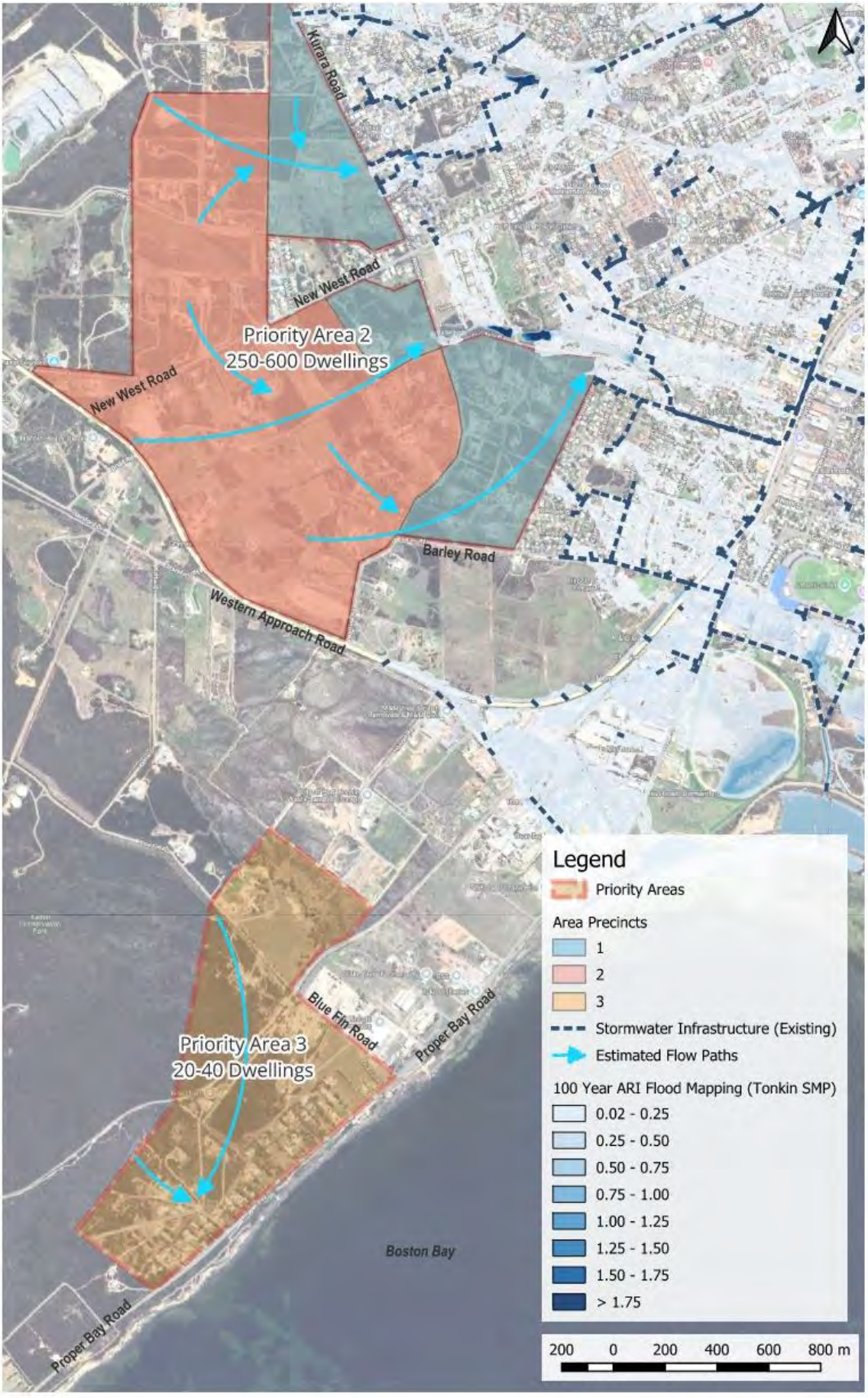

Figure 4-2: Priority Area 2 and 3 Flood Extent

4.2 Stormwater Analysis

Preliminary detention calculations have been completed as per Council requirements for a 1% AEP post to pre-development scenario, and 5% AEP post to 20% pre-development scenario. The calculations are based on the following assumptions:

- Varying lot sizes of 750 to 2000m2 (specific to analysis in the Master Plan)
- Pre-development C = 0.15, time of concentration = 30-45 minutes
- Post-development C = 0.60, time of concentration = 15 minutes

A summary of the indicative detention volumes for each zone is in Table 4-2. Note this is subject to further concept and detailed design.

Table 4-2: Detention Volume Summary

PRIORITY AREAS	TOTAL DETENTION VOLUME (m^3)
Priority Area 1	8,000
Priority Area 3	21,000
Priority Area 7	1,500

Storage volumes summarised in Table 4-1 are to be catered for with a series of basin or wetland constructions across each site.

Internal stormwater infrastructure has not been sized, given the preliminary nature of this assessment.

It is assumed that the downstream infrastructure within Port Lincoln will have sufficient capacity to cater for the incoming site flows (post detention). The current volumes assume a freely discharge downstream condition.

Site grades across each priority area are summarised in Section 4. The extent for detention storage for each priority area will be determined through negotiation with Council and subject to the proposed layout, noting the requirement for detention will still be as per the City of Port Lincoln Infrastructure Guidelines.

Further investigations and reporting for stormwater quality and SEDMP management will be required as part of more detailed site investigations for code amendment purposes or site development.

5 SERVICES INFRASTRUCTURE

5.1 Infrastructure Reference Information

The location and capacity of the existing services within the vicinity of the proposed growth areas have been investigated and are detailed within the following sections of this report. Service authorities have been consulted to acquire background information and formalise potential supply arrangements to the proposed residential growth areas. A copy of the relevant correspondence is included in the appendices of this report.

The following key authorities have been consulted in seeking infrastructure input:

- Potable Water – SA Water
- Wastewater – SA Water
- Electricity Supply – SA Power Networks (SAPN)
- Telecommunications – National Broadband Network (NBN)

There is currently no APA gas network infrastructure in Port Lincoln.

Service authorities were contacted to provide high-level insight into the requirements for infrastructure to service the proposed respective internal and external infrastructure to each priority area. Each of the authorities listed above completed an assessment based the preliminary yields zoning locations.

Given the high-level nature of this assessment used to inform planning, no context to the roll out construction phasing of each priority area was given to the authorities. Further information will be sought from the authorities through implementation stage of the Master Plan. Detailed servicing information is also a requirement at land division stage.

6 WASTEWATER

6.1 Existing Wastewater Infrastructure

Information on the existing wastewater infrastructure has been obtained through correspondence with SA Water, with supporting information sought from a Before You Dig (BYD) search and the use of the SA Government's Location SA Map Viewer.

Formal planning advice has been sought from SA Water at the time of this report. This advice confirms the necessary future planning procedures and requires upgrades to existing SA Water infrastructure necessary to service the priority areas.

SA Water have noted that the information provided is high-level and reflective of the pre-code amendment stage where the project is currently at. There is an expectation for network extensions and augmentation, which will require further detailed hydraulic modelling and engineering investigation.

SA Water owns and operates a substantial wastewater network throughout Port Lincoln. Table 6-1 summarises the localised existing infrastructure near each priority area. Council have indicated that in some more rural areas of Port Lincoln, on-site wastewater treatment and disposal is in use.

Table 6-1: Existing Wastewater Infrastructure

PRIORITY AREA	EXISTING INFRASTRUCTURE
Priority Area 1 (Residential)	Minimal SA Water Infrastructure in northern precinct. There is a DN150 gravity main located along Flinders Highway near the centre of the eastern boundary of the growth area, running in a west east towards the trunk main along Tasman Terrace.
Priority Area 2 (Residential)	Minimal SA Water Infrastructure within the priority area. Multiple DN150 gravity mains located along the eastern boundary, running in a west east direction towards various trunk mains.
Priority Area 3 (Residential)	Minimal SA Water Infrastructure within the current priority area. A DN225 gravity and pumped main is located 1300m from the growth area at Proper Bay Road. This connects into the pumping station at the Ravendale Community Sports Centre.

6.2 Service Authority Advice

A summary of SA Water advice is included below:

6.2.1 Existing Network Configuration

- The Port Lincoln wastewater network is comprised of both gravity and pumping mains.
- SA Water has previously identified several sewer system catchments in need of upgrades to support future expansion, refer Appendix B for network layout. These include:
  - Significant upgrades to the western pumping system,
  - The pumping system leading to the Wastewater Treatment Plant at pump station 1 (Located within the Port Lincoln CBD), and
  - Increased capacity for pumping system 2 (Located of Windsor Avenue).

- Additional downstream improvements may also be expected to facilitate growth within the Priority Areas. These upgrades require detailed hydraulic modelling, and this work is not scheduled to proceed in the short to medium term.
- The age profile of wastewater mains within the Port Lincoln network ranges between 1 and 70 years; with newer assets having been installed as part of regular asset upgrade works around the periphery of the town centre.

6.2.2 Proposed Considerations for Development

- The areas proposed for residential zoning encompass undulating terrain. Consequently, there would be a requirement to establish specific sub-catchments to facilitate the development of a suitable sewer servicing scheme.
- It is anticipated that additional network infrastructure will include extensions to both gravity and pumping mains, as well as new sewer pump stations.
- Augmentation to the existing sewer network will also be required to service the additional flows. This is expected to include upsizing of existing SA Water pump stations and upgrading existing sewer mains (both gravity and pumping).

6.3 Wastewater Master Planning

WGA's assessment of the subject land has confirmed that the majority of Priority Area 1 and part of Priority Area 2 can drain via gravity to the existing SA Water wastewater network. The main point of connections for the wastewater will vary depending on where the development is located. This is to be confirmed in a future localised master planning stage.

In the northern portion of Priority Area 1, it is likely on-site wastewater disposal will be required, as installing a full wastewater network is not seen as feasible.

WGA's assessment of Priority Area 3 has confirmed that the majority of the subject land can drain via gravity a collection point along the southeast boundary of the area. However, it is envisaged that a new pump station (and rising main) will be required at this growth area, to convey wastewater to the SA Water wastewater network. Alternatively, on-site wastewater systems may be utilised, which are currently in place within residential dwellings across this growth area.

An excerpt has been included in Figure 6-1 to Figure 6-3 to illustrate the extent and intent of existing wastewater infrastructure and its connection to the proposed site. All wastewater infrastructure shown in these plans is DN150.

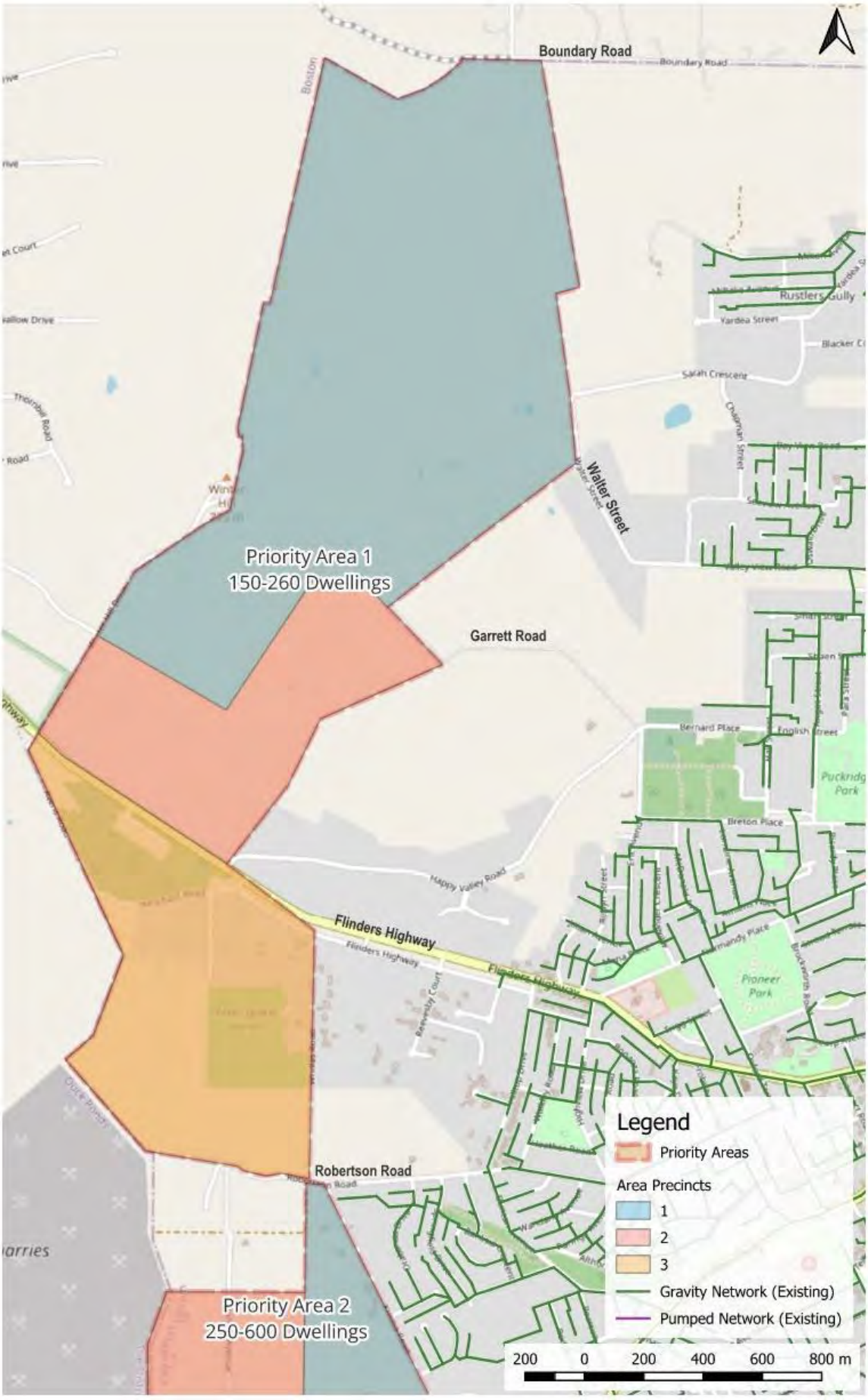

Figure 6-1: Existing SA Water Wastewater Infrastructure – Priority Area 1

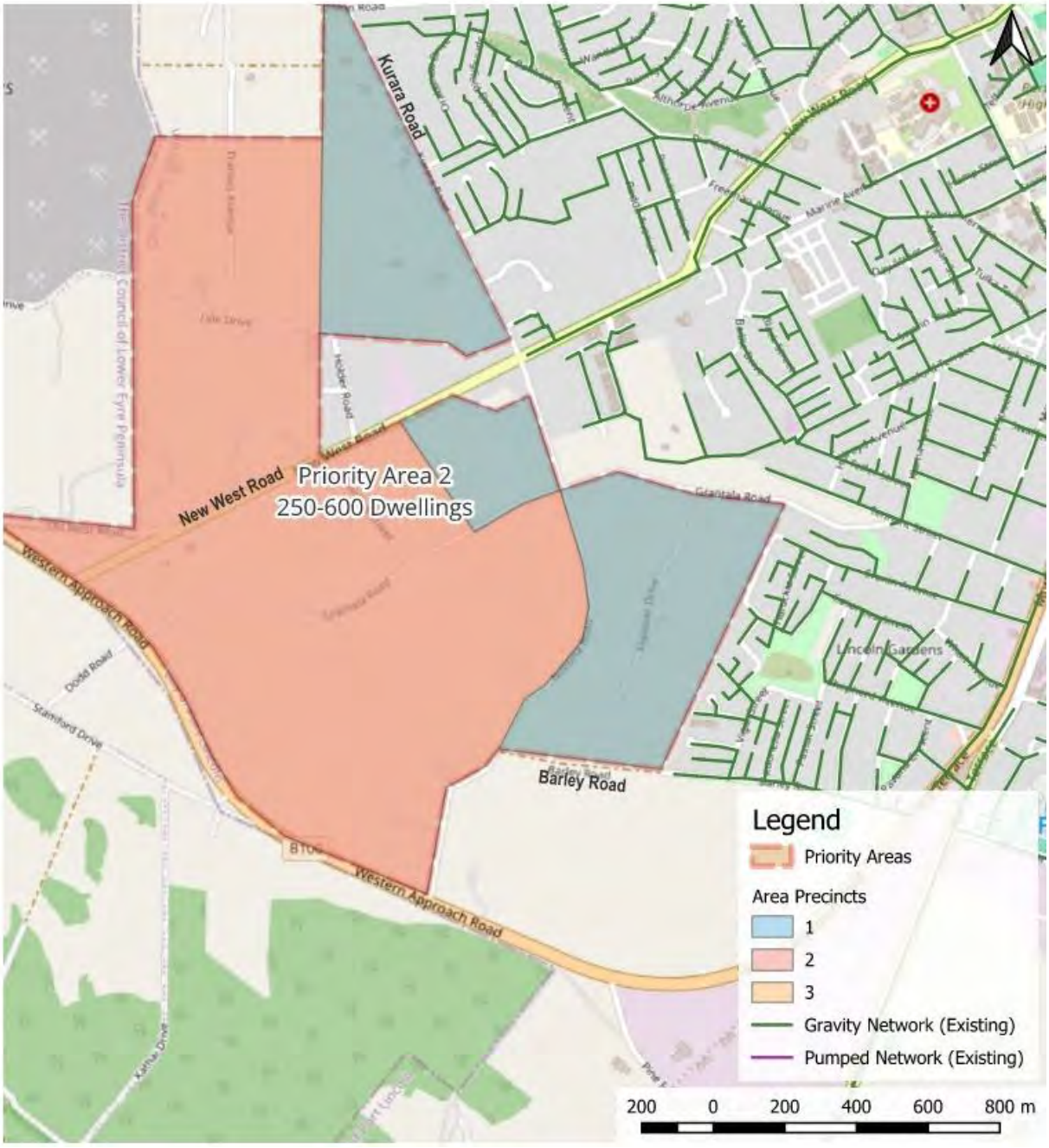

Figure 6-2: Existing SA Water Infrastructure – Priority Area 2

Figure 6-3: Existing SA Water Infrastructure – Priority Area 3

7 POTABLE WATER

7.1 Existing Potable Water Infrastructure

Information on the existing potable water infrastructure has been obtained through correspondence with SA Water, with supporting information sought through a Before You Dig (BYD) search and the use of the SA Government's Location SA Map Viewer.

