



Agenda Report for Decision

Meeting Date: 7 March 2024

Item Name	Code Amendment Initiation Advice to the Minister for Planning – Proposal to Initiate the Dublin Green Circular Economy Precinct (Employment Areas) Code Amendment	
Presenters	Nadia Gencarelli	
Purpose of Report	Decision	
Item Number	4.1	
Strategic Plan Reference	4. Discharging Statutory Obligations	
Work Plan Reference	4.2 Advise the Minister on Code Amendments	
Confidentiality	Not Confidential (Release Delayed). To be released following final decision by the Minister for Planning on initiation of the Code Amendment. Anticipated by May 2024	
Related Decisions	Nil	
Conflicts Declared	Nil	
Is the Report author aware of any potential undeclared conflict?		No

Recommendation

It is recommended that the State Planning Commission (the Commission) resolves to:

1. Approve the designation of this item as Not Confidential (Release Delayed), with the meeting papers for the item to be released following final decision by the Minister for Planning (the Minister) on initiation of the Code Amendment. Anticipated by May 2024.
2. Advise the Minister that it:
 - 2.1 Recommends the initiation of the Dublin Green Circular Economy Precinct (Employment Areas) Code Amendment under section 73(2)(b)(vii) of the *Planning, Development and Infrastructure Act 2016* (the Act), subject to the following conditions applied under section 73(5)(b) of the Act:
 - a) Prior to adoption of the Code Amendment, the Designated Entity must demonstrate to the satisfaction of the Minister for Planning that all necessary agreements or deeds are fully executed as required to secure the funding and/or delivery of all infrastructure required to accommodate the development of the affected area, as proposed by the Code Amendment (to the satisfaction of all relevant infrastructure providers).

- b) The scope of the proposed Code Amendment does not include the creation of new planning rules, and is limited to the spatial application of zones, subzones, overlays, or technical and numerical variations provided for under the published Planning and Design Code (the Code) on the date the Amendment is released for engagement.
- c) The Code Amendment is prepared by a person with qualifications and experience that is equivalent to an Accredited Professional—Planning Level 1 under the Act.
- d) In respect to a review of bushfire hazard risk levels, that the Code Amendment does not include changes to the applicable Hazard – Bushfire Overlays. The State-wide Bushfire Hazards Overlay Code Amendment will establish an updated methodology for assessing bushfire risk levels across the state, following which the overlays will be updated as necessary via section 71 of the Act.

2.2 Recommends that Leinad Land Developments (Dublin) Pty Ltd be the Designated Entity responsible for undertaking the Code Amendment process.

3. Specify that the Designated Entity consults with the following nominated individuals and entities, under section 73(6)(e) of the Act:

- Department for Energy and Mining
- Department for Environment and Water – Green Adelaide, Coast Protection Board, Native Vegetation Council, National Parks and wildlife Service
- Department for Infrastructure and Transport
- Department of Primary Industries and Regions
- Environment Protection Authority
- Green Industries SA
- Integrated Waste Management Pty Ltd Reference Group
- Kurna Yerta Aboriginal Corporation
- Kurna Nation Cultural Heritage Association
- Regional Development Australia – Barossa, Gawler, Light and Adelaide Plains
- South Australian Country Fire Service
- South Australian Fire and Emergency Services Commission
- South Australian Metropolitan Fire Service
- State Members of Parliament for the electorates in which the proposed Code Amendment applies
- Utility providers including SA Power Networks, ElectraNet, APA Group, SEAgas, SA Water, Epic Energy, NBN, Office of the Technical Regulator and other telecommunications providers.

4. Specify the following further investigations or information requirements under section 73(6)(f) of the Act in addition to those outlined in the Proposal to Initiate:

- Considering existing, zoned employment land supply within the region, undertake detailed analysis that:
 - Investigates the quantity and type of employment land required in the region, in the context that the Carslake Road Strategic Employment Zone site is 880 hectares and 488 hectares is largely undeveloped with significant further development capacity. When investigating this, consideration should be given to ability of land to be serviced ('development ready').

- Considers the capacity for the region to accommodate nearly 1,300 hectares of zoned employment land in the context of new employment areas flagged for discussion in the Greater Adelaide Regional Plan Discussion Paper.
 - Identifies cumulative impacts of development on existing infrastructure (road, water, power, wastewater, gas) in the context of existing employment land supply within the region, and whether the Proposal will constrain the ability for such zoned land to be developed in the short-, medium- and long-term.
 - Undertake investigations into potential noise, odour, and air quality interface impacts of intended development on the site (bioreactor, mining), both in terms of impacts on the Dublin township as well as potentially sensitive uses within the Affected Area and identify mitigation measures. This could include zoning / overlay choices and/or identification of mitigation measures on a Concept Plan.
 - Undertake further investigations to confirm buffer requirements to address noise / odour associated with the existing chicken broiler and, where necessary, reflect in zone / overlay choice and identify on a Concept Plan.
 - Provide a comprehensive infrastructure analysis by an appropriately qualified expert (or experts), that identifies all future infrastructure works required to accommodate the development of the affected area as proposed by the Code Amendment. And provide a strategy which offers a funding and delivery solution for all required infrastructure works. This should also take into consideration potential impact on, or integration with, existing employment and urban activities in the area (particularly Integrated Waste Services located south of the affected area).
 - Consider the use of a Concept Plan to identify key matters such as access points and linkages within the affected area and to Dublin / public trails, interface management / buffer areas (including interfaces with existing urban, rural and conservation areas, as well as internal interfaces), open space and water retention / detention areas.
5. Recommend that the Minister approve the initiation of the Code Amendment by signing the Proposal to Initiate (**Attachment 1**) and approval letter with conditions (**Attachment 2**).
 6. Approve and authorise the Chair of the Commission to sign the advice to the Minister as provided in **Attachment 3**.
 7. Authorise the Chair to finalise any minor amendments to the advice and attachments as required.

Background

Section 73(2)(b)(b)(vii) of the Act provides that a proposal to amend the Code may be initiated by a person who has an interest in the relevant land with the approval of the Minister, acting on the advice of the Commission, in relation to the following matters:

- Strategic assessment against the State Planning Policies and *The 30-Year Plan for Greater Adelaide: 2017 Update*.
- Any person or body that must be consulted by the Designated Entity, pursuant to section 73(6)(e) of the Act.
- Any investigations to be carried out or information to be obtained by the Designated Entity, in accordance with section 73(6)(f) of the Act.

The purpose of this report is therefore to provide the Commission with advice to be provided to the Minister in relation to the Proposal to Initiate submitted by Leinad Land Developments (Dublin) Pty Ltd (**Attachment 1**).

Discussion

Scope of the Amendment

The Proposal seeks to rezone some 400 hectares of land located immediately south of the township of Dublin on the Northern Plains of Greater Adelaide. The 400 hectares is currently zoned Rural and forms part of a broader Affected Area under the ownership of the Proponent, comprising 986 hectares.

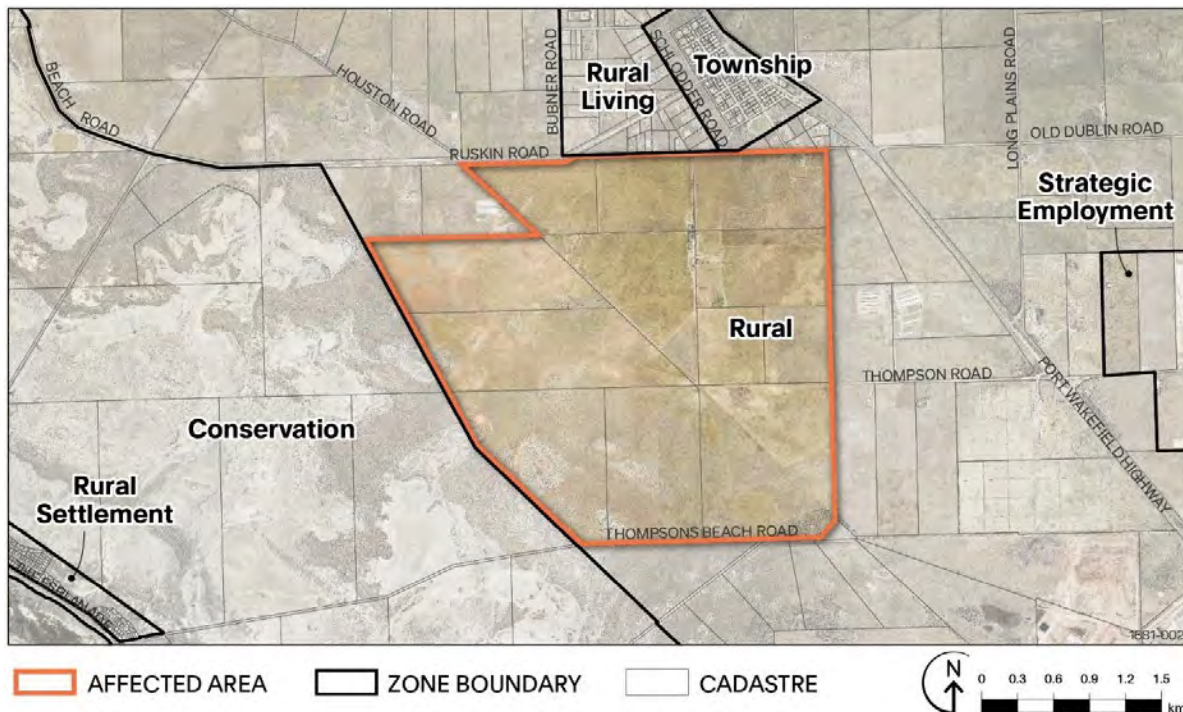
The Proponent has completed an Urban Framework Plan 2023 (the Framework Plan) with a long-term vision to develop a Green Circular Economy Precinct comprising a new master planned community together with a range of green industry and mining operations. The proposed Code Amendment represents the first step in delivering this vision. The Framework Plan is contained in Attachment 1.

The land is currently zoned Rural. The Proposal is to apply an employment-type zone to 400 hectares of the Affected Area to deliver new employment opportunities across a range of sectors, including:

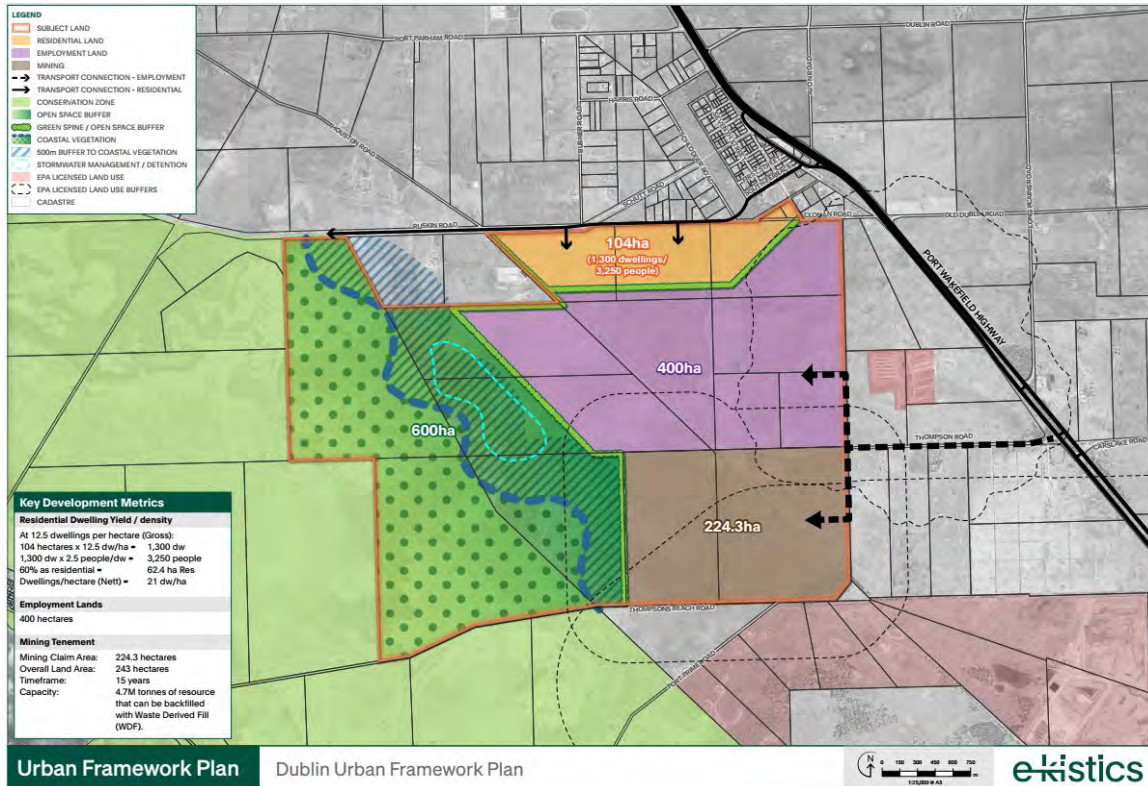
- Green Economy, including energy production from biomass, innovation in farming and food production methods, recycling industries, and fertiliser harvesting and distribution
- Manufacturing, fabrication and logistics, particularly for the renewable energy sector
- Defence and infrastructure.

The Affected Area is in the Adelaide Plains Council (the Council) on Kaurna Country.

The Affected Area and current zoning are shown in the figure below.



Importantly, the exact identification of zone boundaries will be informed through further investigations proposed to as part of the code amendment and the final configuration may or may not be reflective of the areas shown below, as per the current Urban Framework Plan. Indicatively, the focus of the Affected Area is on the purple area (400 hectares) subject to investigations.



Advice to the Minister

The attached advice to the Minister sets out the statutory and procedural elements that must be considered as part of the initiation of a Code Amendment (**Attachment 3**).

The advice recommends that the Minister approve the initiation of the Code Amendment for the following reasons and subject to conditions (as set out below).

Strategic considerations

The Proposal is consistent with the strategic intent of a number of State Planning Policies (SPPs) and *The 30-Year Plan for Greater Adelaide: 2017 Update* by supporting the establishment of new industries contributing to economic growth, the Green Circular Economy and the renewable energy sector. It also proposes to support the Defence industry with the provision of land for contractors and subcontractors, and key connectivity to transport freight routes along Port Wakefield Highway. In summary, the Proposal:

- Supports the clustering of land for key economic growth opportunities in energy and resources, primary industry, defence and green industries.
- Encourages development of underutilised agricultural lands.

- Promotes new, latent, and alternative employment types, attracting new business investment and flexible land use opportunities (generation of new forms of energy, that is, converting waste to electricity).
- Enables potential connectivity and efficiency to supply chains in green industries, supporting the construction and development of renewable energy products across the State.
- Maximises use of existing transport infrastructure and services (Port Wakefield Highway).
- Looks to promote value adding activities to increase investment, while maintaining and protecting the Environment and Food Production Areas (EFPAs).

Key to the Proponent's intention to deliver a Green Circular Economy Precinct is the construction of a new 6.5 MW bioreactor that processes organic waste into gas and electricity, food grade CO₂ for vertical agriculture, water and fertiliser. Outputs from this bioreactor are intended to be integrated with other employment activities within the Affected Area as well as surrounding rural land uses, future residential development (outlined in the Framework Plan and discussed below) and the existing Dublin township. A copy of the Framework Plan is provided in **Attachment 1**.

In this context, the Proposal meets key SPP and Regional Plan policy objectives in supporting the provision of sustainable energy options, creating jobs and in the development of new energy technologies and assets.

Employment Land Supply and Residential Development

The Affected Area is identified as within the Northern Plains and Barossa region.

Recent land supply reports indicate this region has sufficient supply of zoned employment land to accommodate projected growth, based on current needs for the next 15 years. To that end, it is noted that there is 488 hectares of largely undeveloped land within the existing 880-hectare Strategic Employment Zone located 2 kilometres south of the Dublin Township (Carslake Road). As such, should the Code Amendment proceed, it would result in over 1,200 hectares of zoned employment land within a 2-kilometre radius feeding onto Port Wakefield Land.

Whilst noting that the analysis undertaken to inform the land supply reports (specifically, the Commission's 2021 EFPA review) did not necessarily account for large scale projects such as that envisaged for the Affected Area, it is considered further justification is needed to demonstrate why additional employment land is required at this location. An explanation should be given as to why the existing Carslake Road site is inappropriate for the intended development. Further consideration also needs to be given to the cumulative impacts of development on existing infrastructure in the context of existing land supply and whether the Proposal will constrain the ability for such zoned land to be developed.

The Proponent's Urban Framework Plan indicates an intention to explore rezoning of 170 hectares of land for the purposes of residential development. Such a proposal would require significant investigations and justification to warrant consideration of a future Code Amendment and associated changes to the EFPA. To that end, the Proponent has confirmed that this current Code Amendment (and intended Circular Economy Precinct) is not contingent on residential development occurring.

Further strategic considerations and discussion are provided in **Attachment 3**.

The Proposal meets all procedural requirements, as detailed in the attached advice to the Minister (**Attachment 3**).

Conditions proposed and items specified

Several conditions have been recommended to be specified by the Minister, pursuant to sections 73(5)(b) of the Act. In addition, it has been recommended that the Commission specify persons or bodies to be consulted with by the Designated Entity under section 73(6)(e) of the Act, as outlined in the advice to the Minister (**Attachment 3**).

Attachments:

1. Proposal to Initiate the Dublin Green Circular Economy (Employment Areas) Code Amendment Code Amendment (#21020669)
2. Draft approval letter to Leinad Land Developments (Dublin) Pty Ltd (#21109333)
3. State Planning Commission Advice to the Minister (#21109152)

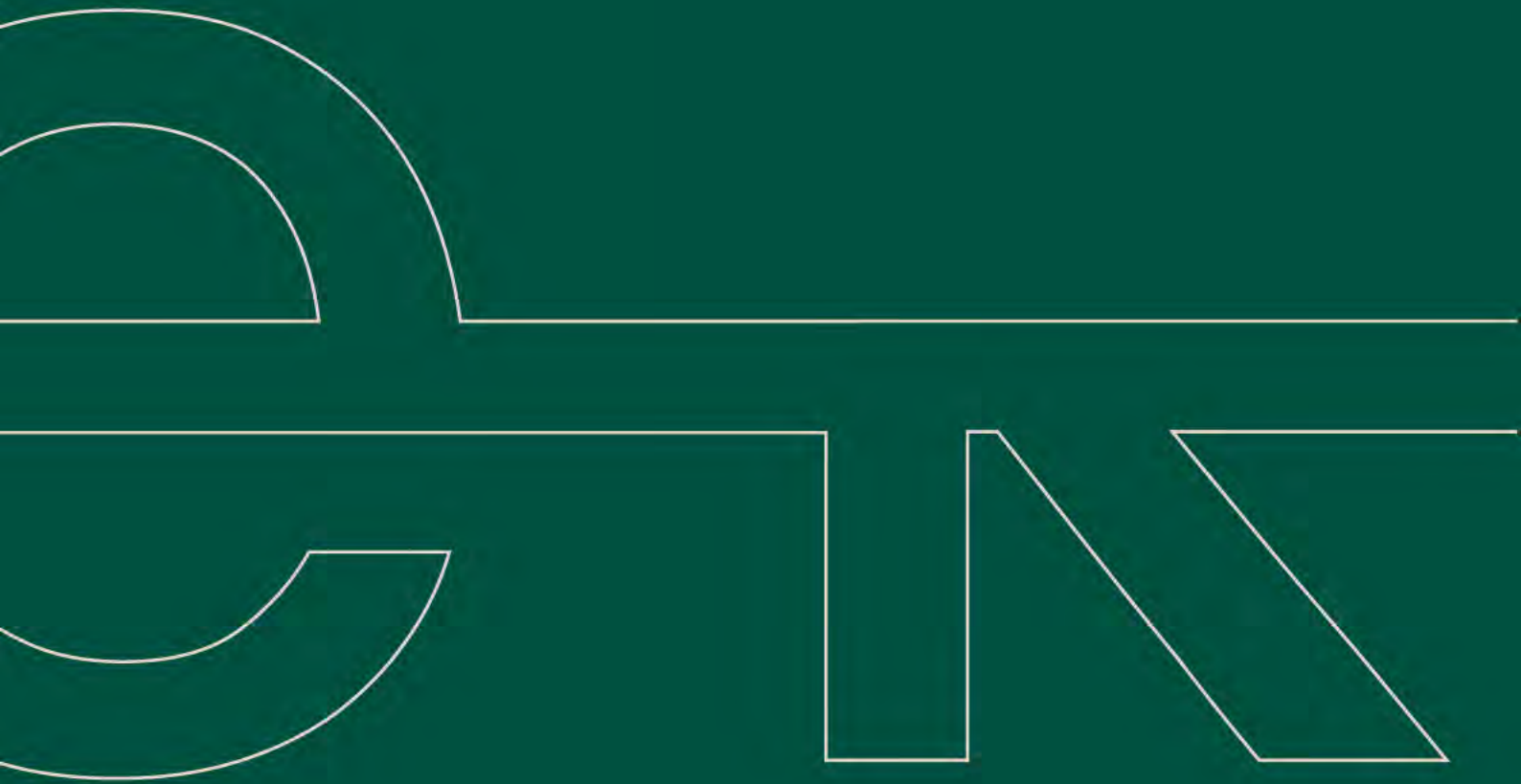
Appendices:

- A. Assessment against the State Planning Policies and Regional Plan (#21109308)

Prepared by: Denise LeBlond / Nadia Gencarelli

Endorsed by: Marc Voortman

Date: 29 February 2024



Proposal to Initiate a Code Amendment

**Dublin Green Circular Economy Precinct
(Employment Areas)**

NOV 2023

REF#01571



ACKNOWLEDGEMENT TO COUNTRY

Ekistics respectfully acknowledges the traditional owners and custodians of the land on which we work and we pay our respects to Elders past and present.



PROPRIETARY INFORMATION STATEMENT

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Revision	Description	Author	Date
Version 1	Draft for Client Review	RH	22 November 2023
Version 2	Document Review	RAD	23 November 2023
Version 3	Document update	RH	22 November 2023
Version 4	Document Review	RAD	29 November 2023
Version 5	Draft – For Client Review	RH	11 December 2023
Version 6	Final	RH	19 December 2023
Approved by	Signature	Position	
Richard Dwyer		Managing Director	



**PROPOSAL TO INITIATE AN
AMENDMENT TO THE PLANNING &
DESIGN CODE**

**Dublin Green Circular Economy Precinct
(Employment Areas) Code Amendment**

**By Leinad Land Developments (Dublin)
Pty Ltd (*the Proponent*)**

 (Signature Required)

Leinad Land Developments (Dublin) Pty Ltd (the Proponent)

Date: 19/12/2023

This Proposal to Initiate document together with conditions specified by the Minister forms the basis for the preparation of a proposed amendment to the Planning and Design Code for the purpose of section 73(2)(b) of the *Planning, Development and Infrastructure Act 2016*. By signing this Proposal to Initiate, the Proponent acknowledges and agrees that this Proposal to Initiate, and any supporting documents may be published on the PlanSA portal by the Attorney General's Department.

_____ (Signature Required)

MINISTER FOR PLANNING

Date:

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5. CULTURAL HERITAGE DESKTOP ASSESSMENT, AUSTRALIAN CULTURAL HERITAGE MANAGEMENT, NOVEMBER 2012	
6. PRELIMINARY TRAFFIC ASSESSMENT, MFY, NOVEMBER 2023	
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1. INTRODUCTION

The Proponent is proposing to initiate an amendment to the Planning and Design Code (the Code Amendment) as it relates to land located to the south of the township of Dublin, in the northern Adelaide Plains of Greater Adelaide.

The purpose of this 'Proposal to Initiate' is to seek approval of the Minister for Planning ['the Minister'] to initiate the Code Amendment under section 73(2)(b) of the Planning, Development and Infrastructure Act 2016 (the Act).

The Proponent is the registered proprietor for the whole of the Affected Area.

This 'Proposal to Initiate' details the scope, relevant strategic and policy considerations, nature of investigations to be carried out and information to be collected for the Code Amendment. It also details the timeframes to be followed in undertaking the Code Amendment, should this 'Proposal to Initiate' be approved by the Minister.

The Proponent acknowledges that the Minister may specify conditions on approving this 'Proposal to Initiate', under section 73(5) of the Act. In the event of inconsistency between this 'Proposal to Initiate' and any conditions specified by the Minister, the conditions will apply.

1.1. Designated Entity for Undertaking the Code Amendment

In accordance with Section 73(4)(a) of the Act, the Proponent will be the 'Designated Entity' responsible for undertaking the Code Amendment process. As a result:

- The Proponent acknowledges that it will be responsible for undertaking the Code Amendment in accordance with the requirements of the Planning Development and Infrastructure Act 2016 ['The Act']
- The Proponent declares that it has not and does not intend to enter into an agreement with a third party for the recovery of costs incurred in relation to the Code Amendment under Section 73(9) of the Act. If the Proponent does enter into such an agreement, the Proponent will notify the Department prior to finalising the Engagement Report under Section 73(7).
- The Proponent's contact person responsible for managing the Code Amendment and receiving all official documents relating to this Code Amendment is:
 - Rick Hutchins - Associate, Ekistics Planning and Design
 - rhutchins@ekistics.com.au
 - 0419 119 021
- The Proponent intends to utilise the services of Ekistics Planning and Design Pty. Ltd. ['Ekistics'] to assist it in undertaking the Code Amendment. Ekistics is a specialist planning consultancy comprising a team of Accredited Professionals with significant experience in the preparation of planning policy as well as land use investigations and community engagement. The Code Amendment process will be undertaken by planning practitioners who have qualifications and experience that is equivalent to an Accredited Professional – Planning Level 1.
- Either Ekistics or a separate independent community engagement specialist (to be confirmed) will be engaged to undertake required community engagement in accordance with 'Practice Direction 2 – Consultation on the Preparation or Amendment of

a Designated Instrument' and the '*Community Engagement Charter*'. Required community engagement will be undertaken by a fully accredited IAP2 specialist with extensive skills and experience in community engagement.

- The Proponent acknowledges that the Minister may, under Section 73(4)(b) of the Act, determine that the Chief Executive of the Department will be the 'Designated Entity' responsible for undertaking the Code Amendment. In this case, the Proponent acknowledges and agrees that they will be required to pay the reasonable costs of the Chief Executive in undertaking the Code Amendment.

1.2. Rationale for the Code Amendment

The following outlines the reasons for the preparation of the Code Amendment and why a review of the existing zoning and policy framework associated with this site is appropriate. An overview of the 'Affected Area' and Locality is initially provided as this outlines important context to the rezoning proposal.

1.2.1. Affected Area

The Proponent has control of in excess of 1,373 hectares of land over multiple land parcels within and to the immediate south of the existing Dublin Township. These land parcels are shown spatially in **Figure 1.1** below. The combined land parcels have frontage to Old Port Wakefield Road, Clonan Road, Thompsons Beach Road and Ruskin Road to the north.

The 'Affected Area' for this Code Amendment is located entirely within the 'Rural Zone'. This Code Amendment does not seek to amend the Planning and Design Code for the portion of the land under the control of the Proponent that is located within the 'Conservation Zone' and north of Clonan Road, as shown in **Figure 1.1**. The portion of the land within the 'Conservation Zone' generally comprises intact samphire and saltmarsh vegetation consistent with the coastal location. The 12 allotments comprising the Affected Area have a total area of approximately 986 hectares.

The significant majority of the subject land that is within the 'Affected Area' has been utilised for ad-hoc agricultural purposes (low intensity grazing) and is in a relatively poor condition of a 'degraded' land quality with a low agricultural production value.

There is a Mineral Claim in the south-eastern corner of the site, with a mineral lease application currently being established for the site to detail the final landform and staged operations. This mining area provides a critical resource and opportunity for the future vision of the land.

This Code Amendment will investigate rezoning in the order of 400 hectares of the 'Affected Area' for 'employment' related land uses (subject to detailed investigations). The 'Affected Area' is outlined in more detail in **Section 2.1** below.

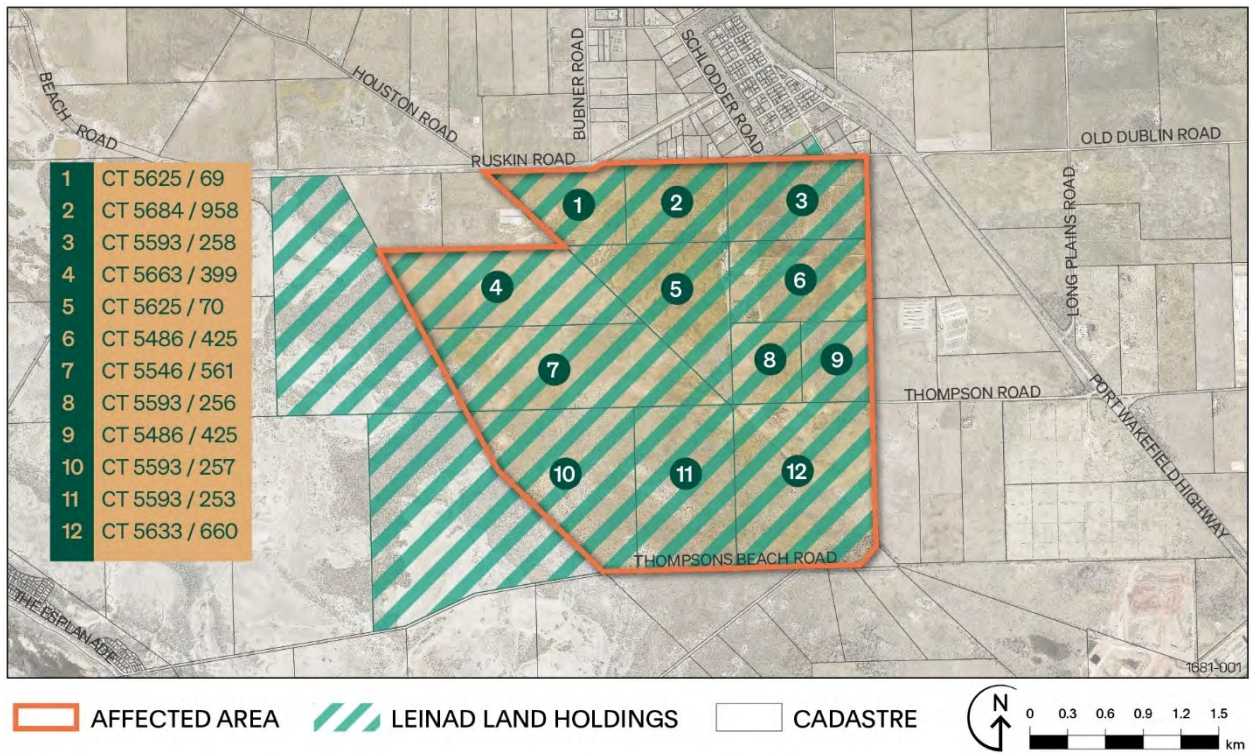


Figure 1-1 Affected Area

Figure 1.2 below illustrates the existing zoning of the land and surrounds.

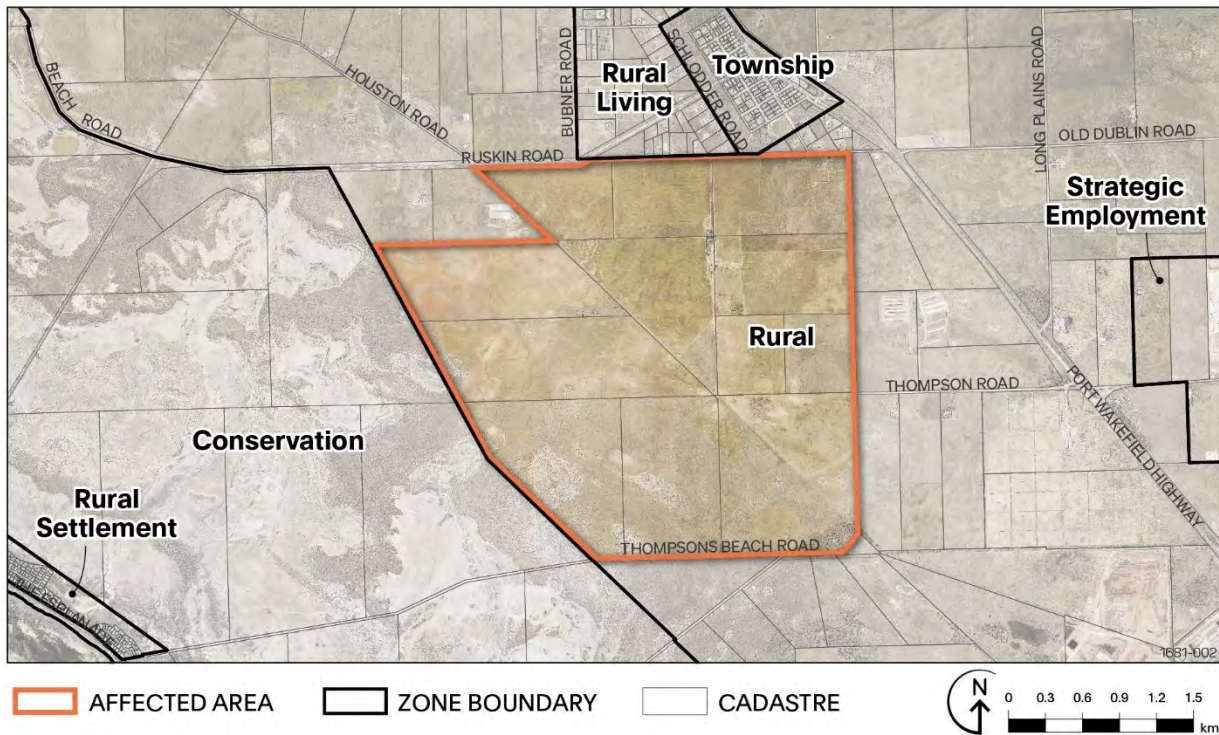


Figure 1-2 - Current Zoning of the Affected Area and surrounds

1.2.2. Locality Features

Dublin is a small town of less than 200 people strategically located on the Adelaide Plains to the north of Adelaide. Dublin is located approximately 50 kilometres north of the Adelaide Central Activity District (CAD), and is approximately 35 kilometres to the south of Port Wakefield and 15 kilometres to the west of Mallala. Dublin's location along Port Wakefield Highway provides convenient access to the State's north where significant investments in renewable energy infrastructure (wind and solar) and hydrogen are taking place as illustrated in **Figures 1.2** and **1.3** below.

The subject land itself sits within a locality that includes:

- The Dublin township;
- Agricultural lands to the north-west, south and east;
- The *Winaityinaityi Pangkara* 'Adelaide International Bird Sanctuary' located along the western boundary of the land (this National Park encompasses over 60 kilometres of coastline north of Adelaide);
- An intensive animal keeping facility (Chicken Broiler Farm) located to the east;
- The 'IWS Waste Bale Fill Facility' and 'Composting Facility' to the immediate south;
- The 'Carslake Road Strategic Employment Land' on the opposite side of the Port Wakefield Highway; and
- Defence Operations at the Proof and Experimental Establishment Port Wakefield situated to the north near the Dublin township.