Formal planning advice has been sought from SA Water at the time of this report. This advice confirms the necessary future planning procedures and requires upgrades to existing SA Water infrastructure necessary to service the growth areas.

SA Water have noted that the information provided is high-level and reflective of the pre-code amendment stage where the project is currently at. There is an expectation for network extensions and augmentation, which will require further detailed hydraulic modelling and engineering investigation.

SA Water owns and operates a substantial water network throughout Port Lincoln. Table 7-1 summarises the localised existing infrastructure near each priority area.

Table 7-1: Existing Potable Water Infrastructure

PRIORITY AREAS	EXISTING INFRASTRUCTURE
Priority Area 1 (Residential)	Minimal SA Water Infrastructure in northern precinct. There is a DN150 main located along Flinders Highway near the centre of the eastern boundary of the growth area. There is also a DN375 main located approximately 800m from the site, which may serve as a point of connection
Priority Area 2 (Residential)	A DN375 water main intersects the northern point of the priority area. 2xDN450 mains intersect the growth area, along New West Road A DN200 water main borders the southern boundary of the growth area, along western approach Road. These 3 mains provide multiple access points for this area.
Priority Area 3 (Residential)	A DN150 water main is located along Blue Fin Road, which can act as a point of service.

7.1.1 Existing Network Configuration

- Port Lincoln is supplied by gravity from North Side Hill Tank and has seven pressure zones, refer Appendix B:
  - SA Water have advised there are a number of areas within the existing potable water network that have varying degrees of service pressure due to the current gravity feed servicing arrangements, particularly in low lying areas.
- As a result, SA Water have indicated it is proposed to install two DN150/DN100 Pressure Reducing Valve (PRV) stations to create Port Lincoln EL60 PRV zone in the southern part of the township. This work is proposed but not scheduled to proceed in the short to medium term.
- Water network assets in Port Lincoln are generally in good condition, with most watermains laid between 1941 and 2025.

7.1.2 Proposed Considerations for Development

- For development to be facilitated within the growth areas, some localised watermain upgrades will be required. Mains extension to be completed by developers as part of DAFI/MLD agreements.
- Proposed landsites for development outside of the existing service area in Port Lincoln at high elevations will require additional pump stations, tanks and reticulation network augmentation.
- Port Lincoln HL Tank zone also has a relatively small contingency storage for peak day supply. Future development will reduce the available contingency further, and the need for additional network storage(s) will need to be assessed.

7.2 Potable Water Master Planning

Sizing of the internal reticulation network will be largely informed by concepts prepared by SA Water, which will be dictated by pressure throughout the subject area and the capacity of surrounding infrastructure.

Typically, proposed developments internally will be made up by the following:

- DN100mm minor water reticulation main servicing allotments
- DN150mm or DN200 trunk water main connection to existing trunk mains

Upgrades to the tank and trunk main infrastructure are likely, as indicated by SA Water. However, the extent and magnitude of these upgrades are unknown at this stage and are subject to further investigations by SA Water.

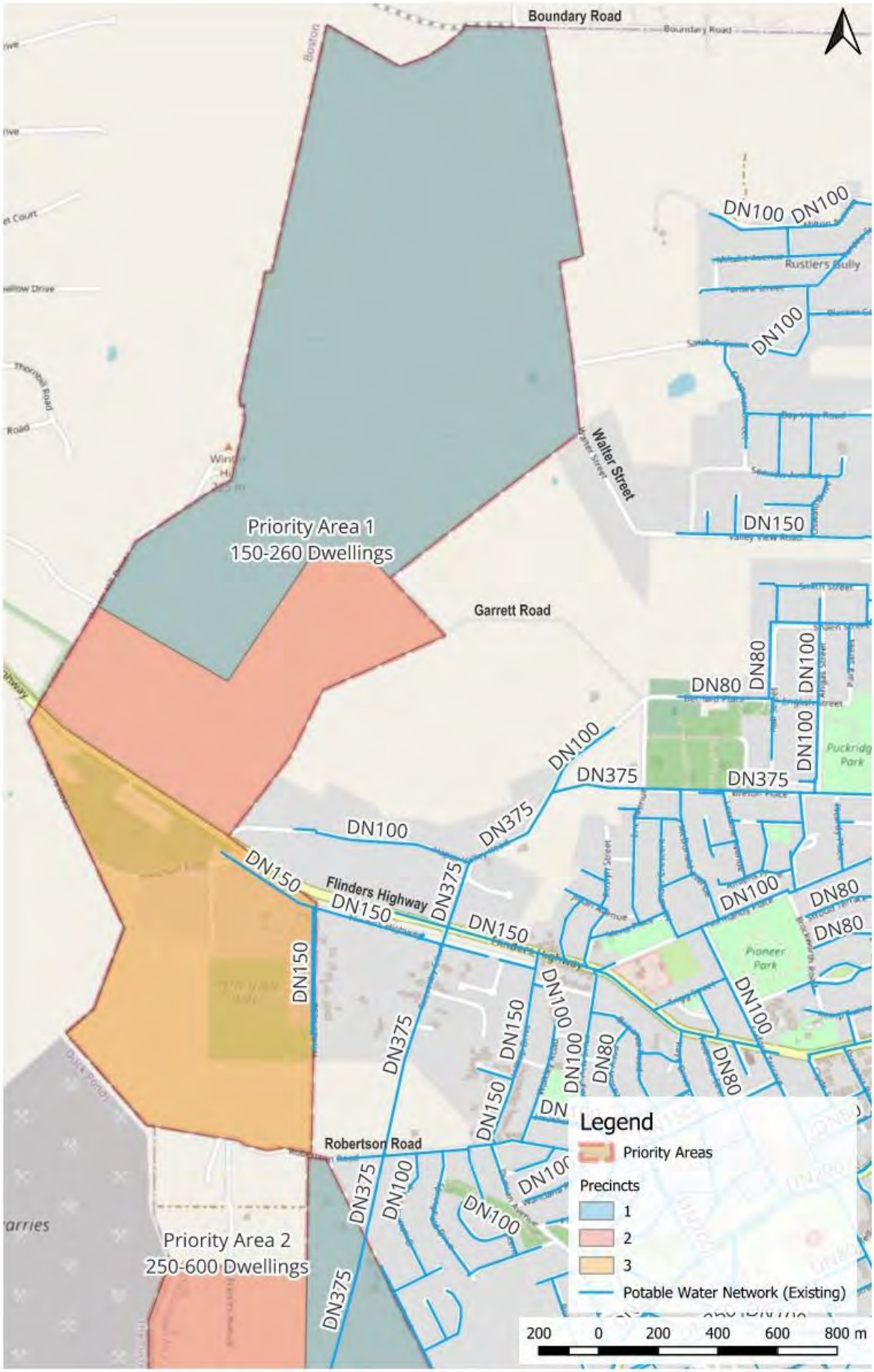

Figure 7-1: Existing SA Water Potable Water Infrastructure – Priority Area 1

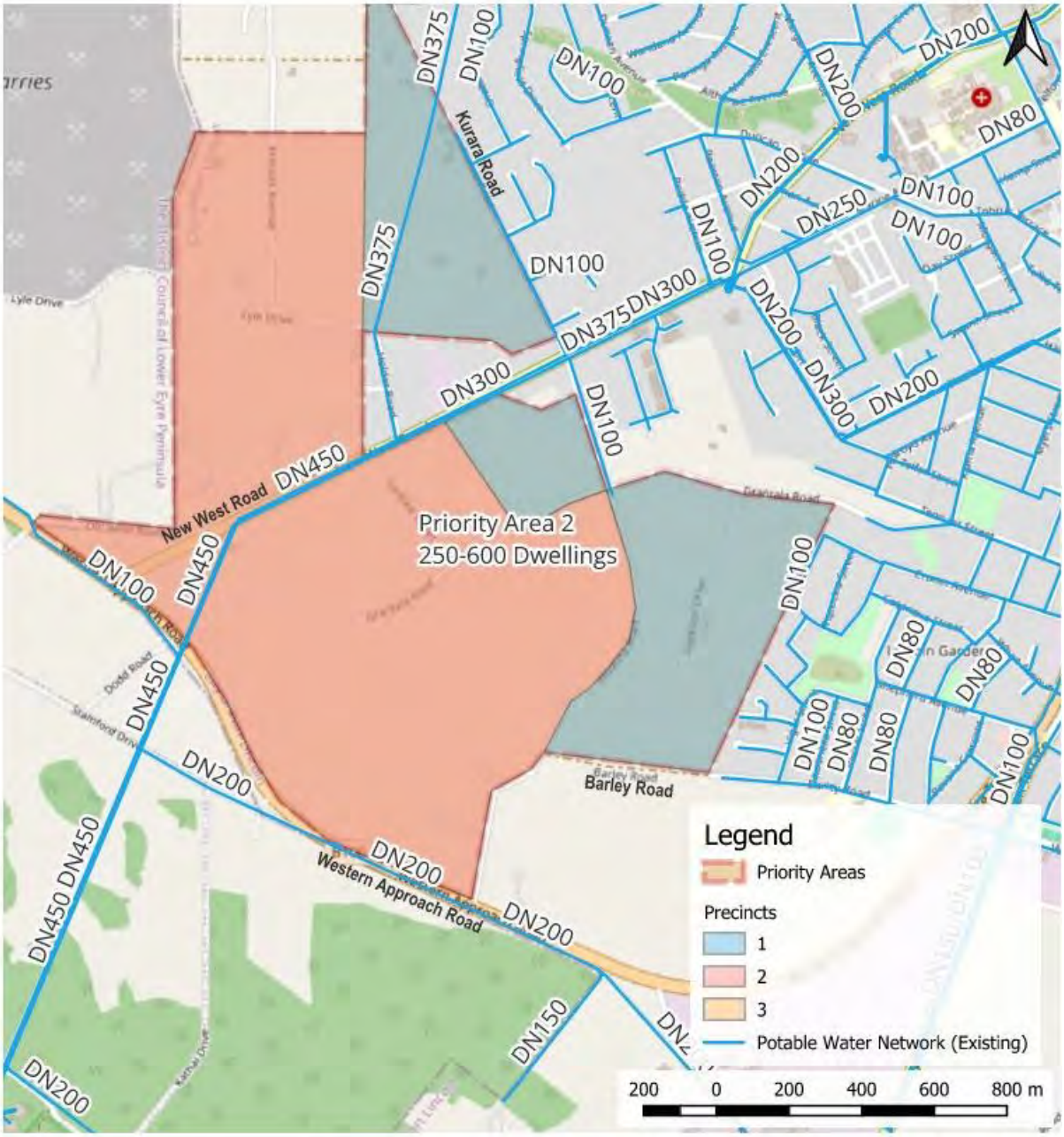

Figure 7-2: Existing SA Water Potable Water Infrastructure – Priority Area 2

Figure 7-3: Existing SA Water Potable Water Infrastructure – Priority Area 3

8 ELECTRICAL

8.1 Existing Electrical Infrastructure

Information on the existing infrastructure has been obtained through correspondence with SA Power Networks, with supporting information sought through a Before You Dig (BYD) search and use of the SA Government's Location SA Map Viewer. A summary of the existing electrical infrastructure is included in Table 8-1.

Table 8-1: Existing Electrical Infrastructure

PRIORITY AREAS	EXISTING INFRASTRUCTURE
Priority Area 1 (Residential)	Multiple 11kV high voltage overhead lines are located at each of the boundaries of the priority area, providing options for access points. A 33kV high voltage overhead line runs along the southern boundary of the growth area. There are some existing 11kV lines that branch off from this line. There are no underground cables near the growth area.
Priority Area 2 (Residential)	Multiple 11kV and 33kV high voltage overhead lines are located at each of the boundaries of the growth area, providing options for service points. An 11kV high voltage underground cable runs along New West Road. This continues along the eastern boundary of the growth area.
Priority Area 3 (Residential)	An 11kV high voltage overhead line runs along the northeastern boundary along Blue Fin Road. There is also an 11kV line along the southeastern boundary along Proper Bay Road There are minimal underground HV cables near this growth area.

8.2 Electrical Masterplanning

SA Power Networks (SAPN) have indicated that augmentation work would be required for each zone, but the magnitude is subject to further detail in the next stages and a clearer understanding of the proposed loads.

Current upgrades in the region are driven by corrosion or asset condition, rather than load.

SAPN have provided the following advice in regards to possible connection points:

- Priority Area 1
  - Boundary Road (northern boundary) is not suitable as it is 1 phase 11kV. Will require augmentation and conversion to 3 phase.
  - Walter Street (east) is suitable, but likely require augmentation or possible feeder split.
  - Flinders Highway (central) is suitable, but likely require augmentation.
- Priority Area 2
  - 33kV lines are not suitable for supply as they are the backbone for substation connection. These exist on Robertson Road (north), Kurara Road (east), and New West Road (central).
  - Frances Avenue and Lyle Drive (central north) likely suitable for connection.
  - Western Approach Road (south) likely suitable for connection, but will require augmentation.

- Priority Area 3
  - Blue Fin Road (east) likely suitable for connection, but will require augmentation
  - Proper Bay Road (south) likely suitable for connection, but will require augmentation

Augmentation rates of $/kVA were unable to be provided at the time of assessment, with figures dependent on the selected connection point and the feeder capacity.

It is expected that a high-voltage loop will be required internally within the developments to form a connection between the site perimeters. This would be installed on a staged basis, within the common service trench.