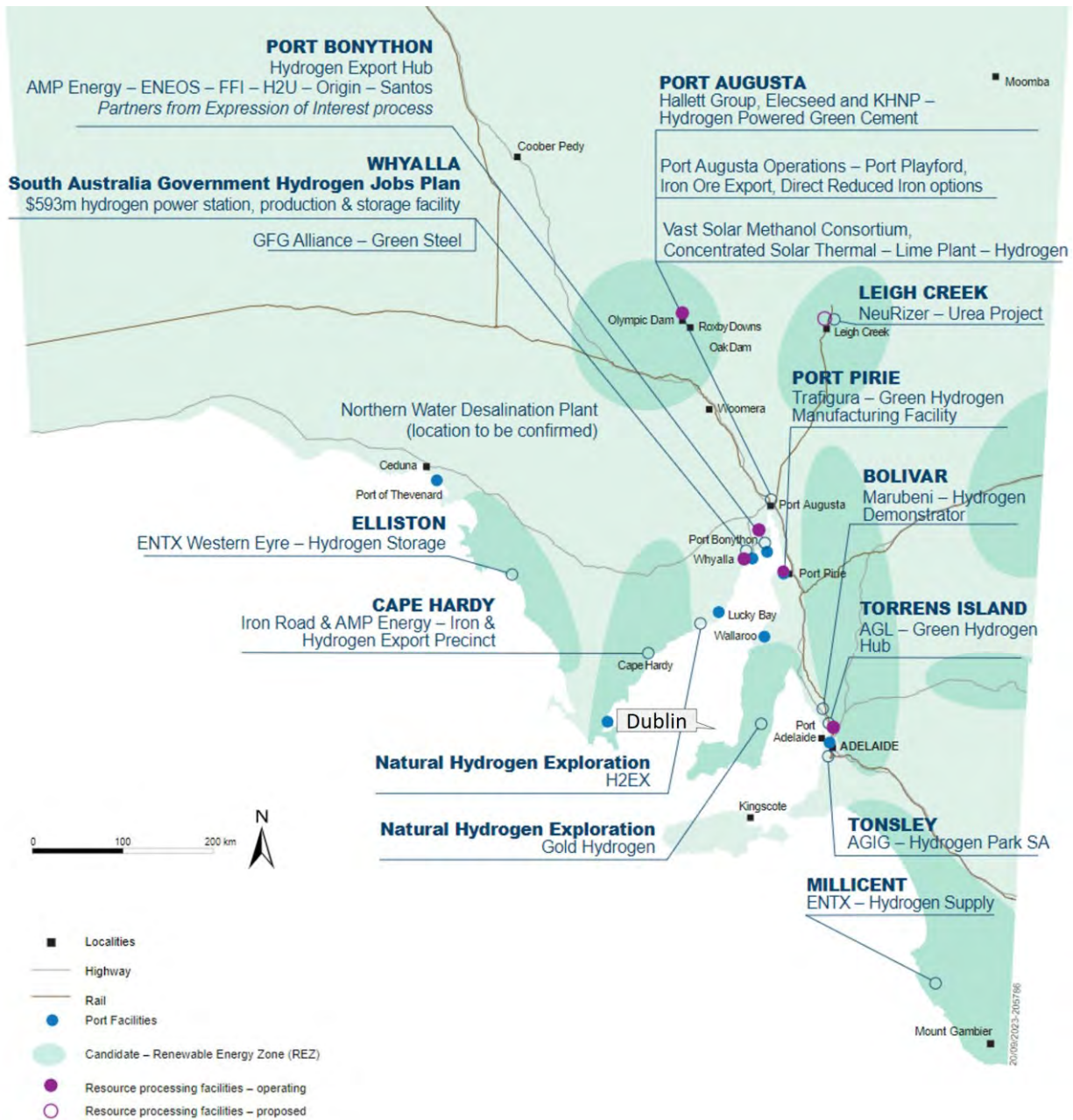


Figure 1-3 - SA Hydrogen Projects (Source: Government of South Australia)

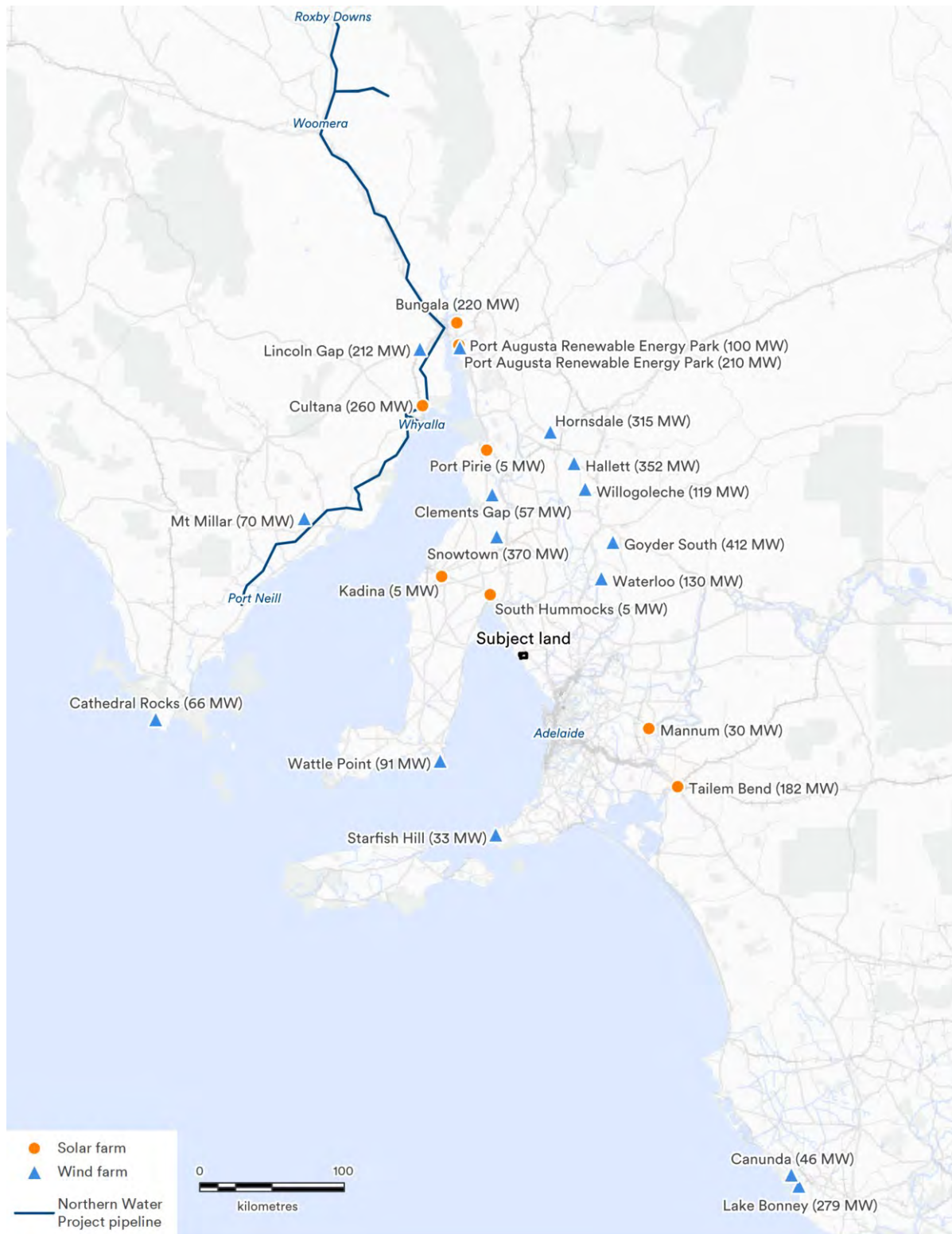


Figure 1-4 - Significant State Hydrogen and Energy (Wind & Solare) Infrastructure Projects (Source: Deep End Services)

1.2.3. Rationale for the Proposed Code Amendment

The following outlines the reasons for the preparation of the Code Amendment and a description of the circumstances leading to the need for the Code Amendment

Since 2012, Leinad have been undertaking investigations into opportunities for the future use and development of the land holdings including its physical characteristics and surrounding locality, the environmental, social impacts, economic impacts of future township expansion as well as the policy implications to implement township growth.

In 2023, Leinad have prepared an 'Urban Framework Plan' to deliver the 'Dublin Green Circular Economy Precinct'. The full Urban Framework Plan is attached in **Appendix 3**.

The Urban Framework Plan includes a high-level spatial framework plan that is illustrated in **Figure 1.4**. This plan demonstrates proposed land use distribution, neighbourhood structure, key linkages and transport systems, major road connections, activity centres/nodes, open space and recreation facilities as well as overall employment and housing population/density.

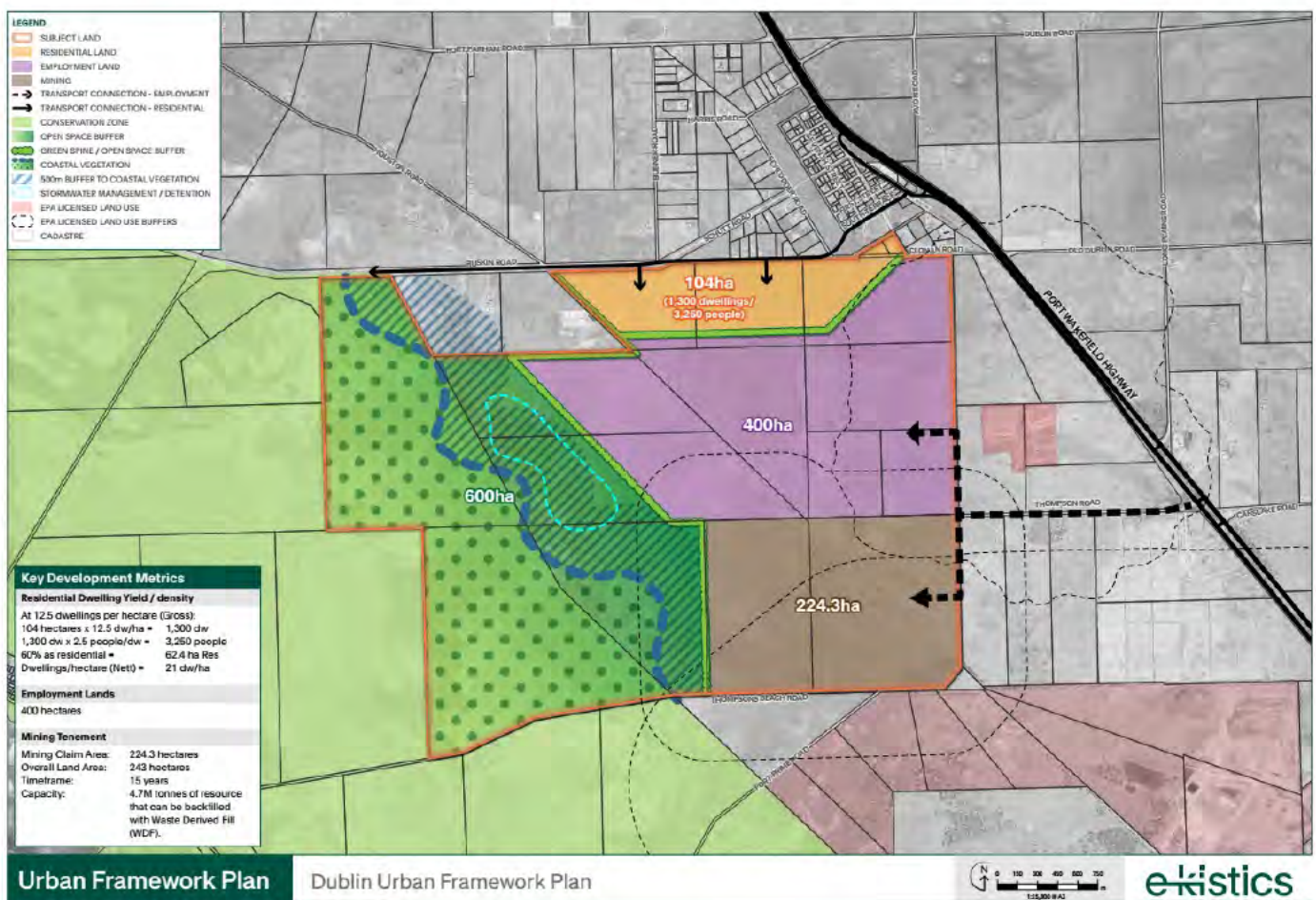


Figure 1-5 - Dublin Urban Framework Plan

Preliminary Investigations have identified a strong case for a significant portion of the 'Affected Area' to be used for employment-related land uses.

This Code Amendment seeks to rezone land to facilitate the provision of ‘employment land’ within the ‘Affected Area’. The exact identification of zone boundaries will be determined through further investigations that are proposed to be undertaken as part of the Code Amendment.

Importantly, the ‘Affected Area’ includes all of the land within the Current ‘Rural Zone’ under the control of the Proponent (excluding land located within the ‘Conservation Zone’) but the final area and spatial configuration of future employment land would be subject to more detailed investigations and may not directly reflect the preliminary Urban Framework Plan provided in **Figure 1.4** above and attached in **Appendix 3**.

Further, whilst the Urban Framework Plan capitalises on the benefits of interrelated land uses to achieve a future ‘circular economy’ (a model of production and consumption involving the sharing, reusing and recycling of existing materials and products) for the purposes of the proposed Code Amendment, the investigations examining the suitability, size, composition and configuration of potential future employment land on the ‘Affected Area’ are not contingent or reliant upon the development of future residential and other related uses on the balance of land in the ‘Affected Area’ that is not ultimately rezoned for employment purposes.

The type and density of land uses envisaged in the ‘employment area’ are not anticipated in the existing ‘Rural Zone’ which supports a wide range of primary production activities and associated value-adding, processing, warehouse and distribution activities as well as the generation of energy from renewal sources.

Accordingly, the Code Amendment seeks to introduce a suitable zone and policy framework that delivers new employment opportunities particularly aimed at the following sectors:

- The local Green Economy including innovative farming and food production methods, recycling industries, energy production from biomass, and fertiliser harvesting and distribution;
- Manufacturing, fabrication and logistics for the renewable (wind, solar and hydrogen) energy sector in metropolitan and regional South Australia;
- Defence and infrastructure contractors or subcontractors requiring more land; and
- Manufacturing or transport uses hauling long, wide or high freight to destinations using Port Wakefield Highway.

2. SCOPE OF THE CODE AMENDMENT

2.1. Affected Area

The proposal seeks to review and subject to detailed investigations amend the Planning and Design Code for the whole or part of the 'Affected Area', comprising the following land parcels, shown in **Figure 1.1**:

1. Certificate of Title Volume 5625 Folio 69 (Section 165 in Hundred 140400);
2. Certificate of Title Volume 5684 Folio 958 (Section 127 in Hundred 140400);
3. Certificate of Title Volume 5593 Folio 258 (Section 128 in Hundred 140400);
4. Certificate of Title Volume 5663 Folio 399 (Section 299 in Hundred 140400);
5. Certificate of Title Volume 5625 Folio 70 (Section 163 in Hundred 140400);
6. Certificate of Title Volume 5486 Folio 425 (Section 162 in Hundred 140400);
7. Certificate of Title Volume 5546 Folio 561 (Section 300 in Hundred 140400);
8. Certificate of Title Volume 5593 Folio 256 (Section 161 in Hundred 140400);
9. Certificate of Title Volume 5486 Folio 425 (Section 164 in Hundred 140400);
10. Certificate of Title Volume 5593 Folio 257 (Section 301 in Hundred 140400);
11. Certificate of Title Volume 5593 Folio 253 (Section 253 in Hundred 140400); and
12. Certificate of Title Volume 5633 Folio 660 (Allotment 799 in Filed Plan 175266).

The Affected Area is irregular in shape with a frontage of approximately 3.4 kilometres to Ruskin Road and Clonan Road on the northern boundary, a frontage of approximately 3.2 kilometres to Thompsons Beach Road on its eastern boundary and 2.2 kilometres to Thompsons Beach Road on its southern boundary. The Affected Area (comprising the entire area of the 12 allotments) has a total area of approximately 1,026 hectares.

The Affected Area is located in the Adelaide Plains Council area, and the adjoining roads are under the care and control of Council.

Based on preliminary investigations, it is intended to rezone in the order of 400 hectares of the 'Affected Area' as 'employment land' with the final size and location of the area to be rezoned to be determined.

2.2. Scope of the Proposed Code Amendment

The following table (**Table 2.1**) outlines the current policy applying to the 'Affected Area' as well as the potential future planning policy to be explored for possible adoption in the 'Affected Area' in association with the proposed Code Amendment.

Table 2-1 - Current and Intended Policy

<p>Current Policy</p>	<p>The site is currently affected by the following relevant Overlays, Subzones, Zones and Technical & Numeric Variations within the Planning and Design Code (version 2023.17):</p> <p>Current Zone:</p> <ul style="list-style-type: none"> • Rural Zone <p>Subzone</p> <p>Nil</p> <p>Current Overlays (either covering the whole or portion of the Affected Area):</p> <ul style="list-style-type: none"> • Environment and Food Production Area • Hazards (Acid Sulfate Soils) • Hazards (Bushfire – General) • Hazards (Bushfire – Medium Risk) • Hazards (Flooding – Evidence Required) • Interface Management • Native Vegetation • State Significant Native Vegetation • Traffic Generating Development • Water Resources <p>Current Local Variations (TNVs):</p> <ul style="list-style-type: none"> • Minimum Site Area – 40 hectares
<p>Amendment Outline</p>	<p>The overall objective for the Code Amendment is to rezone portion of the land to accommodate future employment related land uses.</p>
<p>Intended Policy</p>	<p>The Code Amendment intends to replace the existing 'Rural Zone' with one or more of the following Zones and Subzones to be explored for possible inclusion over the Affected Area:</p> <p>Zones</p> <ul style="list-style-type: none"> • Strategic Employment Zone;

- Employment Zone;
- Employment (Enterprise) Zone; and
- Infrastructure Zone;

Subzones

- Significant Industry Subzone

Overlays

No removal of Overlays is sought. Relevant applicable Overlays and TNVs will be applied spatially based on Code drafting principles.

The following Overlays will be considered for insertion or review:

- Hazards (Bushfire – General)
- Hazards (Bushfire – Medium Risk)
- Interface Management
- Significant Interface Management

Local Variations (TNVs)

Nil

3. STRATEGIC PLANNING OUTCOMES

Proposed Code Amendments occur within a State, regional and local strategic setting, which includes:

- State Planning Policies (SPPs);
- Regional Plans; and
- Other relevant strategic documents.

3.1. Alignment with State Planning Policies

The State Planning Policies (SPPs) set out the State's overarching goals and requirements for the planning system. Under section 66(3)(f) of the Act, the Code must comply with any principle prescribed by a SPP.

The Code Amendment should be initiated because the strategic planning outcomes sought to be achieved through the Code Amendment align with or seek to implement the following SPPs (as set out in **Table 3.1**):

Table 3-1 - Alignment with State Planning Policies

State Planning Policy (SPP)	Code Amendment alignment with SPPs:
<p>SPP1 – Integrated Planning</p> <p><u>Objective:</u></p> <p><i>To apply the principles of integrated planning (Figure 2) to shape cities and regions in a way that enhances our livability, economic prosperity and sustainable future.</i></p> <p><u>Policies:</u></p> <p><i>1.1 An adequate supply of land (well serviced by infrastructure) is available that can accommodate housing and employment growth over the relevant forecast period.</i></p> <p><i>1.2 Provide an orderly sequence of land development that enables the cost-effective and timely delivery of infrastructure investment commensurate with the rate of future population growth</i></p> <p><i>1.3 Plan growth in areas of the state that is connected to and integrated with, existing and</i></p>	<p>SPP1 identifies that the integrated planning of land use, transport and infrastructure helps to address longer term challenges and opportunities by working towards a common vision.</p> <p>The Code Amendment will seek to rezone in the order of 400 hectares of land to facilitate the provision of new employment land that is well located within the Northern Adelaide Plains to support the growth in renewable energy and circular economy processes, recycling industries, Defence support industries, food production and food processing, infrastructure support industries, transport logistics and warehousing.</p> <p>As per SPP1.4, the Code Amendment will protect any land that is of environmental importance, mining, or food production significance. Preliminary investigations have identified that the majority of the Affected Area that has been used for agricultural purposes is of low habitat value and is likely to support a low diversity of fauna species common to the area. The Affected Area also includes a mineral claim (mining area) that will be protected and considered through the Code Amendment process to determine if rezoning of this area is appropriate to support proposed mining operations.</p>

State Planning Policy (SPP)	Code Amendment alignment with SPPs:
<p><i>proposed public transport routes, infrastructure, services and employment lands.</i></p> <p><i>1.4 Protect areas of rural, landscape character, environmental importance, mining or food production significance from the expansion of urban areas, towns and settlements.</i></p>	<p>The Code Amendment will follow the principles of good planning, more particularly by:</p> <ul style="list-style-type: none"> • ‘Balanced decision making’ through the consideration of multiple perspectives in determining a policy framework which supports the most appropriate development for the site and locality; • ‘Support for infrastructure investment’ through having access to existing infrastructure and the planned intent for on-site energy and water generation; and • Supporting population growth by increasing employment opportunities in a region with a growing population.
<p>SPP4 – Biodiversity</p> <p><u>Objective:</u></p> <p><i>To maintain and improve our state’s biodiversity and its life supporting functions</i></p> <p><u>Policies:</u></p> <p><i>4.1 Minimise impacts of development on areas with recognised natural character and values, such as native vegetation and critical habitat so that critical life-supporting functions to our state can be maintained.</i></p> <p><i>4.3 Encourage the re-introduction of biodiversity or its components in development areas to provide life-supporting functions at low cost.</i></p>	<p>The proposed Code Amendment will not result in the rezoning of land comprising recognised high value biodiversity characteristics, including the <i>Winaityinaityi Pangkara</i> Adelaide International Bird Sanctuary and coastal lands on the western area of the Proponent’s land holdings, therefore protecting the natural character and habitat at this interface.</p> <p>As identified in Section 1.2.1 above, the Affected Area for the Code Amendment does not include land within the existing Conservation Zone.</p>
<p>SPP5 – Climate Change</p> <p><u>Objective:</u></p> <p><i>Provide for development that is climate ready so that our economy, communities and environment will be resilient to climate change impacts</i></p> <p><u>Policies:</u></p> <p><i>5.1 Create carbon-efficient living environments through a more compact urban form that</i></p>	<p>The Code Amendment seeks to provide a supportive policy framework to enable delivery of the Employment Land component of the Proponent’s vision for the <i>Dublin Green Circular Economy Precinct</i>, as outlined in Section 1.2.3 above.</p> <p>The Code Amendment will support development that is climate ready through:</p> <ul style="list-style-type: none"> • Rezoning of land that will facilitate green technologies and industries (SPP5.6) and transition away from industries that rely on fossil fuels (SPP5.10);

State Planning Policy (SPP)	Code Amendment alignment with SPPs:
<p><i>supports active travel, walkability and the use of public transport.</i></p> <p>5.3 <i>Facilitate climate-smart buildings to increase climate change resilience and future livability.</i></p> <p>5.5 <i>Avoid development in hazard-prone areas or, where unavoidable, ensure risks to people and property are mitigated to an acceptable or tolerable level through cost-effective measures.</i></p> <p>5.6 <i>Facilitate green technologies and industries that reduce reliance on carbon-based energy supplies and directly or indirectly reduce our greenhouse gas emissions.</i></p> <p>5.7 <i>Protect and enhance areas that provide biodiversity and ecological services and maximise opportunities for carbon storage.</i></p> <p>5.9 <i>Encourage development that does not increase our vulnerability to, or exacerbate the impacts of climate change and which makes the fullest possible contribution to mitigation.</i></p> <p>5.10 <i>Support the transition of traditional industries that rely on fossil fuels to climate smart initiatives to reduce greenhouse gas emissions.</i></p>	<ul style="list-style-type: none"> • Preliminary investigations have identified that the Affected Area is not subject to any flooding and bushfire constraints that would prevent future development (SPP5.5); and • Protecting important biodiversity areas that are located on the Proponents land in the adjacent 'Conservation Zone' to the immediate west of the Affected Area (SPP5.7).
<p>SPP7 – Cultural Heritage</p> <p><u>Objective</u></p> <p><i>To protect and conserve heritage places and areas for the benefit of our present and future generations</i></p> <p><u>Policies</u></p>	<p>The Affected Area does not contain any heritage places and there are no known Aboriginal Cultural Heritage sites on the subject land.</p>

State Planning Policy (SPP)	Code Amendment alignment with SPPs:
<p><i>7.2 Recognise and protect indigenous cultural heritage sites and areas of significance.</i></p>	
<p>SPP9 – Employment Lands</p> <p><u>Objective</u></p> <p><i>To provide sufficient land supply for employment generating uses that supports economic growth and productivity.</i></p> <p><u>Policies</u></p> <p><i>9.1 Support the expansion and clustering of key economic growth areas including health; education; tourism; energy and resources; primary industry; defence; and knowledge and creative industries.</i></p> <p><i>9.2 Enable opportunities for employment and encourage development of underutilised lands connected to, and integrated with, housing, infrastructure, transport and essential services</i></p> <p><i>9.3 Promote new, latent and alternative employment types and attract new business investment by enabling a diverse range of flexible land use opportunities.</i></p> <p><i>9.11 Encourage the development of integrated employment and residential mixed-use precincts where conflicts between uses can be managed.</i></p> <p><i>9.12 Plan for employment and industrial precincts in strategic locations that improve economic productivity; are protected from encroachment; connect to efficient supply chains; and are located to provide transport access and connectivity.</i></p> <p><i>9.13 Provide an appropriate supply of land for waste and resource recovery infrastructure and other related green industries to maximise</i></p>	<p>As identified in Sections 1.2.3 and 4.1, preliminary investigations have identified that the Affected Area is well located to provide additional employment land in the region to meet demand for large scale, low intensity employment uses that are not suited to other locations.</p> <p>The Code Amendment will therefore support the objective of SPP9 to provide sufficient land supply for employment generating uses that support economic growth and productivity.</p>

State Planning Policy (SPP)	Code Amendment alignment with SPPs:
<p><i>resource use, support economic growth and service our communities.</i></p>	
<p>SPP10 – Mineral and Energy Resources</p> <p><u>Objective:</u></p> <p><i>To protect key resources that contribute to our state’s economy and provide valued employment opportunities.</i></p> <p><u>Policies:</u></p> <p><i>10.1 Define and protect mineral resources operations, associated infrastructure and undeveloped mineral resources from encroachment by incompatible land uses.</i></p>	<p>A mineral claim is located in the south-west corner of the Affected Area. The Code Amendment will facilitate a policy framework to protect the operation of the mining area.</p>
<p>SPP11: Strategic Transport Infrastructure</p> <p><u>Objective:</u></p> <p>To integrate land use policies with existing and future transport infrastructure, services and functions to preserve and enhance safe, efficient and reliable connectivity for people and business.</p> <p><u>Policies:</u></p> <p><i>11.1 Facilitate an efficient, reliable and safe transport network that connects business to markets and people to places (i.e. where they live, work, visit and recreate).</i></p> <p><i>11.2 Development that maximises the use of current and planned investment in transport infrastructure, corridors, nodes and services</i></p>	<p>The Affected Area is well located to access existing strategic road and rail transport infrastructure.</p>
<p>SPP12 – Energy</p> <p><u>Objective:</u></p>	<p>The Code Amendment will rezone land that can be used to generate new energy (waste to electricity) as part of the overall vision for the Dublin Green Circular Economy Precinct.</p>

State Planning Policy (SPP)	Code Amendment alignment with SPPs:
<p><i>To support the ongoing provision of sustainable, reliable and affordable energy options that meet the needs of the community, business and industry.</i></p> <p><u>Policies:</u></p> <p><i>12.1 Development of energy assets and infrastructure (including ancillary facilities) where the impact on surrounding land uses, regional communities and the natural and built environment can be minimised.</i></p> <p><i>12.2 Facilitate renewable sources of energy supply, such as solar and wind, at the local level.</i></p> <p><i>12.5 Enable industries to reduce carbon emissions by supporting energy efficient urban and building designs.</i></p> <p><i>12.6 Facilitate energy technologies that support a stable energy market and continued energy supply and do not adversely affect the amenity of regional communities.</i></p>	<p>In addition, the Code Amendment will rezone land that is well located and suited to provide critical land to support the construction and development of renewable energy projects across the State.</p>
<p>SPP15 – Natural Hazards</p> <p><u>Objective:</u></p> <p><i>To build the resilience of communities, development and infrastructure from the adverse impact of natural hazards</i></p> <p><u>Policies:</u></p> <p><i>15.1 Identify and minimise the risk to people, property and the environment from exposure to natural hazards including extreme heat events; bushfire; terrestrial and coastal flooding; soil erosion; drought; dune drift; acid sulfate soils; including taking into account the impacts of climate change.</i></p> <p><i>15.3 Avoid locating sensitive developments and communities in areas at high risk of hazards –</i></p>	<p>The Affected Area is affected by the 'Flooding (Evidence Required) Overlay' and 'Bushfire (General Risk) Overlay', providing clear guidance on matters relating to natural hazards. Through the preparation of the Urban Framework Plan, the Code Amendment has avoided locating new employment lands on areas subject to a higher risk of flooding and bushfire on the Proponent's broader land holdings.</p>

State Planning Policy (SPP)	Code Amendment alignment with SPPs:
<p><i>namely hospitals, telecommunication towers, major transport infrastructure, energy base stations and water services – or ensure that these developments are subject to a higher level of assessment.</i></p> <p><i>15.6 Avoid development in high or extreme hazard risk areas (such as bushfire risk areas) that will necessitate the removal of native vegetation.</i></p>	

3.2. Alignment with Regional Plans

As with the SPPs, the directions set out in Regional Plans provide the long term vision as well as setting the spatial patterns for future development in a region. This includes consideration of land use integration, transport infrastructure and the public realm.

The ‘30 Year Plan for Greater Adelaide (2017 update)’ volume of the Planning Strategy is relevant for this Code Amendment.

Table 3.2 sets out the alignment with the Regional Plan.

Table 3-2 - Alignment with Regional Plan

Regional Plan Identified Priorities or Targets	Code Amendment alignment with Regional Plan:
<p>The Economy and Jobs – Primary Production</p> <p><i>P57. Maintain and protect primary production and tourism assets in the Environment and Food Production Areas, while allowing for appropriate value-adding activities to increase investment opportunities (Refer to Map 5)</i></p> <p><i>P58. Ensure that the Environment and Food Production Areas, Character Preservation Districts and planning policies work in an integrated way to:</i></p> <ul style="list-style-type: none"> » <i>protect key primary production assets and opportunities</i> » <i>facilitate local operating and investment conditions that support primary</i> 	<p>The Affected Area is located within the Environment and Food Production Area.</p> <p>Section 7 of the <i>Planning Development and Infrastructure Act 2016</i> identifies the purpose of the EFPA is to ‘<i>ensure that areas of rural, landscape, environmental or food production significance within Greater Adelaide are protected from urban encroachment.</i>’</p> <p>Investigations have identified that the Affected Area is degraded through a long history of clearance, grazing and cultivation and is of low primary production value.</p> <p>The Code Amendment will provide a policy framework that will encourage new agri-business (such as vertical agriculture) to be established in the region, and the creation of a circular economy precinct that can create new resources (such as fertiliser) to improve the soil condition and productivity of nearby primary production lands.</p>

Regional Plan Identified Priorities or Targets	Code Amendment alignment with Regional Plan:
<p><i>production and related agri-business development</i></p> <p>» <i>enable timely business adjustment and climate change adaptation by primary producers.</i></p> <p>P59. <i>Enable major new primary production and agri-business development across the Northern Adelaide and Barossa regions and in the Mount Barker-Murray Bridge corridor and prevent ad hoc land use changes that may compromise those investments.</i></p>	
<p>The Economy and Jobs – Green Industries</p> <p>P70. <i>Ensure planning controls for employment lands are flexible to allow new green technologies and industries to emerge and grow.</i></p> <p>P71. <i>Encourage the establishment and expansion of medium and large scale renewable energy generation within the region.</i></p> <p>P72. <i>Encourage the development of large scale habitat restoration and conservation projects to increase environmental and primary production values and add to local economies and employment opportunities.</i></p>	<p>The Code Amendment will provide a zone and policy framework to allow and encourage new green technologies and industries to emerge and grow.</p>
<p>The Economy and Jobs - Employment Land</p> <p>P73. <i>Provide sufficient strategic employment land options with direct access to major freight routes to support activities that require separation from housing and other sensitive land uses.</i></p>	<p>The Code Amendment will deliver new employment land that has been identified through investigations to have attractive attributes for larger scale, low intensity employment uses which can leverage off its location with access from Port Wakefield Highway with short travel times back to the workforce and industrial support services of Outer North Adelaide.</p>
<p>Climate Change</p> <p>P109. <i>Support a zero waste culture by reducing the waste footprint of new development</i></p>	<p>The Code Amendment seeks to deliver a zoning outcome that will enable the delivery of new infrastructure and land uses that will contribute to the delivery of a vision to create the ‘<i>Dublin Green Circular Economy Precinct</i>’, including the future development of a</p>

Regional Plan Identified Priorities or Targets	Code Amendment alignment with Regional Plan:
	new 6.5 MW Bioreactor that takes organic waste products to create energy (gas & electricity), food grade CO ² for vertical agriculture, water and fertiliser for the use in the entire precinct and other land in the region.

3.3. Alignment with Other Relevant Documents

Additional documents may relate to the broader land use intent within the scope of this proposed Code Amendment (or directly to the Affected Area) and therefore are identified for consideration in the preparation of the Code Amendment.

Table 3.3 identifies other documents relevant to the proposed Code Amendment.

Table 3-3 Alignment with Other Relevant Documents

Other Relevant Documents	Code Amendment alignment with Other Relevant Documents
Adelaide Plains Council Strategic Plan 2020-2024	<p>The Strategic Plan identifies four (4) key themes to progress its vision:</p> <p>The Code Amendment will contribute towards achieving Council's strategic plan goals through:</p> <p>Enviably Lifestyle: The Code Amendment will create new employment lands that will provide new opportunities for local employment that will support the desire to arrest the departure of the younger population. New employment opportunities will also support new opportunities for improved local retail and services in the Dublin township.</p> <p>Emerging Economy: The Code Amendment will support this outcome by providing a policy framework that supports new value-add employment generators and creation of new employment to support projected population growth in the region.</p> <p>Remarkable Landscapes: The proposed rezoning in the Code Amendment will not seek to alter the existing 'Conservation Zone' and the Urban Framework Plan has identified buffers to ensure adequate separation of future activities from important coastal environments and vegetation.</p> <p>Proactive Leadership: The proponent will coordinate with Council and relevant infrastructure bodies to ensure the vision for the <i>Dublin Green Circular Economy Precinct</i> maximises opportunities for the local area.</p>

Other Relevant Documents

Adelaide Plains Council, Growth Strategy and Action Plan, May 2023

Code Amendment alignment with Other Relevant Documents

In May 2023, the Adelaide Plains Council adopted its Adelaide Plains Growth Strategy and Action Plan (GSAP).

The GSAP identifies that planning for population growth of the Adelaide Plains is important, as population is forecast to double over the next 20 years. Council identifies that the majority of population growth is at Two Wells which could ultimately grow to 13,400 people. Notwithstanding, the Council supports further growth opportunities in Dublin, subject to further investigations, rezoning and infrastructure planning.

The GSAP notes that growth within the Adelaide Plains is part of the outer north that is being planned for the greatest amount of fringe growth in Greater Adelaide.

The GSAP identifies that Adelaide Plains is envisaged to retain a three (3) major town structure (Two Wells, Mallala and Dublin) which would be complemented by twelve (12) coastal and rural settlements across the region, as illustrated below:



For Dublin, the GASP identifies the rezoning of 170 hectares of land owned by the Proponent south of the existing Dublin Township to the Township Zone as illustrated below.

Other Relevant Documents

Code Amendment alignment with Other Relevant Documents



The Urban Framework Plan prepared by Leinad (refer to Section 1.2.3 above) identifies the opportunity for up to 1,300 dwellings on the land to the south of the Dublin township that has been identified for future township expansion by the GSAP.

The future development of this land for Residential purposes requires an amendment to the Environment and Food Production Area boundary as well as a Code Amendment to rezone the land for residential purposes. The development of this land for residential purposes will support the *Dublin Green Circular Economy Precinct* concept and is supported by Leinad.

The possible rezoning of this land for residential purposes will be progressed concurrently and separately by the Proponent and will be informed by detailed investigations undertaken in association with this Code Amendment and the future strategic direction provided by the new 'Greater Adelaide Regional Plan' that is expected to be released in 2024.

The Affected Area for this Code Amendment includes the 170ha of land that has been earmarked in the GSAP for township expansion for residential purposes. This is to enable detailed investigations to confirm the spatial extent of employment lands at the interface with potential future expansion of the Dublin township and to take into consideration required buffers and planning policy provisions (including the possible application of the 'Interface Management Overlay' or 'Significant Interface Management Overlay') to protect possible future residential development from existing and potential future EPA licensed activities in the Affected Area and locality.

South Australia Waste Strategy 2020-2025, Supporting a Circular Economy

The circular economy is a prominent focus for Green Industries SA. The *Green Industries SA Act 2004* incorporates the concept of circular economy as a guiding principle. The potential benefits of a circular economy in South

Other Relevant Documents	Code Amendment alignment with Other Relevant Documents
	<p>Australia have been measured (Green Industries SA, 2017), which describes gains to be achieved in local job creation and reductions in greenhouse gas emissions by 2030.</p> <p>‘<i>South Australia’s Waste Strategy 2020-2025</i>’ outlines actions that can contribute to the development of a circular economy – that is, an economy that realises the best or full value from products and materials produced, consumed and recovered in South Australia.</p> <p>The Proponent’s vision for the <i>Dublin Green Circular Economy Precinct</i> which will create energy (gas & electricity), food grade CO² for use in vertical agriculture, water and fertiliser for the use in the entire precinct and other land in the region from organic waste products - is strongly aligned with circular economy principles.</p> <p>Preliminary Investigations have also identified the land to be well located and suited to support the manufacturing, fabrication and logistics for renewable energy projects in regional South Australia.</p>

4. INVESTIGATIONS AND ENGAGEMENT

4.1. Investigations Already Undertaken

Leinad have prepared a Dublin Urban Framework Plan (included as **Appendix 3**) that includes a high-level spatial framework plan to deliver the *Dublin Green Circular Economy Precinct*. The preparation of the Urban Framework Plan has been informed by an assessment of the strategic context, the location and site conditions and a series of preliminary investigations.

The Dublin Urban Framework Plan provides a high level spatial framework showing basic land use distribution, neighbourhood structure, key linkages and transport systems, major road connections, activity centres/nodes, open space and recreation facilities as well as overall employment and housing population/density.

The table below identifies what investigations have already been undertaken in support of the preparation of the Urban Framework Plan and the proposed Code Amendment for new employment land:

Investigation Undertaken	Summary of Scope of Investigations	Summary of Outcome of Recommendations
Preliminary Land Economics Assessment, Deep End Services, October 2023 (see Appendix 4)	Preliminary investigations into future demand for employment lands including identifying the key sectors where growth is anticipated in the region and an estimate of the likely area of land to be required for long-term development	<ul style="list-style-type: none"> • Deep End have advised that there is a strong case for a significant proportion of the 1,026-hectare ‘Affected Area’ to be designated for employment uses. • The land can accommodate a range of employment uses and processes not suited to, or priced out of, the smaller and more expensive industrial sites in Edinburgh Parks which are targeting more intensive manufacturing, food processing and warehouse and logistics operations. • Dublin has attractive attributes for larger scale, low intensity uses which can leverage: <ul style="list-style-type: none"> – Location with access from along Port Wakefield Highway with short travel times back to the workforce and industrial support services of Outer North Adelaide; – Access to nearby rail corridors with loading facilities; – The growing regional population including projected growth in the Adelaide Plains local government area; – Emerging interest in Green Circular Economy projects and processes stimulated by South Australia’s

Investigation Undertaken	Summary of Scope of Investigations	Summary of Outcome of Recommendations
		<p>investment in renewable energy generation with ready regional sources of biomass and other inputs;</p> <ul style="list-style-type: none"> – Strong linkages to the agricultural sector of the Northern Plains, the renewable energy and infrastructure projects of regional South Australia (to the north & west) and to a lesser extent, Defence contracts and related work; – Support from Adelaide Plains Council and their planning strategy based on a three towns service model including residential growth at Dublin; and – Affordable and larger land parcels. <ul style="list-style-type: none"> • The sectors which appear to be well-suited to the site based on the location and expressed interest from occupiers are: <ul style="list-style-type: none"> – The circular processes of a local Green Economy including innovative farming and food production methods, recycling industries, energy production from biomass, fertiliser harvesting and distribution and links or interdependencies with residential and industrial uses; – Manufacturing, fabrication or logistics for the renewable (wind, solar and hydrogen) energy sector in metropolitan and regional SA; – Defence and infrastructure contractors or subcontractors requiring more land extensive sites; and – Manufacturing or transport uses hauling long, wide or high freight to destinations using Port Wakefield Highway. • The Dublin employment land may differentiate itself from metropolitan industrial areas as it attracts uses requiring flexibility, mobility and even temporary facilities for operations to be scaled up and down as industry demand

Investigation Undertaken	Summary of Scope of Investigations	Summary of Outcome of Recommendations
		<p>requires, as well as a permanent location for businesses seeking a competitive edge in entry pricing.</p> <ul style="list-style-type: none"> There is no model-driven formula at this stage for the calculation of industrial land needs for a peri-urban location such as Dublin. Notwithstanding based on the expressions of interest received to date, larger land area requirements, existing Strategic Employment land reserves to the east, the long term nature of the estate and the need for an area to develop a critical mass and provide a range of land options, up to 400 hectares of employment land can be justified and planned for. This is less than half the area of the existing 'Strategic Employment Zone' east of Dublin.
<p>Cultural Heritage Desktop Assessment, Australian Cultural Heritage Management, November 2012.</p> <p>Search of Register of Aboriginal Sites and Objects (Taa Wika), April 2023</p> <p>(see Appendix 5)</p>	<p>Conduct a search of the Aboriginal Heritage Registers to identify relevant Aboriginal heritage considerations, including any identified cultural sites and objects.</p>	<ul style="list-style-type: none"> The land is within the Kurna Native Title Claim area. No specific Aboriginal Cultural Heritage sites have been identified on the subject land. Notwithstanding that there are no known sites, the area is identified as one of historic activity for the Kurna People and therefore artefacts scatters, campsites and human remains may be encountered. Aboriginal heritage sites have a high degree of association with water features and thus the Samphire Coast area and the coastal dunes would provide the most likely areas for finds. All Aboriginal artefacts, sites, or remains are protected under the <i>Aboriginal Heritage Act 1998 (AHA)</i>.
<p>Dublin Development Ecology Assessment, EBS Ecology, Version 2.0, June 2012</p>	<p>Identify flora and fauna condition across the subject land.</p>	<ul style="list-style-type: none"> The entire 'Conservation Zone' to the west of the Affected Area comprises intact samphire and saltmarsh vegetation subject to tidal inundation. The area is of very high ecological value. The saltmarsh and sapphire communities are in good condition and resemble probably pre-European structure, forming part of a much larger intact system. This zone is of high importance for fauna, including the state vulnerable Slender-Biller Thornbill and a range of

Investigation Undertaken	Summary of Scope of Investigations	Summary of Outcome of Recommendations
		<p>shorebirds. Provided a suitable buffer is provided to the 'Conservation Zone', the proposed rezoning should not have significant impact on the coastal vegetation or shorebird habitat.</p> <ul style="list-style-type: none"> For the remainder of the Affected Area, the study identified native vegetation was highly modified and of very poor condition, limited to scattered low shrub land that has persisted in grazing paddocks. The vegetation is highly degraded with high levels of disturbance and exotic species. In general, the Affected Area is of low habitat value and is likely to support a low diversity of fauna species common to the area
Partial Stage 1 Environmental Site History, TMK Consulting Engineers, October 2012	To assess the potential for gross or widespread soil contamination to exist as a result of current or previous land uses	<ul style="list-style-type: none"> A partial 'Stage 1 Environmental Site History' Report was prepared by TMK Engineers in 2012. The purpose of the site history research was to assess the potential for gross or widespread soil contamination to exist as a result of current or previous land uses. The site history report was also prepared to establish if there are any significant impediments to the proposed future redevelopment of the site for residential purposes from a site contamination perspective. The report indicated that the risk of significant or gross soil and/or groundwater contamination across the whole site, that would be likely to preclude the use of the site for future residential development, is considered to be low. There are no known new activities since this report was undertaken that would lead to the likelihood of any new site contamination sources arising.
Broiler Farm Odour Emissions Residential Development, Preliminary Assessment, Enviroscan, October 2023 (see Appendix 7)	To provide a preliminary assessment for a buffer zone around an established broiler farm located about 1.2 kilometres south of the Dublin township (and on land	<ul style="list-style-type: none"> The adjacent licensed broiler farm has an approved capacity for 420,000 birds. As a preliminary estimate, the Enviroscan report has recommended an approximate minimum buffer distance of 1,000m (representing an odour exposure up to ≤ 4 OU).

Investigation Undertaken	Summary of Scope of Investigations	Summary of Outcome of Recommendations
	adjacent to the eastern boundary of the Affected Area)	<ul style="list-style-type: none"> • Further assessment is recommended at future stages of site planning, depending on the location of sensitive land uses on the subject land. • The land within the buffer separation distance is appropriate for other uses, including employment land.
Background Investigation, Preliminary Services Assessment, TMK Consulting Engineers, August 2012	Preliminary investigations of existing service infrastructure and potential augmentation.	<ul style="list-style-type: none"> • Section 6.8 of the Dublin Urban Framework Plan (Appendix 3) provides a detailed summary of investigations undertaken to date by the proponent on potable water, sewer, power, gas and telecommunications. • Leinad are currently establishing Development Agreements with service providers, including Alano Utilities Pty Ltd and NBN Co, to ensure the adequate provision of services to the 'Affected Area'. • The circular economy model will generate on-site electricity and water, which will reduce infrastructure augmentation as a result of localised generation and distribution of power and potable water.
Review of Traffic Capacity, MFY, November 2023 (see Appendix 6)	To provide a preliminary assessment of additional traffic volumes generated by development in the employment and mining areas identified in the Dublin Urban Framework Plan (see Section 1.2.3)	<ul style="list-style-type: none"> • Preliminary Investigations have suggested that future employment and mining uses should be accessed via Thompson Road to minimise any impact on the Dublin township created by large vehicles. The Thompson Road/Port Wakefield Highway intersection has been designed to cater for large commercial vehicles and currently provides access to and from the existing chicken farm. • Additional volumes generated by development in the employment and mining area will be dependent on the ultimate land use. • Given the existing and proposed future population densities and thresholds within the Dublin Township, it is unlikely that public transport would extend to Dublin in the foreseeable future. Notwithstanding, the planned growth

Investigation Undertaken	Summary of Scope of Investigations	Summary of Outcome of Recommendations
		in the northern suburbs of Adelaide (including Buckland Park and Two Wells) may bring regular services closer and/or may provide critical mass for a private operator to extend services.

4.2. Further Investigations Proposed

In addition to the investigations already undertaken and identified above, the table below outlines the additional investigations that will be undertaken to support the Code Amendment.

Further Investigation Proposed	Explanation of how the further investigations propose to address an identified issue or question
Survey	Analysis of site boundaries, easements, as well as site features and levels etc
Native Vegetation and Biodiversity	Review and update the Ecological Assessment to assess the presence of native vegetation and fauna habitat, identify any flora species of national and State conservation significance known or likely to occur in the area, identify threatened species known to or likely to occur in the Affected Area and quantify the potential impacts on flora and fauna (including fauna habitat) associated with undertaking the Code Amendment process.
Land Economics	Review and refine investigations identifying key drivers and sectors for industrial land supply and demand in the region, including associated with the proposed <i>Dublin Green Circular Economy Precinct</i> .
Flooding, Hydrology and Stormwater	Investigate the potential stormwater and flood constraints affecting the land and identify a strategy to adequately manage stormwater quantity and quality in a manner that mitigates impacts off-site.
Infrastructure and Utility Services	<p>Review and update investigations on the impacts of the proposed Code Amendment on the existing infrastructure services available and determine whether any upgrades are required to service the Affected Area.</p> <p>Updated civil infrastructure investigations will review existing servicing and infrastructure to the Affected area including infrastructure capacity and augmentation capability in relation to supply of:</p> <ul style="list-style-type: none"> – Potable Water,

Further Investigation Proposed	Explanation of how the further investigations propose to address an identified issue or question
	<ul style="list-style-type: none"> – Recycled Water; – Wastewater; – Electrical; – Gas; – Communications; and – Any other services as relevant. <p>This review will consider the circular economy model that may be adopted to generate energy (electricity and hydrogen) and water which will reduce infrastructure augmentation as a result of localised generation and distribution of power and potable water.</p>
Transport & Access	Preparation of a Traffic Impact Assessment to ensure that the existing and future road network can accommodate anticipated traffic movements associated with future development, including investigating walking and cycling.
GIS	Preparation of required spatial mapping for inclusion within the Planning and Design Code.

4.3. Engagement Already Undertaken

4.3.1. Adelaide Plains Council

In accordance with 'Practice Direction 2 – Preparation and Amendment of Designated Instruments', the proponent and its representatives have liaised with senior representatives the Adelaide Plains Council concerning the proposed Code Amendment. On the 29 November 2023, the proponent and representatives of Ekistics met with Senior Administration of the Adelaide Plains Council regarding the proposed initiation of a Code Amendment.

Following this meeting, on 29 November 2023, a formal letter was sent to the Council Chief Executive Officer outlining the intended Proposal to Initiate a Code Amendment, the Affected Area extent, and the investigations intended to be undertaken as part of the future Code Amendment.

A copy of the letter from the Council Chief Executive Officer confirming that Council has no objections to the initiation of the Code Amendment is included in **Appendix 8**. Council has provided comments on the proposed investigations and identified a number of references to be aware of as part of preparation of further investigations. In addition, Council has identified a various groups who have an interest in the future of Dublin that should be included as part of future engagement. These recommendations will be considered as part of the preparation of the Engagement Plan.

4.4. Further Engagement Proposed

In addition to the engagement already undertaken and identified above, the table below outlines what additional engagement will be undertaken to support the Code Amendment:

Further Engagement Proposed	Explanation of how the further engagement proposes to address an identified issue or question
Adelaide Plains Council	Ongoing engagement will be undertaken with Council in relation to the Code Amendment. The purpose of this additional engagement will be to identify and resolve planning matters of local significance to the Council and its local community
Owners and occupiers of adjacent land	To identify and consider the potential impact of the proposed Code Amendment on neighbouring land.
State Government/Departments and Agencies including: <ul style="list-style-type: none"> • Environment Protection Authority (EPA) • Department for Environment and Water (DEW) • National Parks and Wildlife Services South Australia • Department for Trade & Investment (DTI) • Department for Infrastructure and Transport (DIT) • Green Adelaide • Department of Primary Industries and Regions (PIRSA) • South Australian Fire and Emergency Services Commission (SAFECOM) • South Australian Metropolitan Fire Service (SAMFS) 	To confirm the potential impacts and appropriateness of the changes proposed by the Code Amendment.

Further Engagement Proposed	Explanation of how the further engagement proposes to address an identified issue or question
<ul style="list-style-type: none"> Country Fire Service (CFS) 	
Service Agencies and Utilities including: <ul style="list-style-type: none"> SA Water SA Power Networks Electranet SEAgas Office of the Technical Regulator 	To determine existing infrastructure capacity and augmentation capability
Regional Development Australia (RDA)	To gain an understanding of any economic implications of the Code Amendment on the Regional Economy.
Local business and community groups	To confirm the potential impacts and appropriateness of the changes proposed by the Code Amendment.
State Members of Parliament	To inform required investigations
Kaurna Yerta Aboriginal Corporation (KYAC) and/or Kaurna Nation Cultural Heritage Association (KNCHA)	To inform required investigations

5. CODE AMENDMENT PROCESS

5.1. Engagement Plan

The Code Amendment process will occur in accordance with the 'Community Engagement Charter' and '*Practice Direction 2 – Consultation on the Preparation or Amendment of a Designated Instrument*'.

The Designated Entity will prepare an Engagement Plan prior to the commencement of engagement on the proposed Code Amendment. The Engagement Plan will include the following mandatory consultation requirements (which may be in addition to the engagement outlined in this Proposal to Initiate):

The Local Government Association must be notified in writing of the proposed Code Amendment

If the Code Amendment has a specific impact on 1 or more particular pieces of land in a particular zone or subzone (rather than more generally), the Designated Entity must take reasonable steps to give a notice in accordance with Regulation 20 of the *Planning, Development and Infrastructure (General) Regulations 2017*, to:

- the owners or occupiers of the land; and
- owners or occupiers of each piece of adjacent land

Consultation must also occur with any person or body specified by the State Planning Commission under section 73(6)(e) of the Act.

5.2. Engagement Report

Once engagement on the Code Amendment is complete, the Designated Entity will prepare an Engagement Report under Section 73(7) of the Act.

The Designated Entity must ensure that a copy of the Engagement Report is provided to the Minister and also published on the PlanSA portal. This will occur in accordance with Practice Direction 2.

The Engagement Plan and the Engagement Report will also be considered by the State Planning Commission during the final stages of the Code Amendment process. The Commission will provide a report to the Environment, Resources and Development Committee of Parliament under Section 74(3) of the Act. The Commission's report will provide information about the reason for the Code Amendment, the consultation undertaken on the Code Amendment and any other information considered relevant by the Commission.

5.3. Code Amendment Timetable

The Proponent (where it is also the Designated Entity) commits to undertaking the Code Amendment in line with the timeframe outlined in **Appendix 2**. If a timeframe is exceeded (or expected to be exceeded) the Proponent agrees to provide an amended

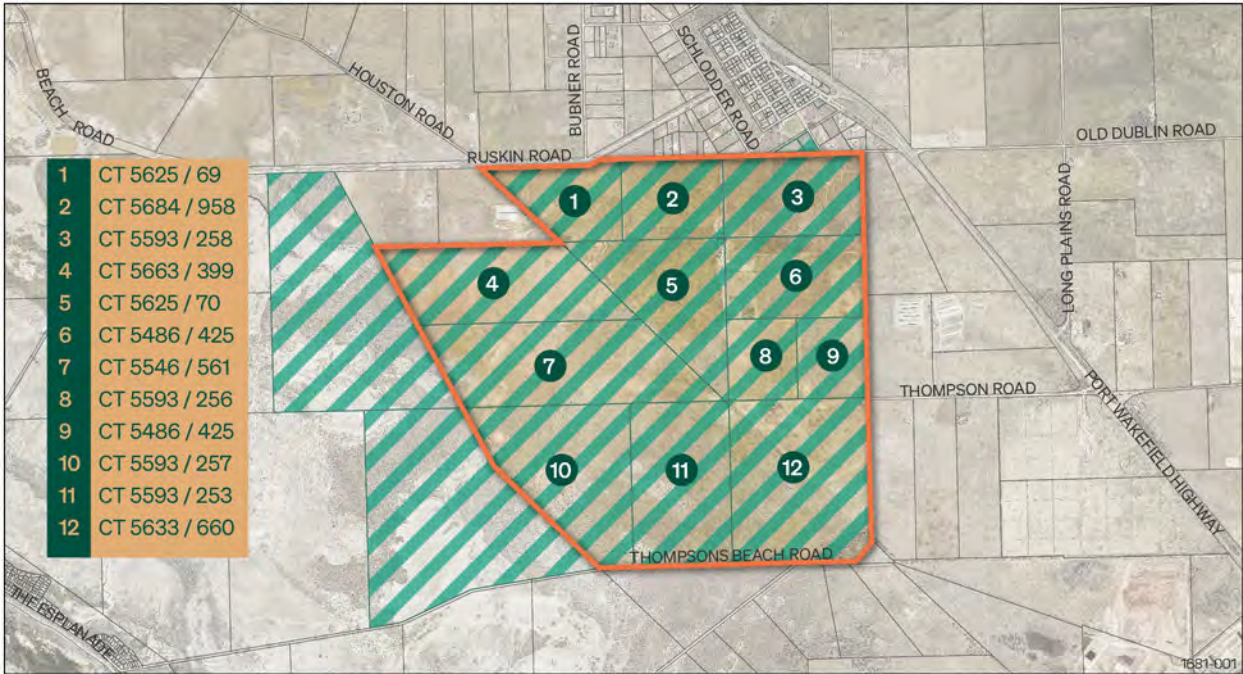


timetable to the Department with an explanation of the delay, for approval by the Minister of an extension of time for the Code Amendment.

A large, decorative white line art graphic is positioned on the left side of the page. It features a large semi-circle at the top, a horizontal line extending to the right, and a series of geometric shapes below, including a semi-circle, a rectangle, and a parallelogram.

APPENDIX 1

Map of Affected Area





Title Register Search

LANDS TITLES OFFICE, ADELAIDE

For a Certificate of Title issued pursuant to the Real Property Act 1886

REGISTER SEARCH OF CERTIFICATE OF TITLE * VOLUME 5625 FOLIO 69 *

COST : \$18.70 (GST exempt)	PARENT TITLE : CT 3465/51
REGION : EMAIL	AUTHORITY : CONVERTED TITLE
AGENT : PUSH BOX NO : 000	DATE OF ISSUE : 17/02/1999
SEARCHED ON : 31/05/2011 AT : 10:22:40	EDITION : 2
CLIENT REF DUB165	

REGISTERED PROPRIETOR IN FEE SIMPLE

RODNEY GEORGE BAKER OF C/- POST OFFICE DUBLIN SA 5501

DESCRIPTION OF LAND

SECTION 165
HUNDRED OF DUBLIN
IN THE AREA NAMED DUBLIN

EASEMENTS

SUBJECT TO THE EASEMENT OVER THE LAND MARKED A TO THE MINSITER FOR
INFRASTRUCTURE (VM 8629912)

SCHEDULE OF ENDORSEMENTS

NIL

NOTATIONS

DOCUMENTS AFFECTING THIS TITLE

NIL

REGISTRAR-GENERAL'S NOTES

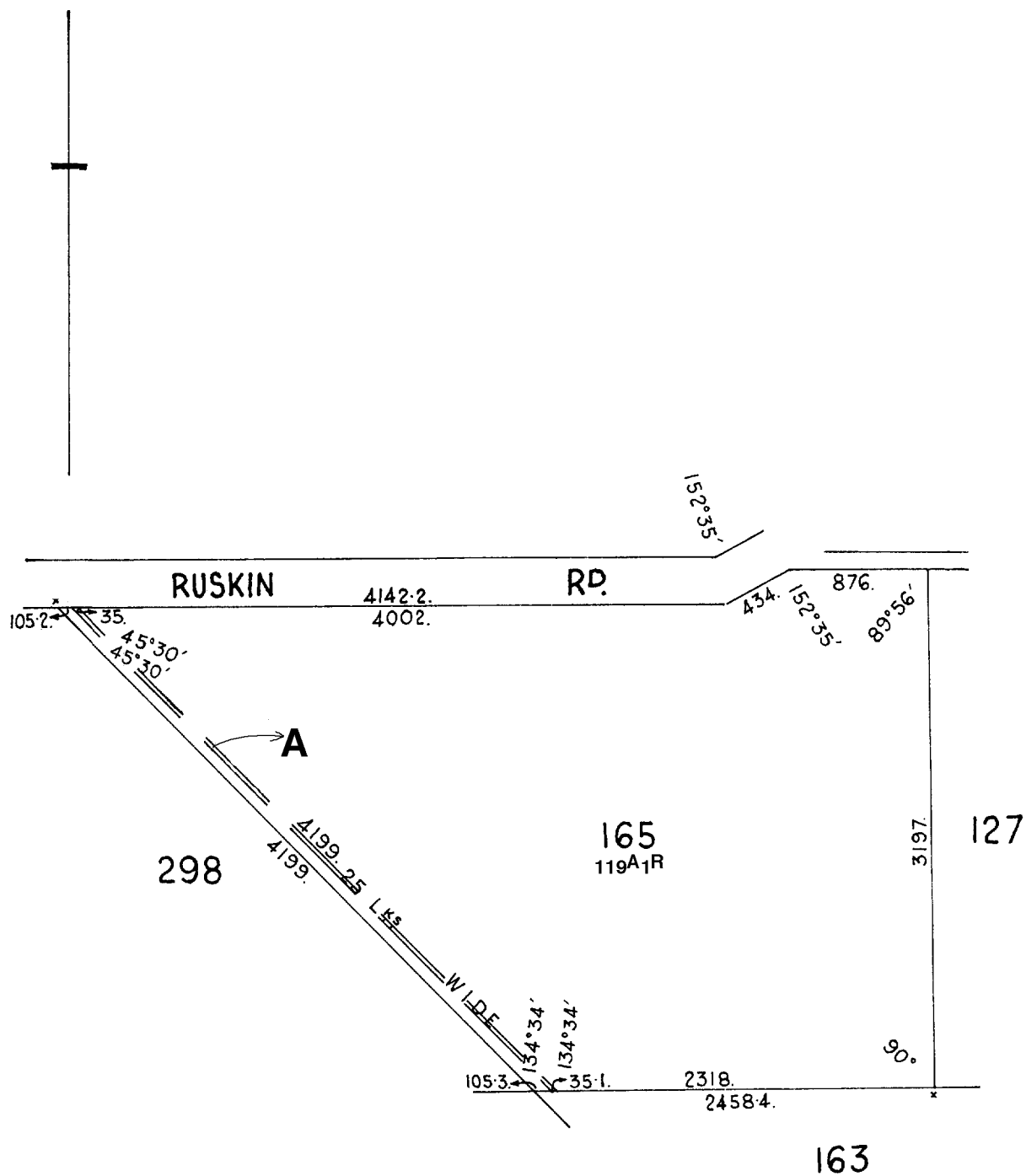
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END OF TEXT.

LANDS TITLES OFFICE ADELAIDE SOUTH AUSTRALIA

DIAGRAM FOR CERTIFICATE OF TITLE VOLUME 5625 FOLIO 69

SEARCH DATE : 31/05/2011 TIME: 10:22:40



10 5 0 10 CHS.

FOR METRIC CONVERSION	
1 LINK	= 0.201168 METRES
1 CHAIN	= 100 LINKS
1 ACRE	= 0.404686 HECTARES
1 ROOD	= 1011.7 m ²
1 PERCH	= 25.29 m ²



Title Register Search

LANDS TITLES OFFICE, ADELAIDE

For a Certificate of Title issued pursuant to the Real Property Act 1886

REGISTER SEARCH OF CERTIFICATE OF TITLE * VOLUME 5684 FOLIO 958 *

COST : \$18.70 (GST exempt)	PARENT TITLE : CT 1595/132
REGION : EMAIL	AUTHORITY : CONVERTED TITLE
AGENT : PUSH BOX NO : 000	DATE OF ISSUE : 25/08/1999
SEARCHED ON : 31/05/2011 AT : 10:16:00	EDITION : 2
CLIENT REF DUB127	

REGISTERED PROPRIETOR IN FEE SIMPLE

RODNEY GEORGE BAKER OF C/- POST OFFICE DUBLIN SA 5501

DESCRIPTION OF LAND

SECTION 127
HUNDRED OF DUBLIN
IN THE AREA NAMED DUBLIN

EASEMENTS

NIL

SCHEDULE OF ENDORSEMENTS

NIL

NOTATIONS

DOCUMENTS AFFECTING THIS TITLE

NIL

REGISTRAR-GENERAL'S NOTES

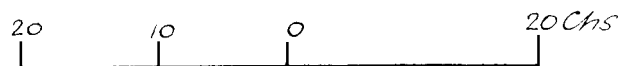
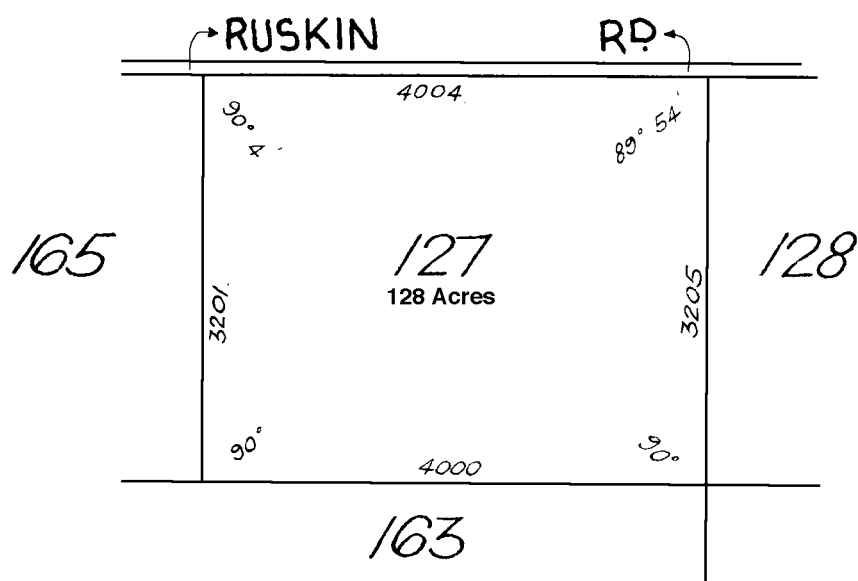
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END OF TEXT.

LANDS TITLES OFFICE ADELAIDE SOUTH AUSTRALIA

DIAGRAM FOR CERTIFICATE OF TITLE VOLUME 5684 FOLIO 958

SEARCH DATE : 31/05/2011 TIME: 10:16:00



FOR METRIC CONVERSION	
1 LINK	= 0.201168 METRES
1 CHAIN	= 100 LINKS
1 ACRE	= 0.404686 HECTARES
1 ROOD	= 1011.7 m ²
1 PERCH	= 25.29 m ²



Title Register Search

LANDS TITLES OFFICE, ADELAIDE

For a Certificate of Title issued pursuant to the Real Property Act 1886

REGISTER SEARCH OF CERTIFICATE OF TITLE * VOLUME 5593 FOLIO 258 *

COST : \$18.70 (GST exempt)	PARENT TITLE : CT 2555/40
REGION : EMAIL	AUTHORITY : CONVERTED TITLE
AGENT : PUSH BOX NO : 000	DATE OF ISSUE : 05/11/1998
SEARCHED ON : 31/05/2011 AT : 10:09:11	EDITION : 3
CLIENT REF DUB128	

REGISTERED PROPRIETORS IN FEE SIMPLE

ERIC SEED AND JANE LEAH MCCONNELL BOTH OF PO BOX 26 DUBLIN SA 5501 AS
JOINT TENANTS

DESCRIPTION OF LAND

SECTION 128
HUNDRED OF DUBLIN
IN THE AREA NAMED DUBLIN

EASEMENTS

NIL

SCHEDULE OF ENDORSEMENTS

11421982 MORTGAGE TO COMMONWEALTH BANK OF AUSTRALIA

NOTATIONS

DOCUMENTS AFFECTING THIS TITLE

NIL

REGISTRAR-GENERAL'S NOTES

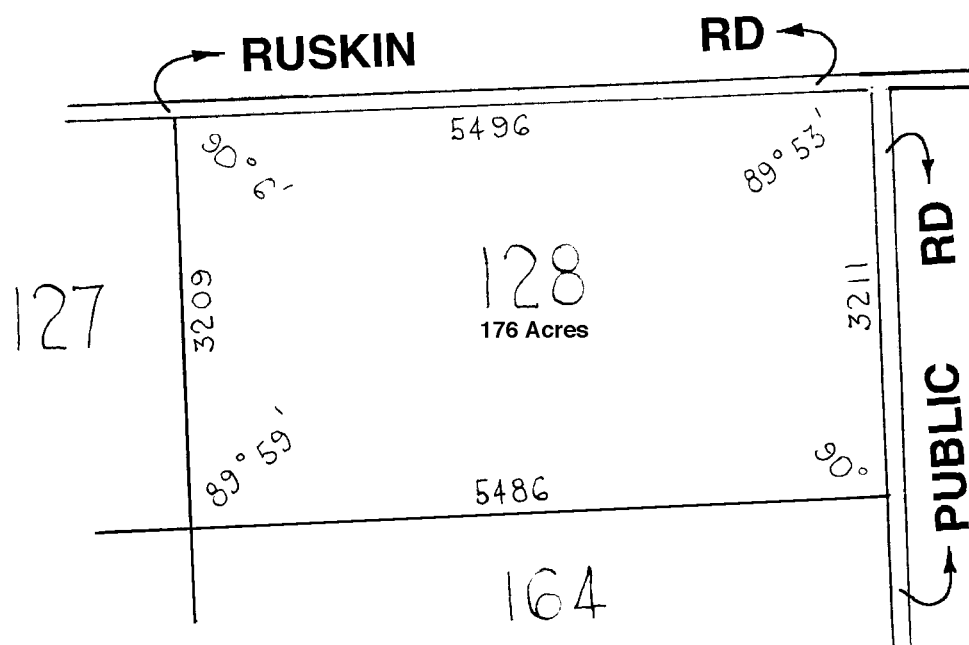
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END OF TEXT.

LANDS TITLES OFFICE ADELAIDE SOUTH AUSTRALIA

DIAGRAM FOR CERTIFICATE OF TITLE VOLUME 5593 FOLIO 258

SEARCH DATE : 31/05/2011 TIME: 10:09:11



20 10 0 20 Chns.

FOR METRIC CONVERSION

1 LINK = 0.201168 METRES
1 CHAIN = 100 LINKS
1 ACRE = 0.404686 HECTARES
1 ROOD = 1011.7 m²
1 PERCH = 25.29 m²



Title Register Search

LANDS TITLES OFFICE, ADELAIDE

For a Certificate of Title issued pursuant to the Real Property Act 1886

REGISTER SEARCH OF CERTIFICATE OF TITLE * VOLUME 5663 FOLIO 399 *

COST : \$18.70 (GST exempt)	PARENT TITLE : CT 2476/68
REGION : EMAIL	AUTHORITY : CONVERTED TITLE
AGENT : PUSH BOX NO : 000	DATE OF ISSUE : 17/06/1999
SEARCHED ON : 31/05/2011 AT : 11:01:05	EDITION : 3
CLIENT REF DUB299	

REGISTERED PROPRIETOR IN FEE SIMPLE

RODNEY GEORGE BAKER OF C/- POST OFFICE DUBLIN SA 5501

DESCRIPTION OF LAND

SECTION 299
HUNDRED OF DUBLIN
IN THE AREA NAMED DUBLIN

EASEMENTS

NIL

SCHEDULE OF ENDORSEMENTS

9055939 MORTGAGE TO ST.GEORGE BANK LTD.

NOTATIONS

DOCUMENTS AFFECTING THIS TITLE

NIL

REGISTRAR-GENERAL'S NOTES

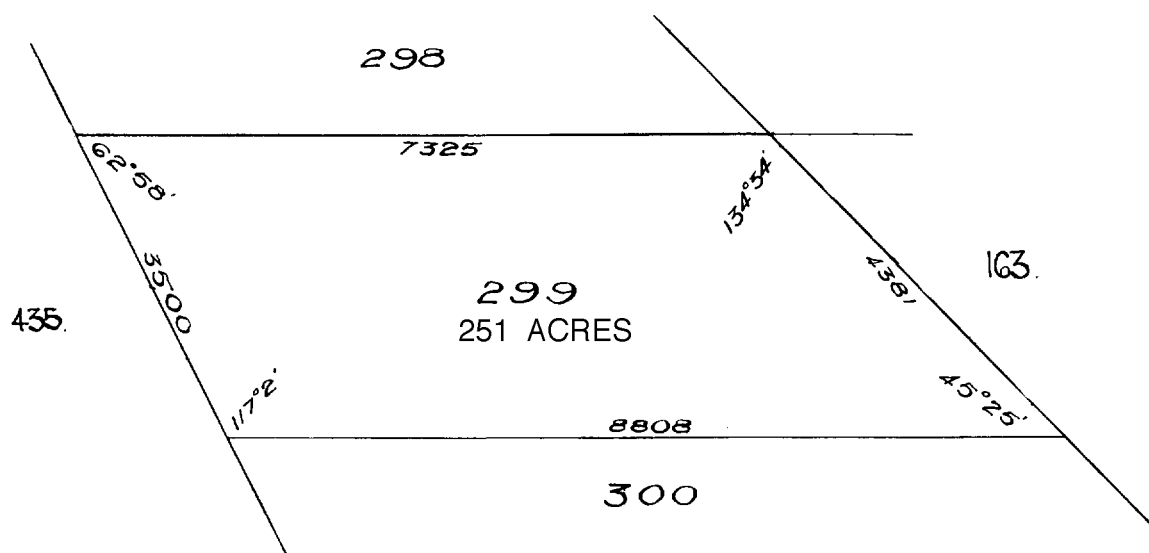
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LANDS TITLES OFFICE ADELAIDE SOUTH AUSTRALIA

DIAGRAM FOR CERTIFICATE OF TITLE VOLUME 5663 FOLIO 399

SEARCH DATE : 31/05/2011 TIME: 11:01:05



FOR METRIC CONVERSION	
1 LINK	= 0.201168 METRES
1 CHAIN	= 100 LINKS
1 ACRE	= 0.404686 HECTARES
1 ROOD	= 1011.7 m ²
1 PERCH	= 25.29 m ²



Title Register Search

LANDS TITLES OFFICE, ADELAIDE

For a Certificate of Title issued pursuant to the Real Property Act 1886

REGISTER SEARCH OF CERTIFICATE OF TITLE * VOLUME 5625 FOLIO 70 *

COST : \$18.70 (GST exempt)	PARENT TITLE : CT 3465/49
REGION : EMAIL	AUTHORITY : CONVERTED TITLE
AGENT : PUSH BOX NO : 000	DATE OF ISSUE : 17/02/1999
SEARCHED ON : 31/05/2011 AT : 10:51:47	EDITION : 2
CLIENT REF DUB163	

REGISTERED PROPRIETOR IN FEE SIMPLE

RODNEY GEORGE BAKER OF C/- POST OFFICE DUBLIN SA 5501

DESCRIPTION OF LAND

SECTION 163
HUNDRED OF DUBLIN
IN THE AREA NAMED DUBLIN

EASEMENTS

SUBJECT TO THE EASEMENT OVER THE LAND MARKED A TO THE MINISTER FOR
INFRASTRUCTURE (VM 8629912)

SCHEDULE OF ENDORSEMENTS

NIL

NOTATIONS

DOCUMENTS AFFECTING THIS TITLE

NIL

REGISTRAR-GENERAL'S NOTES

NIL

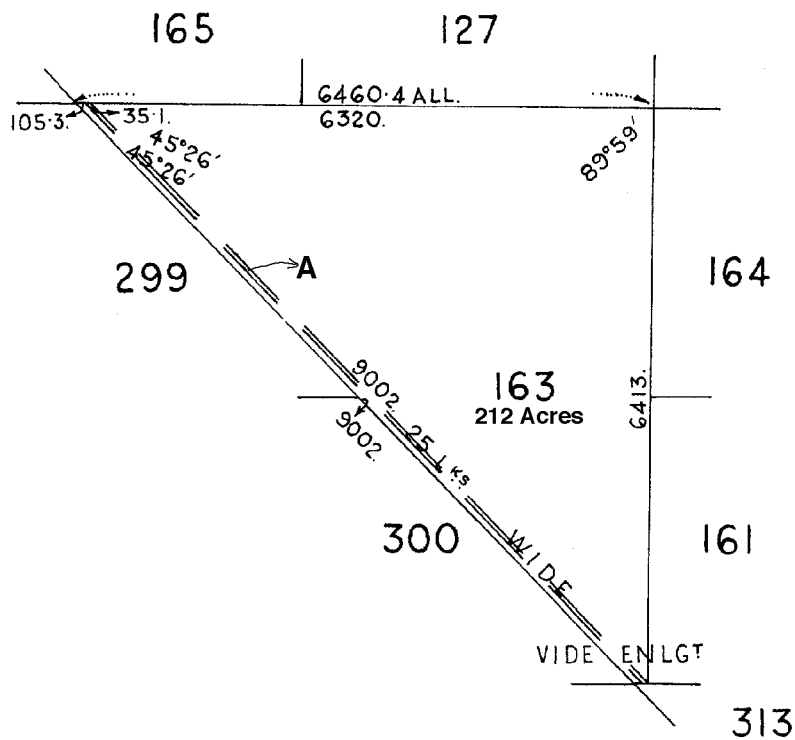
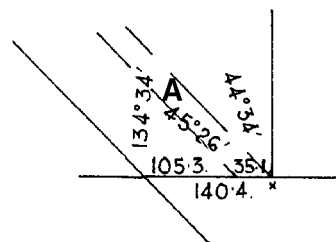
END OF TEXT.