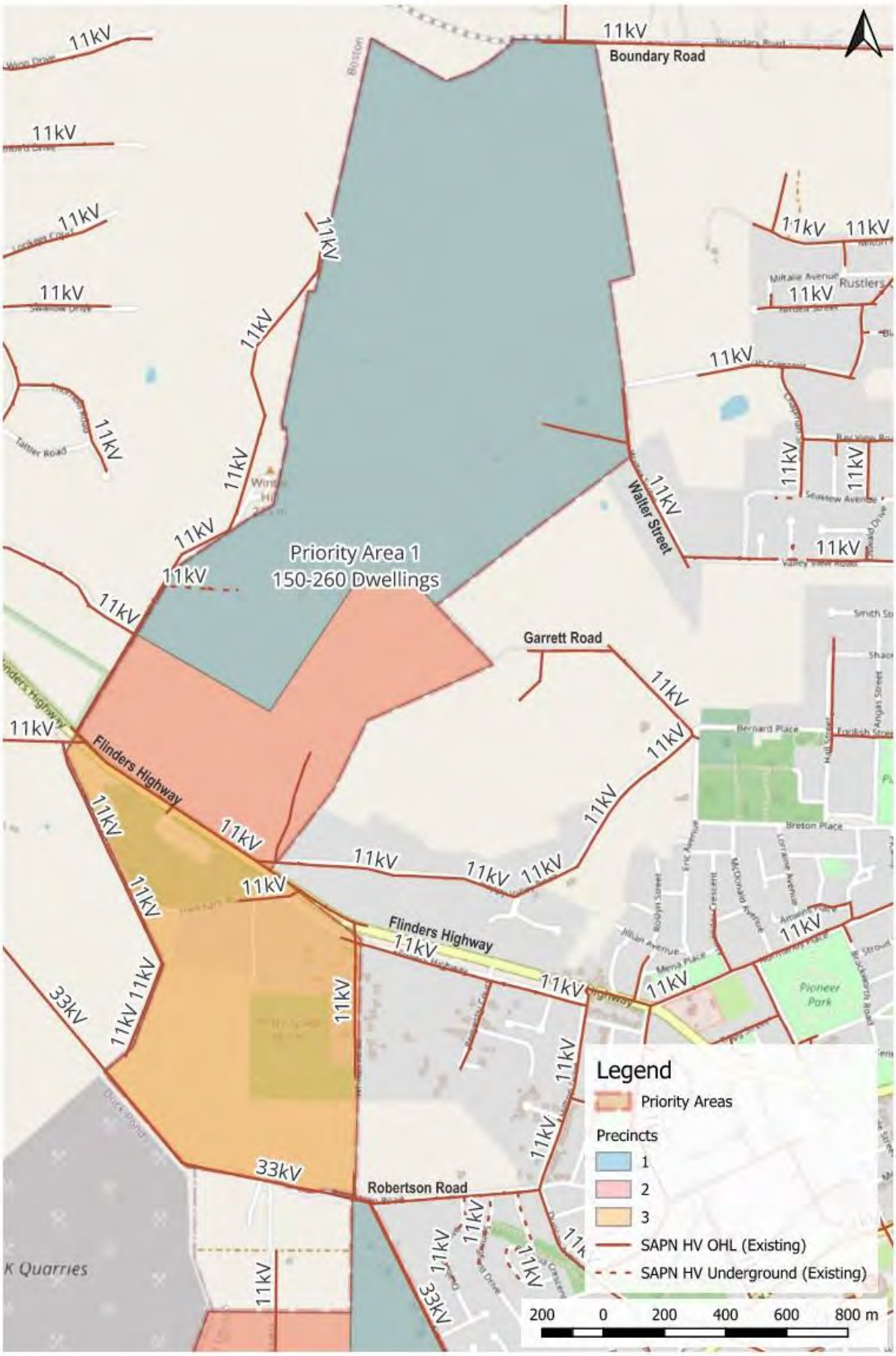

Figure 8-1: Existing Electrical Infrastructure – Priority Area 1

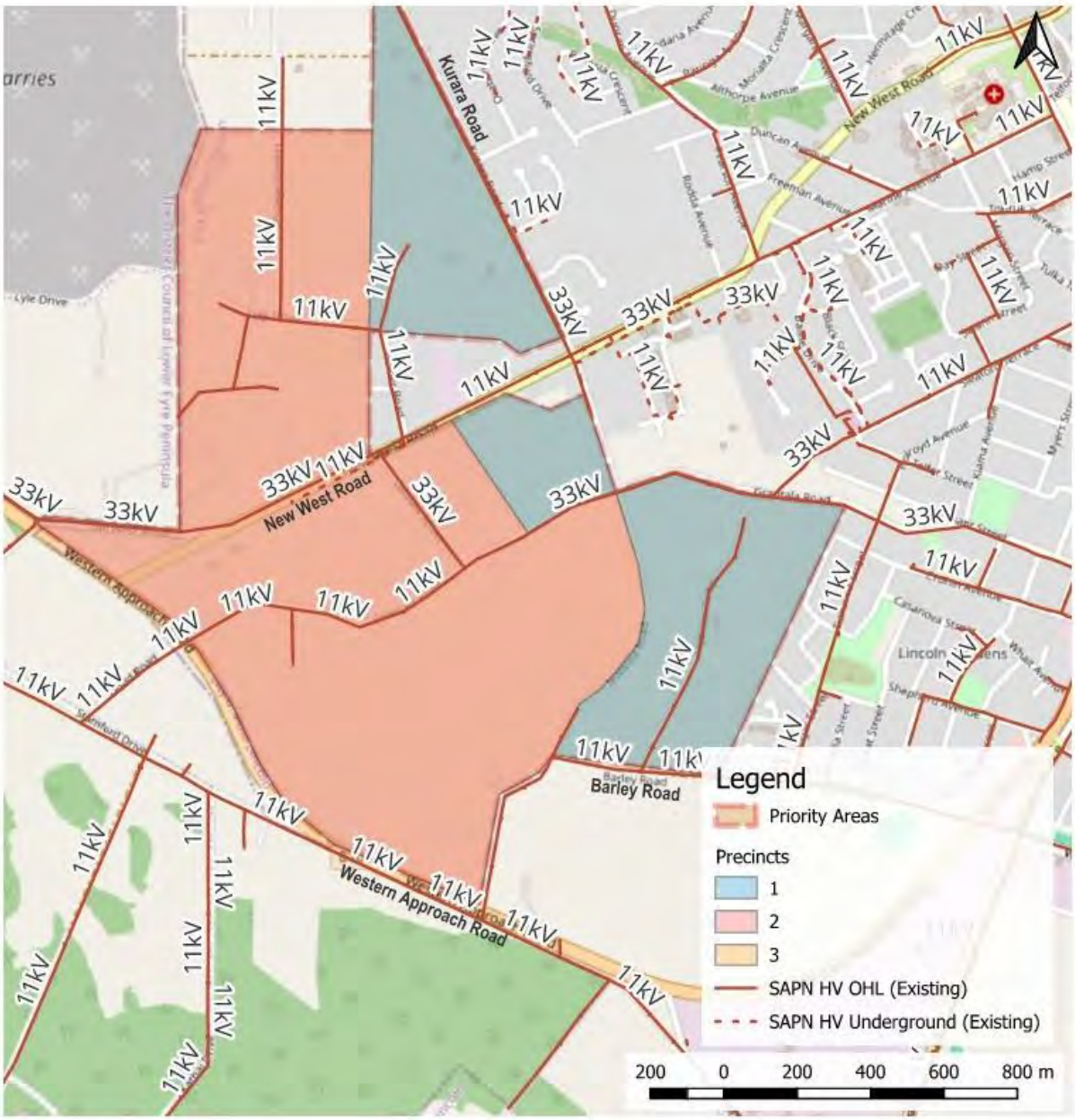

Figure 8-2: Existing Electrical Infrastructure - Priority Area 2

Figure 8-3: Existing Electrical Infrastructure - Priority Area 3

9 COMMUNICATIONS

9.1 Existing Communications Infrastructure

Information on the existing communications infrastructure has been obtained through correspondence with NBN Co, with supporting information sought through a Before You Dig (BYD). Existing infrastructure is included in Table 9-1.

Table 9-1: Existing Communications Infrastructure

PRIORITY AREAS	EXISTING INFRASTRUCTURE
Priority Area 1 (Residential)	In-service cables exist around the perimeter exist in the northern portion of the growth area along Flinders Highway In-service cables existing within the southern portion of the growth area
Priority Area 3 (Residential)	In service cables exist around the eastern perimeter of the growth area.
Priority Area 6 (Residential)	No NBN infrastructure is located within or adjacent to the growth area.

9.2 Communications Master Planning

At the time of this reporting, NBN has not undertaken a feasibility assessment to service the proposed growth areas. Each priority area is located adjacent to the existing NBN fixed line network footprint, but not within it. Given the scale of development, it's likely there will be no backhaul charges to service the developments as part of the land rezoning. NBN have indicated that the infrastructure will likely be Fibre to the Premises (FTTP) services with capacity to cater for residential grade connections. It is noted that this is subject to an application being submitted.

A standard capped per premises contribution is likely to apply to service the development (invoiced on a stage-by-stage basis).

Figure 9-1 highlights the extent of the current NBN within proximity of the development, highlighting that there is significant infrastructure adjacent to adequately service the adjacent growth areas.

Internal NBN infrastructure can be installed within common service trenches and progressively extended as the stage works continue. The developer would contribute a portion of the internal infrastructure cost which would be confirmed at the time of design. Indicative current costs based on previous experience are below, noting these are subject to change, and likely to increase:

- Single Dwelling Units (SDU): Approx. $600.00 incl. GST per premises
- Multi Dwelling Units (MDUs): Approx. $400.00 incl. GST per premises.

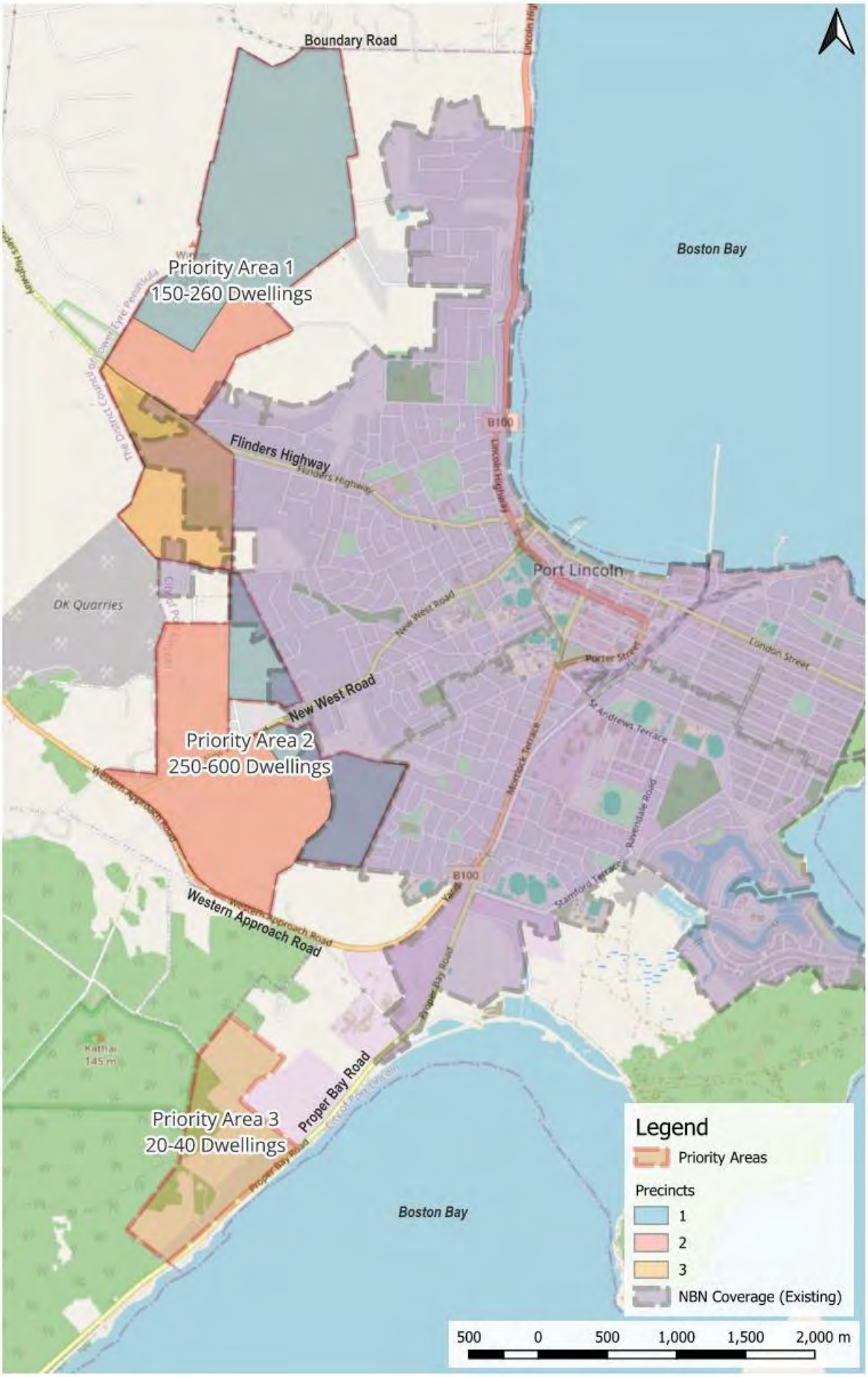

Figure 9-1: Existing NBN Infrastructure

10 RECYCLED WATER NETWORK

10.1 General

Recycled water servicing was not considered as part of the masterplanning review for the three identified priority areas. However, Council have indicated they own and operate a recycled water network within Port Lincoln. Although this infrastructure is not critical to service the proposed developments, future consideration could be given to expanding the network to service open spaces. Detailed review and hydraulic masterplanning assessment would be required to understand how this system could be expanded to support the future growth areas of Port Lincoln.

Council's network is included in Figure 10-1.

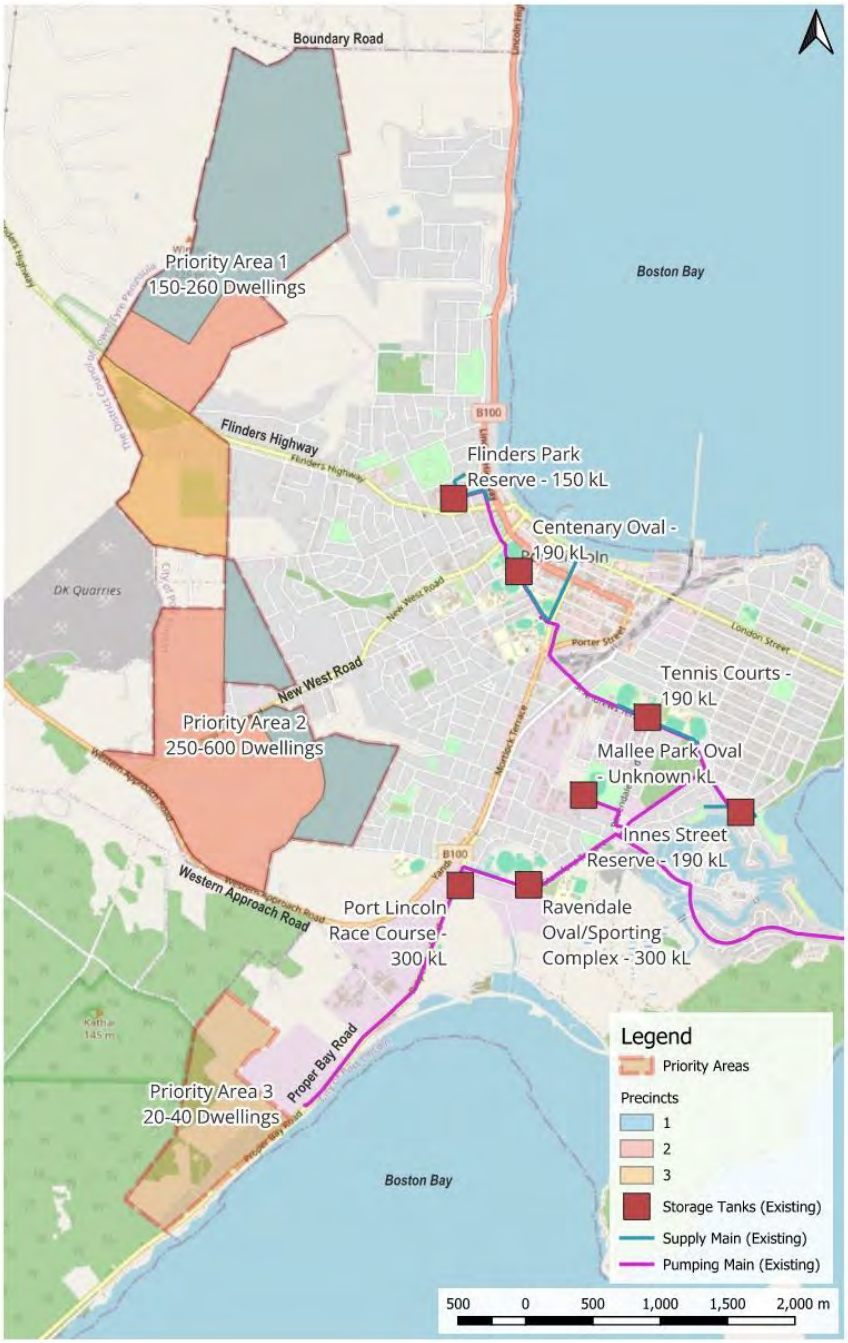

Figure 10-1: Council's Recycled Water Network

11 SUMMARY

A summary of infrastructure requirements identified in this report for each priority area is included in Table 11-1.

Table 11-1: Growth Management Summary

LOCATION	CATEGORY	INFRASTRUCTURE	ACTIONS
Priority Area 1	Residential (Code Amendment will increase existing residential supply)	Future development should include a stormwater management system designed to mitigate peak flows and manage the rate and duration of stormwater discharges from the site to ensure that the development does not increase the peak flows in downstream systems, aligning with the outcomes of the Port Lincoln SMP New Wastewater infrastructure required. Likely on-site disposal in Precinct 1, while Precincts 2 and 3 assumed to connect to existing wastewater network New Potable Water infrastructure required. Likely a booster pump station and new storage tank required Several electricity infrastructure connection points available Telecommunications infrastructure available adjacent to growth area. Main road access via Flinders Highway	1. Investigate options with SA Water whether an additional potable water booster pump station and storage tank are required to service the area. Headworks expansion to be negotiated with future developers and SA Water to identify funding agreements 2. Investigate capacity of existing wastewater network adjacent to Precincts 2 and 3 and confirm feasibility of connecting to existing network

LOCATION	CATEGORY	INFRASTRUCTURE	ACTIONS
Priority Area 2	Residential	Future development should include a stormwater management system designed to mitigate peak flows and manage the rate and duration of stormwater discharges from the site to ensure that the development does not increase the peak flows in downstream systems. Flooding not critical (can be contained locally within overland flow paths) New Wastewater infrastructure required to service western portion of the site. Given number of lots and topography of the site, this will likely require a separate pump station to service the western area. The eastern area can likely connect into the existing network New Potable Water infrastructure required. Multiple connection points available. Looped networks to provide redundancy will be required. Several electricity infrastructure connection points available Telecommunications infrastructure available adjacent to growth area. Main road access via Old West Road or Western Approach Road	1. Investigate funding options for a new wastewater pump station for the western portion of the area 2. Investigate capacity of existing wastewater system along eastern portion of the area to determine number of lots able to connect without upgrades to new network. Will require liaison with SA Water 3. Ensure infrastructure agreement in place to upgrade DN100 water main along Nootina Road for future loop network

LOCATION	CATEGORY	INFRASTRUCTURE	ACTIONS
Priority Area 3	Residential	Future development should include a stormwater management system designed to mitigate peak flows and manage the rate and duration of stormwater discharges from the site to ensure that the development does not increase the peak flows in downstream systems. Flooding not critical (can be contained locally within overland flow paths) New Wastewater infrastructure required. On-site wastewater deemed more viable solution New Potable Water infrastructure required Several electricity infrastructure connection points available Telecommunications infrastructure available approximately 1km from area and will require extension along Proper Bay Road Main road access via Proper Bay Road	1. Confirm stormwater discharge requirements with Council 2. Confirm potable water headworks funding agreement with SA Water.

APPENDIX A
SITE LAYOUT PLAN

DRAWING LIST

WGA242687-SK-CV-0001	LOCALITY PLAN
WGA242687-SK-CV-0002	ELEVATION - PRIORITY ZONE 1
WGA242687-SK-CV-0003	STORMWATER - PRIORITY ZONE 1
WGA242687-SK-CV-0004	POTABLE WATER - PRIORITY ZONE 1
WGA242687-SK-CV-0005	WASTEWATER - PRIORITY ZONE 1
WGA242687-SK-CV-0006	ELECTRICAL - PRIORITY ZONE 1
WGA242687-SK-CV-0007	ELEVATION - PRIORITY ZONE 2
WGA242687-SK-CV-0008	STORMWATER - PRIORITY ZONE 2
WGA242687-SK-CV-0009	POTABLE WATER - PRIORITY ZONE 2
WGA242687-SK-CV-0010	WASTEWATER - PRIORITY ZONE 2
WGA242687-SK-CV-0011	ELECTRICAL - PRIORITY ZONE 2
WGA242687-SK-CV-0012	ELEVATION - PRIORITY ZONE 3
WGA242687-SK-CV-0013	STORMWATER - PRIORITY ZONE 3
WGA242687-SK-CV-0014	POTABLE WATER - PRIORITY ZONE 3
WGA242687-SK-CV-0015	WASTEWATER - PRIORITY ZONE 3
WGA242687-SK-CV-0016	ELECTRICAL - PRIORITY ZONE 3
WGA242687-SK-CV-0017	NBN COVERAGE
WGA242687-SK-CV-0018	RECYCLED WATER
WGA242687-SK-CV-0019	100 YEAR FLOOD DEPTH AEP

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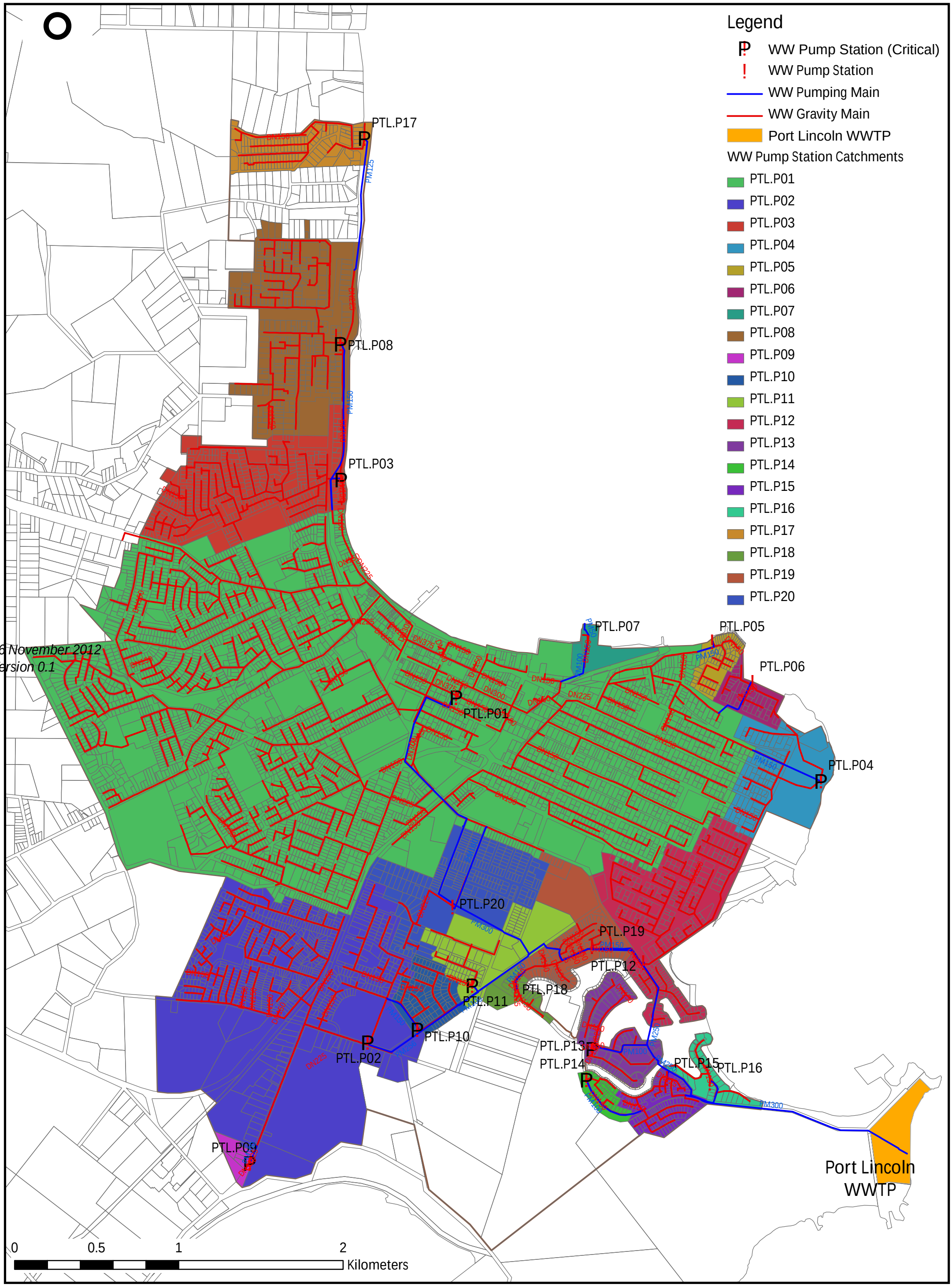
APPENDIX B
SERVICE AUTHORITY NETWORKS

Port Lincoln Wastewater Network Plan

Date: 23 November 2012

Version: 0.1



A Appendix A – Water Network Considerations

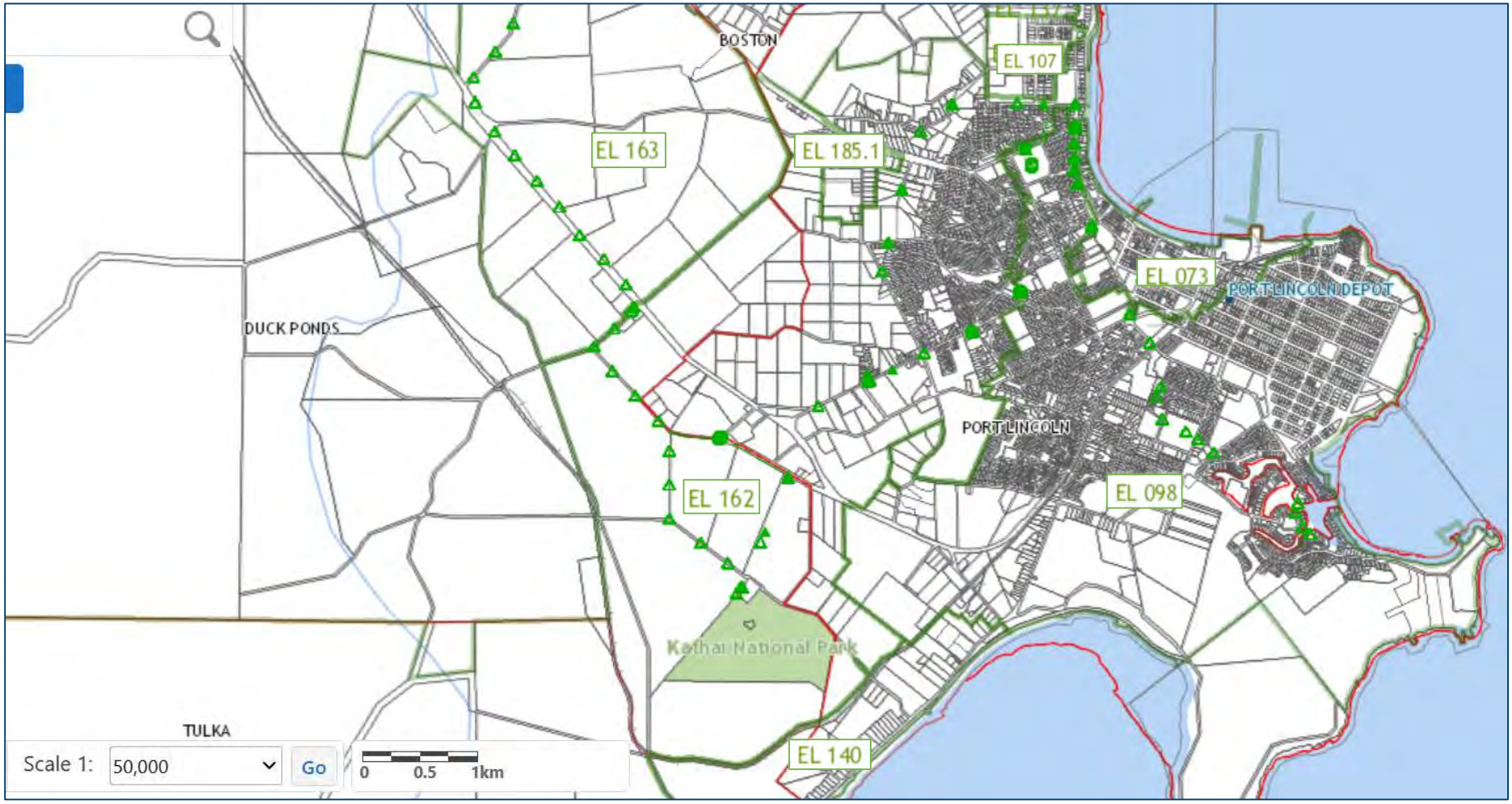


Figure 1 – Port Lincoln pressure zones

APPENDIX C
INFRASTRUCTURE MAPS

DRAWING LIST

WGA242687-SK-CV-0001	LOCALITY PLAN
WGA242687-SK-CV-0002	ELEVATION - PRIORITY ZONE 1
WGA242687-SK-CV-0003	STORMWATER - PRIORITY ZONE 1
WGA242687-SK-CV-0004	POTABLE WATER - PRIORITY ZONE 1
WGA242687-SK-CV-0005	WASTEWATER - PRIORITY ZONE 1
WGA242687-SK-CV-0006	ELECTRICAL - PRIORITY ZONE 1
WGA242687-SK-CV-0007	ELEVATION - PRIORITY ZONE 2
WGA242687-SK-CV-0008	STORMWATER - PRIORITY ZONE 2
WGA242687-SK-CV-0009	POTABLE WATER - PRIORITY ZONE 2
WGA242687-SK-CV-0010	WASTEWATER - PRIORITY ZONE 2
WGA242687-SK-CV-0011	ELECTRICAL - PRIORITY ZONE 2
WGA242687-SK-CV-0012	ELEVATION - PRIORITY ZONE 3
WGA242687-SK-CV-0013	STORMWATER - PRIORITY ZONE 3
WGA242687-SK-CV-0014	POTABLE WATER - PRIORITY ZONE 3
WGA242687-SK-CV-0015	WASTEWATER - PRIORITY ZONE 3
WGA242687-SK-CV-0016	ELECTRICAL - PRIORITY ZONE 3
WGA242687-SK-CV-0017	NBN COVERAGE
WGA242687-SK-CV-0018	RECYCLED WATER
WGA242687-SK-CV-0019	100 YEAR FLOOD DEPTH AEP

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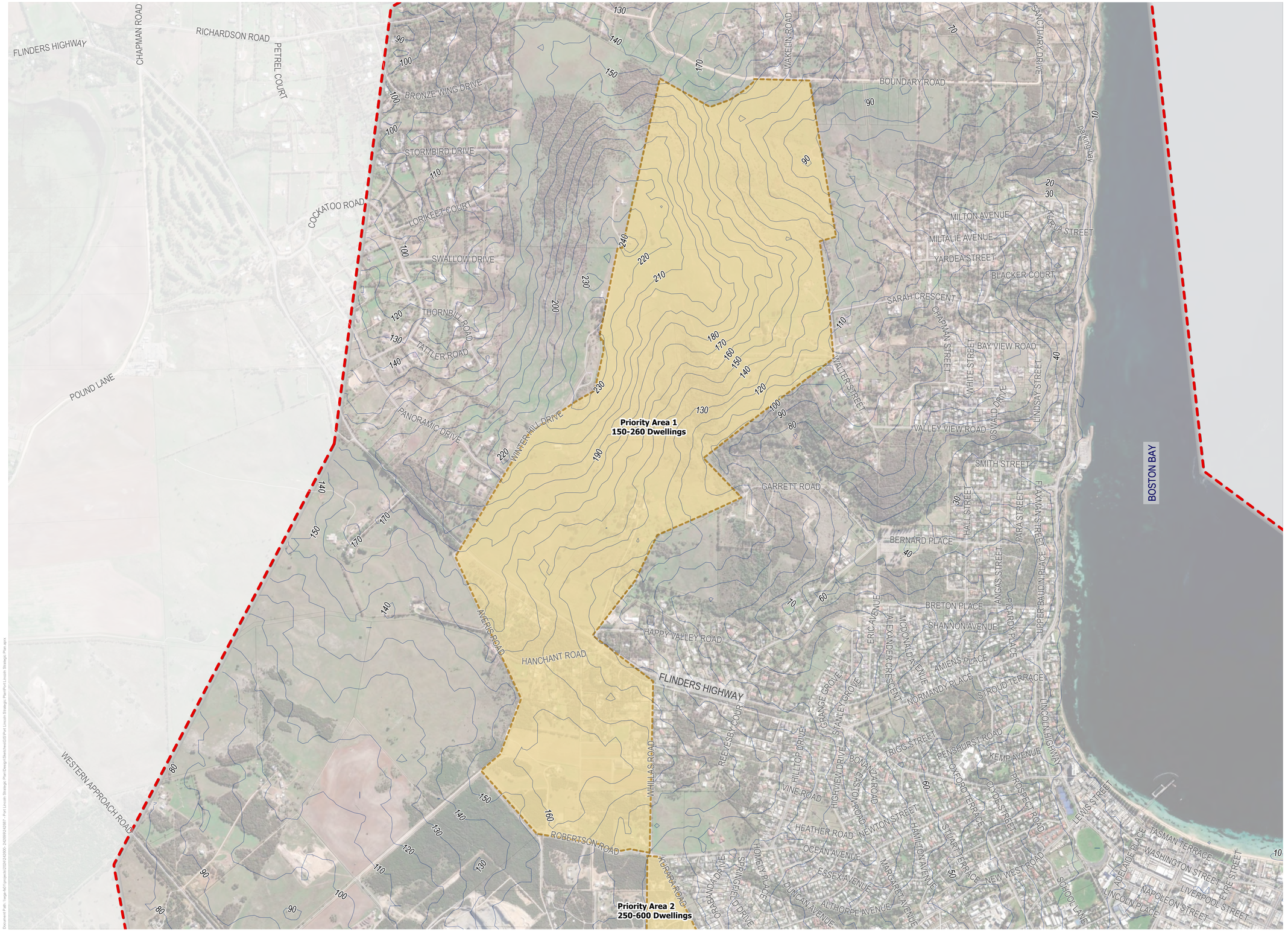