LANDS TITLES OFFICE ADELAIDE SOUTH AUSTRALIA

DIAGRAM FOR CERTIFICATE OF TITLE VOLUME 5625 FOLIO 70

SEARCH DATE : 31/05/2011 TIME: 10:51:47

ENLARGEMENT



20 10 0 20 CHS.

FOR METRIC CONVERSION

1 LINK = 0.201168 METRES
 1 CHAIN = 100 LINKS
 1 ACRE = 0.404686 HECTARES
 1 ROOD = 1011.7 m²
 1 PERCH = 25.29 m²



Title Register Search

LANDS TITLES OFFICE, ADELAIDE

For a Certificate of Title issued pursuant to the Real Property Act 1886

REGISTER SEARCH OF CERTIFICATE OF TITLE * VOLUME 5486 FOLIO 425 *

COST : \$19.20 (GST exempt)	PARENT TITLE : CT 4173/299
REGION : EMAIL	AUTHORITY : CONVERTED TITLE
AGENT : SLAWP BOX NO : 000	DATE OF ISSUE : 23/12/1997
SEARCHED ON : 24/08/2011 AT : 09:05:59	EDITION : 3
CLIENT REF SL:110043	

REGISTERED PROPRIETOR IN FEE SIMPLE

RODNEY GEORGE BAKER OF C/- POST OFFICE DUBLIN SA 5501

DESCRIPTION OF LAND

SECTIONS 162 AND 164
HUNDRED OF DUBLIN
IN THE AREA NAMED DUBLIN

EASEMENTS

NIL

SCHEDULE OF ENDORSEMENTS

8734523 MORTGAGE TO ST.GEORGE BANK LTD.

NOTATIONS

DOCUMENTS AFFECTING THIS TITLE

NIL

REGISTRAR-GENERAL'S NOTES

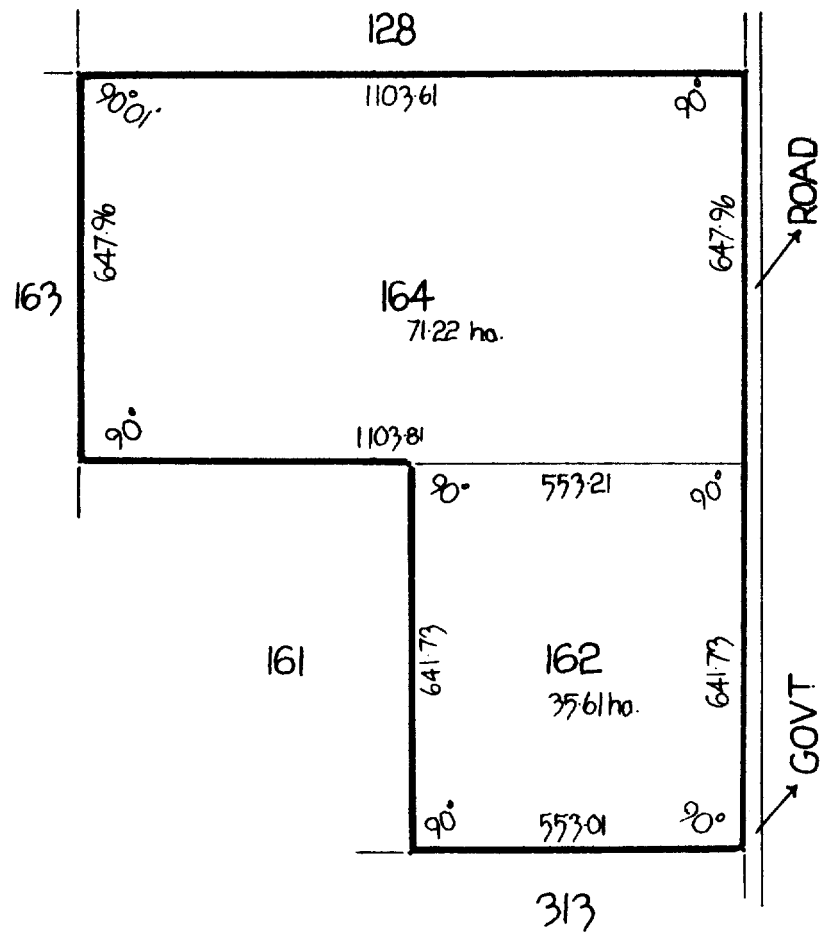
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LANDS TITLES OFFICE ADELAIDE SOUTH AUSTRALIA

DIAGRAM FOR CERTIFICATE OF TITLE VOLUME 5486 FOLIO 425

SEARCH DATE : 24/08/2011 TIME: 09:05:59



0 125 250 375 500 Metres



Title Register Search

LANDS TITLES OFFICE, ADELAIDE

For a Certificate of Title issued pursuant to the Real Property Act 1886

REGISTER SEARCH OF CERTIFICATE OF TITLE * VOLUME 5546 FOLIO 561 *

COST : \$18.70 (GST exempt)	PARENT TITLE : CT 3523/161
REGION : EMAIL	AUTHORITY : CONVERTED TITLE
AGENT : PUSH BOX NO : 000	DATE OF ISSUE : 18/06/1998
SEARCHED ON : 31/05/2011 AT : 11:06:55	EDITION : 3
CLIENT REF DUB300	

REGISTERED PROPRIETOR IN FEE SIMPLE

RODNEY GEORGE BAKER OF C/- POST OFFICE DUBLIN SA 5501

DESCRIPTION OF LAND

SECTION 300
HUNDRED OF DUBLIN
IN THE AREA NAMED DUBLIN

EASEMENTS

NIL

SCHEDULE OF ENDORSEMENTS

9055939 MORTGAGE TO ST.GEORGE BANK LTD.

NOTATIONS

DOCUMENTS AFFECTING THIS TITLE

NIL

REGISTRAR-GENERAL'S NOTES

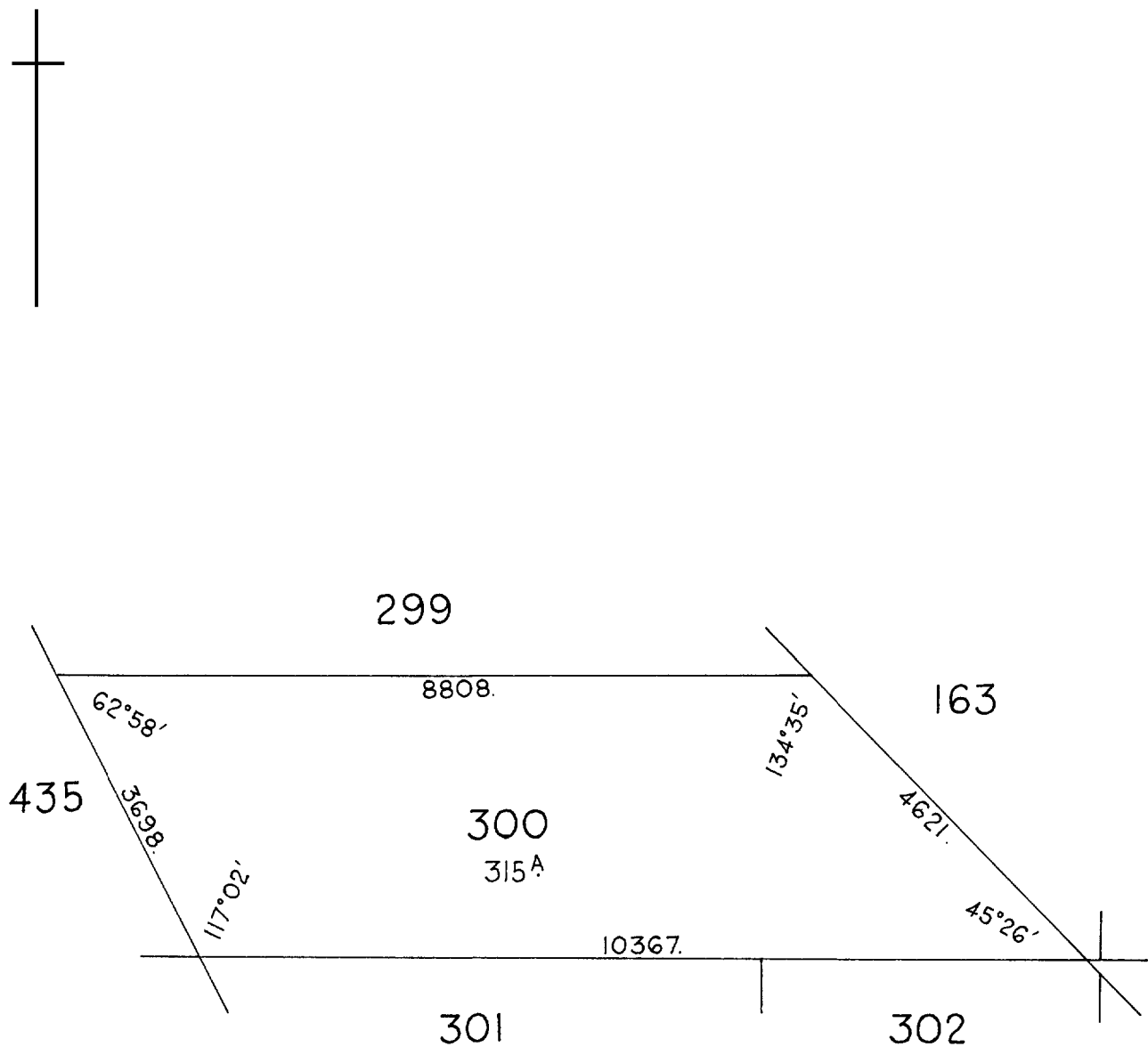
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END OF TEXT.

LANDS TITLES OFFICE ADELAIDE SOUTH AUSTRALIA

DIAGRAM FOR CERTIFICATE OF TITLE VOLUME 5546 FOLIO 561

SEARCH DATE : 31/05/2011 TIME: 11:06:55



20 10 0 20 CHS

FOR METRIC CONVERSION

1 LINK = 0.201168 METRES
1 CHAIN = 100 LINKS
1 ACRE = 0.404686 HECTARES
1 ROOD = 1011.7 m²
1 PERCH = 25.29 m²



Title Register Search

LANDS TITLES OFFICE, ADELAIDE

For a Certificate of Title issued pursuant to the Real Property Act 1886

REGISTER SEARCH OF CERTIFICATE OF TITLE * VOLUME 5593 FOLIO 256 *

COST : \$18.70 (GST exempt)	PARENT TITLE : CT 1799/118
REGION : EMAIL	AUTHORITY : CONVERTED TITLE
AGENT : PUSH BOX NO : 000	DATE OF ISSUE : 05/11/1998
SEARCHED ON : 31/05/2011 AT : 11:13:26	EDITION : 3
CLIENT REF DUB161	

REGISTERED PROPRIETOR IN FEE SIMPLE

RODNEY GEORGE BAKER OF C/- POST OFFICE DUBLIN SA 5501

DESCRIPTION OF LAND

SECTION 161
HUNDRED OF DUBLIN
IN THE AREA NAMED DUBLIN

EASEMENTS

NIL

SCHEDULE OF ENDORSEMENTS

8734523 MORTGAGE TO ST.GEORGE BANK LTD.

NOTATIONS

DOCUMENTS AFFECTING THIS TITLE

NIL

REGISTRAR-GENERAL'S NOTES

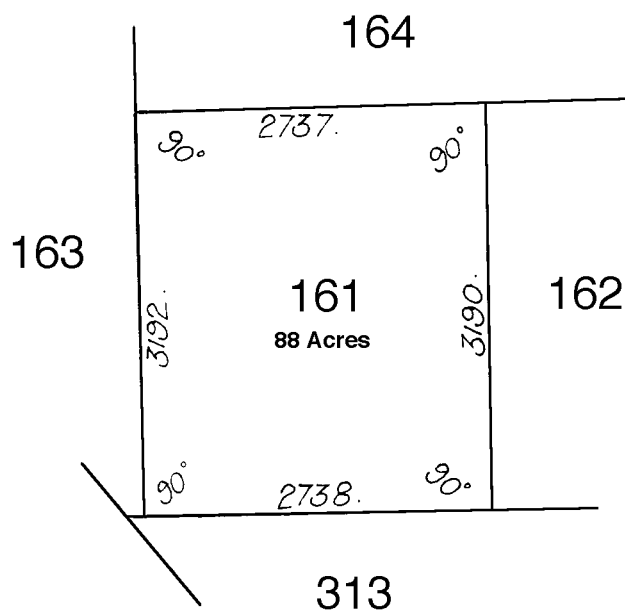
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LANDS TITLES OFFICE ADELAIDE SOUTH AUSTRALIA

DIAGRAM FOR CERTIFICATE OF TITLE VOLUME 5593 FOLIO 256

SEARCH DATE : 31/05/2011 TIME: 11:13:26



FOR METRIC CONVERSION	
1 LINK	= 0.201168 METRES
1 CHAIN	= 100 LINKS
1 ACRE	= 0.404686 HECTARES
1 ROOD	= 1011.7 m ²
1 PERCH	= 25.29 m ²



Title Register Search

LANDS TITLES OFFICE, ADELAIDE

For a Certificate of Title issued pursuant to the Real Property Act 1886

REGISTER SEARCH OF CERTIFICATE OF TITLE * VOLUME 5593 FOLIO 257 *

COST : \$18.70 (GST exempt)	PARENT TITLE : CT 2586/133
REGION : EMAIL	AUTHORITY : CONVERTED TITLE
AGENT : PUSH BOX NO : 000	DATE OF ISSUE : 05/11/1998
SEARCHED ON : 31/05/2011 AT : 11:35:01	EDITION : 3
CLIENT REF DUB301	

REGISTERED PROPRIETOR IN FEE SIMPLE

RODNEY GEORGE BAKER OF C/- POST OFFICE DUBLIN SA 5501

DESCRIPTION OF LAND

SECTION 301
HUNDRED OF DUBLIN
IN THE AREA NAMED DUBLIN

EASEMENTS

NIL

SCHEDULE OF ENDORSEMENTS

8734523 MORTGAGE TO ST.GEORGE BANK LTD.

NOTATIONS

DOCUMENTS AFFECTING THIS TITLE

NIL

REGISTRAR-GENERAL'S NOTES

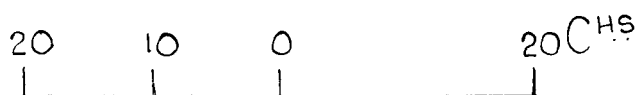
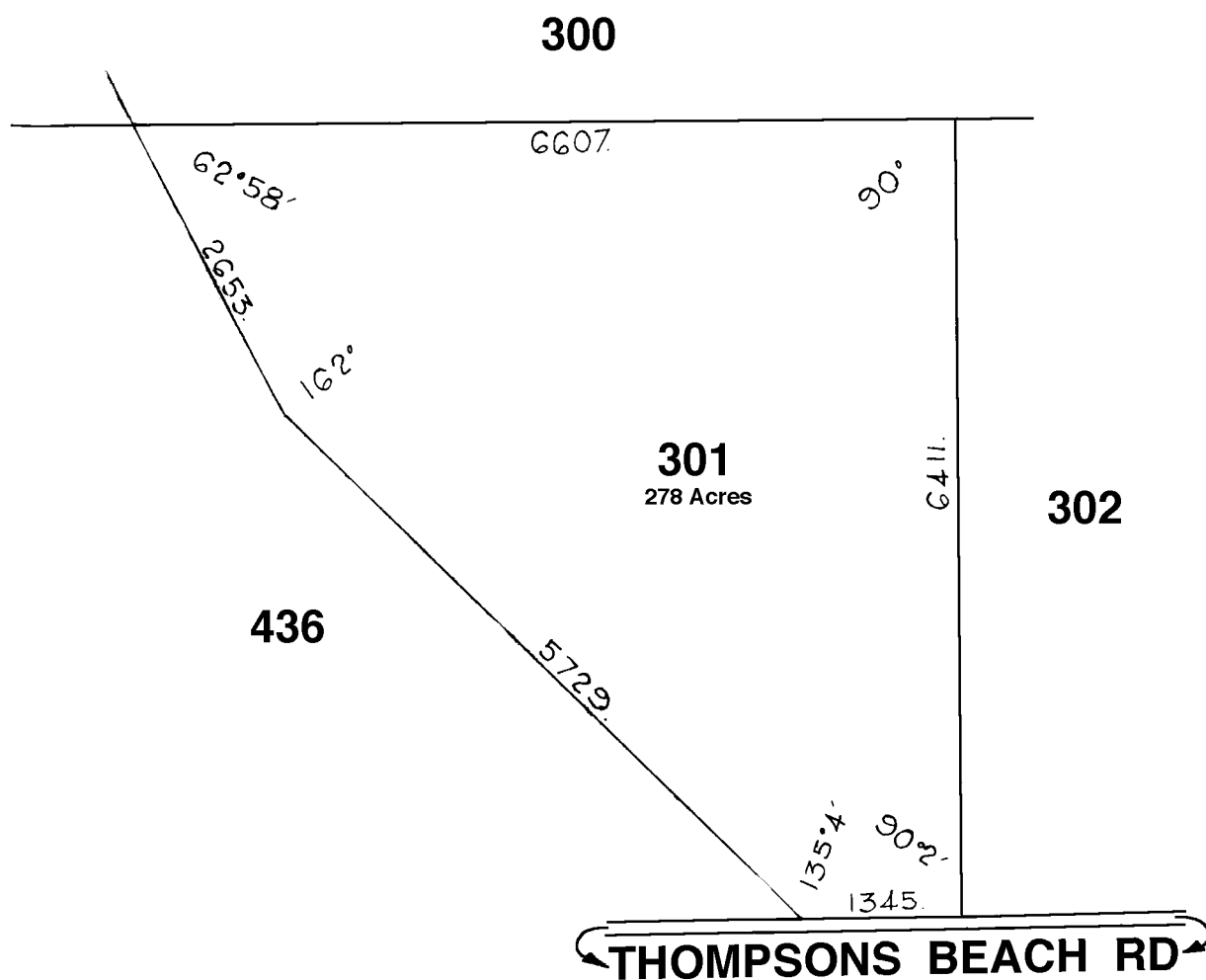
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END OF TEXT.

LANDS TITLES OFFICE ADELAIDE SOUTH AUSTRALIA

DIAGRAM FOR CERTIFICATE OF TITLE VOLUME 5593 FOLIO 257

SEARCH DATE : 31/05/2011 TIME: 11:35:01



FOR METRIC CONVERSION	
1 LINK	= 0.201168 METRES
1 CHAIN	= 100 LINKS
1 ACRE	= 0.404686 HECTARES
1 ROOD	= 1011.7 m ²
1 PERCH	= 25.29 m ²



Title Register Search

LANDS TITLES OFFICE, ADELAIDE

For a Certificate of Title issued pursuant to the Real Property Act 1886

REGISTER SEARCH OF CERTIFICATE OF TITLE * VOLUME 5593 FOLIO 253 *

COST : \$18.70 (GST exempt)	PARENT TITLE : CT 2487/45
REGION : EMAIL	AUTHORITY : CONVERTED TITLE
AGENT : PUSH BOX NO : 000	DATE OF ISSUE : 05/11/1998
SEARCHED ON : 31/05/2011 AT : 11:40:04	EDITION : 3
CLIENT REF DUB302	

REGISTERED PROPRIETOR IN FEE SIMPLE

RODNEY GEORGE BAKER OF C/- POST OFFICE DUBLIN SA 5501

DESCRIPTION OF LAND

SECTION 302
HUNDRED OF DUBLIN
IN THE AREA NAMED DUBLIN

EASEMENTS

NIL

SCHEDULE OF ENDORSEMENTS

8734523 MORTGAGE TO ST.GEORGE BANK LTD.

NOTATIONS

DOCUMENTS AFFECTING THIS TITLE

NIL

REGISTRAR-GENERAL'S NOTES

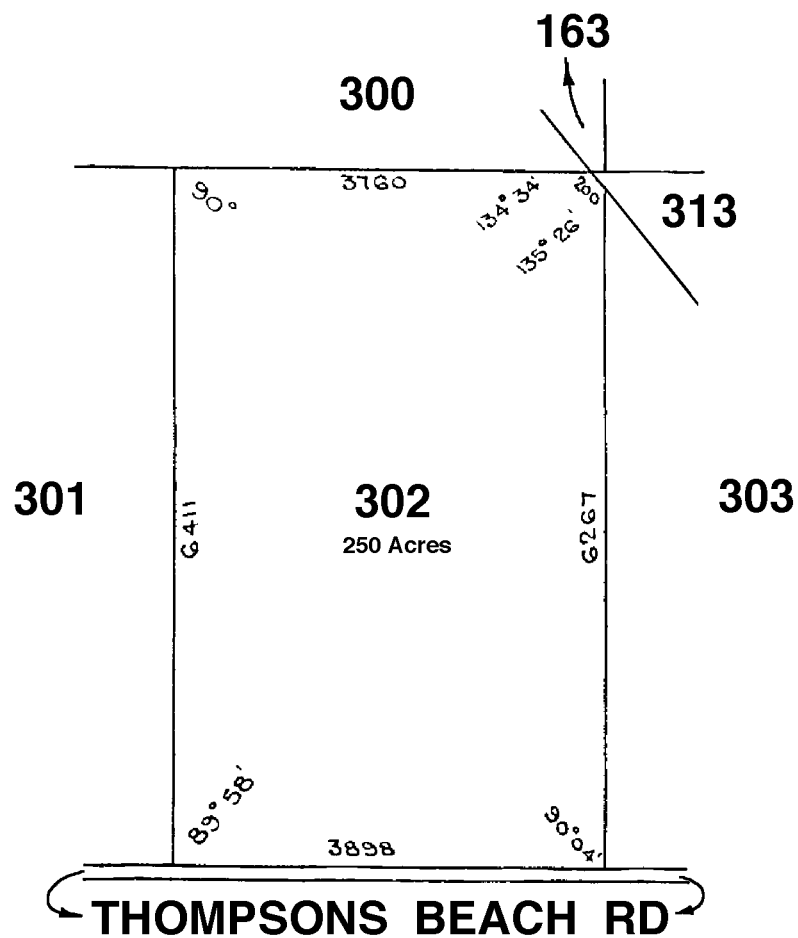
NIL

END OF TEXT.

LANDS TITLES OFFICE ADELAIDE SOUTH AUSTRALIA

DIAGRAM FOR CERTIFICATE OF TITLE VOLUME 5593 FOLIO 253

SEARCH DATE : 31/05/2011 TIME: 11:40:04



20 10 0 20 CHS

FOR METRIC CONVERSION	
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1 CHAIN	= 100 LINKS
1 ACRE	= 0.404686 HECTARES
1 ROOD	= 1011.7 m ²
1 PERCH	= 25.29 m ²



Title Register Search

LANDS TITLES OFFICE, ADELAIDE

For a Certificate of Title issued pursuant to the Real Property Act 1886

REGISTER SEARCH OF CERTIFICATE OF TITLE * VOLUME 5633 FOLIO 660 *

COST : \$18.70 (GST exempt)	PARENT TITLE : CT 4012/795
REGION : EMAIL	AUTHORITY : CONVERTED TITLE
AGENT : PUSH BOX NO : 000	DATE OF ISSUE : 10/03/1999
SEARCHED ON : 31/05/2011 AT : 11:43:20	EDITION : 3
CLIENT REF DUB799	

REGISTERED PROPRIETOR IN FEE SIMPLE

RODNEY GEORGE BAKER OF C/- POST OFFICE DUBLIN SA 5501

DESCRIPTION OF LAND

ALLOTMENT 799 FILED PLAN 175266
IN THE AREA NAMED DUBLIN
HUNDRED OF DUBLIN

EASEMENTS

SUBJECT TO THE EASEMENT OVER THE LAND MARKED A TO THE MINISTER FOR
INFRASTRUCTURE (VM 8629912)

SCHEDULE OF ENDORSEMENTS

8734522 MORTGAGE TO ST.GEORGE BANK LTD.

NOTATIONS

DOCUMENTS AFFECTING THIS TITLE

NIL

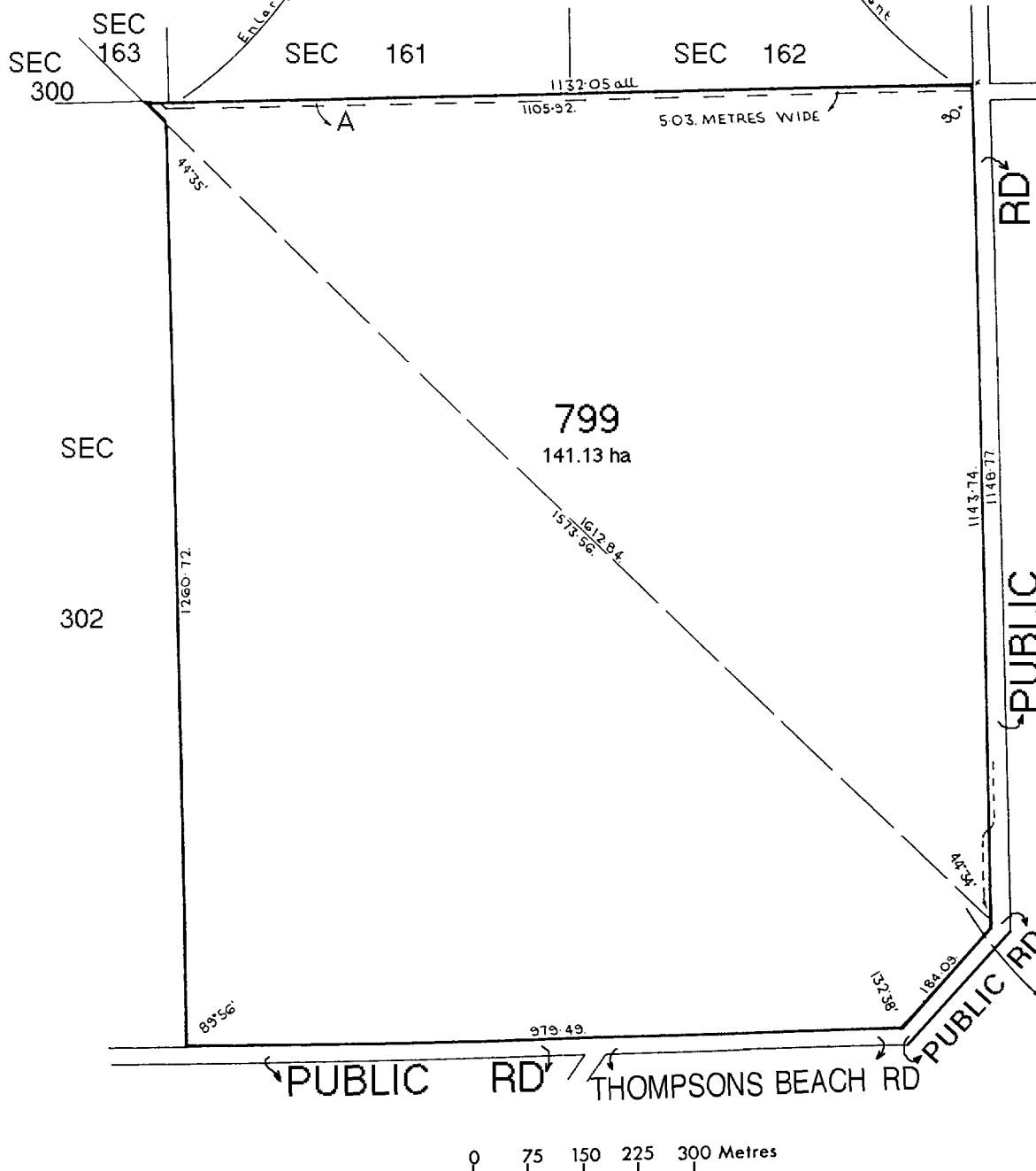
REGISTRAR-GENERAL'S NOTES

NIL

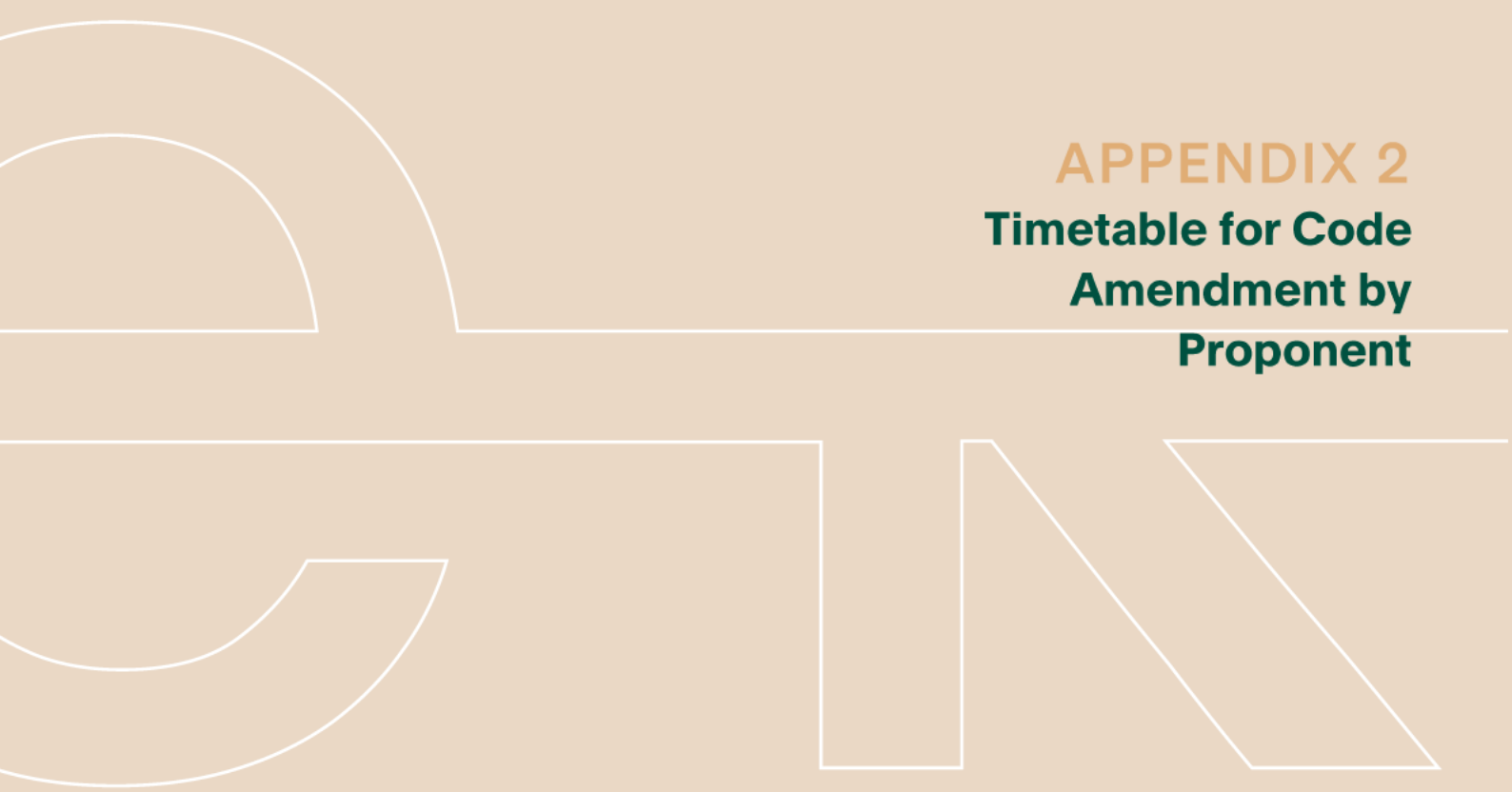
END OF TEXT.

SEARCH DATE : 31/05/2011 TIME: 11:43:20

SEC 162
1110-87. A 8.
1105-92. 5.03
799 8.
1143-74. PUBLIC RD



Page 2 of 2

Abstract white line art is scattered across the page. On the left, there are two concentric semi-circles. Below them is a larger, more complex shape resembling a stylized 'C' or a partial circle. To the right of the text, there is a vertical rectangle and a parallelogram. Further right, there is a trapezoid. These shapes are all white outlines on a light beige background.

APPENDIX 2

Timetable for Code Amendment by Proponent

Timetable for Code Amendment by Proponent

Step	Responsibility	Timeframes
Approval of the Proposal to Initiate		
Review of Proposal to Initiate to confirm all mandatory requirements are met (timeframe will be put on hold if further information is required). Referral to the Minister to request advice from the Commission.	AGD	2 weeks <i>(includes lodgement and allocation + referral to Government Agencies within the first week)</i>
Minister requests advice from the Commission.	Minister	2 weeks
Referral to Government Agencies for comment (where necessary).	AGD, Relevant Government Agencies	+ 2 weeks
Consideration of Proposal to Initiate and advice to the Minister.	Commission (Delegate)	3 weeks
	Commission	+ 3 weeks
Proposal to Initiate agreed to by the Minister	Minister	2 weeks
Preparation of the Code Amendment		
Engagement Plan Prepared. Investigations conducted; Code Amendment Report prepared. The Drafting instructions and draft mapping provided to AGD.	Designated Entity	8 weeks
AGD prepares Amendment Instructions and Mapping and provides to Council for consultation purposes.	AGD	1 week
Preparation of Materials for Consultation.	Designated Entity	2 weeks
Engagement on the Code Amendment		
Code Amendment Report released for public consultation in accordance with the Community Engagement Charter and the prepared Community Engagement Plan .	Designated Entity	6 weeks

Step	Responsibility	Timeframes
Consideration of Engagement and Finalisation of Amendments		
Submissions summarised; Amended drafting instructions provided, Engagement Report prepared and lodged with AGD.	Designated Entity	4 weeks
Assess the amendment and engagement. Prepare report to the Commission or delegate Timeframe will be put on hold if further information is required, or if there are unresolved issues.	AGD	4 weeks
Consideration of Advice	Commission (Delegate)	2 weeks <i>(includes 1 week to process through Minister's office)</i>
	Commission	+ 3 weeks
Decision Process		
Minister considers the Code Amendment Report and the Engagement Report and makes decision	Minister	3 weeks
Implementing the Amendment (operation of the Code Amendment)		
Go- Live- Publish on the PlanSA portal	AGD	2-4 weeks
Parliamentary Scrutiny		
Referral of approved Code Amendment to ERDC	AGD	8 weeks

Abstract geometric shapes in white outline are positioned on the left side of the page. These include a large semi-circle at the top, a smaller semi-circle below it, and a series of connected lines and curves at the bottom that form a stylized, modern graphic element.

APPENDIX 3

***Dublin Green Circular
Economy Precinct***

Urban Framework Plan



Leinad Land Developments (Dublin) Pty Ltd

DUBLIN URBAN FRAMEWORK PLAN

Prepared by Ekistics Planning and Design Pty. Ltd. December 2023

ACKNOWLEDGEMENT TO COUNTRY

Ekistics respectfully acknowledges the traditional owners and custodians of the land on which we work and we pay our respects to Elders past and present.



PROPRIETARY INFORMATION STATEMENT

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Approved by	Signature	Position
Richard Dwyer		Managing Director



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1. EXECUTIVE SUMMARY

The ‘Dublin Circular Green Economy Precinct’ will transform an underutilised site in Dublin into South Australia's first green industrial, residential, and clean energy economy using sustainable technologies.

1.1 Project Overview

Leinad Land Developments (Dublin) Pty Ltd (‘Leinad’) owns and controls 1,373 hectares of land located to the immediate south of the Dublin Township which is located approximately 50 kilometres north of the Adelaide CBD. The land parcel under the control of Leinad is identified spatially in **Figure 1.1**.

It is the vision of Leinad to develop ‘Dublin Park’ as a new master planned community and South Australia’s first Green Circular Economy Precinct positioning Dublin Park at the forefront of sustainable residential and industrial development in Australia.

Leinad have prepared an ‘Urban Framework Plan’ to deliver the Dublin Green Circular Economy Precinct. The Urban Framework Plan includes a high-level spatial framework plan that is illustrated in **Figure 1.2**.

Key features of the proposed Urban Framework Plan, include:

- The creation of a new master planned residential community (up to 1,300 dwellings) as a contiguous logical expansion of the existing Dublin town centre and ensuring the preservation of the commercial primacy of town centre with the ongoing and expanded delivery of services and activities to consolidate township function and viability;
- Location of mining activities (approx. 240 hectares) and employment land (up to 400 hectares) to act as buffer and provide the required separation distances from adjacent land uses – thereby enabling an efficient use of land, avoidance of any potential conflicts or limitations on the operation of existing adjacent land uses whilst providing a high quality living environment for future residents;

- Separation of internal road networks for future residential and commercial/industrial areas;
- Creation of buffers/green spines between housing and employment lands; and
- Generous buffer areas to the existing high value and environmentally significant coastal vegetation as well as the adjoining Winaityinaityi Pangkara (Adelaide International Bird Sanctuary)

This document provides an information base that supports the future development of land to the south of the Dublin township and has been produced based on a range of investigations into the site. These preliminary investigations have included the physical characteristics of the site and surrounding locality, the environmental, social impacts, economic impacts of future township expansion as well as the policy implications to implement township growth.

Specially these preliminary investigations have identified the following benefits associated with township expansion on the subject land:

- The subject land is a large, consolidated land holding allowing opportunity to develop and deliver a structured and master planned community that is not obstructed by fragmented ownership or control;
- The existing condition of the subject land is generally ‘degraded’ and it is considered to have low primary production value and potential;
- There is opportunity to provide for township expansion to support the growth and viability of the Dublin Township noting that up to 1,300 dwellings can be accommodated to support the expansion and viability of the Dublin township without the need for additional significant services and infrastructure (including reliance on existing

transport infrastructure without the need for major upgrades to intersections with Port Wakefield Highway);

- Expert Land Economics advice from Deep End Services has identified a strong case for up to 400 hectares of land for large site area, low cost industrial land in the region. Deep End has advised that Dublin has attractive attributes for larger scale, low intensity uses aligned with the circular economy process and approach, the renewable energy sector, Defence and manufacturing as well as transport uses hauling long, wide or high freight using Port Wakefield Highway.
- Dublin can provide employment land to suit a range of employment uses and processes not suited to, or priced out of, the smaller and more expensive industrial sites in other locations. The Dublin employment land may differentiate itself from metropolitan industrial areas as it attracts uses requiring flexibility, mobility and even temporary facilities for operations to be scaled up and down as industry demand requires, as well as a permanent location for businesses seeking a competitive edge in entry pricing;
- The establishment of a mine will result in the opportunity to extract approximately 4.7M tonnes of resource from the site which can be backfilled with genuine Waste Derived Fill (WDF) in line with the ‘SA Waste Strategy’;
- The subject land is of sufficient size to provide for generous buffers to existing adjacent land uses and activities – this will protect the ongoing operation and existing use rights of these adjacent uses and enable the creation of a high-quality living environment for future residents. The employment areas within the subject site can also

act as a buffer separating future housing from existing EPA licenced activities - maximising the efficient use of land;

- The topography is suitable for urban development (noting that proposed mining operations on site could generate resource which can be utilised to create desired site levels for required falls and stormwater management);
- The land is largely unconstrained and free from topographical and environmental constraints excluding existing vegetation adjacent the western boundary of the site within the existing ‘Conservation Zone’ that will be retained;
- There are no state or local heritage places on the land, or previously record Aboriginal Sites or Objects;
- Based on site history research, the risk of significant or gross soil and/or groundwater contamination across the whole site, that would be likely to preclude the use of the site for the proposed residential development, is considered to be low; and
- Whilst limited services currently exist, the site and township is likely to have adequate infrastructure capacity and/or augmentation capability to service and support an expanded township noting that limited township expansion of an additional 1,300 dwellings would not give rise to additional significant transport, social or community infrastructure in support of township growth and given the opportunity for localised generation and distribution of power and potable water.

This proposed modest and localised township expansion will ensure that Dublin will retain its own separate identity whilst supporting existing township function and viability.

To facilitate the growth and expansion of the Dublin Township and proceed with the next level of detailed investigations, the following key actions and directions are requested from the State Planning Commission and ultimately the Minister for Planning:

- Identification of the opportunity for the expansion of the township of Dublin within the 'Greater Adelaide Regional Plan' to support township function and viability whilst retaining and preserving the towns separate identify;
- Support the immediate initiation of a Code Amendment to rezone portion of the subject land for employment related land uses; and
- Amend the 'Environment & Food Production Area' (EFPA) boundary to exclude portion of the subject site and subsequently support the initiation of a Code Amendment to introduced a supportive Zone and policy framework to facilitate the future construction for up to 1,300 dwellings on land that is generally 'degraded' and is considered to have low primary production value and potential.

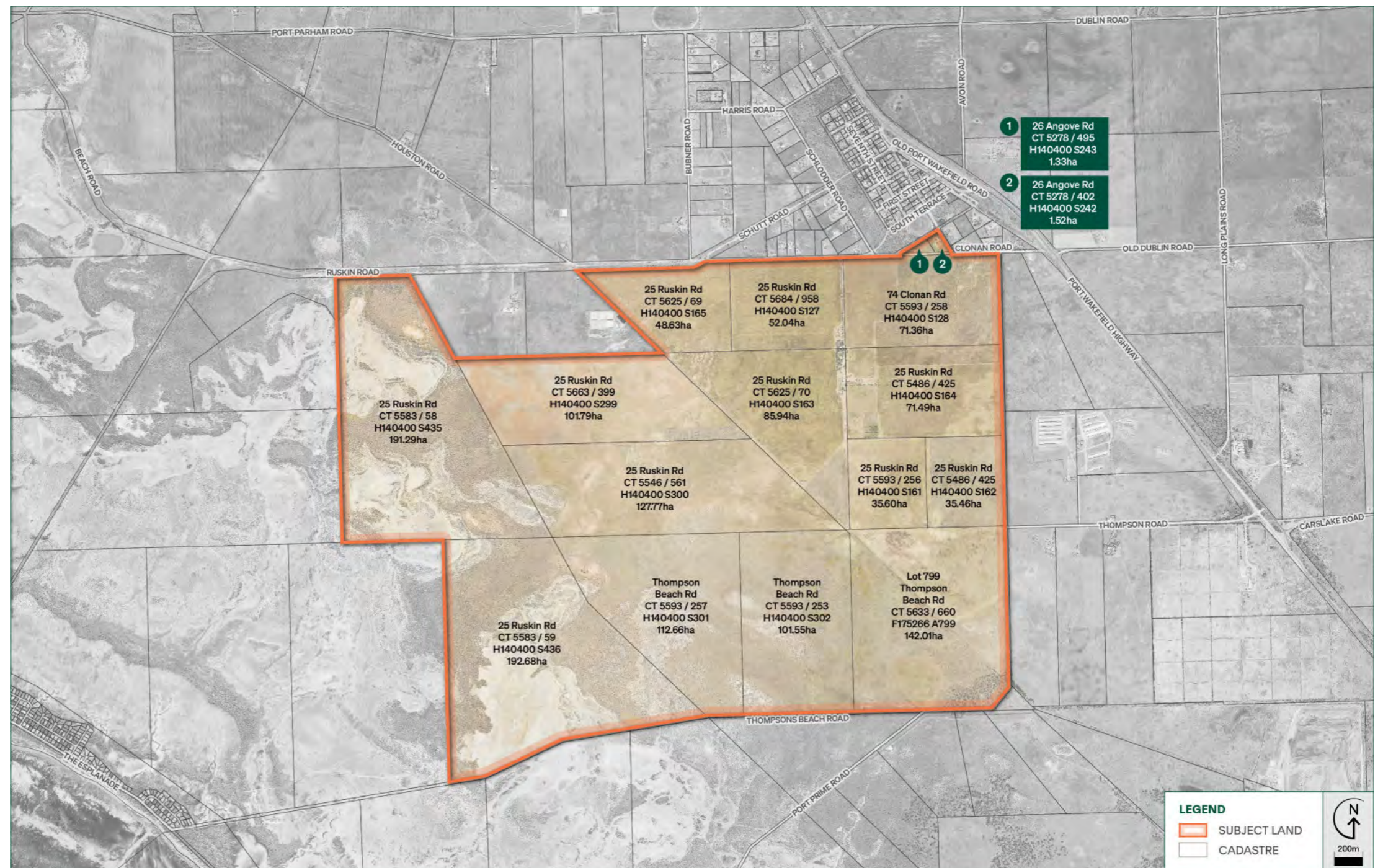


Figure 1.1 – Subject Land

1.2 Urban Framework Plan

The Urban Framework Plan (**Figure 1.2**) provides a high level spatial framework showing basic land use distribution, neighbourhood structure, key linkages and transport systems, major road connections, activity centres/nodes, open space and recreation facilities as well as overall employment and housing population/density.



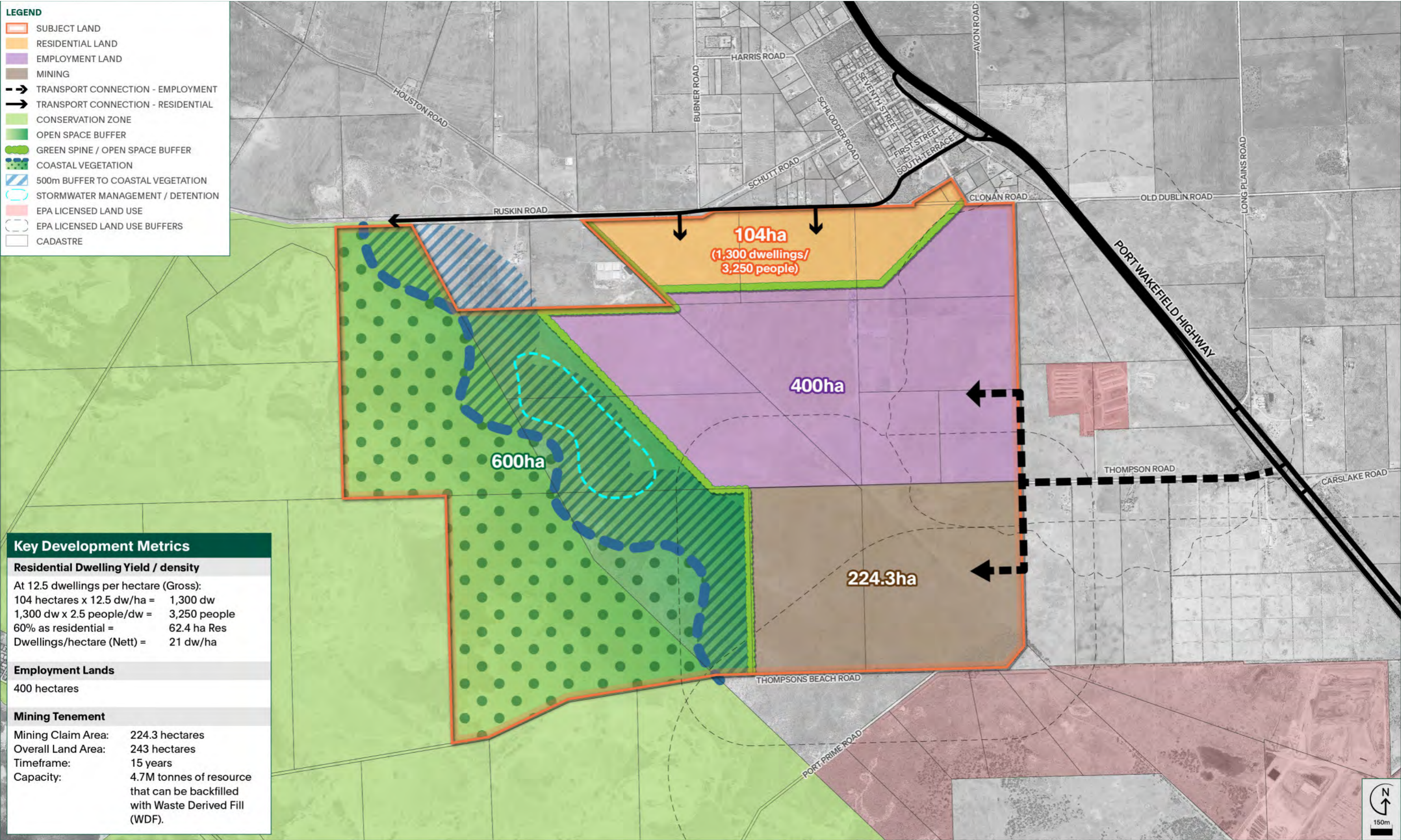


Figure 1.2 – Dublin Urban Framework Plan

2. VISION FOR DUBLIN



2.1 Dublin Green Circular Economy Precinct

The circular economy is a system that prioritises the preservation of energy, labour, and materials by promoting reuse, remanufacturing, and recycling.

It is the vision of Leinad to develop 'Dublin Park' as a new master planned community and South Australia's first Green Circular Economy Precinct. This will position 'Dublin Park' at the forefront of sustainable residential and industrial development in Australia.

The vision for 'Dublin Park' is an integrated mixed use development comprising future residential development, industry, employment lands and mining opportunities facilitated and supported by sustainable infrastructure, energy, water and wastewater production.

Land use configuration within 'Dublin Park' will respond to the unique context of the site with up to 1,300 dwellings in a master planned community to be developed to the immediate south (adjacent) the

existing Dublin township. This residential community would transition south to a new central employment hub comprising opportunities for primary production (including intensive 'vertical agriculture'), manufacturing, logistics and warehousing as well as sustainable infrastructure including a new 6.5MW bioreactor for energy generation. Further south, a mining licence is proposed over approximately 240 hectares of land to act as a buffer at the interface with the existing IWS waste and compost facility.

The Mining tenement will result in the ability to extract approximately 4.7M Tonnes of resource from the site which can be backfilled with genuine Waste Derived Fill (WDF) in line with the 'SA Waste Strategy'.

The CSIRO (July 2022) identifies seven Megatrends that will shape the next 20 years including 'Adapting to Climate Change' and 'Leaner, Cleaner, Greener'. The CSIRO report identifies that Australia has the highest wind and solar capacity of any developed nation and a wealth of critical energy minerals. Dublin is well located to support South Australia being a leader in the generation of clean energy.



Figure 2.1 – CSIRO, Our Future World, June 2022

The solution: Dublin Circular **Green** Economy

How does it work?

1. Create a housing estate close to the existing township
2. Create an industrial estate with a bioreactor and new vertical agriculture.
3. Create a mining claim to act as a buffer zone from IWS.

2.1.1 How does it work?

The circular economy is a system that prioritises the preservation of energy, labour, and materials by promoting reuse, remanufacturing, and recycling. In accordance with strategic directions of Council and Government, 'Dublin Park' will transform an underutilised site into South Australia's first green industrial, residential, and clean energy economy using sustainable technologies.

A diagrammatic flow chart of how the 'Dublin Green Circular Economy Precinct' will work and operate is provided in **Figure 2.1** including the synergistic interrelationship between land uses and activities proposed within the master planned estate. A schematic diagram of the proposed 'Dublin Green Circular Economy Precinct' is also attached in **Appendix 3**.

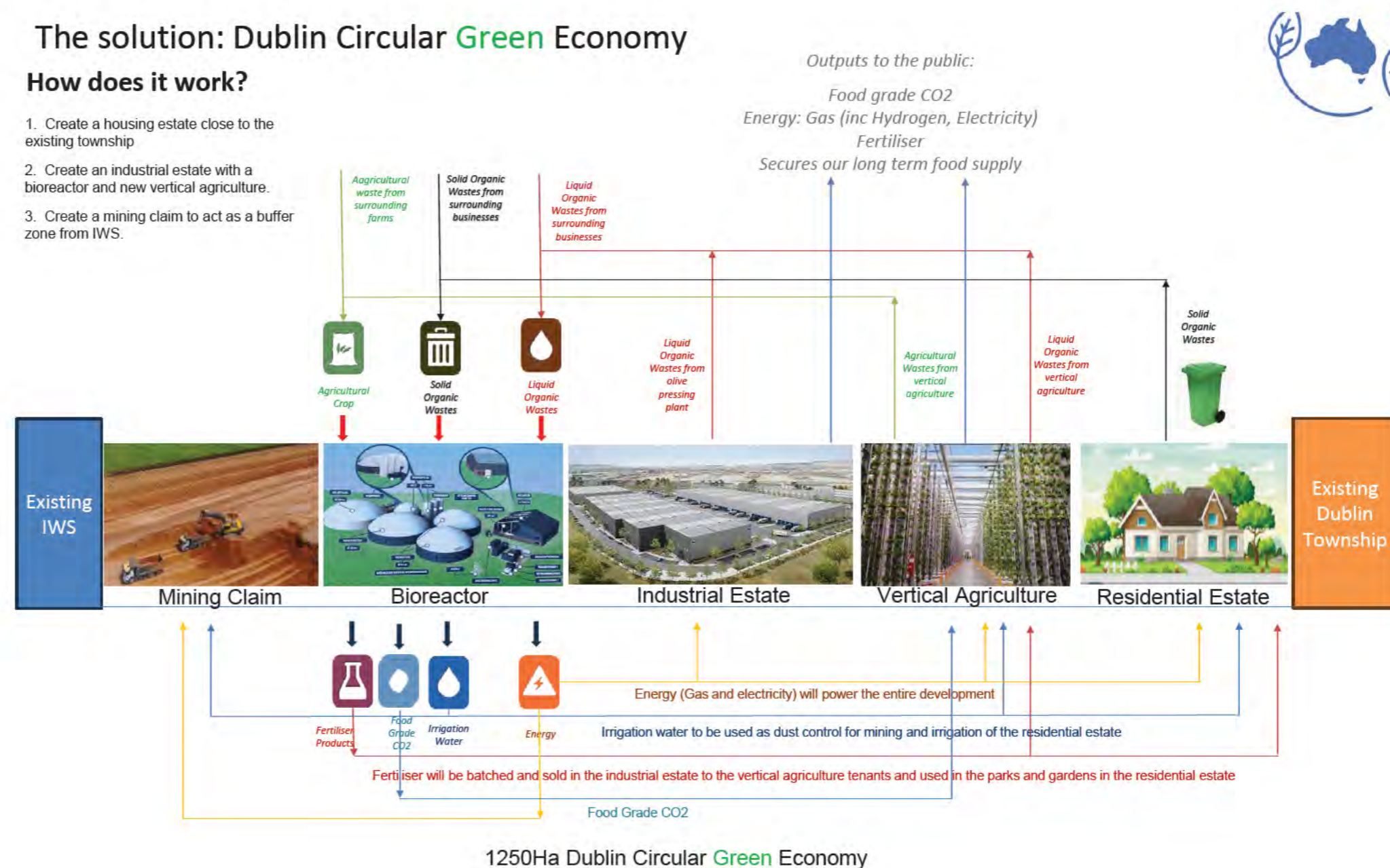


Figure 2.2 – The Dublin Green Circular Economy Precinct





The proposed 6.5MW Bioreactor that:

- Would take organic waste product from local farms and businesses (including the opportunity to take solid organic wastes generated by the future residential estate) to create gas (including CO² and hydrogen) and electricity for the entire "Dublin Green Circular Economy Precinct" including the future housing estate and employment related land uses
- Would generate fertiliser (byproduct) in the form of a compost equivalent soil conditioner and a liquid nutrient concentrate, which can also be utilised in proposed primary production activities on site or within the broad Adelaide Plains region (Note: the bioreactor would have the capacity to produce over 123,000t of soil conditioner and 37,000kL of concentrated liquid nutrient with an in-direct carbon benefit of approximately 7,000t CO²)
- Would generate CO² (food grade) which can be packaged and sold for use in the region and local food industry
- Result in an opportunity for a hydrogen refuelling station near Pt Wakefield Road that can be established straight from the bioreactors hydrogen output
- Results in the opportunity to supply energy to other employment generating activities in the region including the 'Carslake Road Strategic Employment Land' to the east, over Pt Wakefield Road.



The future residential community would:

- Have access to future employment opportunities within the proposed future employment lands reducing trip generation, travel times, congestion, energy use and pollution
- Have access to affordable, local sustainable and clean energy (electricity and gas) generated by the bioreactor with energy distribution via a dedicated micro grid which will create a competitive market where consumers costs of living is lower as a result of local sustainable energy generation and distribution
- Have access to a clean potable water supply and efficient wastewater management with access to clean energy generated on site
- Benefit from reduced upfront infrastructure costs associated with infrastructure augmentation as a result of localised generation and distribution of power and potable water.



Primary production and 'vertical agriculture' activities:

- Would be irrigated by treated wastewater generated from residential development
- Would result in wastes and byproducts from primary production activities (together with agricultural waste from the Northern Adelaide Plains Food Cluster) utilised to generate electricity within the bioreactor (green energy in the form of gas will be generated from the raw materials then converted to electricity, adopting carbon reduction)
- Benefit from a reduction of vectors and insects associated with green waste product removed and used to fuel the bioreactor.



The mining tenement would:

- Generate resource that can be utilised for residential and commercial applications (both on and off site)
- Generate resource which can be utilised to create desired site levels for required falls across the balance of the 'Dublin Park' estate
- Utilise treated wastewater for dust suppression and control.

3. REGIONAL GROWTH & INVESTMENT

3.1 A Growing Region

The Adelaide Plains area, north of the Gawler River, is one of the fastest growing regions in Greater Adelaide with population set forecast to double over the next 20 years.

Strong residential population growth and multiple opportunities for employment growth are anticipated in association with food production and agriculture, renewable energy, mining and the defence sector. Dublin's location along Port Wakefield Highway provides convenient access to the State's north where significant investments in renewable energy infrastructure (wind and solar) and hydrogen are taking place as illustrated in **Figures 3.1** and **3.2**.

Recent significant infrastructure investment (as illustrated in **Figure 3.3**) including in the North Connector, Pt Wakefield Highway duplication (including the recent duplication of the Joy Balush AM Bridge at Port Augusta) and the 'Northern Adelaide Irrigation Scheme' provide a platform for future growth.

The Adelaide Plains Council in its submission to the GARP (adopted by Council on 23 October 2023) requests that the GARP provides spatial and timing clarity for growth at Dublin.

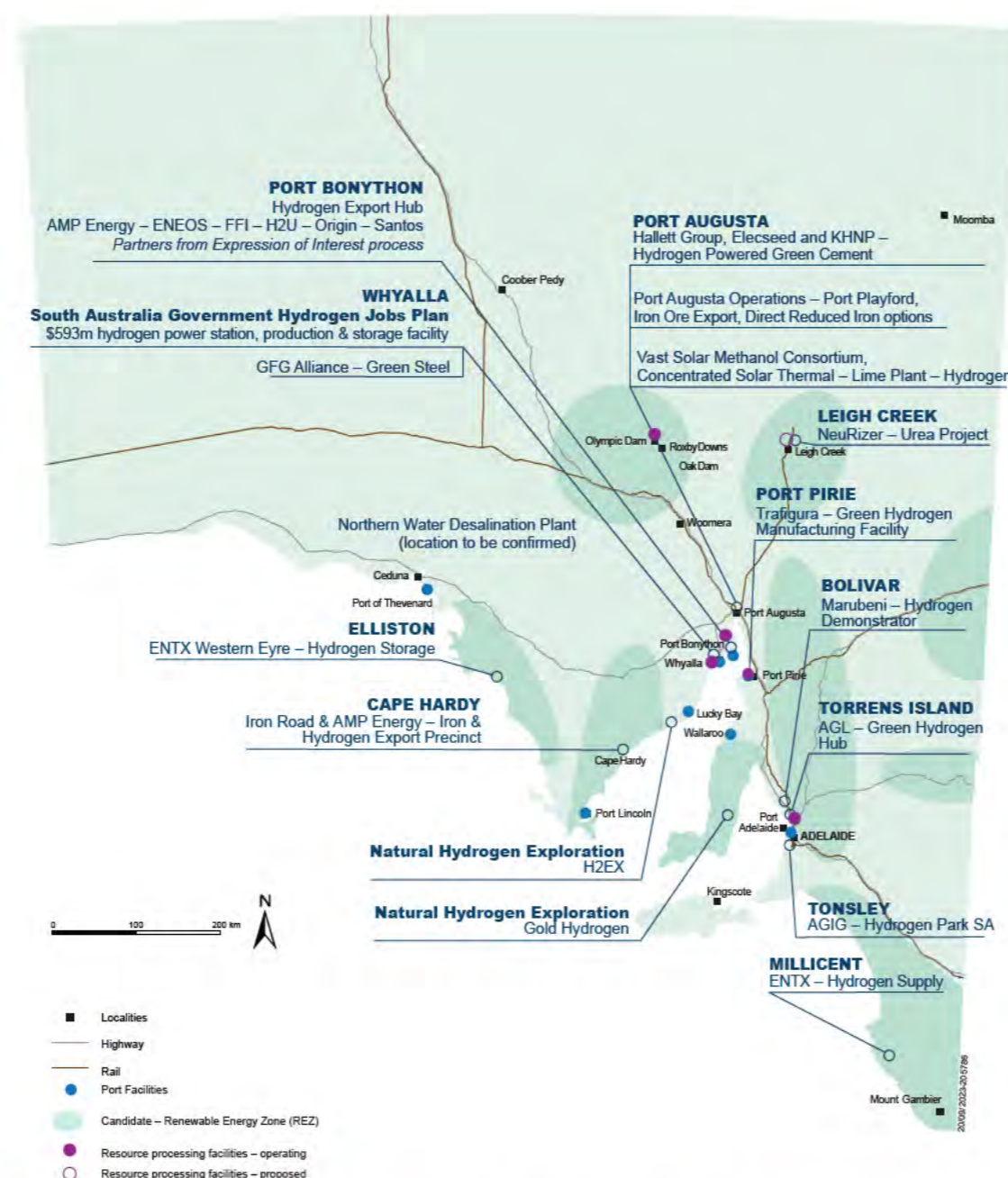


Figure 3.1 – SA Hydrogen Projects (Source: Government of South Australia)



Figure 3.2 – South Australian Wind Farms, Solar Farms and Northern Water Project Pipeline (Source: Deep End Services)

4. SITE & REGIONAL CONTEXT

4.1 Subject Land

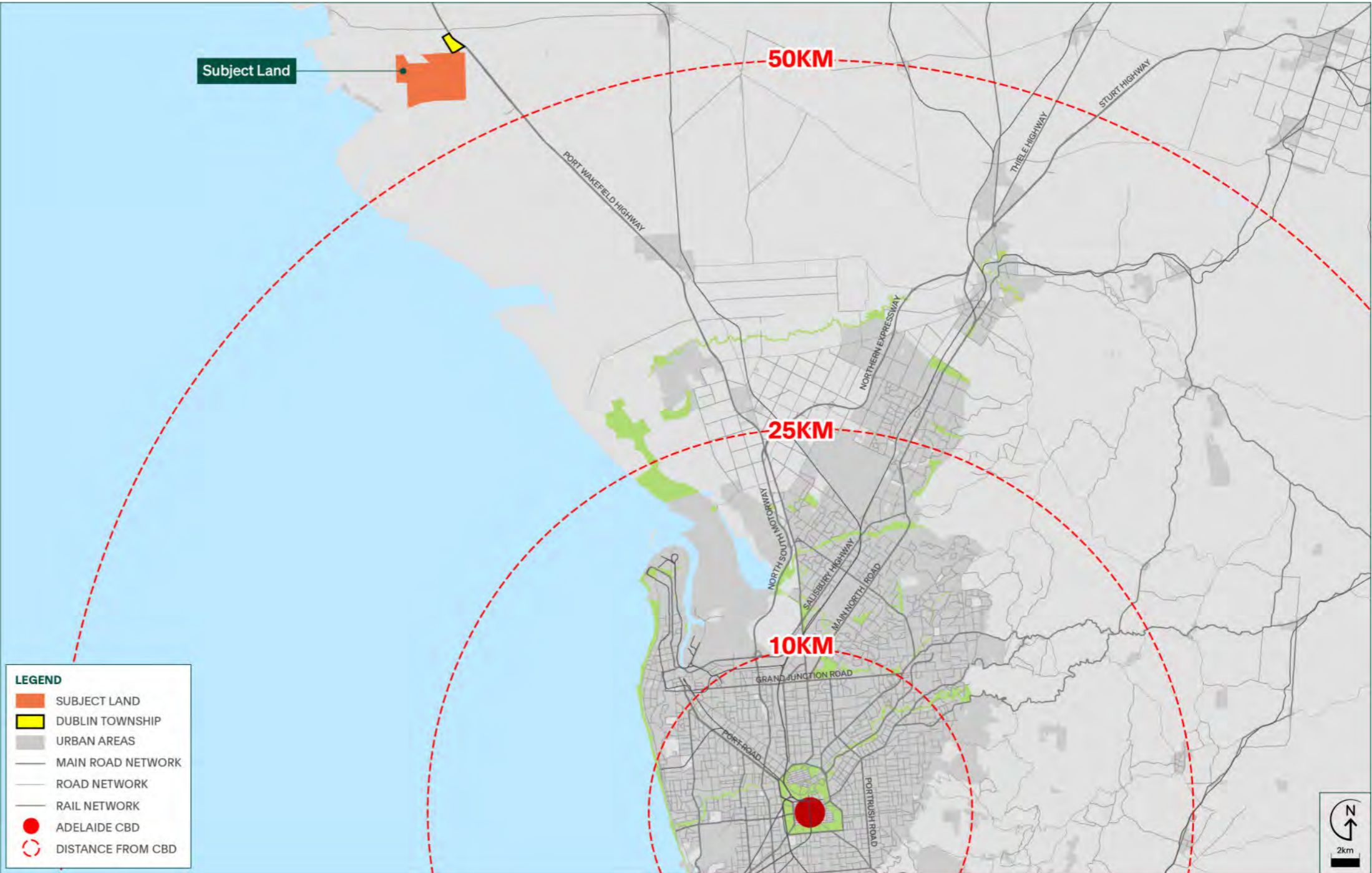
Leinad owns and controls in excess of 1,373 hectares of land over multiple land parcels within and to the immediate south of the existing Dublin Township (refer **Figure 1.1**).

As illustrated in **Table 4.1** below, the land is approximately 50 kilometres (45 minutes’ drive) to the north of the Adelaide CBD and is approximately 35 kilometres to the south of Port Wakefield (25 minutes’ drive), 15 kilometres (15 minutes’ drive) to the west of Mallala and 20 kilometres (15 minutes’ drive) to Two Wells. The settlement of Thompsons Beach is located to the west.

The combined land parcels have frontage to Clonan Road, Thompsons Beach Road and Ruskin Road to the north.

From Adelaide	KM	Time in Minutes
Dublin	63.9	50
Mt Barker	33.3	34
Roseworthy	49.3	45
Seaford	35.7	41
Aldinga	43.6	50
Gawler	53.1	43
Freeling	67.5	52
Nuriootpa	80	58
Kapunda	84.2	62

Table 4.1 – Travel Distances



4.2 Land Use & Configuration

The land uses of the subject land and surrounding locality are illustrated on **Figure 4.1**.

4.2.1 Subject Site

The significant majority of the subject land is utilised for ad-hoc agricultural purposes (low intensity grazing) and is in a relatively poor condition and 'degraded', with a low agricultural production value.

The western end of the Subject Land comprises intact samphire and saltmarsh vegetation and is subject to tidal inundation.

There are three (3) existing dwellings on the Subject Land located towards the northern section of the subject land.

4.2.1.1 Mining

Leinad are currently exploring the opportunity for a mining licence over approximately 240 hectares of land to the south of the site, at the interface with the existing IWS Waste and compost facility.

Mineral Claim #4557 is registered with a mineral lease application currently being established for the site to detail the final landform and staged operations.

A 'Program for Environment Protection and Rehabilitation' (PEPR) will describe how mining operations will be undertaken and detail required rehabilitation works to enable commencement of this activity on site.

The Mining licences will result in the ability to extract approximately 4.7M tonnes of resource from the site which can be backfilled with genuine Waste Derived Fill (WDF) in line with the 'SA Waste Strategy'.

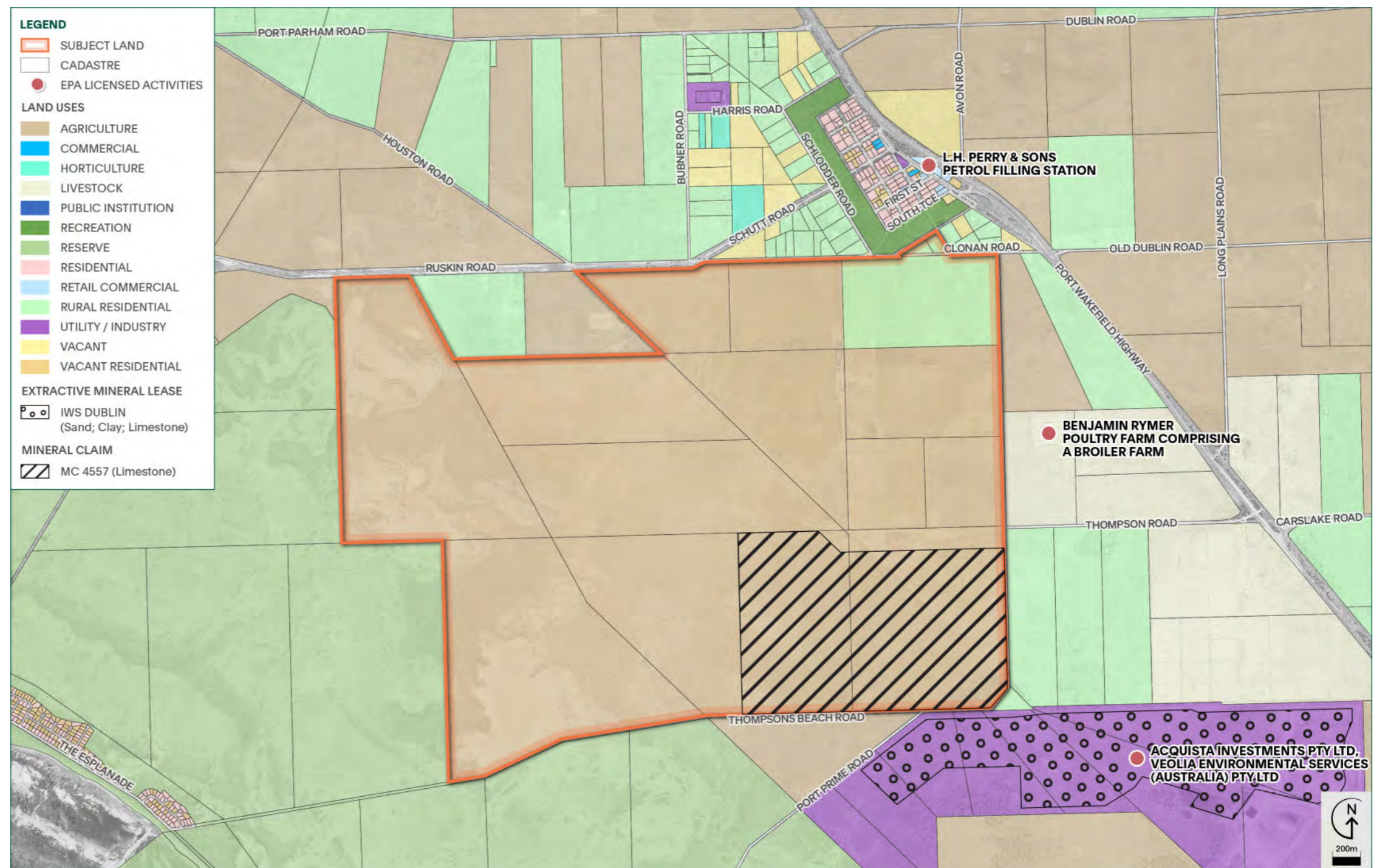


Figure 4.1 – Existing Land Uses



The resource can be utilised for residential and commercial applications (both on and off site) and utilised to create desired site levels for required falls across the balance of the 'Dublin Park' estate.

Based on proposed import and export quantities, mining activities on site are expected to employ 10 FTE staff working for 15 years (based on a 5-day working week) and will return royalties to the State of 2% of complete turnover. This is estimated to be approximately \$10M (royalties & levies) and the mine is expected to contribute approximately \$920,000 in GST revenue to the State (based on a 9.2% share of GST).

4.2.2 Adjoining & Nearby Land Uses

4.2.2.1 Dublin Township

Dublin is a small and historic settlement with a current population of around 200 people functioning as a service town for the surrounding rural and coastal community.

The town contains basic amenities including small scale shopping facilities, petrol filling station, hotel (currently closed) and oval/recreation precinct including a small clubroom.

On 12 November 2015, approval was granted to Leinad for the development of a new Neighbourhood Centre on Old Port Wakefield Road within the town centre of Dublin (the vacant parcel of land to the south-east of the Dublin Hotel). Whilst not ultimately enacted, this development comprised a supermarket, five (5) speciality shops and a total of 1,700 sqm of retail floor space to reinforce the primacy of the Dublin Main Street and support, facilitate and underpin the future growth and expansion of Dublin proposed by Leinad (refer to **Figure 7.2**).



Fruit and Veg Shops



Existing Shops



Pharmacy



Service Station

4.2.2.2 Adelaide International Bird Sanctuary

The *Winaityinaityi Pangkara* (Adelaide International Bird Sanctuary) encompasses over 60km of coastline north of Adelaide, adjacent to the Gulf of St Vincent, Adelaide's northern suburbs and spans across four (4) Council areas. The Sanctuary abuts the western boundary of the subject land as illustrated in **Figure 4.2**.

Winaityinaityi Pangkara means 'a country for all birds and the country that surrounds these birds' in the language of the Kaurna people.