LEGEND

- PARCEL CADASTRE
- PORT LINCOLN STUDY EXTENT
- PRIORITY AREA
- MAJOR CONTOURS

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ELEVATION - PRIORITY AREA 1

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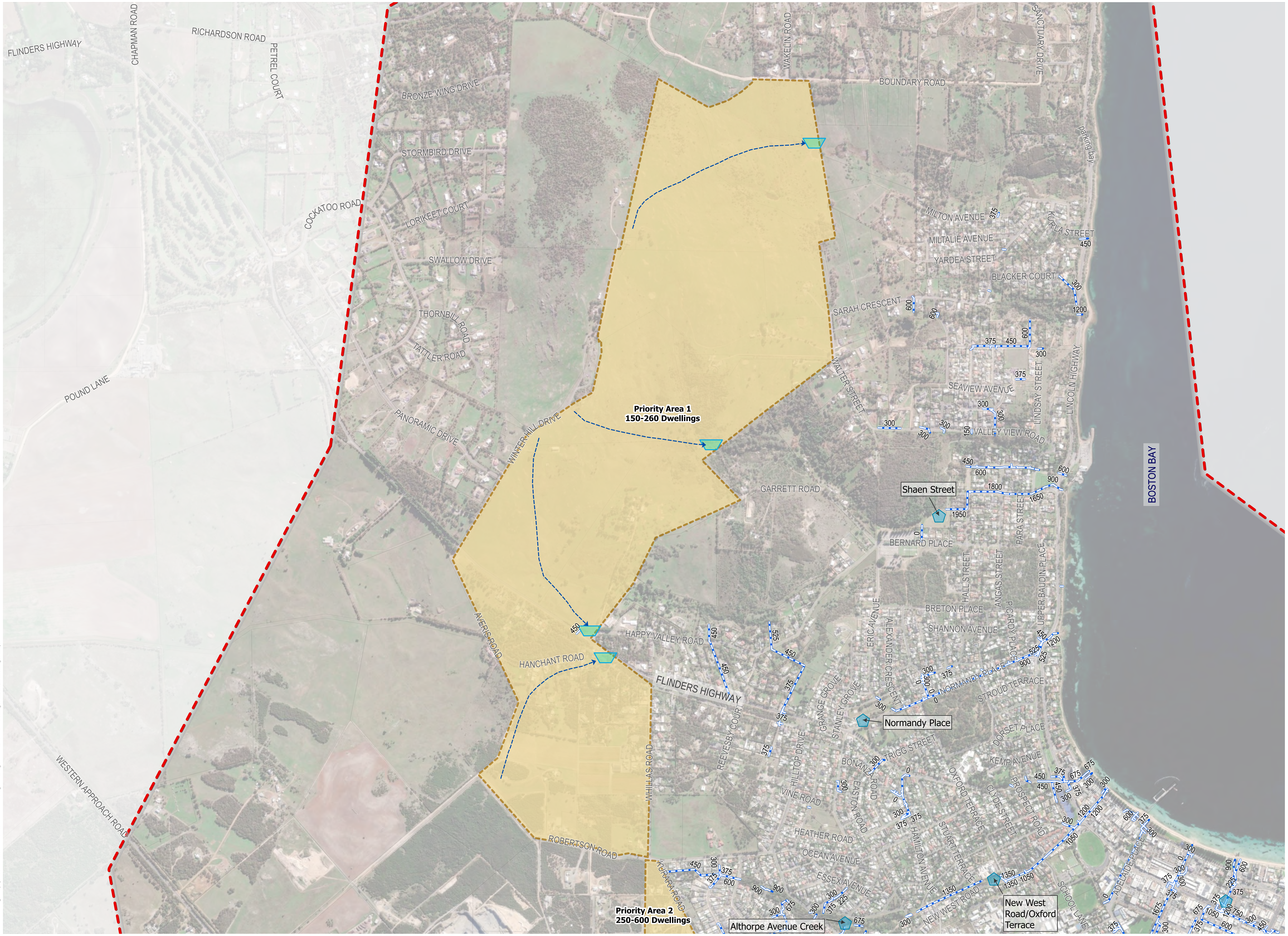

LEGEND

- PARCEL CADASTRE
- PORT LINCOLN STUDY EXTENT
- EXISTING STORMWATER DRAINS
- PRIORITY AREA
- EXISTING STORMWATER BASIN
- PROPOSED STORMWATER BASINS
- ESTIMATED FLOW PATHS THROUGH PROPOSED PARCEL

NOTES:

- MULTIPLE CONNECTION POINTS TO EXISTING NETWORK AVAILABLE
- DETENTION BASIN OUTLETS TO CONNECT INTO EXISTING NETWORKS AND NATURAL FLOWPATHS
- DETENTION REQUIREMENTS FOR PRIORITY AREA 1 = 8,000M³ (ASSUMED 260 DWELLINGS). TO BE INCLUDED AS SERIES OF BASINS/WETLANDS ACROSS THE AREA

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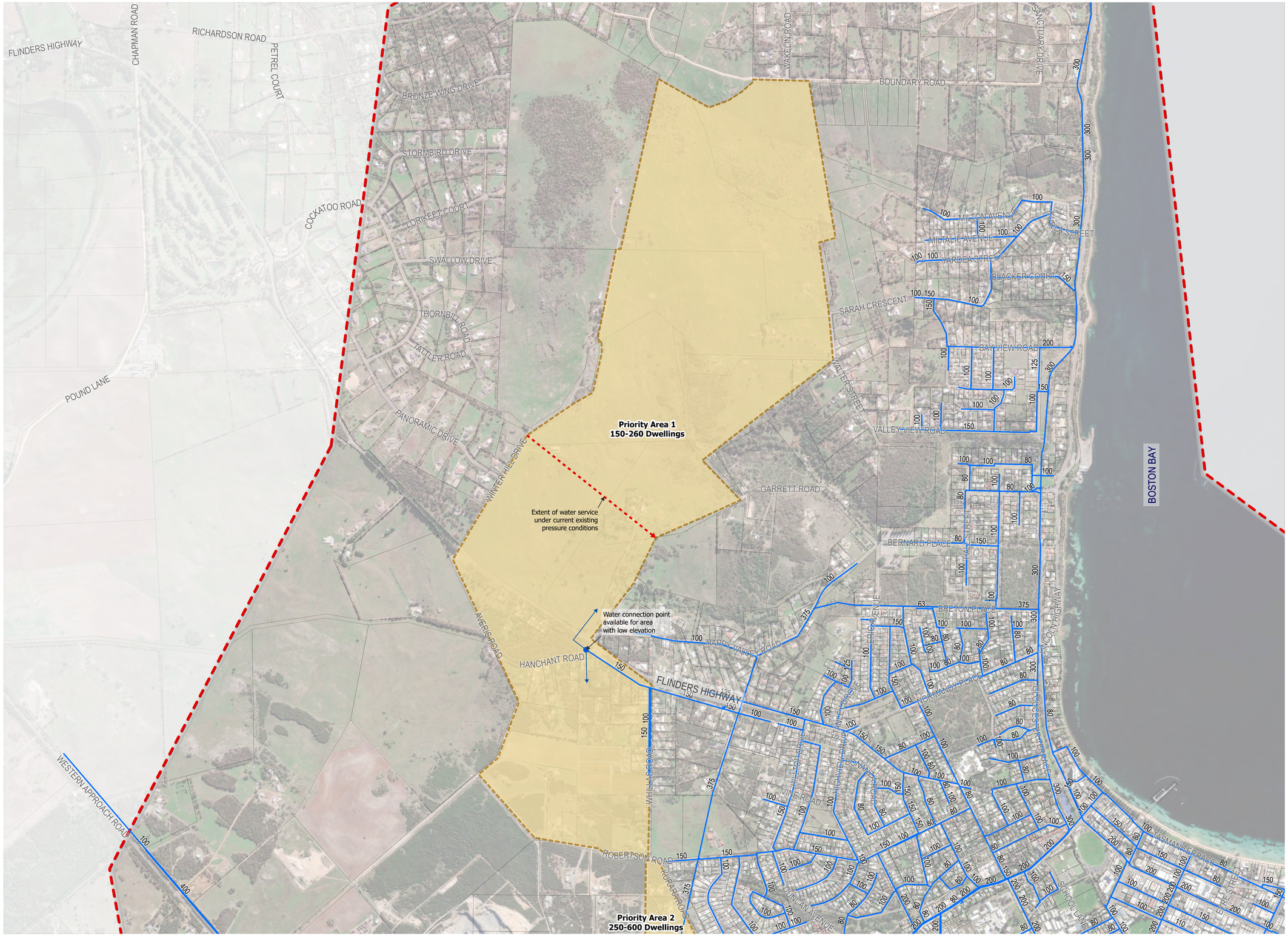

LEGEND

- PARCEL CADASTRE
- PORT LINCOLN STUDY EXTENT
- EXISTING WATER MAIN (SA WATER)
- PRIORITY AREA
- EXTENT OF WATER SERVICE UNDER CURRENT EXISTING PRESSURE
- POTABLE CONNECTION TEE OFF LOCATIONS
- WATER CONNECTION POINT

NOTES:

- MULTIPLE CONNECTION POINTS TO EXISTING NETWORK AVAILABLE
- CONNECTION SUBJECT TO SA WATER REVIEW OF EXISTING NETWORK CAPACITY
- NEW BOOSTER PUMP AND STORAGE TANK MAY BE REQUIRED TO SERVICE THE AREA (SUBJECT TO SA WATER REVIEW)
- INTERNAL ROAD NETWORKS TO UTILISE TYPICAL 100MM, 150MM OR 200MM PIPE NETWORK

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STORMWATER - PRIORITY AREA 1

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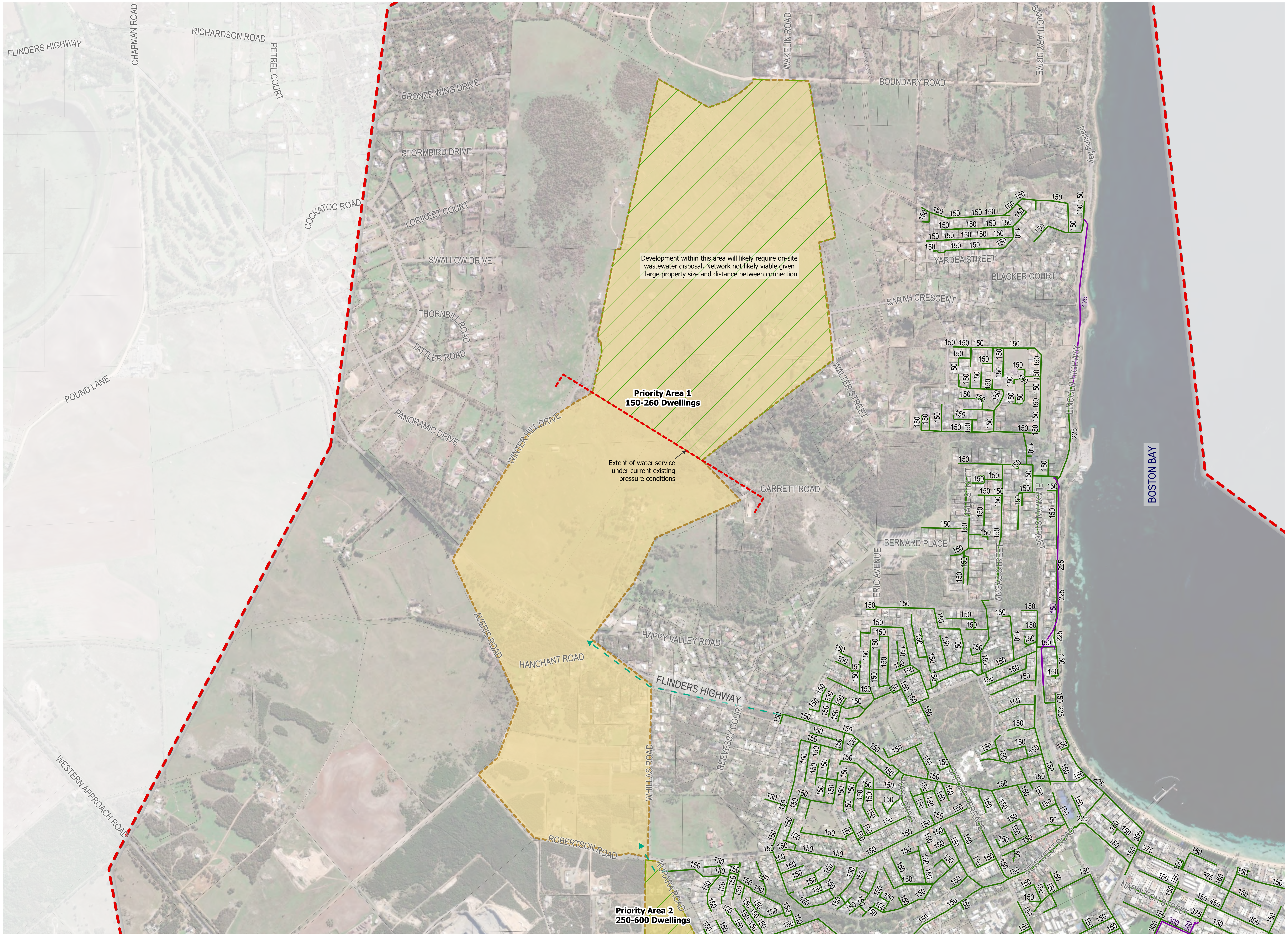

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- PARCEL CADASTRE
- PORT LINCOLN STUDY EXTENT
- PRIORITY AREA
- EXISTING WASTE WATER PUMPING (SA WATER)
- WASTE WATER GRAVITY MAIN (SA WATER)
- POTENTIAL SEWER GRAVITY EXTENSION
- ONSITE WASTEWATER MANAGEMENT ZONE
- EXTENT OF GRAVITY SERVICE CAPABILITY

NOTES:

- MULTIPLE CONNECTION POINTS TO EXISTING 150MM SEWER NETWORK
- CONNECTION SUBJECT TO SA WATER REVIEW OF EXISTING NETWORK CAPACITY
- GIVEN LARGE NUMBER OF DWELLINGS, SA WATER MAY REQUEST NEW PUMP STATION TO SERVICE DEVELOPMENT
- INTERNAL ROAD NETWORKS TO UTILISE TYPICAL 150MM UPVC
- LARGER 225MM TRUNK MAIN MAY BE REQUIRED
- HIGH POTENTIAL FOR ON-SITE WASTEWATER IN NORTHERN PORTION