The Bird Sanctuary is home to 263 unique fauna and flora species and is one of Adelaide's longest continuous conservation areas. In particular, the Bird Sanctuary helps protect resident and migratory shorebirds, including threatened species such as Curlew sandpiper, Ruddy turnstone, Red knot and Eastern Curlew as well productive mangroves, marine and coastal assets, river systems and many significant terrestrial species and ecological communities. (Ref: <https://www.parks.sa.gov.au/parks/adelaide-international-bird-sanctuary-national-park>)

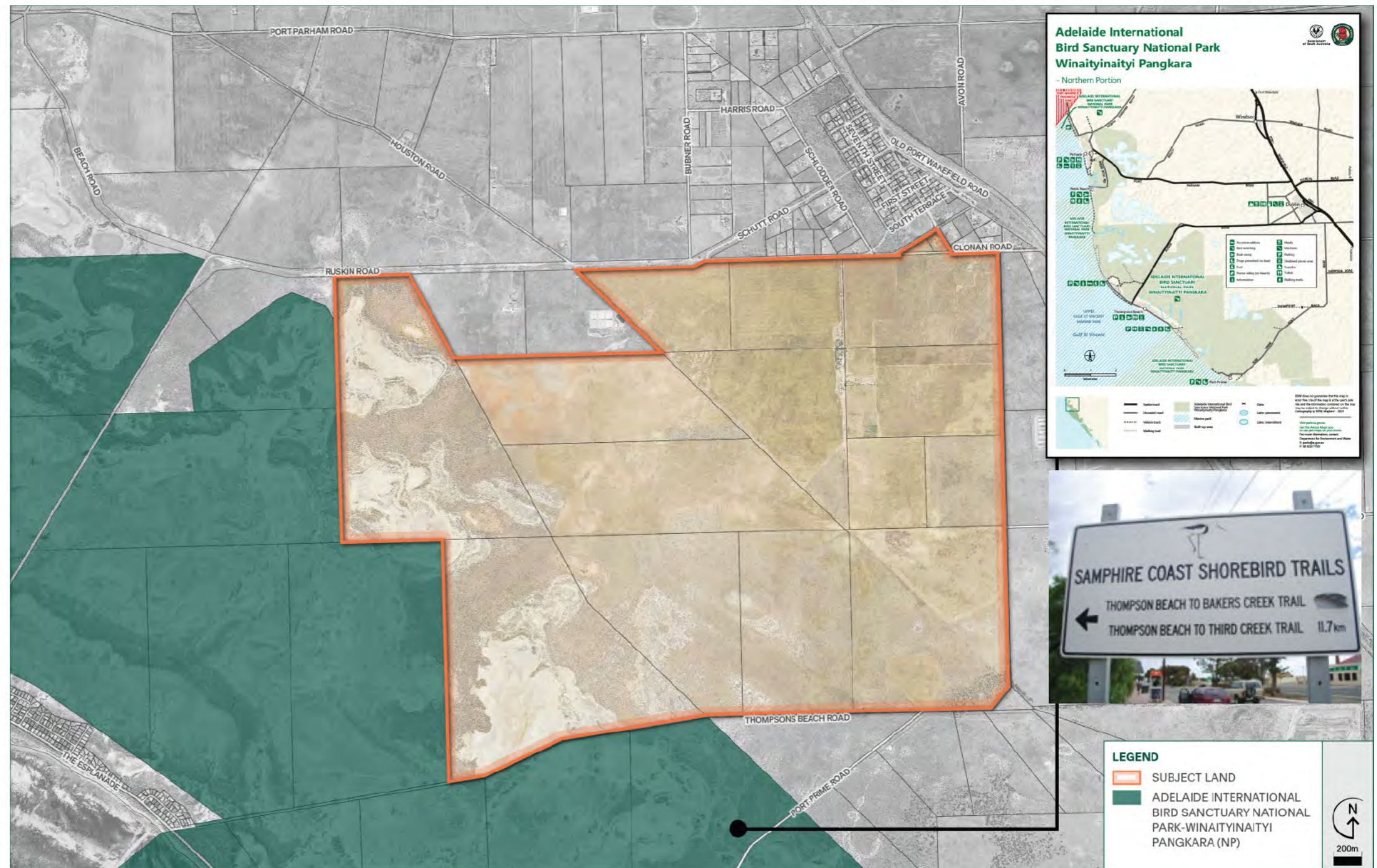


Figure 4.2 – Adelaide International Bird Sanctuary

4.2.2.3 EPA Licenced Activities

As shown on **Figure 4.1**, the following EPA Licensed Activities are located within proximity to the subject land:

- The IWS Waste Balefill and Compost Facility is located to the immediate south of the subject land and is identified as 'Utility/Industry'.
- An Intensive Animal Keeping facility (Chicken Broiler Farm) is located the east of the subject land with a current production capacity of 420,000 birds.

4.2.2.4 Carslake Road Strategic Employment Land

An area to the east of Dublin on the other side of the Port Wakefield Highway of around 840 hectares is located within the 'Strategic Employment Zone'. According to the SA Industrial Database approximately 399 hectares is occupied by three (3) large scale uses including:

- Dublin Clean Grain (grain storage);
- South Australian Livestock Exchange (auction yards); and
- Carslake Road quarry.



4.2.2.5 Defence

The 'Proof and Experimental Establishment Port Wakefield' (P&EE) is situated near the Dublin Township.

P&EE provides critical explosive ordnance (EO) test and evaluation capability for the Australian Defence Force (ADF). P&EE utilises a Defence Prohibited Area of 6,500 hectares. The prohibited area forms the western and southern boundary of P&EE which extends as far south and directly west of Webb Beach. This area is prohibited for public entry at all times as it has a risk of unexploded ordnance.

We note that the Dublin Township is further removed from the P&EE Port Wakefield than other existing residential development and townships, such as Port Parham and Thompsons Beach.

4.2.2.6 Primary Production

There are agricultural/farming land uses adjacent to the site to north-west, south and east of the subject land.

The primary production value of the subject land and adjoining land within the immediate locality is reviewed and discussed in **Section 6.1**.

4.3 Local Climate, Topography & Site Characteristics

4.3.1 Local Climate

Weather data from the Bureau of Meteorology indicates that the site is located in a Mediterranean climate with some areas leading to semi-arid climate with hot dry summers and cool, wet winters. Average rainfall is 352.7 millimetres (mm) per year based on the nearby Port Parham Weather Station. The average monthly temperature varies, with warm summers and moderately cool winters.

The local Windfield around Dublin was examined in some detail by Enviroscan to provide a preliminary assessment for a buffer zone around an established broiler farm located about 1.2 kilometres south of the Dublin township (refer to **Section 6.6.1**). Windrose's (detail for Year 2009 which has been decreed a typical year by SA EPA for air quality assessments) indicated dominant southeast winds for much of the year and northerlies in winter.

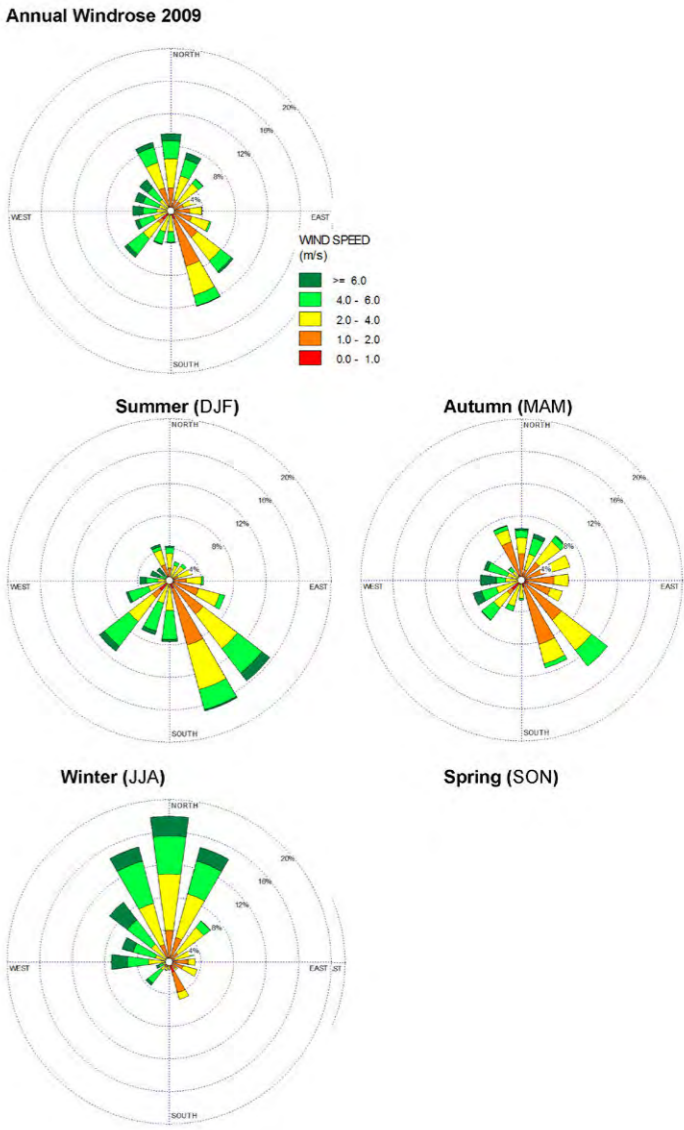


Figure 4.3 – Y2009 Seasonal Windroses for Dublin
(Source: Enviroscan October 2023)



4.3.2 Topography

The site has gentle slope from east to west with a fall of approximately 7.0 metres from east to west (which represents a slope of 0.46%).

4.3.3 Geology and Soil Profile

The subject land comprises several main soil types as illustrated on **Figures 4.4** and **4.5**.

The northern section of the subject land is Hindmarsh clay with the southern section of the land shallow soil above calcrete.

The western section is coastal marine sediment with a wet soil consistent with its coastal location.

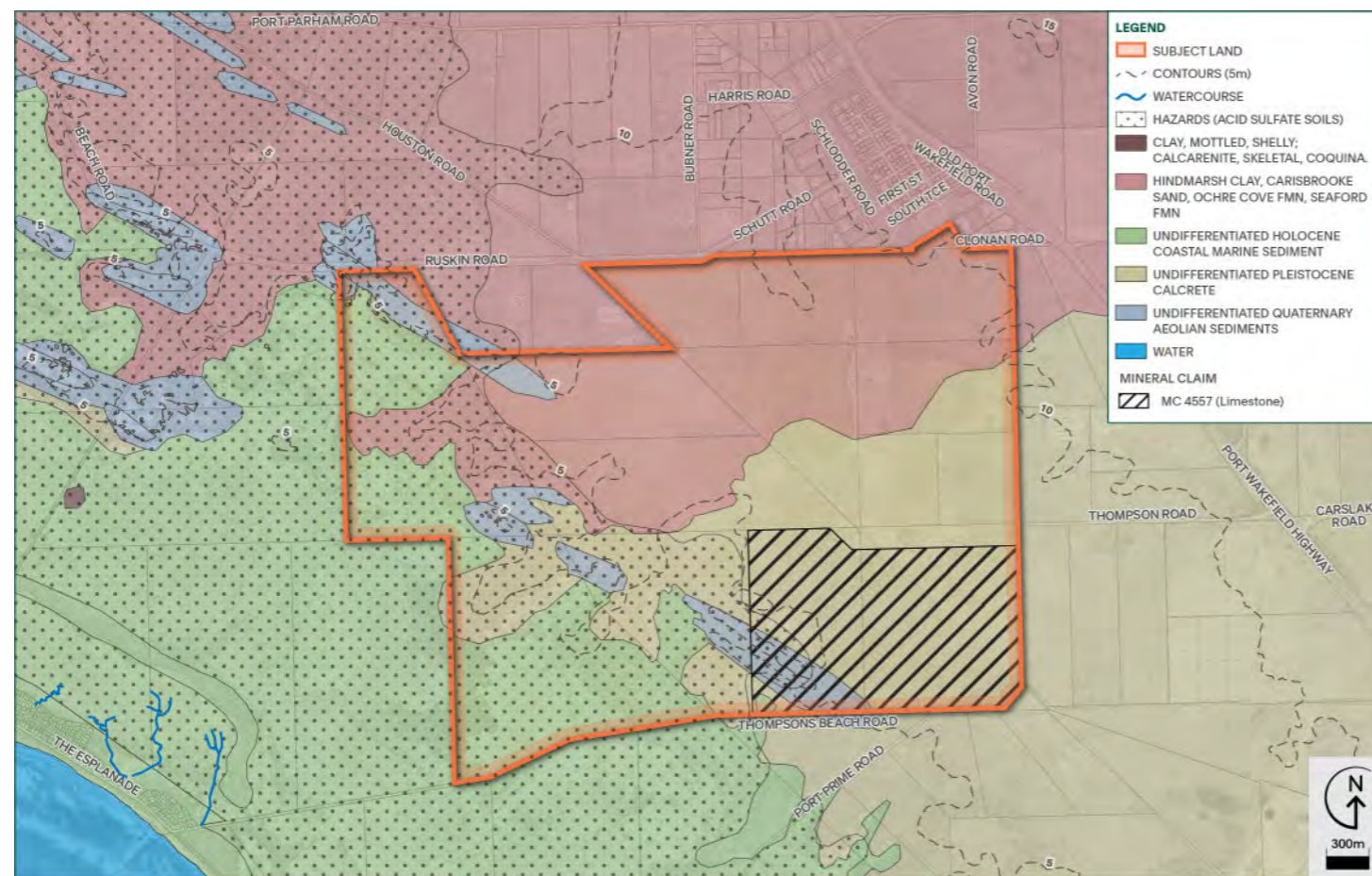


Figure 4.4 – Topography & Geology

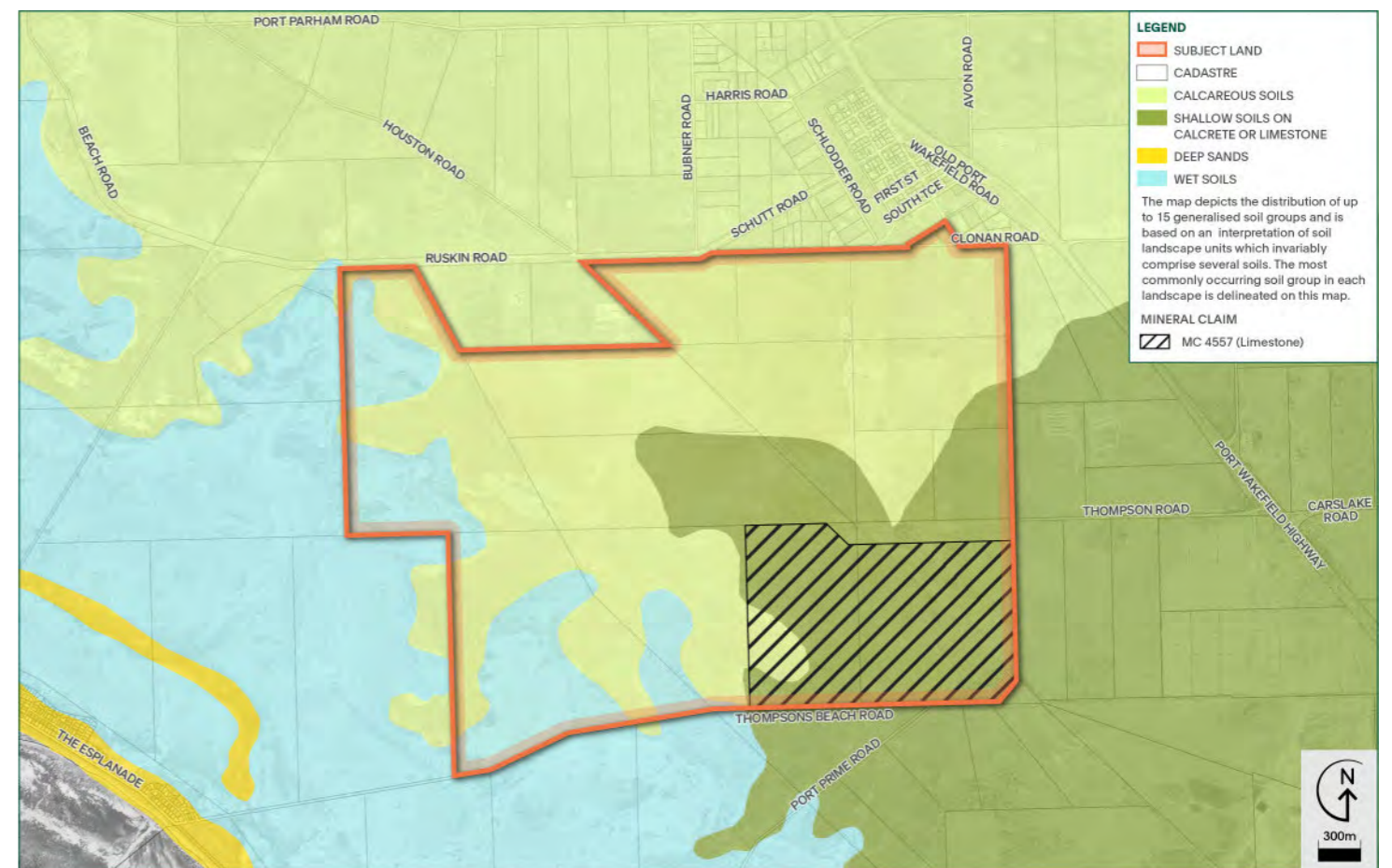


Figure 4.5 – Soil Groups

4.3.4 Flooding and Hydrology

The subject site has limited constraints in regard to flooding and groundwater with no watercourses within the land and limited flooding constraints as illustrated in **Figure 4.6**. There are several areas identified in the 'Water Resources Overlay', mostly within the coastal area to the west of the site, within the 'Conservation Zone'.

A groundwater assessment undertaken by Water Technology in 2022 indicates that groundwater levels within the site are between 2.7 metres and 3 metres below ground level. For the mining area, a two (2) metre buffer is to be established above the groundwater table.

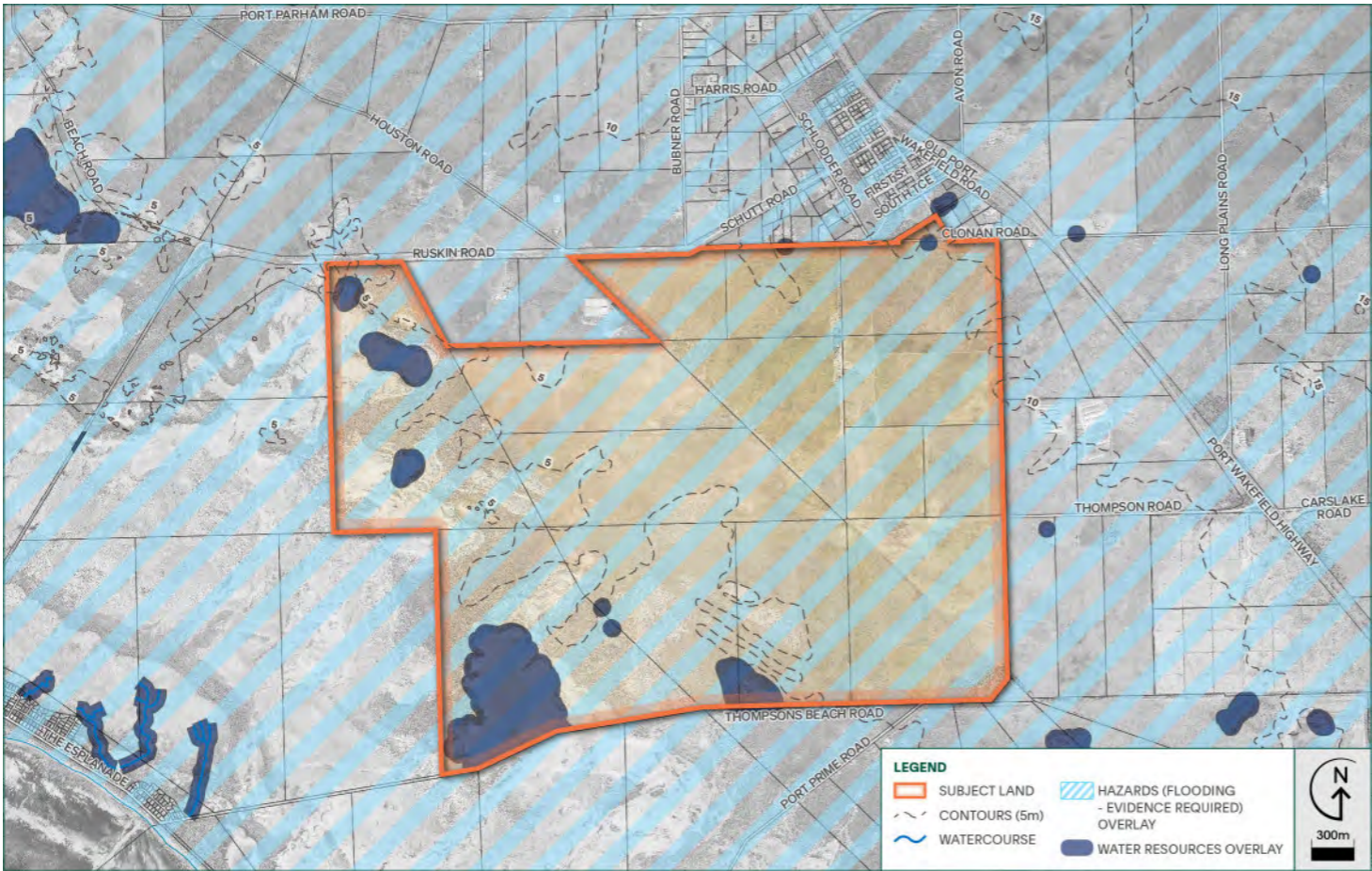


Figure 4.6 – Flooding

4.4 European & Cultural Heritage

4.4.1 European Heritage

There are no listed heritage places on the subject land.

As illustrated on **Figure 4.7** the 'Dublin Institute' is a listed Heritage Place in the Dublin township.

We understand that there is a heritage agreement in place over the northern and western sections of the Park Land belt surrounding the existing Dublin township.

4.4.2 Cultural Heritage

Investigations undertaken in 2012 and again in 2023 have not located any registered Aboriginal Heritage Sites or Objects on the subject land.

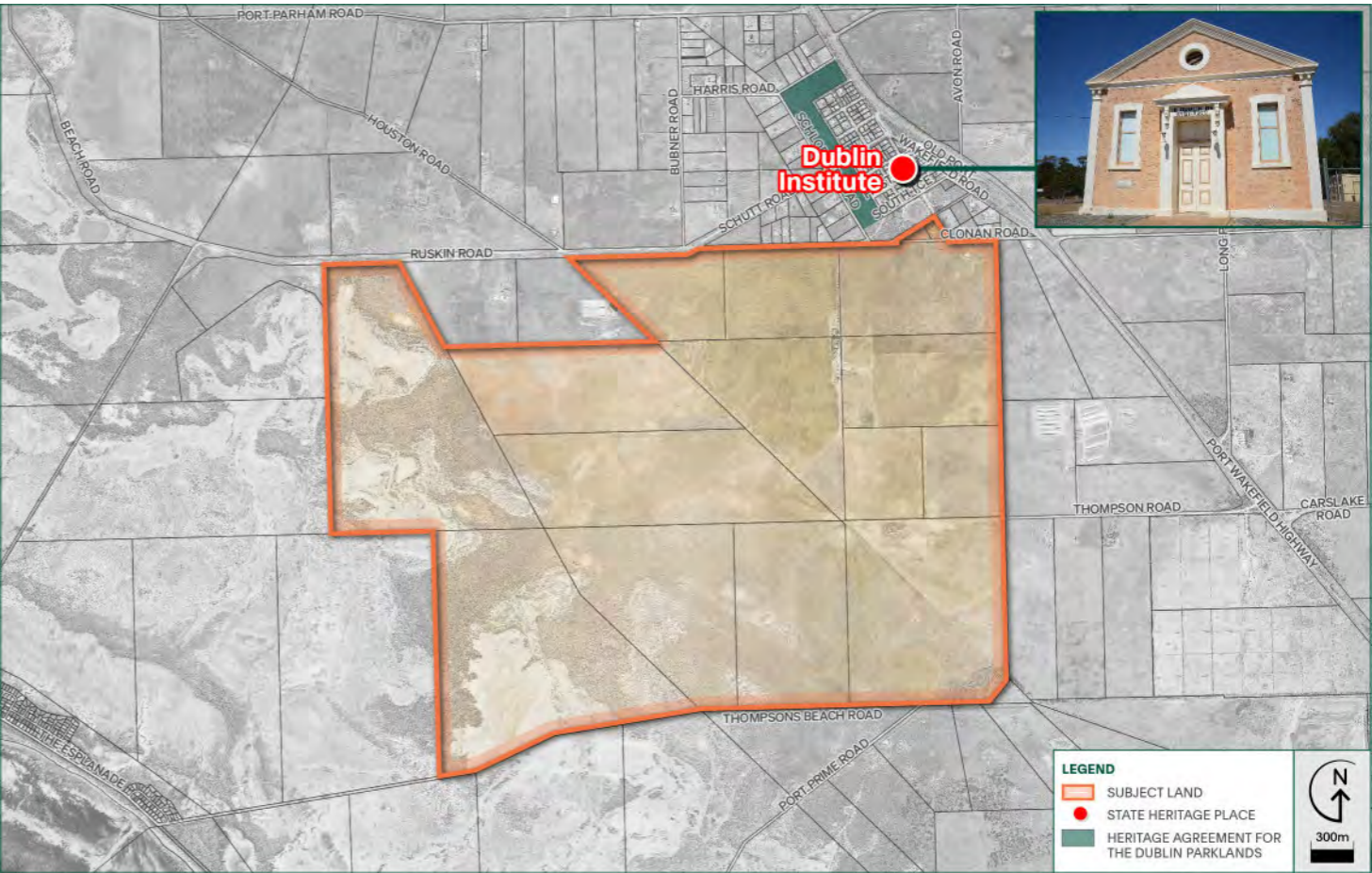


Figure 4.7 – Heritage Places

4.5 Infrastructure

4.5.1 Services & Civil Infrastructure

Investigations undertaken have identified that the subject land has existing power and water connections (refer to **Figure 4.8**).

Alano Utilities Pty Ltd and Leinad are establishing Development Agreements that will ensure a commitment to delivery of the necessary infrastructure and servicing for the future use of the subject site.

4.5.2 Social Infrastructure

The small township of Dublin has local service infrastructure including a general store and pharmacy, petrol filling station, public toilets, and hotel.

Dublin is surrounded on its northern, western and southern sides by Park Lands. Within the southern Park Lands is the local sports and recreation ground including an oval, cricket nets, old tennis courts and

sporting clubroom. Council has an adopted Master Plan to upgrade the precinct and provide additional community facilities including additional facilities for youth.

A CFS Unit was established in Dublin 1966 and an extension to the station was completed in 2020. The unit includes two (2) vehicles and the unit's response area includes Calomba, Dublin, Long Plains, Lower

Light, Parham, Thompson Beach, Webb Beach, Wild Horse Plains and Windsor. [South Australian Country Fire Service Promotions Unit \(fire-brigade.asn.au\)](http://South Australian Country Fire Service Promotions Unit (fire-brigade.asn.au)).

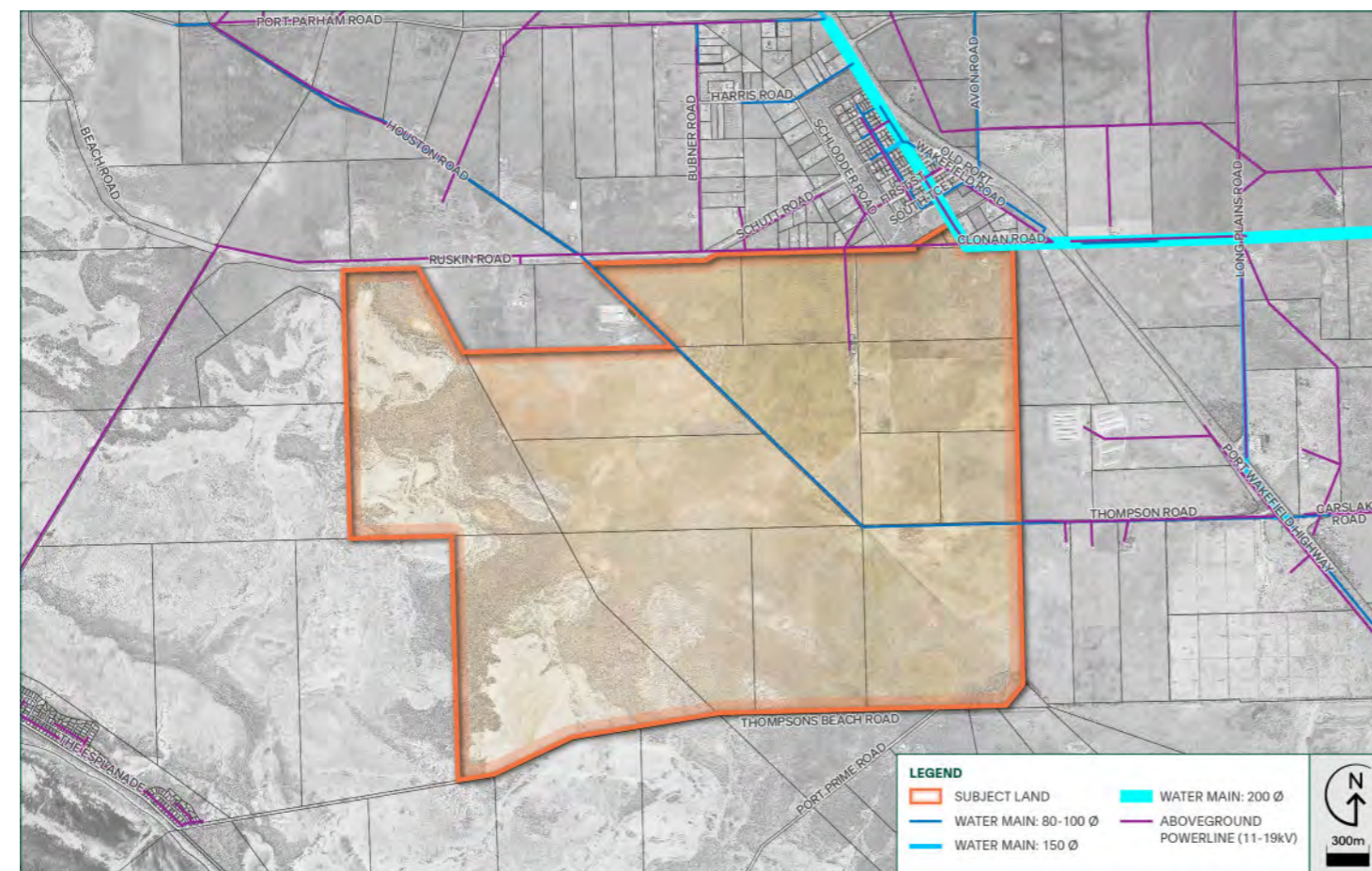


Figure 4.8 – Existing Services Infrastructure

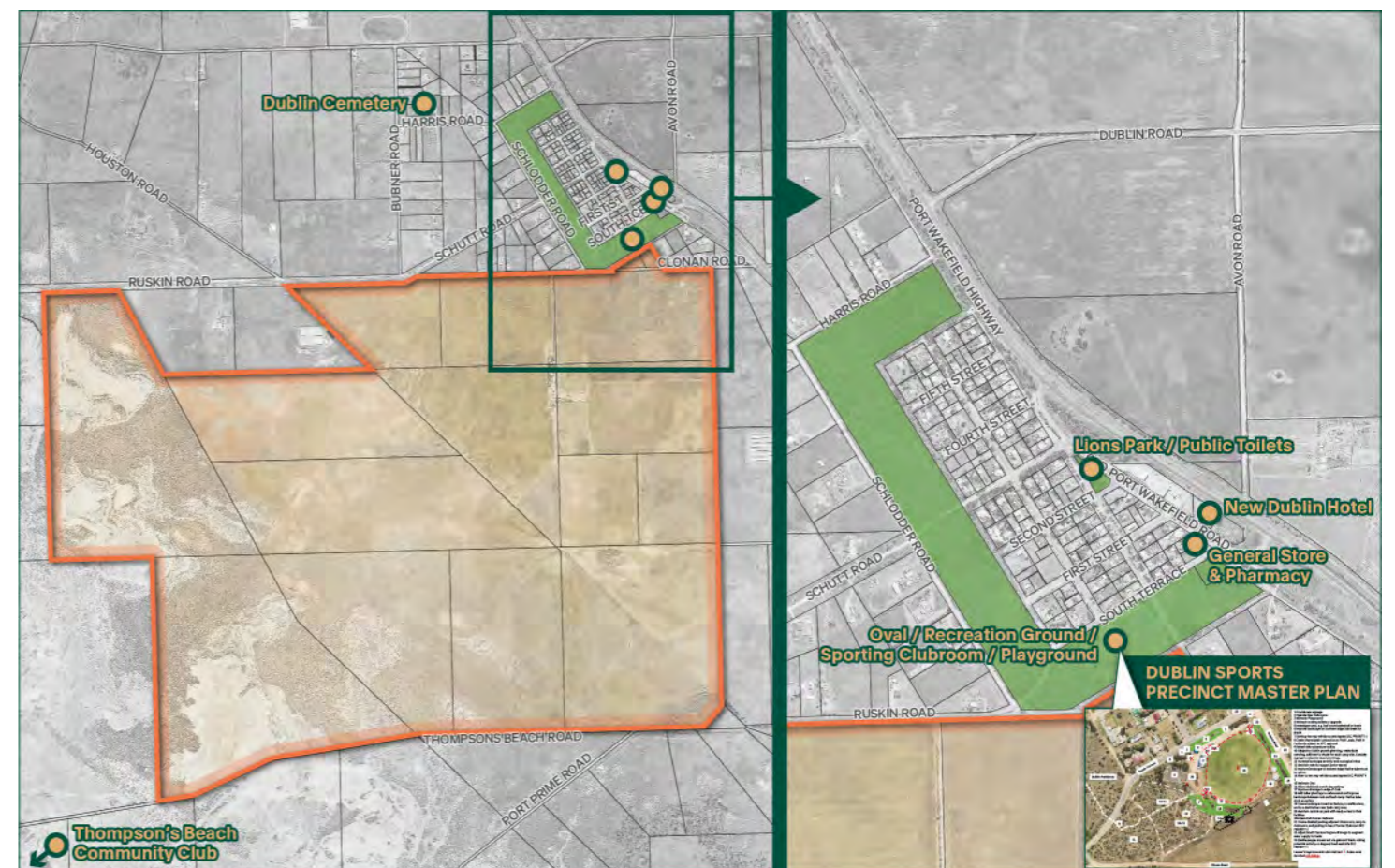


Figure 4.9 – Existing Social Infrastructure

4.6 Transport & Connectivity

The existing transport network servicing the subject land is illustrated in **Figure 4.10**.

The town of Dublin has a number of strategic locational advantages particularly for potential employment related land uses including:

- The township is bypassed by the Port Wakefield Highway (National Highway 1) which connects Adelaide to the Yorke Peninsula, Eyre Peninsula and to the Northern Territory and Western Australia;
- Port Wakefield Highway provides access to South Australia's renewable power and infrastructure projects in regional areas, generally north or west of Adelaide;
- Delivery of long, high or wide loads via over-dimension vehicles in regional South Australia via Port Wakefield Highway and other routes without transiting through Adelaide;
- A rail hub is located at Mallala 15 kilometres to the east or 30 minutes' drive to the SCT Intermodal Freight Terminal at Penfield;
- The Port Adelaide inner harbour, shipping and container yards and connecting freight networks and defence industry sites are directly connected via the Northern Expressway and Port River Expressway; and
- The township is within 30 minutes of waste streams and biomass crops on the Adelaide Plains and Barossa Valley.

The subject land has frontages to Ruskin Road, Clonan Road and Thompsons Beach Road. Connectivity to these roads is provided via Sanders Avenue/South Terrace and Thompson Road, both which intersect with Port Wakefield Highway. These intersections are treated with channelised turn lanes. In addition, There are several unnamed and unsealed roads (tracks) within the subject land that primarily provide access for farming (grazing) purposes.

Ruskin Road along the northern boundary of the subject land provides the primary access to the small beach settlement at Thompsons Beach.

There are no current pedestrian and cycle networks in the locality and limited existing public transport services.

DUBLIN URBAN FRAMEWORK PLAN **Page 25**

5.1.1 Existing Zone & Policy Framework

The Desired Outcomes for the **Rural Zone** include:

Desired Outcome 2: A zone supporting diversification of existing businesses that promote value-adding such as industry, storage and warehousing activities, the sale and consumption of primary produce, tourist development and accommodation.

The Desired Outcomes for the **Conservation Zone** is:

Desired Outcome 1: The conservation and enhancement of the natural environment and natural ecological processes for their ability to reduce the effects of climate change, for their historic, scientific, landscape, habitat, biodiversity, carbon storage and cultural values and provision of opportunities for the public to experience these through low impact recreational and tourism development.