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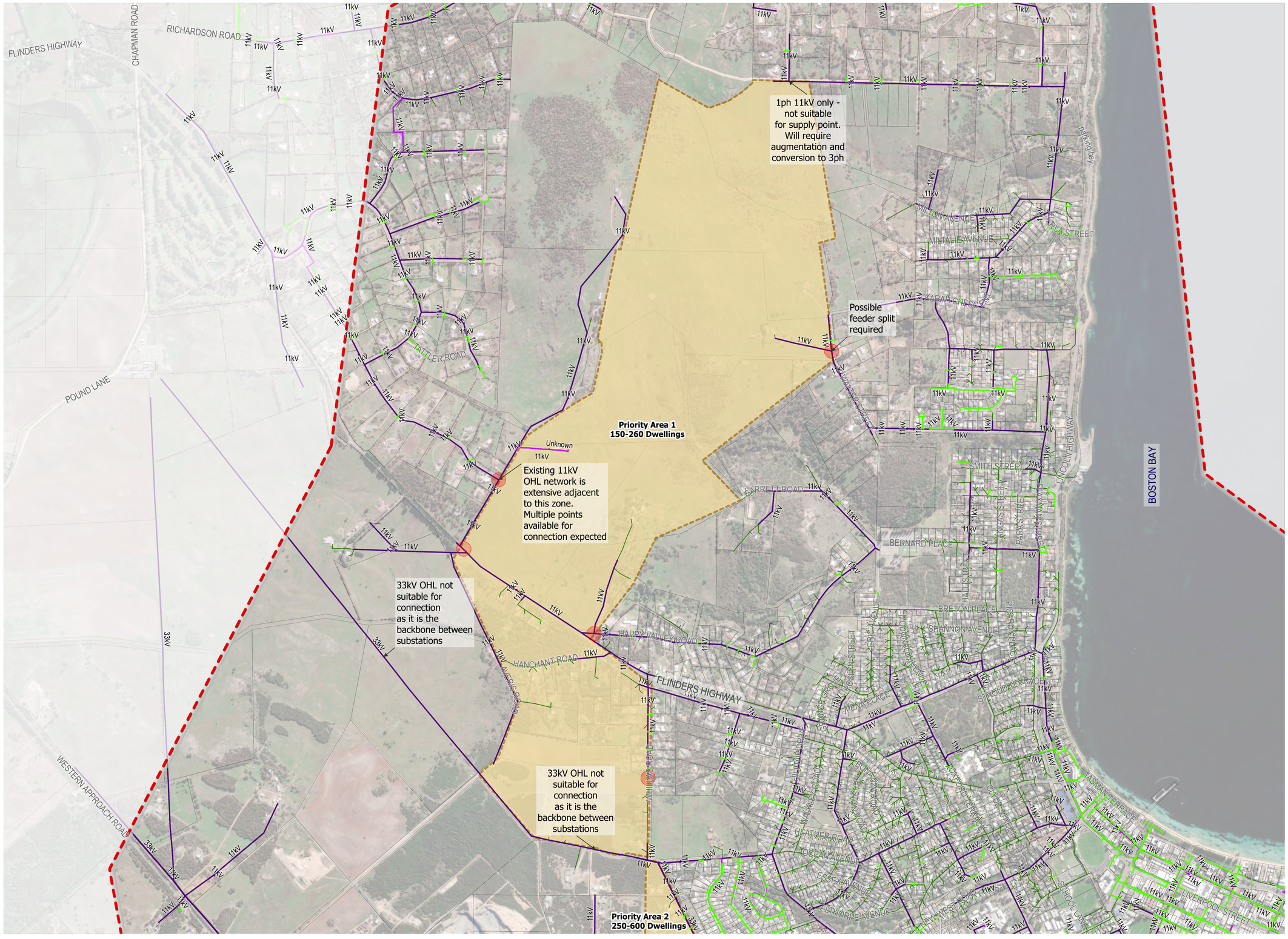

LEGEND

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- PRIORITY AREA
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- HIGH VOLTAGE UNDERGROUND CABLE (SAPN)
- LOW VOLTAGE UNDERGROUND CABLE (SAPN)
- LOW VOLTAGE OVERHEAD CABLE (SAPN)
- PROPOSED SAPN 11KV CONNECTIONS

NOTES:

- CAPACITY ASSESSMENT REQUIRED FROM SAPN TO CONFIRM SUITABILITY FOR CONNECTION
- CONNECTION POINTS WILL LIKELY REQUIRE AUGMENTATION

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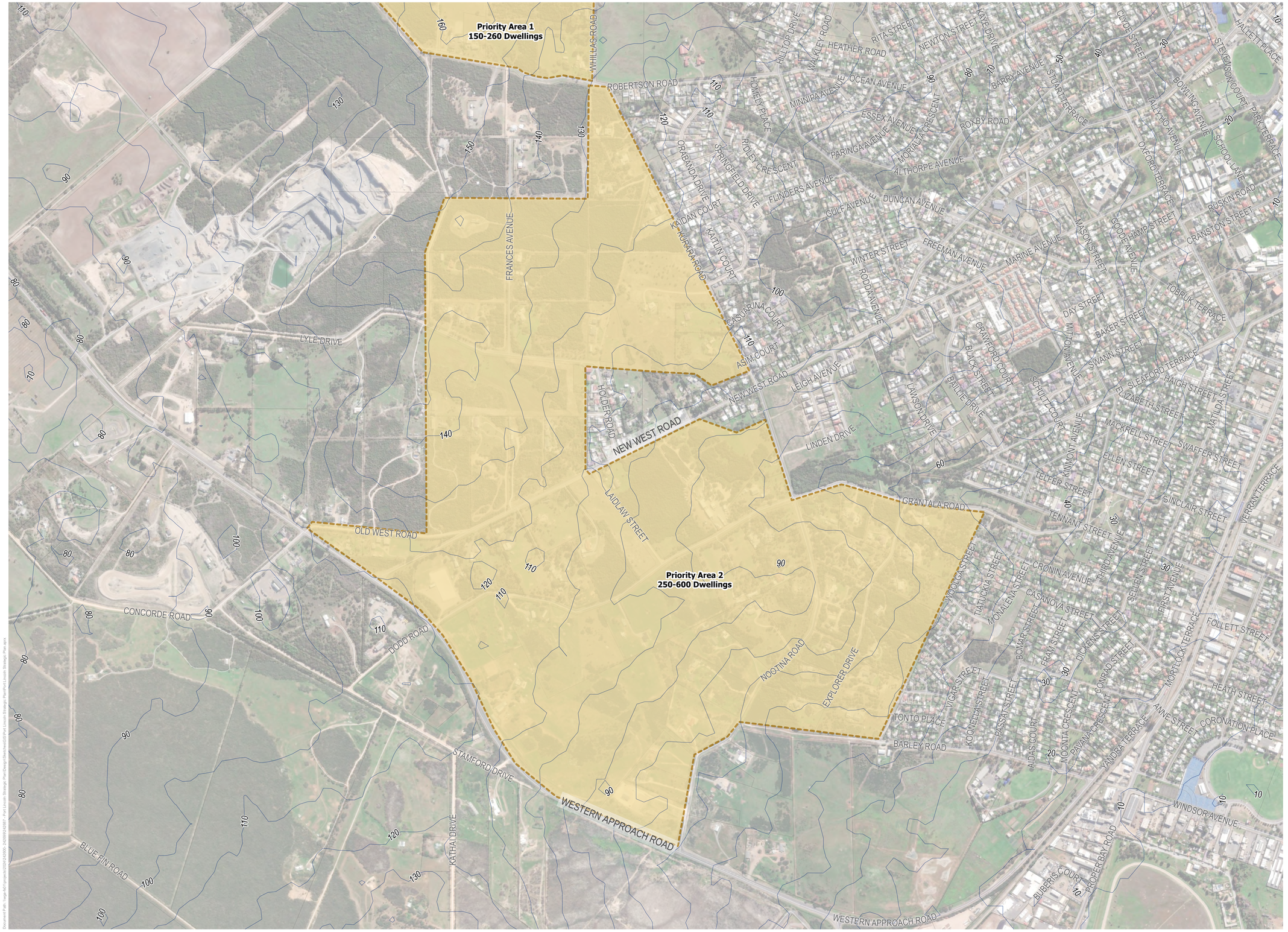

LEGEND

- PARCEL CADASTRE
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- PRIORITY AREA
- MAJOR CONTOURS

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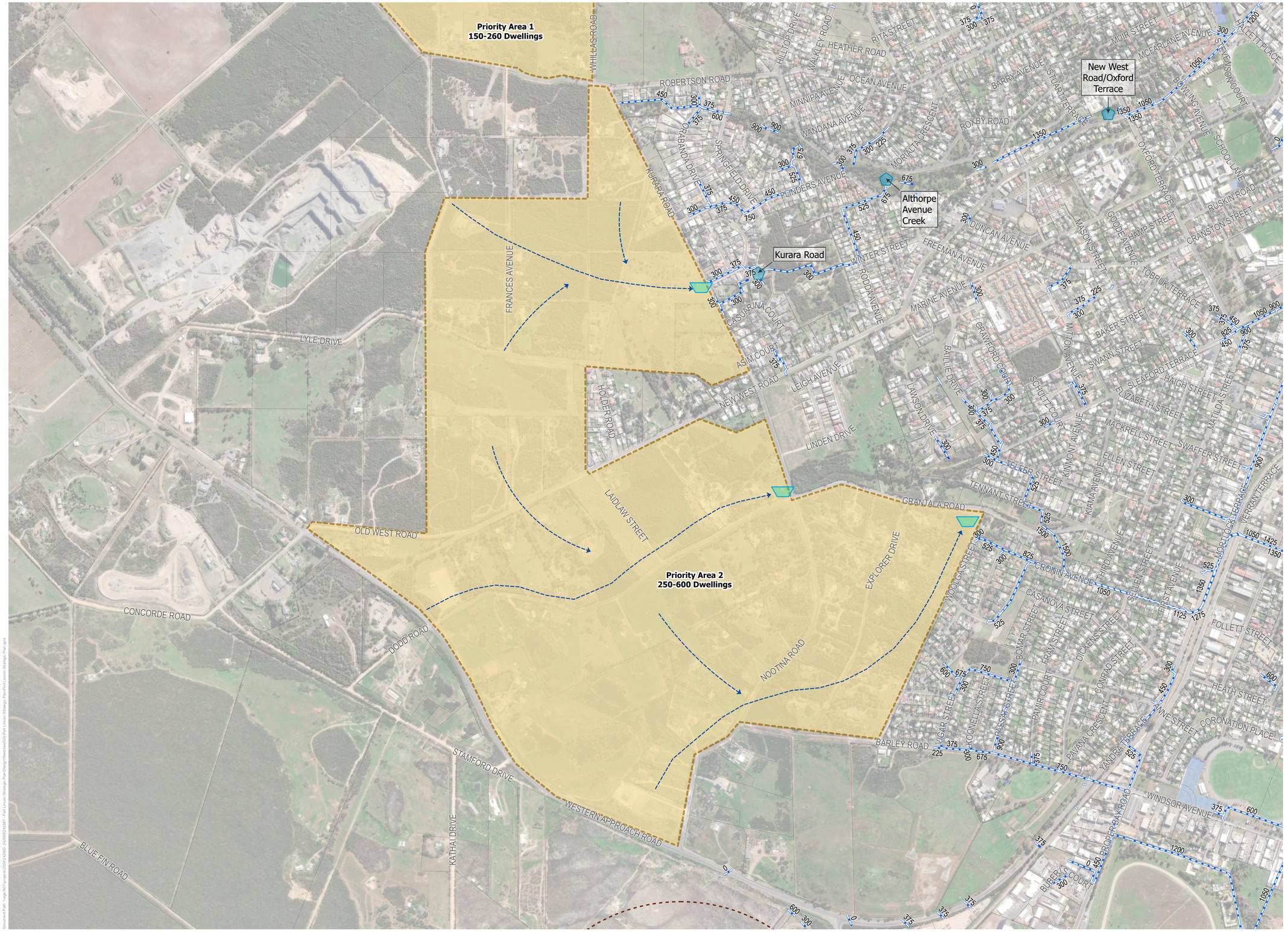

LEGEND

- PARCEL CADASTRE
- PORT LINCOLN STUDY EXTENT
- EXISTING STORMWATER DRAINS
- PRIORITY AREA
- EXISTING STORMWATER BASIN
- PROPOSED STORMWATER BASINS
- ESTIMATED FLOW PATHS THROUGH PROPOSED PARCEL
- INDICATIVE 500M BUFFER ZONE FOR PORT LINCOLN DUMP

NOTES:

- MULTIPLE CONNECTION POINTS TO EXISTING NETWORK AVAILABLE
- DETENTION BASIN OUTLETS TO CONNECT INTO EXISTING NETWORKS AND NATURAL FLOWPATHS
- DETENTION REQUIREMENTS FOR PRIORITY AREA 2 = 26,000M^3 (ASSUMED 600 DWELLINGS). TO BE INCLUDED AS SERIES OF BASINS/WETLANDS ACROSS THE AREA

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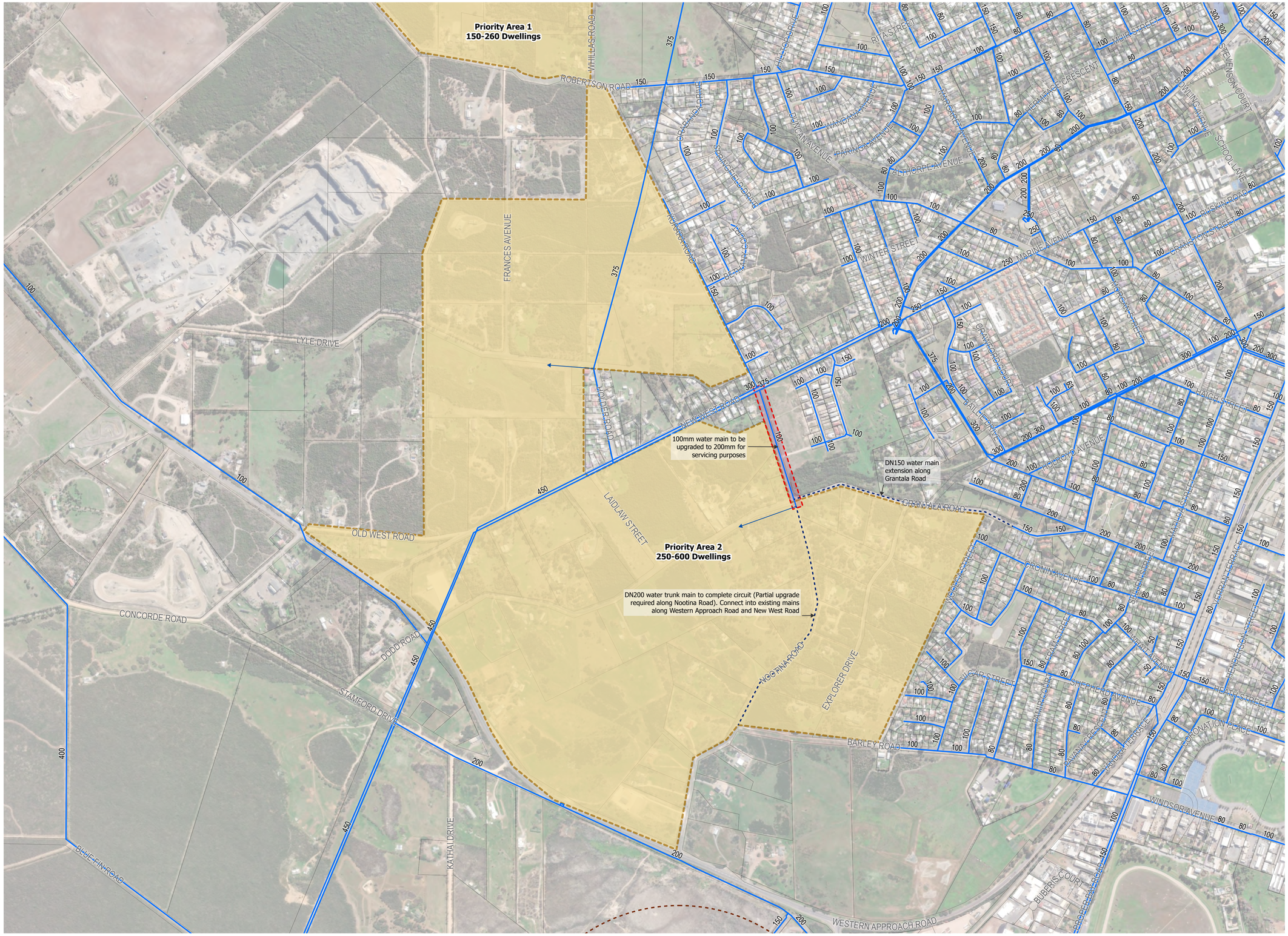