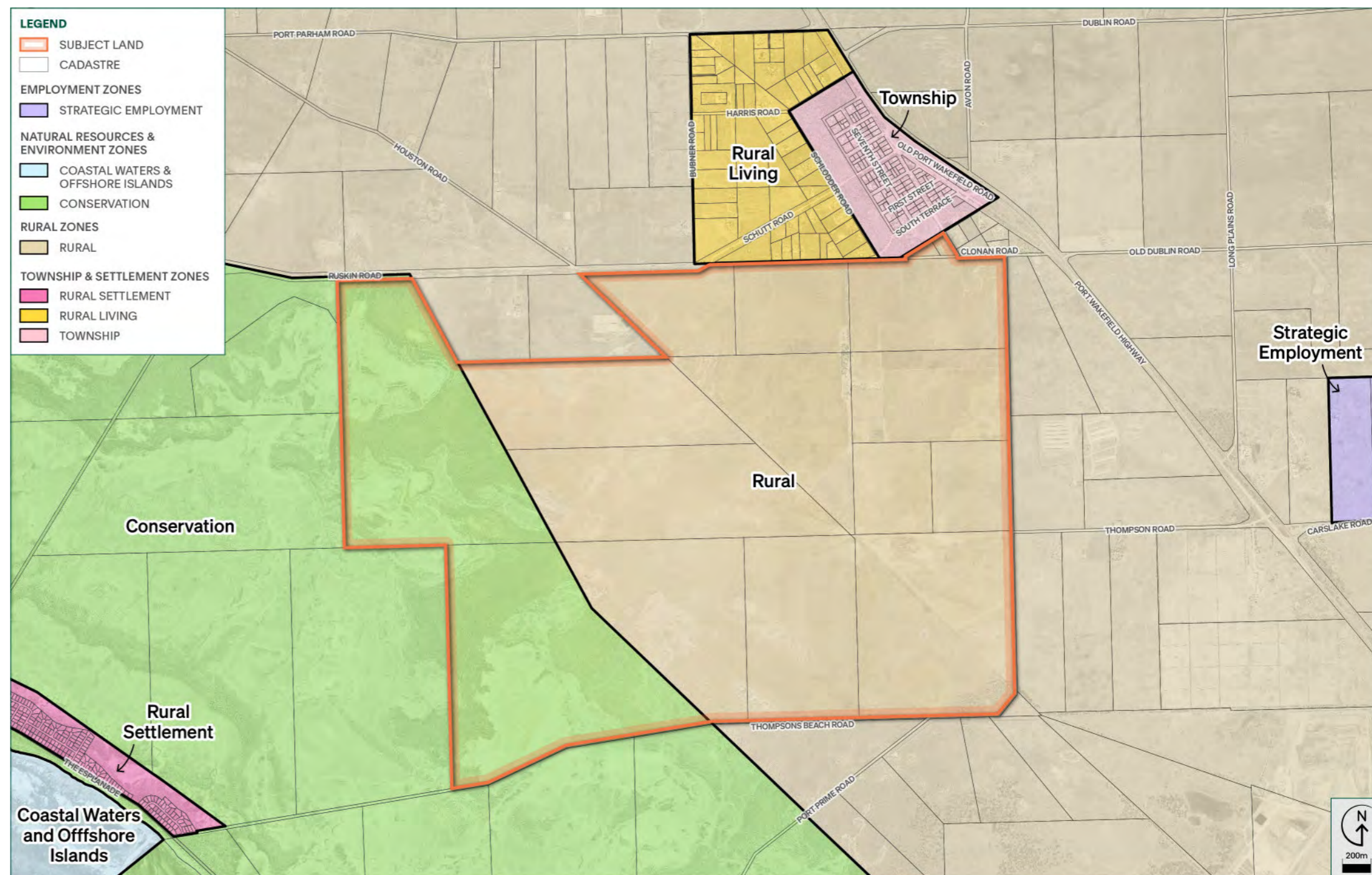


Figure 5.1 – Current Zoning

The following **Overlays** also apply to the subject land:

- 'Coastal Areas Overlay' which applies only to land located within the 'Conservation Zone');
- 'Environment and Food Production Area Overlay';
- 'Hazards (Acid Sulphate Soils) Overlay' which applies only to western portion of the site;
- 'Hazards (Bushfire – General) Overlay';
- 'Hazards (Bushfire – Medium Risk) Overlay';
- Hazards (Flooding – Evidence Required); Overlay'
- 'Native Vegetation Overlay';
- 'State Significant Native Vegetation Overlay' which applies only along the western site boundary (approximate width of 50m) adjacent the 'Adelaide International Bird Sanctuary National Park';
- 'Traffic Generating Development Overlay'; and
- 'Water Resources Overlay'.

5.2 Environment & Food Production Area (EFPA)

Importantly, the subject land under the control of Leinad is located within the 'Environment and Food Production Area (EFPA) (refer to **Figure 5.2**). The EFPA was introduced by the Minister for Planning on 1 December 2017 to protect food producing and rural areas from urban encroachment and encourage residential development within the existing urban footprint. Land division for residential purposes is prevented within the EFPA.

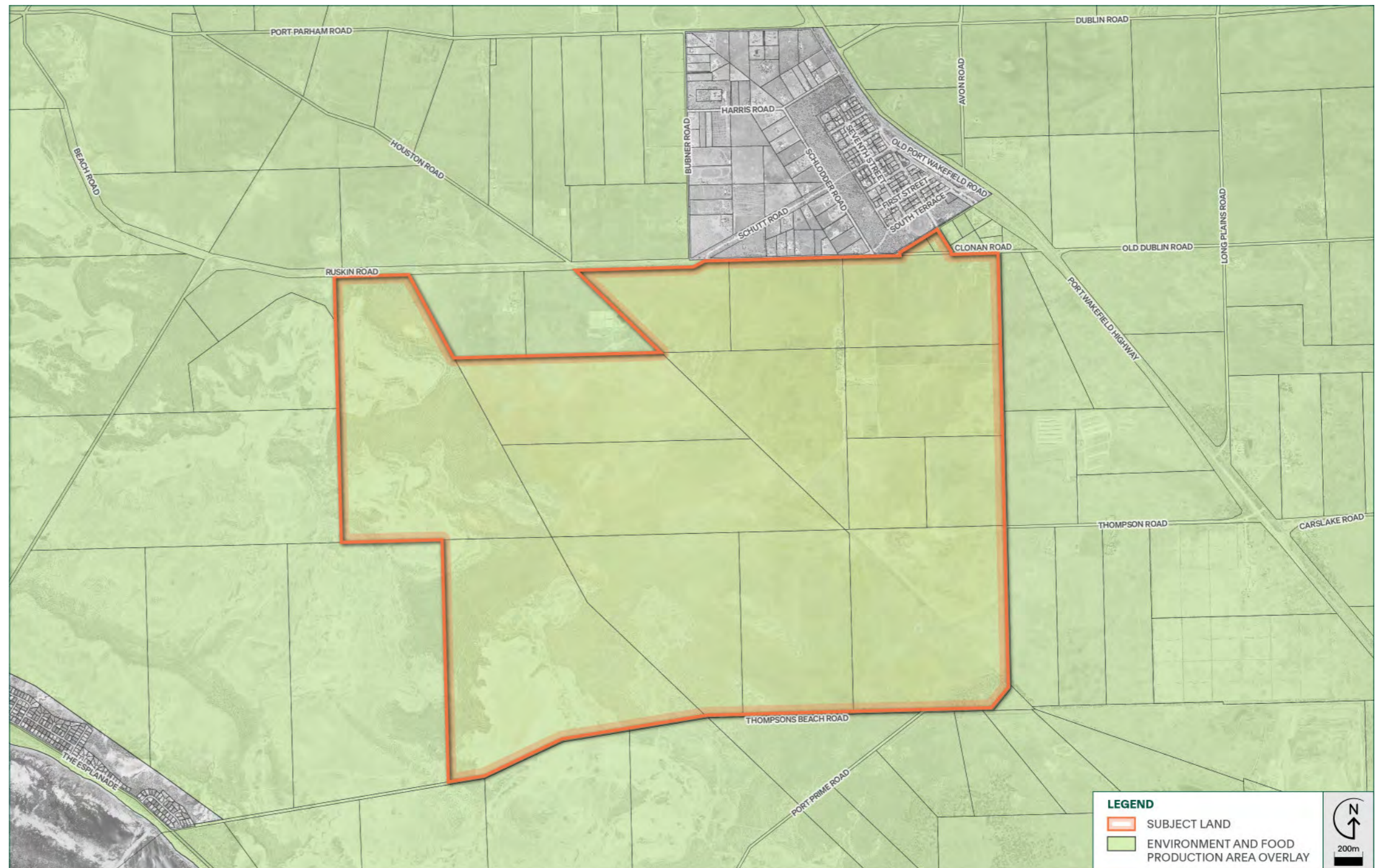


Figure 5.2 – EFPA Surrounding existing Dublin township

5.3 Local Strategic Plans



5.3.1 Growth Strategy & Action Plan

In May 2023, the Adelaide Plains Council released the final Adelaide Plains Growth Strategy and Action Plan (GSAP).

The GSAP identifies that planning for population growth of the Adelaide Plains is important, as population is forecast to double over the next 20 years. Council identifies that the majority of population growth is at Two Wells which could ultimately grow to 13,400 people. Notwithstanding, the Council supports further growth opportunities at Dublin, subject to further investigations, rezoning and infrastructure planning.

The GSAP notes that growth within the Adelaide Plains is part of the outer north that is being planned for the greatest amount of fringe growth in Greater Adelaide.

The GSAP confirms that in 2019, Council supported further investigations for potential urban growth at Dublin (i.e. the 'subject land' under the ownership and control of Leinad). The GSAP identifies the Dublin township has the potential for around 4,000 residents/1,500 dwellings in total. The report confirms that if land under the control of Leinad to the south of the existing township was fully developed by 2040, this would lead to a total population in Dublin of around 4,500 (refer to **Figure 5.3**).



Figure 5.3 – Adelaide Plains Growth Strategy and Action Plan (May 2023)

The GSAP identifies that for Dublin the following further investigations are needed:

- Opportunities to grow tourism and business experiences;
- The need for land supply for housing, including rural living as a transition to agriculture;
- An assessment of the value of soil for food production and the environment;
- Potential for conflict with established uses, such as the chicken hatchery and the waste facility to the south;
- Community infrastructure and open space; and
- Hard infrastructure, e.g. sewer and water.

Notwithstanding, the GSAP identifies that this land remains subject to the EFPA restrictions and the release of this land is therefore unknown and unlikely to occur prior to 2026 (i.e. the State Planning Commission's next quinquennial review of the EFPA).

The GSAP identifies that Adelaide Plains is envisaged to retain a three (3) major town structure (Two Wells, Mallala and Dublin) which would be complemented by twelve (12) coastal and rural settlements across the region (refer to **Figure 5.4**).



Figure 5.4 – Three Town Service Model
(Source: Adelaide Plains GSAP)

5.3.2 Adelaide Plains Council Strategies & Actions

We note that the Adelaide Plains Council strategies and actions are structured based on the 'Strategic Plan' outcomes of 'Enviably Lifestyle', Emerging Economy', 'Remarkable Landscapes' and 'Proactive Leadership'.

The Strategy identifies the following key actions to occur that are relevant to the Dublin township and the 'subject land' under the control of Leinad:

“Enviably Lifestyle Action Plan #1: Land supply and demand - Monitor to understand likely timing and nature of future land releases for urban growth. Consider level of infrastructure needed, and an orderly approach to land release. This is at Two

Wells, **Dublin** and Lewiston, and also associated with the next review of the Environment and Food Production Area in 2026;

Enviably Lifestyle Action Plan #7: Dublin – scope future urban growth, noting 2019 decision to support investigating Leinad land south of existing township. Consider near coastal tourism role, agriculture, proximity to established industries and Carslake Industrial Area, community and open space facilities, recreation and sport, water reuse and necessary infrastructure;

Emerging Economy Strategies: Foster established town centres, principally at Two Wells Main Street, Mallala Town Centre and centre functions at **Dublin;**

Proactive Leadership – The level of success in achieving the GSAP depends upon cooperation between the public and private sectors, in particular:

(b) State Government:

(ii) Support public service provision and incorporation of GSAP policies into the 30 Year Plan for Greater Adelaide, and where relevant, the Planning and Design Code.

(d) Land owners and developers:

(i) Participate in planning that supports the GSAP.

(ii) Enter into agreements with Council and State Government to fund infrastructure to support the GSAP.

(iii) Work with Council to establish and promote a consistent and recognisable Adelaide Plains offering for marketing and promotion of major developments.

(iv) Provide affordable and diverse housing.



5.4 The Regional Plan

5.4.1 30 Year Plan for Greater Adelaide

The existing township of Dublin is identified within the 30 Year Plan for Greater Adelaide - 2017 update, as 'Planned Urban Lands to 2045' with land west of Schlotter Road designated as 'Rural Living' (refer to **Figure 5.5**). The subject land is not included in the '30 Year Plan for Greater Adelaide – 2017 Update' as a future urban growth area and is located within the Environment and Food Production Area.

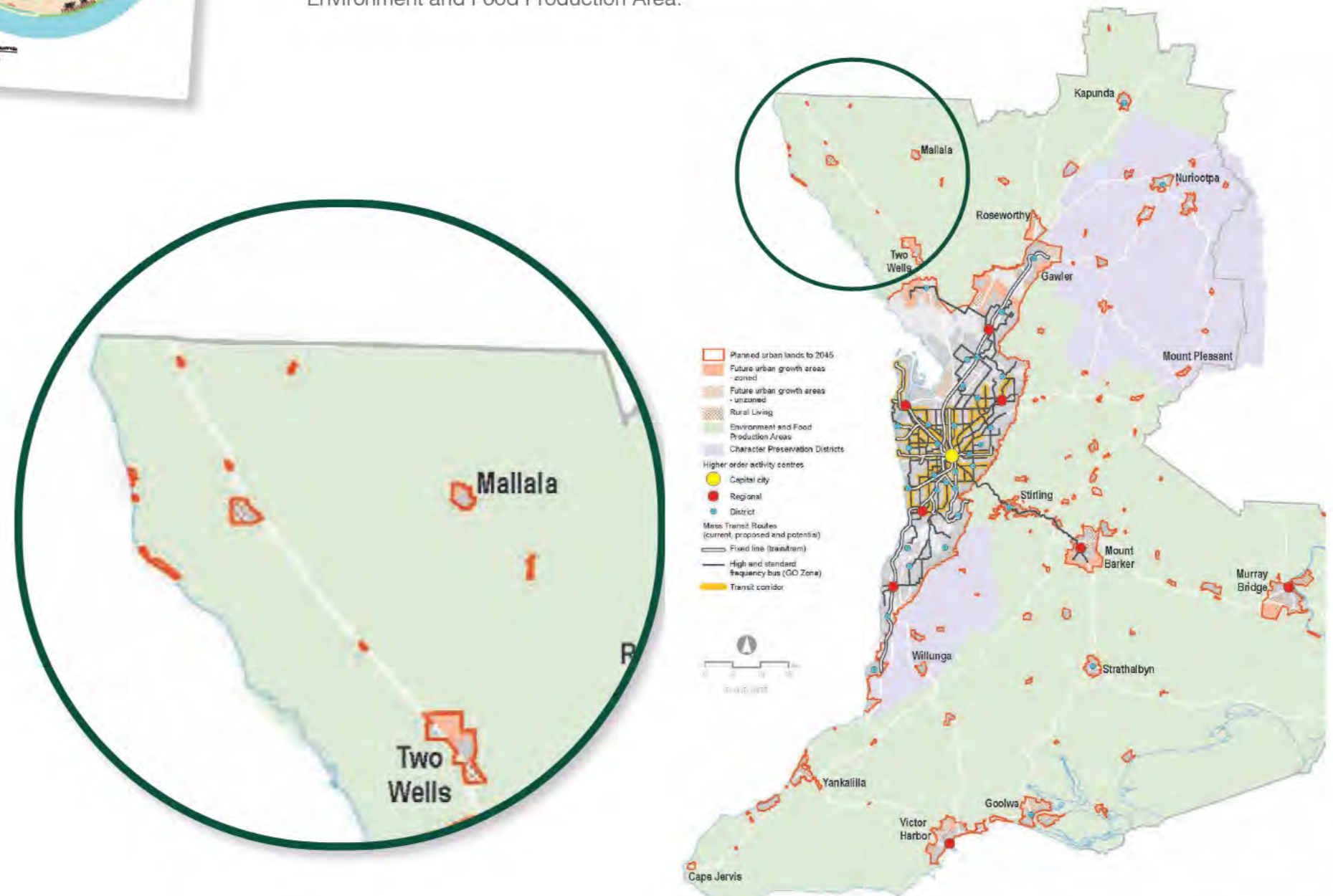


Figure 5.5 – 30 Year Plan for Greater Adelaide (Extract)



5.4.2 Greater Adelaide Regional Plan – Discussion Paper

The Greater Adelaide Regional Plan (GARP) Discussion Paper (the 'Discussion Paper') indicates a projected growth in population within Greater Adelaide of 670,000 by 2051. This represents a 47% increase in Greater Adelaide's current population.

The Discussion Paper also forecasts the need to supply 300,000 new homes to meet this projected population increase and identifies that there is a current capacity for an additional 200,000 homes (164,000 homes in land already zoned for residential development and a further 47,000 homes that could be accommodated on land already identified for future residential rezoning). The Discussion Paper identifies the need to therefore supply an additional 100,000 homes by 2051 or based on current estimates under a high growth scenario - we will run out of land for future residential development within 30 years unless an ongoing rezoning program is established.

The GARP 'Discussion Paper' has identified that growth will balance greenfield, township and infill development, in the right places, with well-timed infrastructure provision. In respect to 'Greenfield Development', the Discussion Paper identifies that master planning and upfront consideration of infrastructure and services is critical to success.

The GARP 'Discussion Paper' identifies four (4) main greenfield 'Investigation Areas' on the fringe of Metropolitan Adelaide for future housing, with these areas being based on the State Planning Commission's seven (7) identified land supply principles identified in the Paper. The areas proposed for detailed investigation extend from Adelaide's four (4) major transport spines with the intent to capitalise on ongoing government investment along these growth corridors.

This includes a 'north-west spine' that begins at the south end of the Port Wakefield Highway stretching northwards from Buckland Park (including the Walker Riverlea development) to Two Wells. Importantly, the GARP 'Discussion Paper' identifies the investigation areas along the north-west spine do not extend as far as the towns of Dublin and Mallala. However, the Discussion Paper does identify that for Dublin and Mallala that:

“These towns will keep their own separate identity but may expand locally to support township function and growth”

The GARP 'Discussion Paper' also states that it will *'carefully plan and sequence growth and infrastructure to ensure timely access to services and amenities for new communities.'* and will:

“Build on existing infrastructure capacity in townships, where local councils have identified growth opportunities.

The GARP 'Discussion Paper' identifies that the SPC considers Greater Adelaide's growth should be guided by the following four (4) outcomes:

- A Greener Wilder and climate resilient environment;
- A more equitable and socially cohesive place
- A strong Economy built on a smarter, cleaner, regenerative future
- A greater choice of housing in the right place.



5.5 The Circular Economy

The circular economy is a prominent focus for Green Industries SA. The *Green Industries SA Act 2004* incorporates the concept of circular economy as a guiding principle. The potential benefits of a circular economy in South Australia have been measured (Green Industries SA, 2017), which describes gains to be achieved in local job creation and reductions in greenhouse gas emissions by 2030.

'*South Australia's Waste Strategy 2020-2025*' outlines actions that can contribute to the development of a circular economy – that is, an economy that realises the best or full value from products and materials produced, consumed and recovered in South Australia.



6. SITE ANALYSIS

6.1 Agricultural / Horticultural Assessment

The condition of the subject land is described as 'degraded' and is considered to have low production potential.

Importantly, the subject land is not identified as a 'Primary Production Priority Area' (PPPA) by PIRSA, with the majority of the site located within a 'Non-Primary Production priority Area' Area' (comprising that part of the subject land within the 'Rural Zone') or an 'Excluded Area' (comprising that part of the subject land within the 'Conservation Zone') (refer to **Figure 6.1**).

Developed by Primary Industries of South Australia (PIRSA), PPPAs have been identified in response to Planning Strategy directives including the 30 Year Plan for Greater Adelaide to identify 'areas of primary production significance' (Government of South Australia, 2010, P. 106).

PPPA's have been identified with reference to a variety of factors including "land capability, industry investment and land use, access to water, climatic considerations (including anticipated climate change) and any local conditions that give rural land special significance for primary production" (Location SA, 2010).

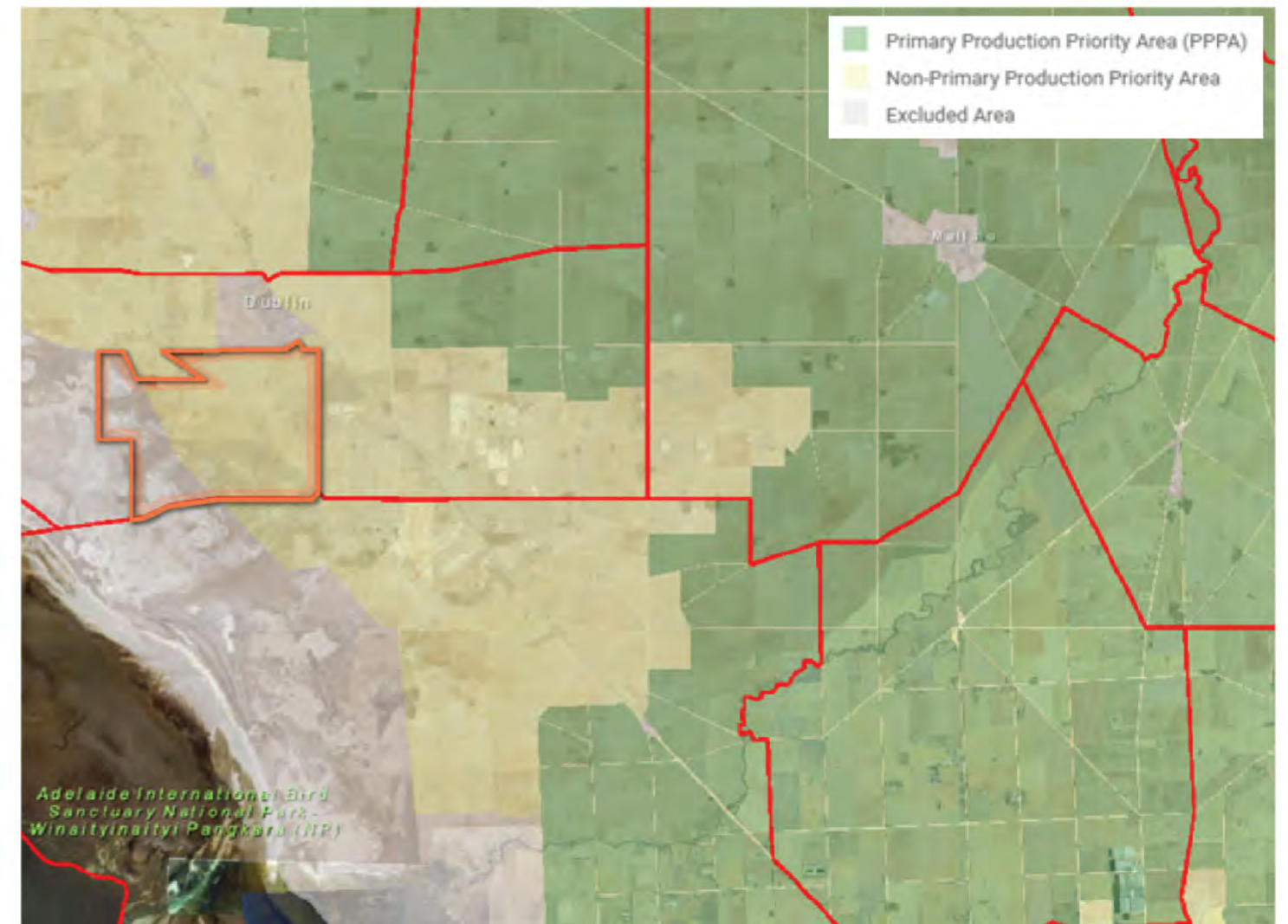


Figure 6.1 – Primary Production Priority Areas (Source: Location SA)



6.2 Cultural & European Heritage

An analysis of likely Aboriginal heritage was undertaken by 'Australian Cultural Heritage Management' (ACHM) in 2012 (refer **Appendix 2**). This included a review of the 'Central Archive' and the 'Register of Aboriginal Sites and Objects', the 'South Australian Museum Collection Database', and the consultant's own corporate archives.

The study also reviewed Aboriginal cultural heritage report and literature relating to mythologies and oral histories. The review work identified that the land is within the Kurna Native Title Claim area but that no specific Aboriginal Cultural Heritage sites have been identified on the subject land (refer to **Figures 6.2** and **Figure 6.3**).

In 2023, this research has been supplemented by updated research as part of the preparation of the Program for Environment Protection and Rehabilitation (PEPR) for the mining tenement. The new research has reached the same findings.

Notwithstanding that there are no known sites, the area is identified as one of historic activity for the Kurna People and therefore artefacts scatters, campsites and human remains may be encountered. Aboriginal heritage sites have a high degree of association with water features and thus the Samphire Coast area and the coastal dunes would provide the most likely areas for finds. All Aboriginal

artefacts, sites, or remains are protected under the *Aboriginal Heritage Act 1998* (AHA).

It is an offence under Section 23 of the AHA to damage, disturb or interfere with an Aboriginal site, objects or remains unless written authorisation from the Minister for Aboriginal Affairs and Reconciliation has been obtained.



Figure 6.2 - Kurna Peoples Native Title Boundary

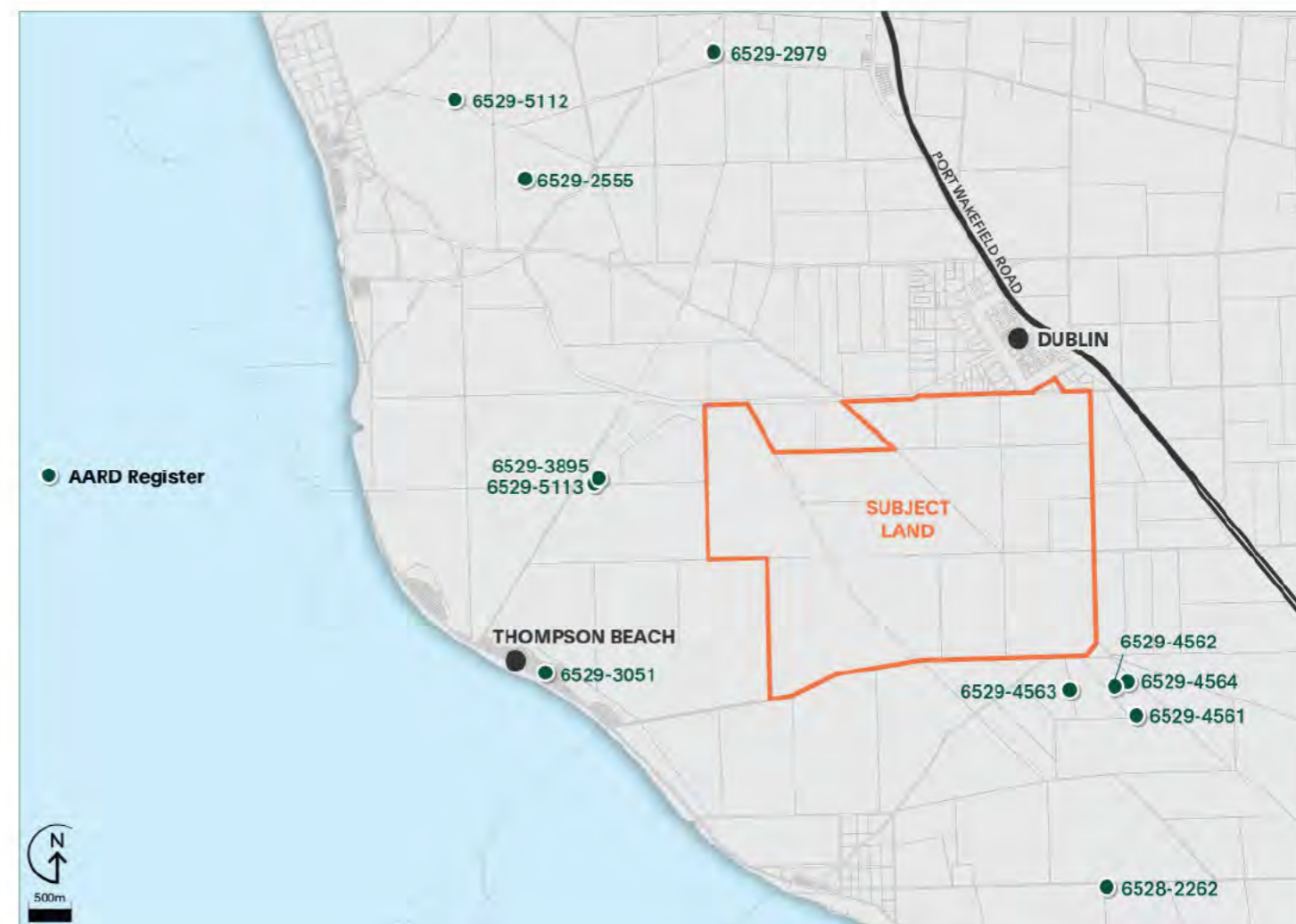


Figure 6.3 - Cultural Heritage Sites (within 5km of subject land)



6.3 Environment (Flora & Fauna)

An extensive flora and fauna analysis was undertaken by EBS Ecology in 2012 (refer Appendix 2). This analysis identified eight (8) broad vegetation associations within the overall landholding, of which three (3) were dominated by native flora species and five (5) were dominated by introduced flora species.

Figures 6.4 and 6.5 below identifies the vegetation associations and vegetation condition across the subject land.

The entire 'Conservation Zone' to the west of the subject land comprises intact samphire and saltmarsh vegetation subject to tidal inundation (refer to **Figure 6.4**). The area is of very high ecological

value. The saltmarsh and sapphire communities are in good condition and resemble probably pre-European structure, forming part of a much larger intact system. This zone is of high importance for fauna, including the state vulnerable Slender-Biller Thornbill and a range of shorebirds. Provided a suitable buffer is provided to the 'Conservation Zone', the proposed development should not have significant impact on the coastal vegetation or shorebird habitat.

Further investigations are recommended if development is to have any impact (direct or indirect) on the Conservation Zone, including further

survey of the 'Conservation Zone' to ensure all vegetation/areas of conservation significance are recorded.

For the remainder of the subject land, the study identified native vegetation was highly modified and of very poor condition, limited to scattered low shrub land that has persisted in grazing paddocks. The vegetation is highly degraded with high levels of disturbance and exotic species. In general, this area of the subject land is of low habitat value and is likely to support a low diversity of fauna species common to the area.

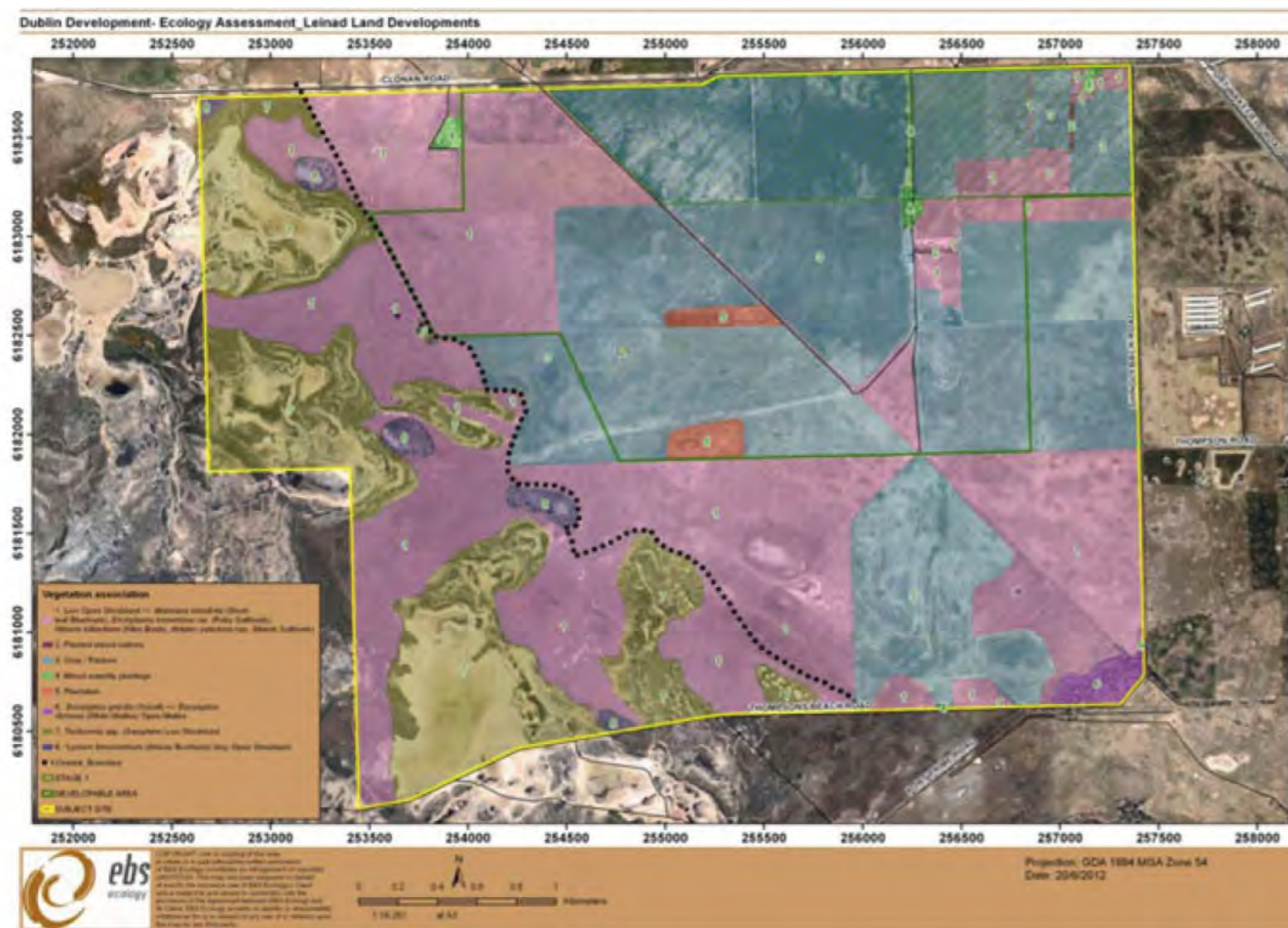


Figure 6.4 - Vegetation Associations

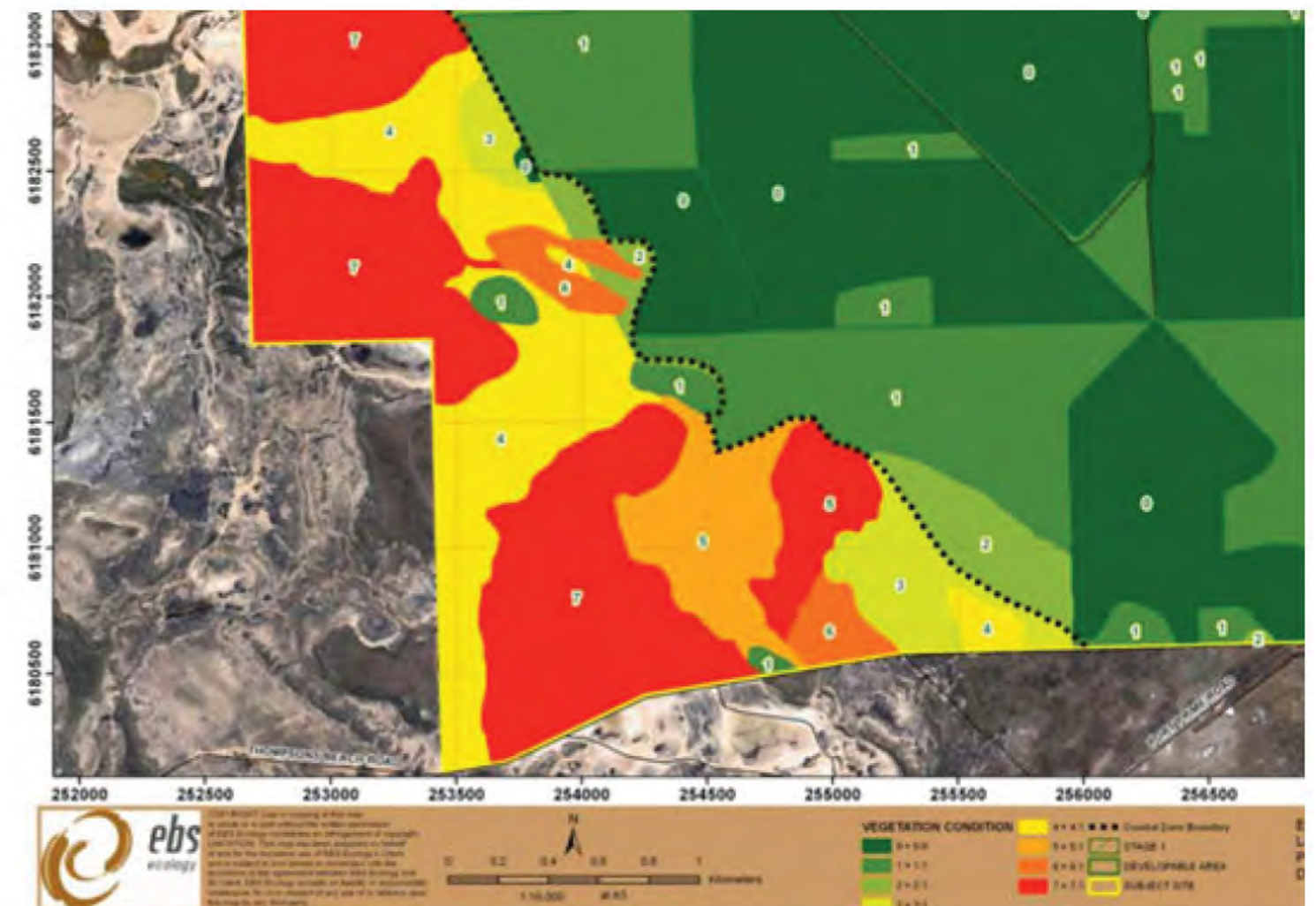


Figure 6.5 - Vegetation Condition



6.4 Environmental Site History

A partial 'Stage 1 Environmental Site History' Report was prepared by TMK Engineers in 2012.