LEGEND

- PARCEL CADASTRE
- PORT LINCOLN STUDY EXTENT
- EXISTING WATER MAIN (SA WATER)
- PRIORITY AREA
- POTABLE WATER UPGRADE
- POTABLE CONNECTION TEE OFF LOCATIONS
- PROPOSED WATER MAIN
- INDICATIVE 500M BUFFER ZONE FOR PORT LINCOLN DUMP

NOTES:

- MULTIPLE CONNECTION POINTS TO EXISTING NETWORK AVAILABLE
- CONNECTION SUBJECT TO SA WATER REVIEW OF EXISTING NETWORK CAPACITY
- TRUNK MAIN UPGRADES AND EXTENSION ALONG GRANTALA ROAD AND NOOTINA ROAD REQUIRED
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POTABLE WATER - PRIORITY AREA 2

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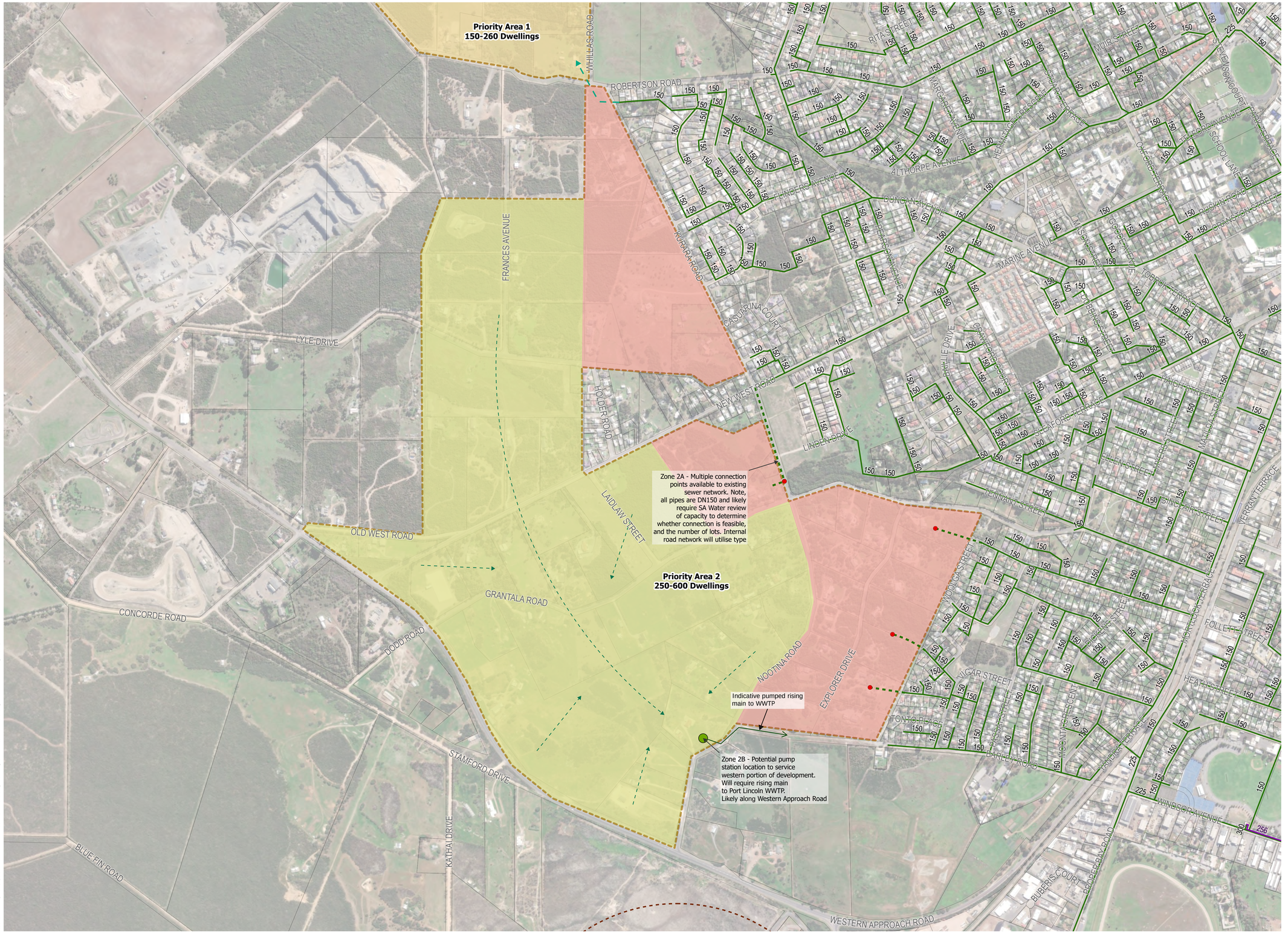

LEGEND

- PARCEL CADASTRE
- PORT LINCOLN STUDY EXTENT
- PRIORITY AREA
- EXISTING WASTE WATER PUMPING (SA WATER)
- WASTE WATER GRAVITY MAIN (SA WATER)
- POTENTIAL SEWER GRAVITY EXTENSION
- ONSITE WASTEWATER MANAGEMENT ZONE
- POTENTIAL CONNECTION POINTS TO EXISTING SEWER GRAVITY MAIN
- POTENTIAL PUMP STATION LOCATION
- INDICATIVE INTERNAL GRAVITY ARRANGMENT TO DOWNSTREAM PUMP STATIONS
- PROPOSED ZONE 2A TO UTILISE EXISTING PORT LINCOLN NETWORK
- PROPOSED ZONE 2B TO FORM NEW INTERNAL PUMP STATION CATCHMENT
- INDICATIVE 500M BUFFER ZONE FOR PORT LINCOLN DUMP

NOTES:

- PRIORITY AREA SEPARATED INTO AREA 2A (EAST) AND AREA 2B (WEST) BASED ON CAPACITY
- MULTIPLE CONNECTION POINTS TO EXISTING 150MM SEWER NETWORK AVAILABLE IN AREA 2A SUBJECT TO SA WATER REVIEW OF EXISTING NETWORK CAPACITY
- AREA 2B LIKELY REQUIRE INDEPENDENT PUMP STATION TO SERVICE DWELLINGS (SUBJECT TO SAWATER REVIEW AND FEASIBILITY STUDIES)
- INTERNAL ROAD NETWORKS TO UTILISE TYPICAL 150MM UPVC
- LARGER 225MM TRUNK MAIN MAY BE REQUIRED

N

When sheet printed full size, the scale bar is 100mm.

0 50 100mm

Scale 1:6,000 @ A1

0 150 300 450 600 Meters

INFORMATION ISSUE
NOT FOR CONSTRUCTION

REV	DATE	DESCRIPTION	DRAFT	ENG.	CHKD
A	19/08/25	WASTEWATER	ADS	JPH	JPB
B	07/10/25	WASTEWATER	ADS	JPH	JPB

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PORT LINCOLN STRATEGIC PLAN
MASTERPLANNING

WASTEWATER - PRIORITY AREA 2

A1

DOCUMENT NUMBER
Project Number: WGA242687-SK-CV-0010
Sheet No.:
Rev.: B

Design: JPH
Drawn: ADS

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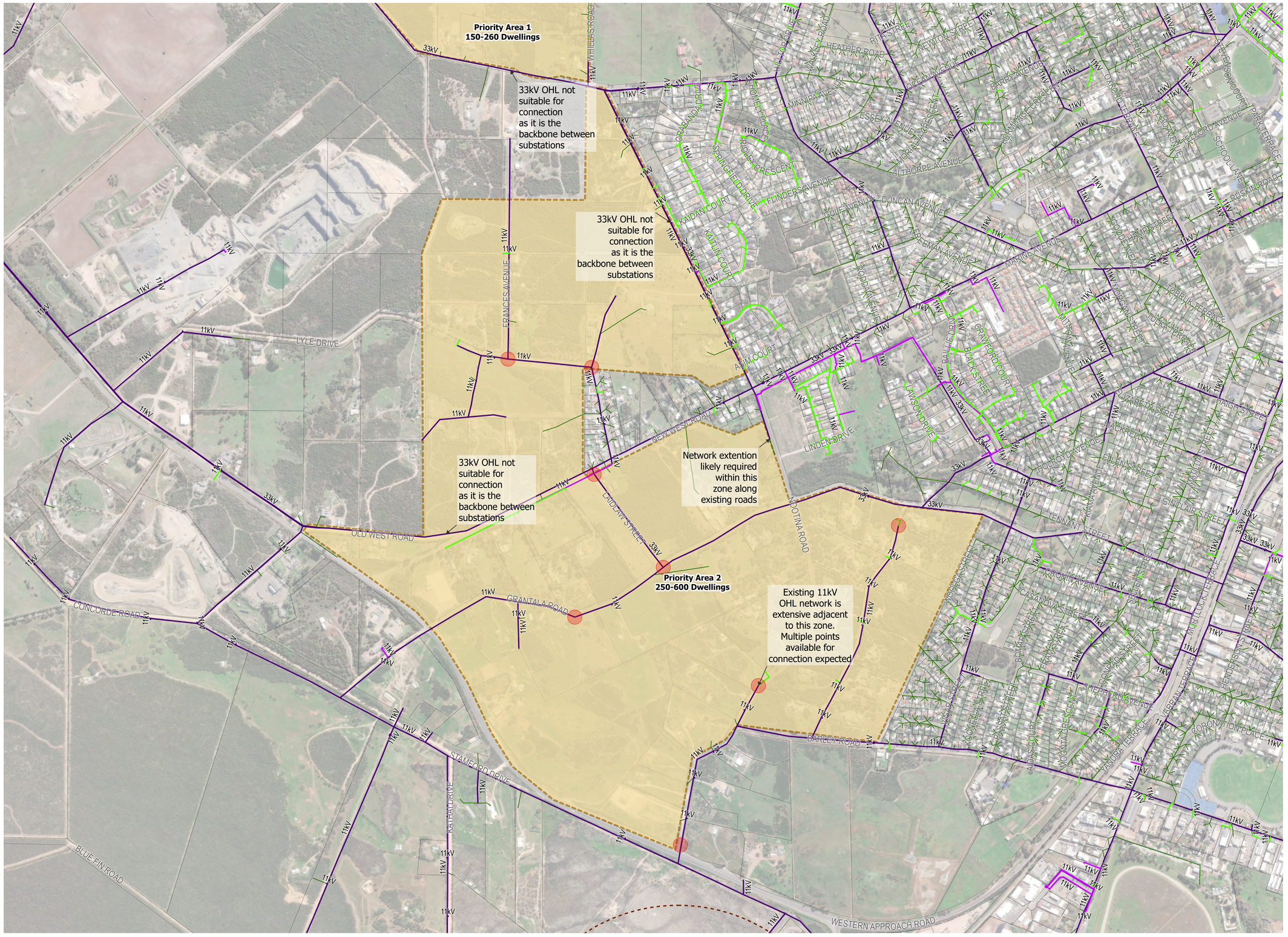

LEGEND

- PARCEL CADASTRE
- PORT LINCOLN STUDY EXTENT
- PRIORITY AREA
- HIGH VOLTAGE OVERHEAD CABLE (SAPN)
- HIGH VOLTAGE UNDERGROUND CABLE (SAPN)
- LOW VOLTAGE UNDERGROUND CABLE (SAPN)
- LOW VOLTAGE OVERHEAD CABLE (SAPN)
- INDICATIVE 500M BUFFER ZONE FOR PORT LINCOLN DUMP
- PROPOSED SAPN 11KV CONNECTIONS

NOTES:

- CAPACITY ASSESSMENT REQUIRED FROM SAPN TO CONFIRM SUITABILITY FOR CONNECTION
- CONNECTION POINTS WILL LIKELY REQUIRE AUGMENTATION

N

When sheet printed full size, the scale bar is 100mm.

0 50 100mm

Scale 1:6,000 @ A1

0 150 300 450 600 Meters

INFORMATION ISSUE
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REV	DATE	DESCRIPTION	DRAFT	ENG.	CHKD
A	19/08/25	ELECTRICAL	ADS	JPH	JPB
B	07/10/25	ELECTRICAL	ADS	JPH	JPB

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PORT LINCOLN STRATEGIC PLAN
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ELECTRICAL - PRIORITY AREA 2

A1 | DOCUMENT NUMBER | Project Number | Sheet No. | Rev.
Design JPH | Drawn ADS | WGA242687-SK-CV-0011 | B

LEGEND

- PARCEL CADASTRE
- PORT LINCOLN STUDY EXTENT
- PRIORITY AREA
- MAJOR CONTOURS

N

When sheet printed full size, the scale bar is 100mm.

0 50 100mm

Scale 1:4,000 @ A1

0 100 200 300 400 Meters

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REV	DATE	DESCRIPTION	DRAFT	ENG.	CHKD
A	19/08/25	ELEVATION	ADS	JPH	JPB
B	07/10/25	ELEVATION	ADS	JPH	JPB

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PORT LINCOLN STRATEGIC PLAN
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ELEVATION - PRIORITY AREA 3

A1

DOCUMENT NUMBER
Project Number | Sheet No. | Rev.

Design JPH | Drawn ADS | WGA242687-SK-CV-0012 B

LEGEND

- PARCEL CADASTRE
- PORT LINCOLN STUDY EXTENT
- EXISTING STORMWATER DRAINS
- PRIORITY AREA
- PROPOSED STORMWATER BASINS
- ESTIMATED FLOW PATHS THROUGH PROPOSED PARCEL
- INDICATIVE 500M BUFFER ZONE PORT LINCOLN DUMP

NOTES:

- NO STORMWATER INFRASTRUCTURE INDICATED NEAR THIS AREA
- DETENTION BASIN OUTLETS OR STORMWATER INFRASTRUCTURE LIKELY DISCHARGE TO OCEAN
- DETENTION REQUIREMENTS FOR PRIORITY AREA 3 = 1,500M^3 (ASSUMED 40 DWELLINGS). TO BE INCLUDED AS SERIES OF BASINS/WETLANDS ACROSS THE AREA

N

When sheet printed full size, the scale bar is 100mm.

0 50 100mm

Scale 1:4,000 @ A1

0 150 300 450 600 Meters

INFORMATION ISSUE
NOT FOR CONSTRUCTION

REV	DATE	DESCRIPTION	DRAFT	ENG.	CHKD
A	19/08/25	STORMWATER	ADS	JPH	JPB
B	07/10/25	STORMWATER	ADS	JPH	JPB

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PORT LINCOLN STRATEGIC PLAN
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STORMWATER - PRIORITY AREA 3

A1 DOCUMENT NUMBER

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JPH	ADS	WGA242687-SK-CV-0013		B

LEGEND

- PARCEL CADASTRE
- PORT LINCOLN STUDY EXTENT
- EXISTING WATER MAIN (SA WATER)
- PRIORITY AREA
- POTABLE CONNECTION TEE OFF LOCATIONS
- INDICATIVE 500M BUFFER ZONE FOR PORT LINCOLN DUMP

NOTES:

- MULTIPLE CONNECTION POINTS TO EXISTING NETWORK AVAILABLE
- CONNECTION SUBJECT TO SA WATER REVIEW OF EXISTING NETWORK CAPACITY
- INTERNAL ROAD NETWORKS TO UTILISE TYPICAL 100MM OR 150MM PIPE NETWORK

N

When sheet printed full size, the scale bar is 100mm.

0 50 100mm

Scale 1:4,000 @ A1

0 150 300 450 600 Meters

INFORMATION ISSUE
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REV	DATE	DESCRIPTION	DRAFT	ENG.	CHKD
A	19/08/25	POTABLE WATER	ADS	JPH	JPB
B	07/10/25	POTABLE WATER	ADS	JPH	JPB

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PORT LINCOLN STRATEGIC PLAN
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POTABLE WATER - PRIORITY AREA 3

A1 | DOCUMENT NUMBER Project Number | Sheet No. | Rev.

Design JPH | Drawn ADS | WGA242687-SK-CV-0014 | B

LEGEND

- PARCEL CADASTRE
- PORT LINCOLN STUDY EXTENT
- PRIORITY AREA
- EXISTING WASTE WATER PUMPING (SA WATER)
- WASTE WATER GRAVITY MAIN (SA WATER)
- POTENTIAL SEWER GRAVITY EXTENSION
- ONSITE WASTEWATER MANAGEMENT ZONE
- INDICATIVE 500M BUFFER ZONE FOR PORT LINCOLN DUMP

NOTES:

- CLOSEST EXISTING INFRASTRUCTURE TO AREA IS LOCATED OVER 1KM TO THE EAST ALONG PROPER BAY ROAD
- LIKELY EXISTING DWELLINGS UTILISE ON-SITE WASTEWATER SYSTEMS
- HIGH POTENTIAL TO UTILISE ON-SITE WASTEWATER DISPOSAL SYSTEMS GIVEN LOW LOT YIELDS

N

When sheet printed full size, the scale bar is 100mm.

0 50 100mm

Scale 1:4,000 @ A1

0 150 300 450 600 Meters

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A	19/08/25	WASTEWATER	ADS	JPH	JPB
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PORT LINCOLN STRATEGIC PLAN
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WASTEWATER - PRIORITY AREA 3

A1 | DOCUMENT NUMBER | Project Number | Sheet No. | Rev.

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LEGEND

- PARCEL CADASTRE
- PORT LINCOLN STUDY EXTENT
- PRIORITY AREA
- HIGH VOLTAGE OVERHEAD CABLE (SAPN)
- HIGH VOLTAGE UNDERGROUND CABLE (SAPN)
- LOW VOLTAGE UNDERGROUND CABLE (SAPN)
- LOW VOLTAGE OVERHEAD CABLE (SAPN)
- INDICATIVE 500M BUFFER ZONE FOR PORT LINCOLN DUMP
- PROPOSED SAPN 11KV CONNECTIONS

NOTES:

- CAPACITY ASSESSMENT REQUIRED FROM SAPN TO CONFIRM SUITABILITY FOR CONNECTION
- CONNECTION POINTS WILL LIKELY REQUIRE AUGMENTATION

N

When sheet printed full size, the scale bar is 100mm.

0 50 100mm

Scale 1:4,000 @ A1

0 150 300 450 600 Meters

INFORMATION ISSUE
NOT FOR CONSTRUCTION

REV	DATE	DESCRIPTION	DRAFT	ENG.	CHKD
A	19/08/25	ELECTRICAL	ADS	JPH	JPB
B	07/10/25	ELECTRICAL	ADS	JPH	JPB

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PORT LINCOLN STRATEGIC PLAN
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ELECTRICAL - PRIORITY AREA 3

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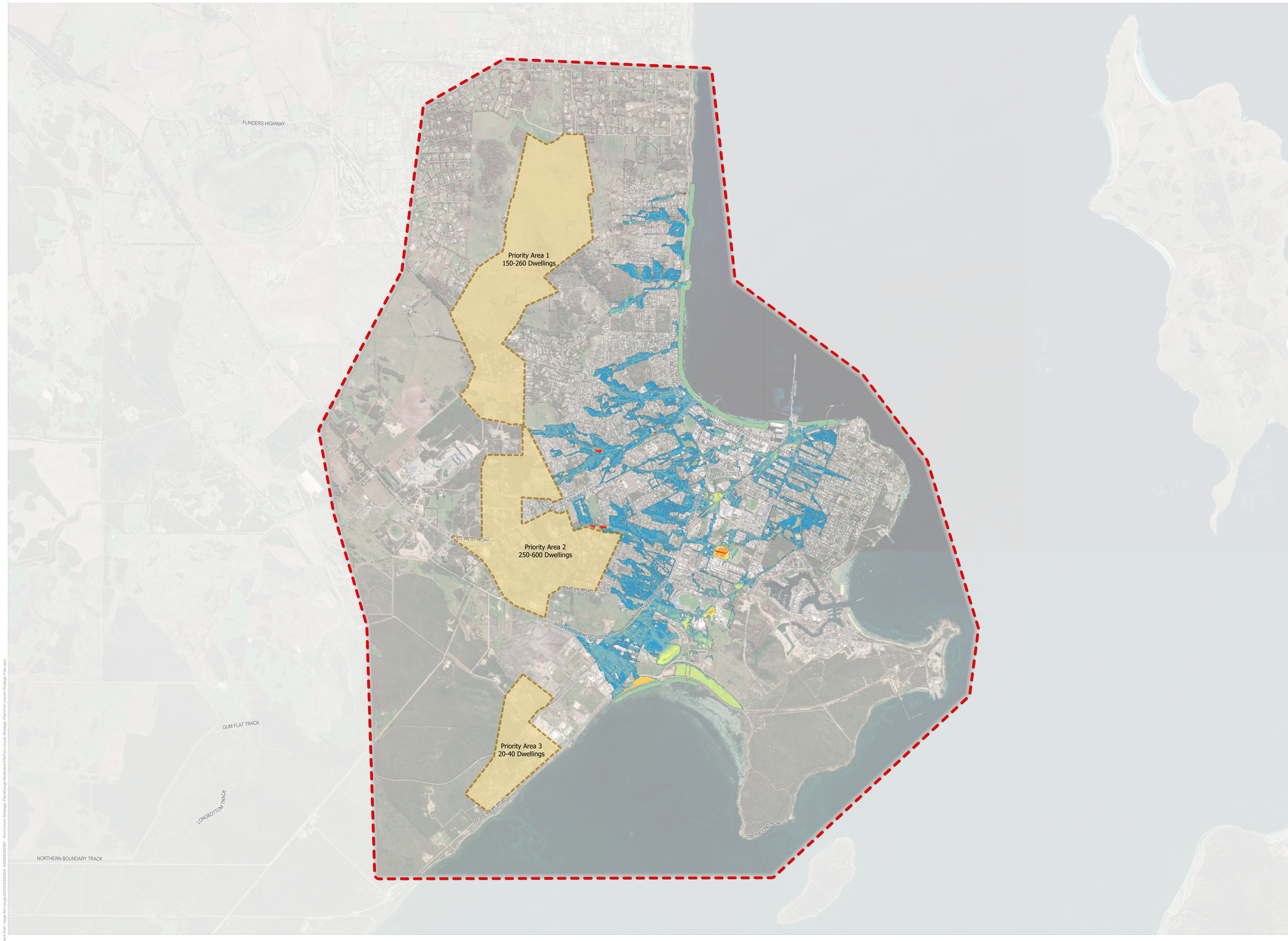

LEGEND

- PARCEL CADASTRE
- PORT LINCOLN STUDY EXTENT
- PRIORITY AREA

100 YEAR FLOOD DEPTH AEP

- < 0.02
- 0.02 - 0.25
- 0.25 - 0.5
- 0.5 - 0.75
- 0.75 - 1
- 1.0 - 1.25
- 1.25 - 1.5
- 1.5 - 1.75
- > 1.75

NOTE:

100 YEAR FLOOD DEPTHS FROM TONKIN REPORT 20150098R0014

N

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Scale 1:24,000 @ A1

0 0.5 1 1.5 2 Km

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REV	DATE	DESCRIPTION	DRAFT	ENG.	CHKD
A	19/08/25	100 YEAR FLOOD DEPTH AEP	ADS	JPH	JPB
B	07/10/25	100 YEAR FLOOD DEPTH AEP	ADS	JPH	JPB

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PORT LINCOLN STRATEGIC PLAN

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100 YEAR FLOOD DEPTH AEP

A1

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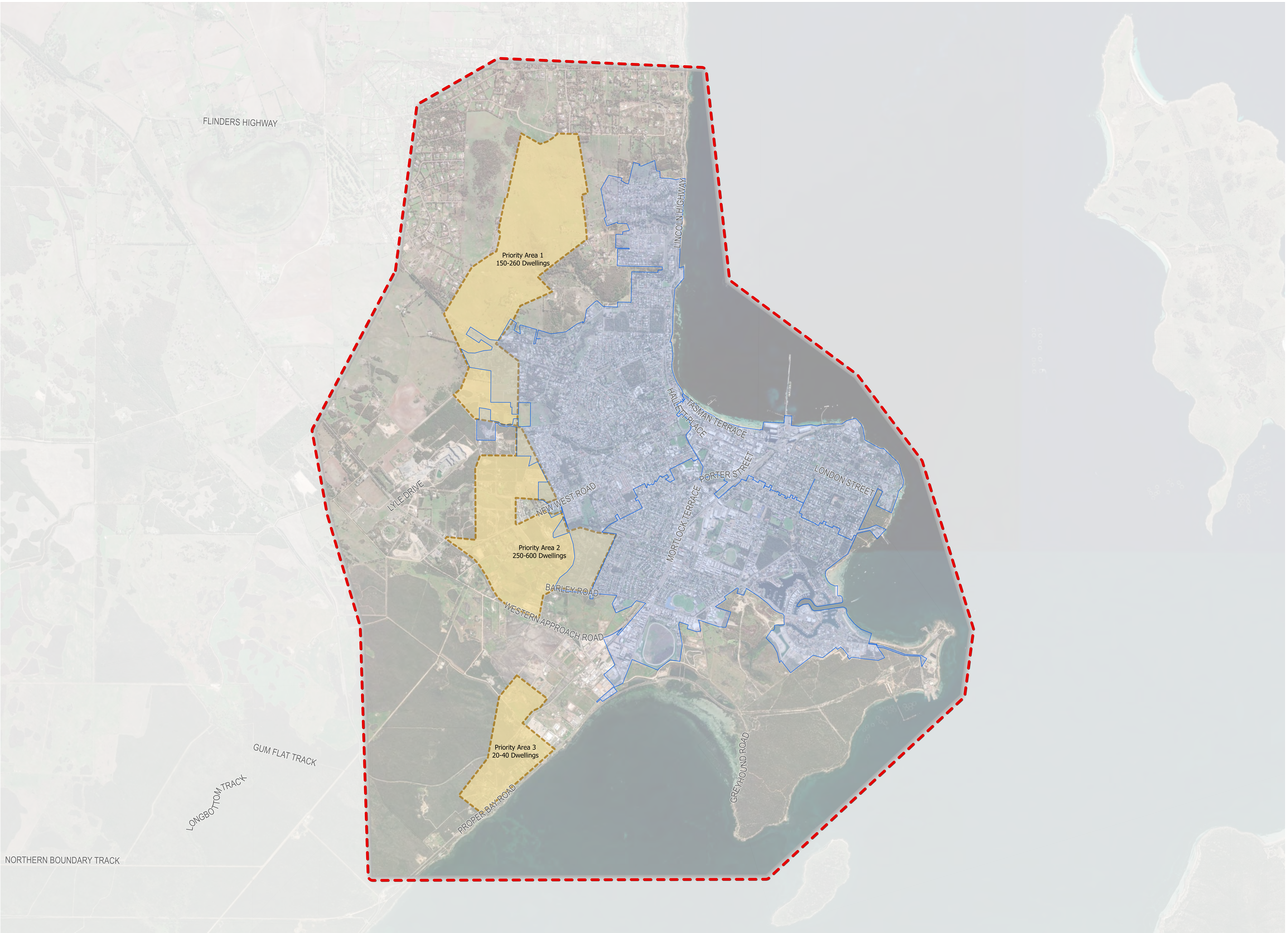

LEGEND

- PARCEL CADASTRE
- PORT LINCOLN STUDY EXTENT
- PRIORITY AREA
- NBN COVERAGE

NOTES:

- EACH ZONE IS ADJACENT TO FIXED LINE FOOTPRINT, BUT NOT WITHIN
- LIKELY NO BACKHAUL FEES TO DELIVER FIBRE TO THE PREMISE (FTTP) TO EACH ALLOTMENT, BUT SUBJECT TO AN APPLICATION BEING SUBMITTED

INFORMATION ISSUE
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REV	DATE	DESCRIPTION	DRAFT	ENG.	CHKD
A	19/08/25	NBN COVERAGE	ADS	JPH	JPB
B	07/10/25	NBN COVERAGE	ADS	JPH	JPB

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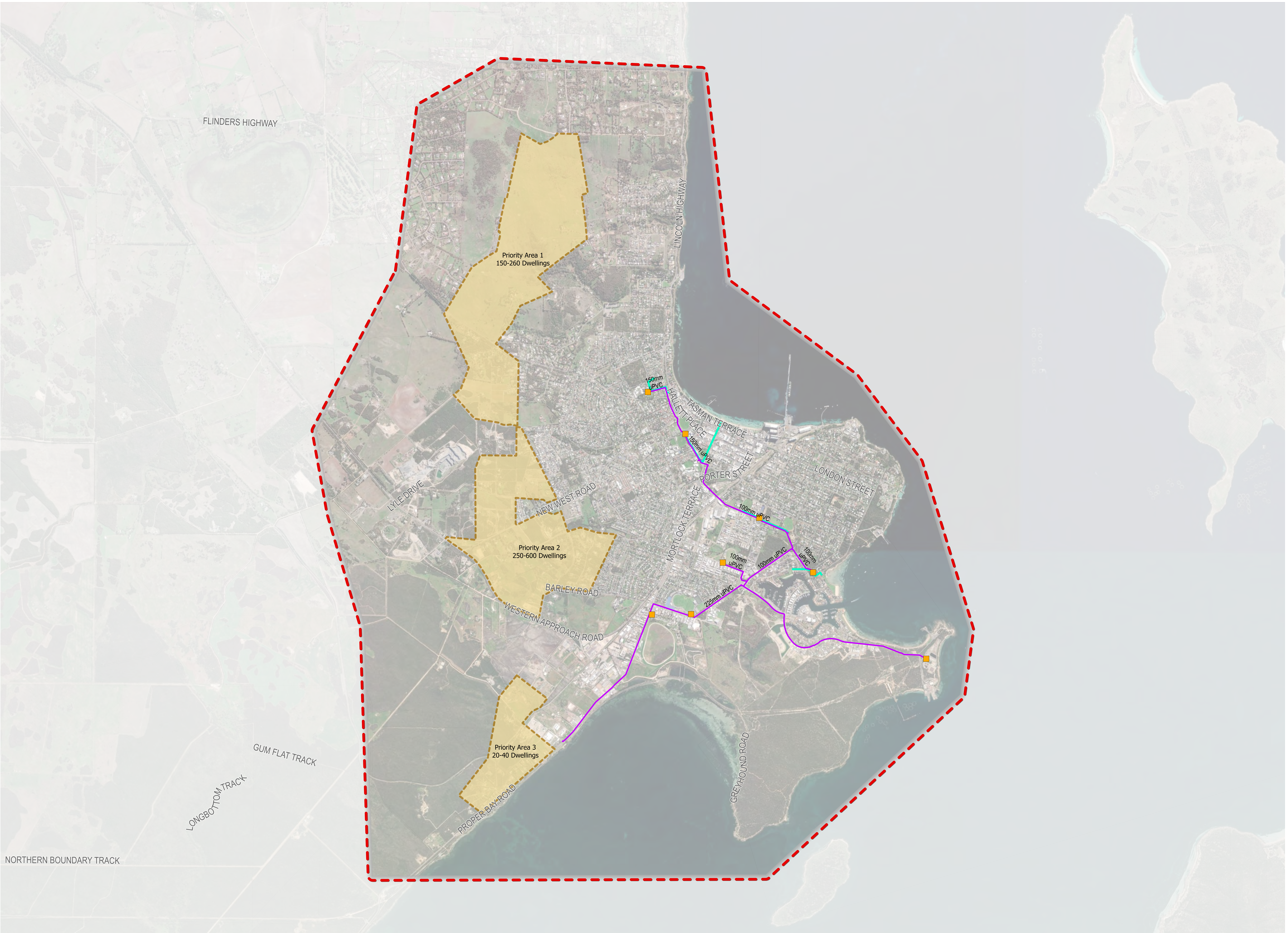
NBN COVERAGE

A1 DOCUMENT NUMBER
Project Number Sheet No. Rev.
Design JPH Drawn ADS
WGA242687-SK-CV-0017 B



LEGEND

- PARCEL CADASTRE
- PORT LINCOLN STUDY EXTENT
- PRIORITY AREA
- PUMPING MAIN
- SUPPLY MAIN
- STORAGE TANKS

N

When sheet printed full size, the scale bar is 100mm.

0 50 100mm

Scale 1:24,000 @ A1

0 0.5 1 1.5 2 Km

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REV	DATE	DESCRIPTION	DRAFT	ENG.	CHKD
A	19/08/25	RECYCLED WATER	ADS	JPH	JPB
B	07/10/25	RECYCLED WATER	ADS	JPH	JPB

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PORT LINCOLN STRATEGIC PLAN

MASTERPLANNING

RECYCLED WATER

A1

DOCUMENT NUMBER

Design	Drawn	Project Number	Sheet No.	Rev.
JPH	ADS	WGA242687-SK-CV-0018		B

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FOR FURTHER INFORMATION CONTACT:

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