The purpose of the site history research was to assess the potential for gross or widespread soil contamination to exist as a result of current or previous land uses. The site history report was also prepared to establish if there are any significant impediments to the proposed future redevelopment of the site for residential purposes from a site contamination perspective.

The report indicated that the risk of significant or gross soil and/or groundwater contamination across the whole site, that would be likely to preclude the use of the site for future residential development, is considered to be low.

There are no known new activities since this report was undertaken that would lead to the likelihood of any new site contamination sources arising. Given the date that these investigations were undertaken it is acknowledged that further steps in the planning process (including rezoning and/or future development applications for more sensitive land uses) is likely to require additional and more detailed site contamination investigations.

6.5 Bushfire

The subject land is located within the 'Hazards (Bushfire – General Risk) Overlay' and 'Hazards (Bushfire – Medium Risk) Overlay' of the Planning and Design Code.

On this basis, it is envisaged that future development will be required to incorporate required bushfire protection measures.

As development proceeds and the subject land transitions to urban and employment land, potential may exist for the Country Fire Service (CFS) to reassign the bushfire risk of at least portion of the area and therefore the extent of bushfire prevention measures which needs to be encapsulated in future development applications. This will be subject to future negotiation and consultation with the CFS.



6.6 EPA Buffer / Separation Distances

There are land uses and activities that interface with the subject land that require that application of suitable 'buffer' separation distances to both protect future urban development from external impacts (i.e dust, noise, chemical spray drift etc) and also ensure the protection of existing lawful non-urban uses (i.e primary production, intensive animal keeping and Defence operations etc) from encroachment by urban development.

The overall subject site interfaces with agricultural and horticultural activities, intensive animal keeping, the IWS Waste Treatment and Composting Facility as illustrated on **Figure 6.6**.

6.6.1 Chicken Broiler Farm

The adjoining Poultry farm comprising a broiler farm is a Licenced EPA activity (EPA Licence Number 51462 in favour of Dublin Farm Pty. Ltd).

Enviroscan (refer **Appendix 3**) have undertaken an analysis of the minimum required buffer separation distance from the existing poultry farm to inform the potential location of sensitive receptors in association with the proposed future southern expansion of the Dublin Township.

The adjacent licensed broiler farm has an approved capacity for 420,000 birds.

As a preliminary estimate, the Enviroscan report has recommended an approximate minimum buffer distance of 1,000m (representing an odour exposure up to ≤ 4 OU).

Further assessment is recommended at future stages of site planning, depending on the location of sensitive land uses on the subject land.

The land within the buffer separation distance is appropriate for other uses, including employment land.



6.6.2 IWS Waste & Composting Facility

The IWS Waste Facility is Licenced for both 'Composting Works' and as a 'Landfill Depot' (EPA Licence Number 51568 in favour of 'Pelican Asset Co Pty Ltd.'). The waste management facility is also permitted to receive and dispose of low-level contaminated waste as well as the treatment and disposal of high-level contaminated waste.

In accordance with the publication 'Evaluation distances for effective air quality and noise management' prepared by the EPA in August 2016 and updated in January 2023, a buffer evaluation distance of 500m is recommended for a landfill facility that disposes of waste to land whilst a buffer evaluation distance of 1,000m is recommended for composting works of greater than 200 tonnes/ year.

On this basis, a conservative separation distance of 1,000 metres has been applied to this composting Works facility and landfill Depot (refer to **Figure 6.6**)

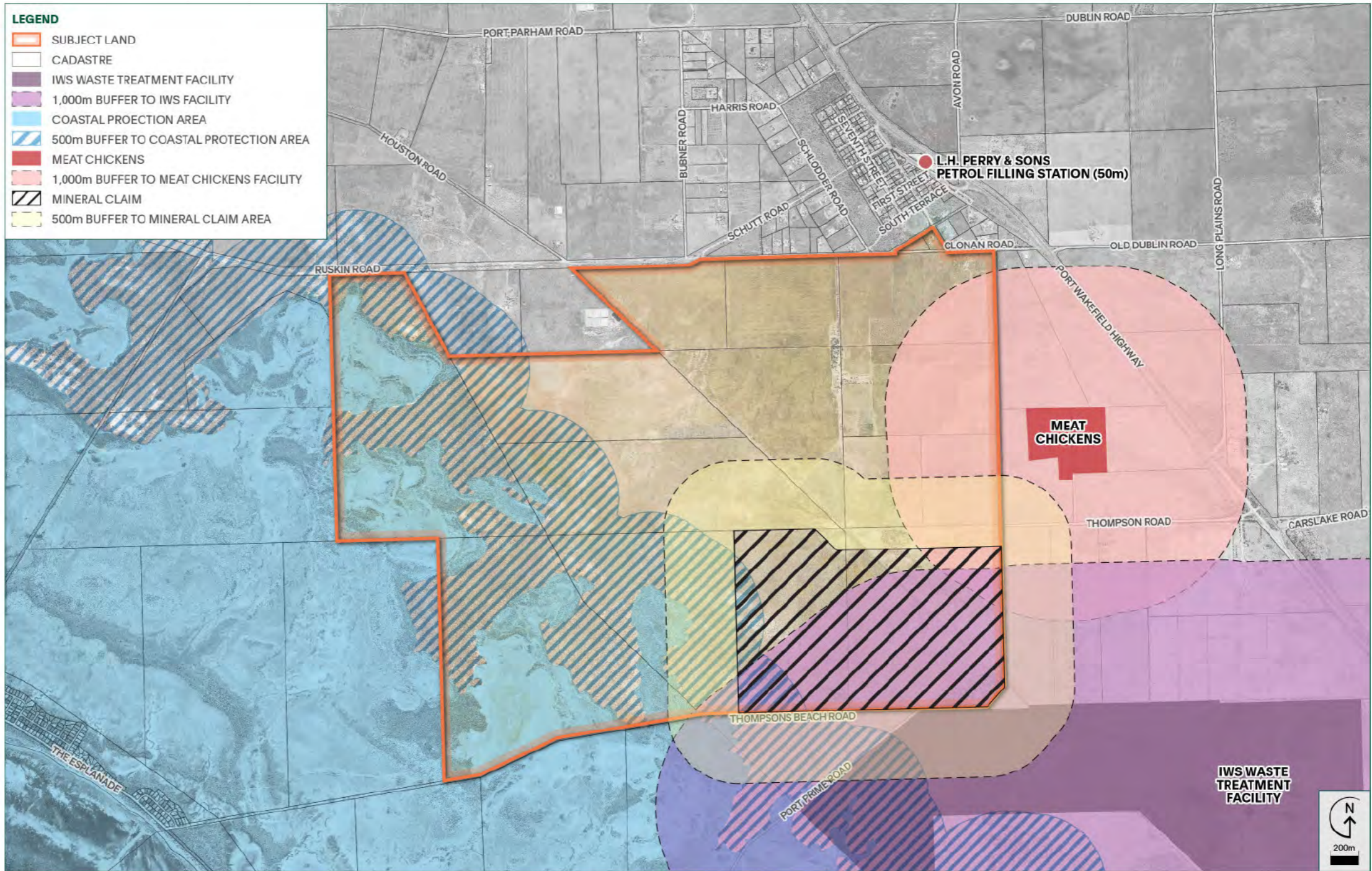


Figure 6.6 – Buffer/Separation Distances

6.7 Social & Community Infrastructure

6.7.1 Human Service Requirements

Preliminary investigations have found that an additional population of 3,250 people (i.e. 1,300 dwellings with 2.5 persons per household) is unlikely to result in the need for:

- An additional primary school or high school;
- A public hospital facility in its own right;
- Community health facilities (potential for an outreach service in Dublin, with base likely in Two Wells);
- A library branch;
- A dedicated community centre;
- A dedicated police station;
- An ambulance station;
- A CFS Station (in addition to the existing CFS unit based in Dublin);
- An SES unit; or
- New sporting and recreational facilities within the current level of facility provision considered reasonably good (noting that however a playground could be added to the existing oval and court complex)

This population increase will likely create demand for local GPs and other medical practitioners, and possibly a child care centre. These services would be likely to be provided by the private sector on a commercial basis and could be located within the existing town centre or a local centre.

The population increase may also create demand for an aged care facility comprising 19 to 25 beds on a site of approximately 4,500m² (including car parking).

Any proposed development is likely to be affordable given the location of the subject land.

6.8 Servicing & Infrastructure

Historic background investigations undertaken have revealed the following:

6.8.1 Potable Water

Historic background investigations undertaken by Leinad and TMK Engineers have identified existing potable water services and infrastructure on the subject land.

Leinad is now working closely with Alano Utilities Pty Ltd ['Alano'] to plan and implement required infrastructure to service future development. This would include maintaining the redundancy of SA Water potable water assets and connections currently located on the site.

Alano upholds a strong focus on balancing the long-term needs of communities, industries, development groups and the environment. Alano is working closely with Leinad to ensure that the solution provided to service development fully integrates into the master plan for the *Dublin Green Circular Economy Precinct*.

Potable water currently exists onsite via multiple SA Water meter connections and Alano have confirmed that this existing infrastructure can be utilised to establish a new network to service the site on demand and as demand progressively increases.

The water meters are serviced by existing infrastructure installed by SA Water in the form of a 200mm high pressure water main running for approximately 500 metres along Clonan Road, immediately adjacent the subject land (refer to **Figure 4.8**).



Additional supply to the site comes from a 100mm diameter high pressure water main that dissects the site (from Houston Road down through the site and across to Port Parham) with multiple water meters connected and currently in use (refer to **Figure 4.8**).

If required, there is also an alternative option to utilise an existing 150mm water main running on Port Wakefield Road which could be extended if required (refer to **Figure 4.8**).

Alano and Leinad are establishing Development Agreements to ensure a commitment to required infrastructure assets and servicing that would be owned and operated by Alano.



6.8.2 Sewer

There is currently no non-potable recycled water supply on site, and SA Water will not be required to service the area in the future given the following potential systems to supply recycled non-potable water:

1. Treated waste water i.e. from a community waste water system (CWMS)
2. Treated storm water; and,
3. Combination of both treated waste water and storm water

Opportunities exist for water harvesting and re-use including the use of storm water for establishing and maintaining open space and recreational areas.

Adelaide Plains Council are likely to expect better water quality than the undeveloped site with the value of water required to match the Environmental Protection Authority (EPA) guidelines including the implementation of Water Sensitive Urban Design (WSUD).

A staged development approach will require the construction of temporary stormwater runoff control measures as part of the 'Construction Environmental Management Plan' to throttle and limit the amount of flow to downstream catchments (a temporary detention system can be utilised with a dual purpose for stormwater detention and as a sedimentation basin required during construction).

The Dublin Township is currently not connected to any formal wastewater collection scheme and new wastewater disposal infrastructure will be required for the proposed expansion and could comprise the following four (4) possible waste water collection systems:

- Vacuum;
- Pressure;
- Gravity; or
- A Community Wastewater Management Scheme (CWMS)

Alano will provide services to the Dublin Green Circular Economy Precinct with connection into an internal wastewater treatment facility network to be constructed on site.

Alano and Leinad are establishing Development Agreements to ensure a commitment to required infrastructure assets and servicing that would be owned and operated by Alano.

The Dublin Township will have an opportunity to connect to the wastewater collection scheme established at the *Dublin Green Circular Economy Precinct*.

6.8.3 Power

Historic background investigations undertaken by Leinad and TMK Engineers have identified the existing power supply services and infrastructure on the subject land (refer to **Figure 4.8**). These existing services will be supported and augmented with a micro grid that will be established on site, once there is enough on-site demand. This will close off the circular economy at peak operation and occupancy, maintaining the redundancy of SA Power network provision on site.

An overhead 19KV High Voltage Power line has been established on the site which enters the site from Ruskin Road to service the existing farming operation and the dwelling (refer to **Figure 4.8**). The 19KV line provides sufficient supply for likely future site requirements.

If required, SA Power could provide a connection to an 11KV High Voltage Power line at the junction of Thompson Road and Thompsons Beach Road.

In addition, there is an alternative option to connect to a 11KV High voltage Power line established along the northern boundary of the subject land along Ruskin Road and Clonan Road.

Irrespective, there is potential to have multiple transformers connected at the developers cost.

An upgrade can be undertaken at the developers cost for three phase power. SA Power Networks have previously advised a 66kV power line located approximately 8 kilometres to the east of Dublin, across the Port Wakefield Highway, could be extended to service the subject land.

In all situations, the developer can connect up to 4.9MW of power back into the grid with the infrastructure available.

6.8.4 Gas

There is currently no gas connection to the site. The township of Dublin is currently serviced by individual gas bottles. The construction of a bioreactor as part of the *Dublin Green Circular Economy Precinct* may create opportunities for on-site gas supply generation, subject to further investigations.

6.8.5 Telecommunications

NBN connection is available to the site. Leinad are establishing Development Agreements to ensure NBN connection is provided to the site for each stage of the future site development. New connection and extensions for individual stages of the development is to be achieved at the developers cost.

Importantly, The circular economy model will generate on-site electricity and water, as described in Section 2 above, which will reduce infrastructure augmentation as a result of localised generation and distribution of power and potable water.



6.9 Traffic Impact Assessment

6.9.1 Movement & Access

Traffic analysis has been undertaken by MFY (refer **Appendix 4**) in respect to the prospective development of the site including SIDRA intersection modelling and liaison with the Department for Infrastructure and Transport.

Based on this analysis, MFY have confirmed that the implementation of the proposed development and vision for Leinad will not result in significant investment in transport infrastructure. In particular, MFY have confirmed that:

A review of the volumes at the existing southern intersection of Port Wakefield Road and the Dublin service road (Sanders Avenue) identified that the subject land could accommodate 1,300 dwellings (up to a design year of 2040). Given that the current future road design year is 2041, it is reasonable to suggest that there would be no road works required at the intersection for this growth. The current channelised left and right turn lanes comply with Austroads criteria for 110km/h at this intersection. The intersection does not currently include acceleration lanes and the additional northbound traffic associated with the dwellings will not change the functionality of the existing turning movement at this intersection.

The balance of the subject land is identified for a potential mining tenement and employment (industrial) areas. These land uses should be accessed via Thompson Road to minimise any impact on the Dublin township created by large vehicles. The Thompson Road/Port Wakefield Highway intersection has been designed to cater for large commercial vehicles and currently provides access to and from the existing chicken farm.

Additional volumes generated by development in the employment and mining area will be dependent on the ultimate land use. As an example, however, the potential mining tenement is forecast to generate in the order of 20 trips a day which is very low and would have a negligible impact on the operation of

the intersection. Further, the existing low volumes at the intersection are low and there is therefore significant spare capacity. Accordingly, while each land use application would be subject to a separate assessment, there is potential for the intersection to cater for the envisaged development

6.9.2 Public Transport

Given the existing and proposed future population densities and thresholds within the Dublin Township, it is unlikely that public transport would extend to Dublin in the foreseeable future. Notwithstanding, the planned growth in the northern suburbs of Adelaide (including Buckland Park and Two Wells) may bring regular services closer and/or may provide critical mass for a private operator to extend services.



7. MARKET ANALYSIS

7.1 Residential Land Supply

As outlined in **Section 5.4.2**, additional residential land supply of 100,000 homes is anticipated to be required to meet projected growth by 2051.

The Adelaide Plains Growth Strategy & Action Plan (GSAP) (refer **Section 5.3.1**) identifies population growth in low, medium and high scenarios across the Council area. The medium scenario includes growth that is known and factors in population growth within Dublin (refer to **Figure 7.1**).

The GSAP identifies the Dublin township has the potential for around 4,000 residents/1,500 dwellings in total. The report confirms that if land under the control of Leinad to the south of the existing township was fully developed by 2040, this would lead to a total population in Dublin of around 4,500 people.

The increase in population growth at Dublin supports the Adelaide Plains Council's envisaged three (3) town structure (see **Section 5.3.1**), and will result in the following positive outcomes to the Dublin township:

- Supports the provision of a range of new services and facilities that will be convenient and accessible to the population within the township and surrounding areas;
- Includes opportunities for future community and recreational facilities, health and education services and employment;
- Provides opportunity for transport upgrades and new services to the community; and
- Facilitates improved connection to the smaller coastal and rural settlements located north-west of Dublin, due to an increase in services and opportunities within the township.

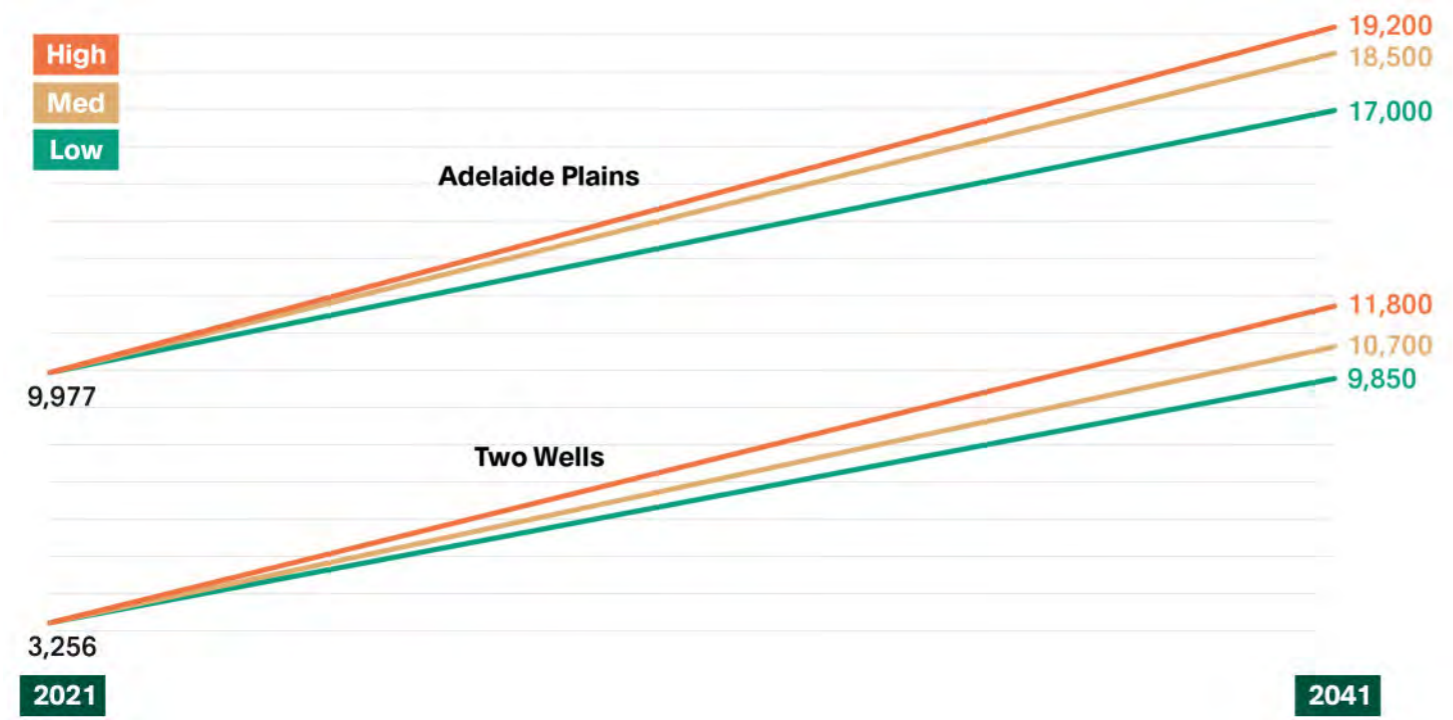


Figure 7.1 – Growth Population Scenarios (Source: Adelaide Plains Council, GSAP)

7.2 Employment Strategy / Opportunities

7.2.1 Retail

The future growth of the township of Dublin will provide critical population mass to support commercial and retail investment within the town centre and will assist to improve the aesthetic quality and commercial strength and viability of the Dublin mainstreet.

It is anticipated that the majority of additional retail floor space would be accommodated within the existing Dublin Town Centre with perhaps a single local centre supporting and serving the new growth south of Ruskin Road. This is likely to be combined with additional non-retail uses in the town centre including small scale medical facilities (i.e GP Practice, dental practice, etc.) and small scale commercial and office uses (i.e. real estate agents and accountants etc.).

As identified in **Section 4.2.2.1**, approval was previously granted to Leinad for the development of a new Neighbourhood Centre comprising a supermarket, five (5) speciality shops and a total of 1,700 sqm of retail floor space on Old Port Wakefield Road within the town centre of Dublin. If supported by future township growth, Leinad would seek to apply to obtain/extend and/or enact this consent (or similar) to reinforce the primacy of the Dublin Main Street and support, facilitate and underpin the future growth and expansion of the Dublin township.



Figure 7.2 – Approved Neighbourhood Centre on Dublin Main Street (Development Application DA No. 312/17/2014)

7.2.2 Employment Land

Deep End Services have undertaken an analysis of the future demand for employment lands including identifying the key sectors where growth is anticipated in the region and an estimate of the likely area of land to be required for long-term development (refer to **Appendix 5**).

Deep End have advised that there is a strong case for a significant proportion of the 1,373-hectare Dublin land holding to be designated for employment uses.

The land can accommodate a range of employment uses and processes not suited to, or priced out of, the smaller and more expensive industrial sites in Edinburgh Parks which are targeting more intensive manufacturing, food processing and warehouse and logistics operations.

Dublin has attractive attributes for larger scale, low intensity uses which can leverage:

- Location with access from along Port Wakefield Highway with short travel times back to the workforce and industrial support services of Outer North Adelaide;
- Access to nearby rail corridors with loading facilities;
- The growing regional population including projected growth in the Adelaide Plains local government area;
- Emerging interest in Green Circular Economy projects and processes stimulated by South Australia's investment in renewable energy generation with ready regional sources of biomass and other inputs;
- Strong linkages to the agricultural sector of the Northern Plains, the renewable energy and infrastructure projects of regional South Australia (to the north & west) and to a lesser extent, Defence contracts and related work.

- Support from Adelaide Plains Council and their planning strategy based on a three towns service model including residential growth at Dublin; and
- Affordable and larger land parcels.

The sectors which appear to be well-suited to the site based on the location and expressed interest from occupiers are:

- The circular processes of a local Green Economy including innovative farming and food production methods, recycling industries, energy production from biomass, fertiliser harvesting and distribution and links or interdependencies with residential and industrial uses;

- Manufacturing, fabrication or logistics for the renewable (wind, solar and hydrogen) energy sector in metropolitan and regional SA;
- Defence and infrastructure contractors or sub-contractors requiring more land extensive sites; and
- Manufacturing or transport uses hauling long, wide or high freight to destinations using Port Wakefield Highway.

The Dublin employment land may differentiate itself from metropolitan industrial areas as it attracts uses requiring flexibility, mobility and even temporary facilities for operations to be scaled up and down as industry demand requires, as well as a permanent

location for businesses seeking a competitive edge in entry pricing.

There is no model-driven formula at this stage for the calculation of industrial land needs for a per-urban location such as Dublin. Notwithstanding based on the expressions of interest received to date, larger land area requirements, existing Strategic Employment land reserves to the east, the long term nature of the estate and the need for an area to develop a critical mass and provide a range of land options, **up to 400 hectares of employment land** can be justified and planned for. This is less than half the area of the existing 'Strategic Employment Zone' east of Dublin.



8. DUBLIN URBAN FRAMEWORK PLAN

8.1 Site Opportunities & Constraints

The following key site opportunities and constraints have been identified:

- The subject land is a large, consolidated land holding allowing opportunity to develop and deliver a structured and master planned community that is not obstructed by fragmented ownership or control;
- There is opportunity to provide for township expansion to support the growth and viability of the Dublin Township that is conveniently located to the nearby towns in the Adelaide Plains region and the northern suburbs of Adelaide;
- 1,300 dwellings can be accommodated to support the expansion and viability of the Dublin township without the need for additional significant services and infrastructure, including major upgrades to the intersections with the Port Wakefield Highway;
- There is a strong case for up to 400 hectares of new employment land to suit a range of employment uses and processes not suited to, (or priced out of), the smaller and more expensive industrial sites in other locations, with Dublin having attractive attributes for larger scale, low intensity uses aligned with circular economy processes, the renewable energy sector, Defence and manufacturing or transport uses hauling long, wide or high freight using Port Wakefield Highway.
- The subject land is of sufficient size to provide for generous buffers to existing adjacent land uses and activities which will protect the ongoing operation and existing use rights of these adjacent uses and enable the creation of a high-quality living environment for future residents. The employment areas within the subject site can also act as buffer separating future housing from existing EPA licenced activities - maximising the efficient use of land;
- The topography is suitable for urban development (noting that proposed mining operations on site could generate resource which can be utilised to created desired site levels for required falls across the balance of the 'Dublin Park' estate to facilitate appropriate stormwater management);
- The existing condition of the subject land is generally 'degraded' and it is considered to have low primary production value and potential;
- The land is largely unconstrained and free from topographical and environmental constraints, excluding the area along the western boundary of the land within the existing 'Conservation Zone'.
- There are no state or local heritage places on the land, or previously record Aboriginal Sites or Objects;
- Based on site history research, the risk of significant or gross soil and/or groundwater contamination across the whole site, that would be likely to preclude the use of the site for the proposed residential development, is considered to be low; and
- The site and township is likely to have adequate infrastructure capacity and/or augmentation capability to service and support an expanded township noting that limited township expansion of an additional 1,300 dwellings would not give rise to additional significant transport, social or community infrastructure in support of township growth. In addition, the circular economy model will generate on-site electricity and water, which will reduce infrastructure augmentation as a result of localised generation and distribution of power and potable water. Notwithstanding SA Water connections exist on site currently and multiple options exist for connections to SAPN.

8.2 Dublin Urban Framework Plan

The Urban Framework Plan (See **Figure 8.1**) has been developed through an iterative process and responds to:

- Leinad's vision for this strategic land holding;
- Consideration of identified site opportunities and constraints;
- Preliminary feedback of the Adelaide Plains Council ;
- Statutory and legislative requirements;
- Preliminary expert and technical inputs.

The preferred site structure plan will retain the separate identify of Dublin with expansion to support the township function and viability including the following key features that together will achieve the vision of the Dublin Green Circular Economy Precinct:

- The creation of a new 400 hectare Employment Precinct to support larger scale, low intensity employment related land uses;
- Provision of 1,300 new residential allotments adjoining the existing Dublin Township to support the ongoing vitality of the township and provide a local supply of workers for the Employment Precinct whilst providing sufficient separation to enable the ongoing operation of existing land uses and activities including Defence, a licensed poultry farm and the IWS Waste Treatment Facility;
- A new mine that will extract resource which can be backfilled with genuine Waste Derived Fill (WDF) waste;
- Walking and cycling connections to the existing Dublin Township and adjacent Bird Sanctuary utilising open space and biodiversity corridors;
- A green network of open space within the expanded township to link with the historic existing parkland belt of the Dublin township and support local amenity, stormwater drainage and water quality treatment;
- Utilising the existing natural features of the adjacent coastal location and Bird Sanctuary as part of the wider open space network promoting wellbeing through connections to nature; and
- Separating industrial and commercial freight and vehicle movements from the proposed housing and through road network design avoiding convenient travels paths through the existing Dublin Township.

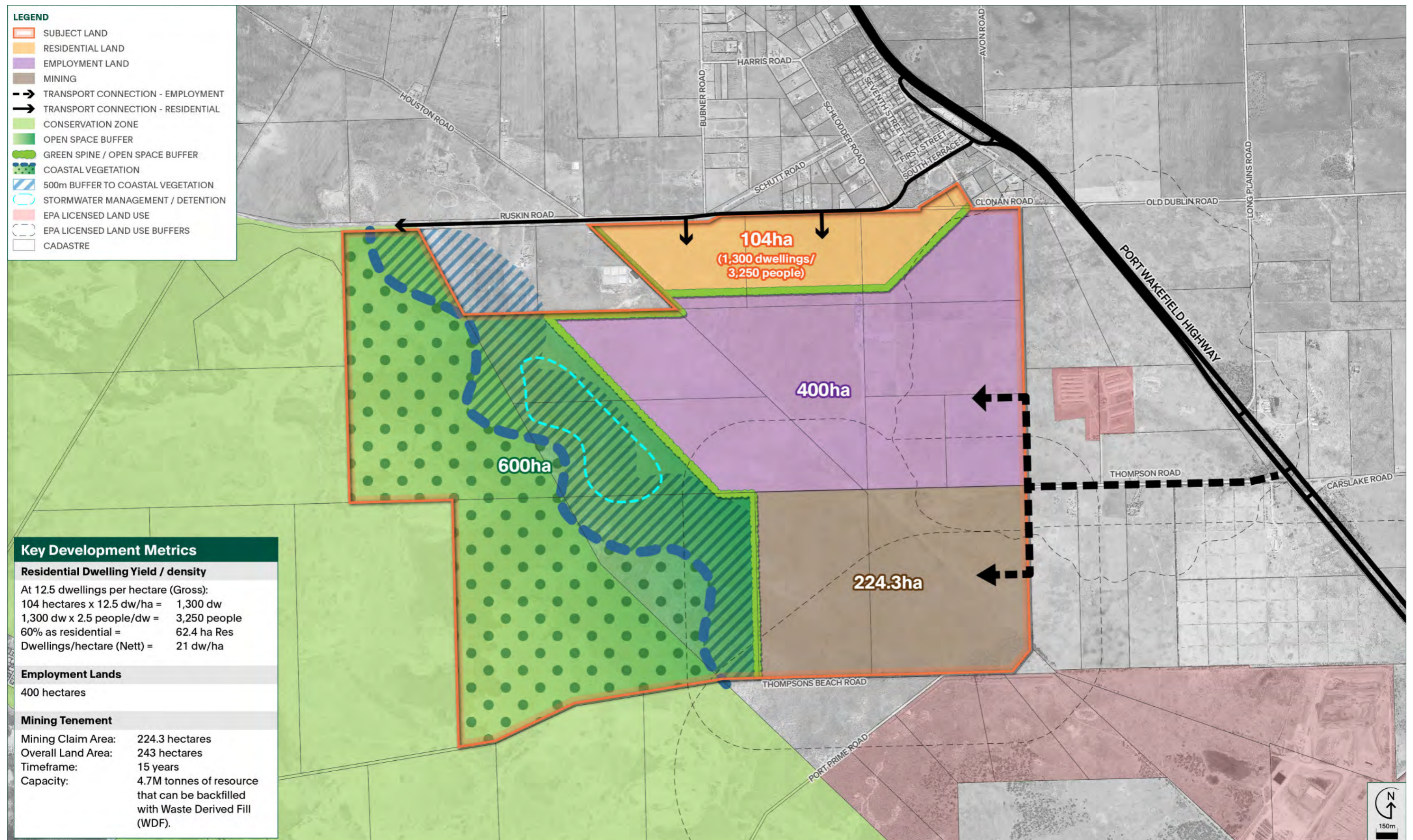
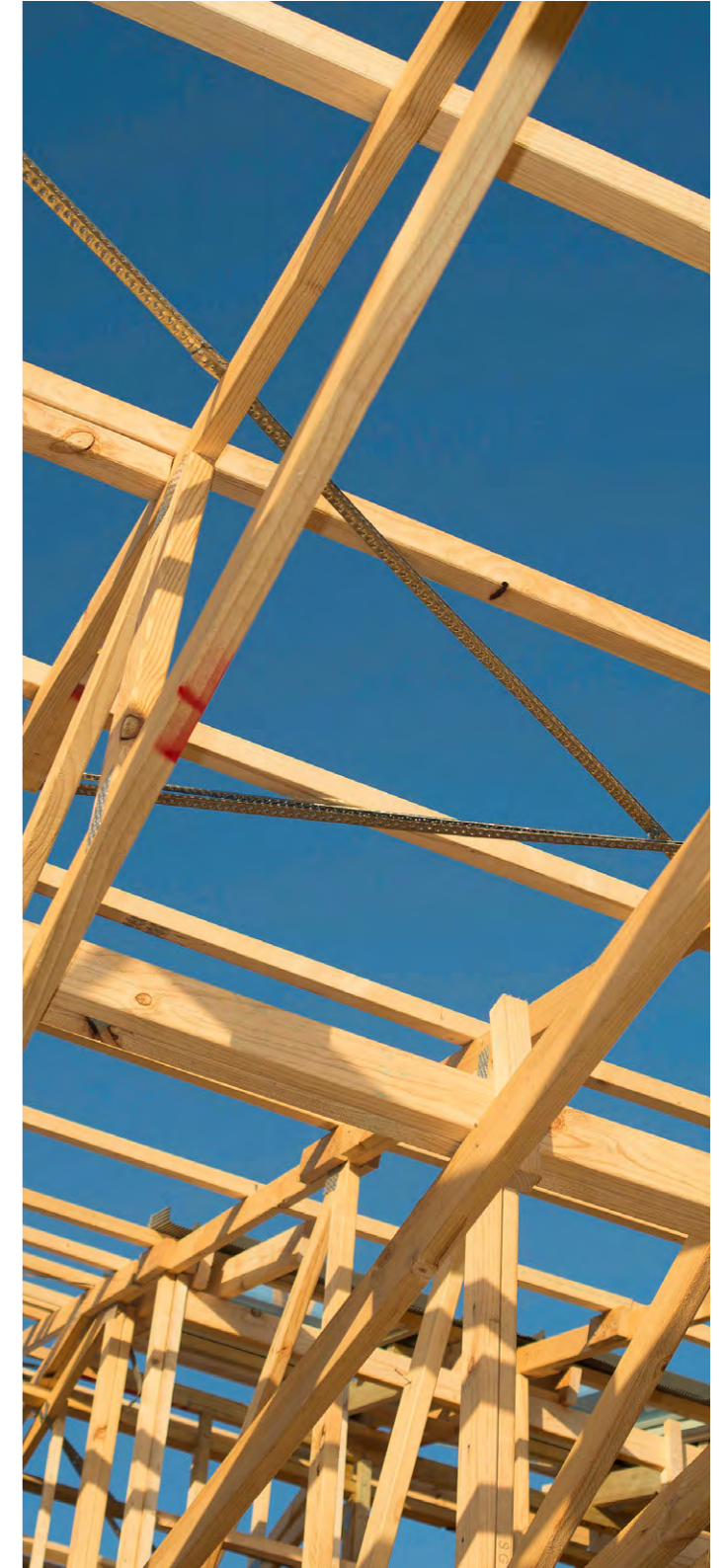


Figure 8.1 – Dublin Urban Framework Plan

9. IMPLEMENTATION

The Urban Framework Plan will be implemented through:

- Identification of land as a future housing and employment growth area in the Greater Adelaide Regional Plan;
- Review of the Environment and Food Protection Area (EFPA) boundary to allow for limited growth for the expansion of the Dublin Township;
- Code Amendment/s to rezone the land for its intended purposes; and
- Agreements for the delivery of necessary infrastructure and services.



10. REFERENCES

ABBREVIATIONS

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Adelaide Plains Council, Strategic Plan 2021-2024

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Government of South Australia, SA Waste Strategy 2020-2025

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Greater Adelaide Regional Plan – Discussion Paper

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Environment Protection Authority, Evaluation distances for effective air quality and noise management, Updated January 2023

<https://www.parks.sa.gov.au/parks/adelaide-international-bird-sanctuary-national-park>

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Planning and Design Code, Version 2023.14 / South Australian Property and Planning Atlas

URPS, Allied Food Industries Land Supply Study, July 2017

ACHM	Australian Cultural Heritage Management
AHD	Adelaide Height Datum
ABS	Australian Bureau of Statistics
ADF	Australian Defence Force
AHA	Aboriginal Heritage Act 1998.
CFS	Country Fire Service
CPTED	Crime Prevention through Environmental Design
EFPA	Environment & Food Production Area
EPA	Environment Protection Authority
EPBC	Environment Protection and Biodiversity Conservation
GARP	Greater Adelaide Regional Plan Discussion Paper
GSAP	Adelaide Plains Growth Strategy and Action Plan
P & EE	Proof and Experimental Establishment Port Wakefield
PEPR	Program for environment protection and rehabilitation
PIRSA	Primary Industries & Resources South Australia
PPPA	Primary Production Priority Area
SPC	State Planning Commission
SAPOL	South Australian Police
SES	State Emergency Services

Abstract white line art on a light beige background. It includes a large semi-circle on the left, a horizontal line extending from its base, and several geometric shapes like a trapezoid and a parallelogram on the right.

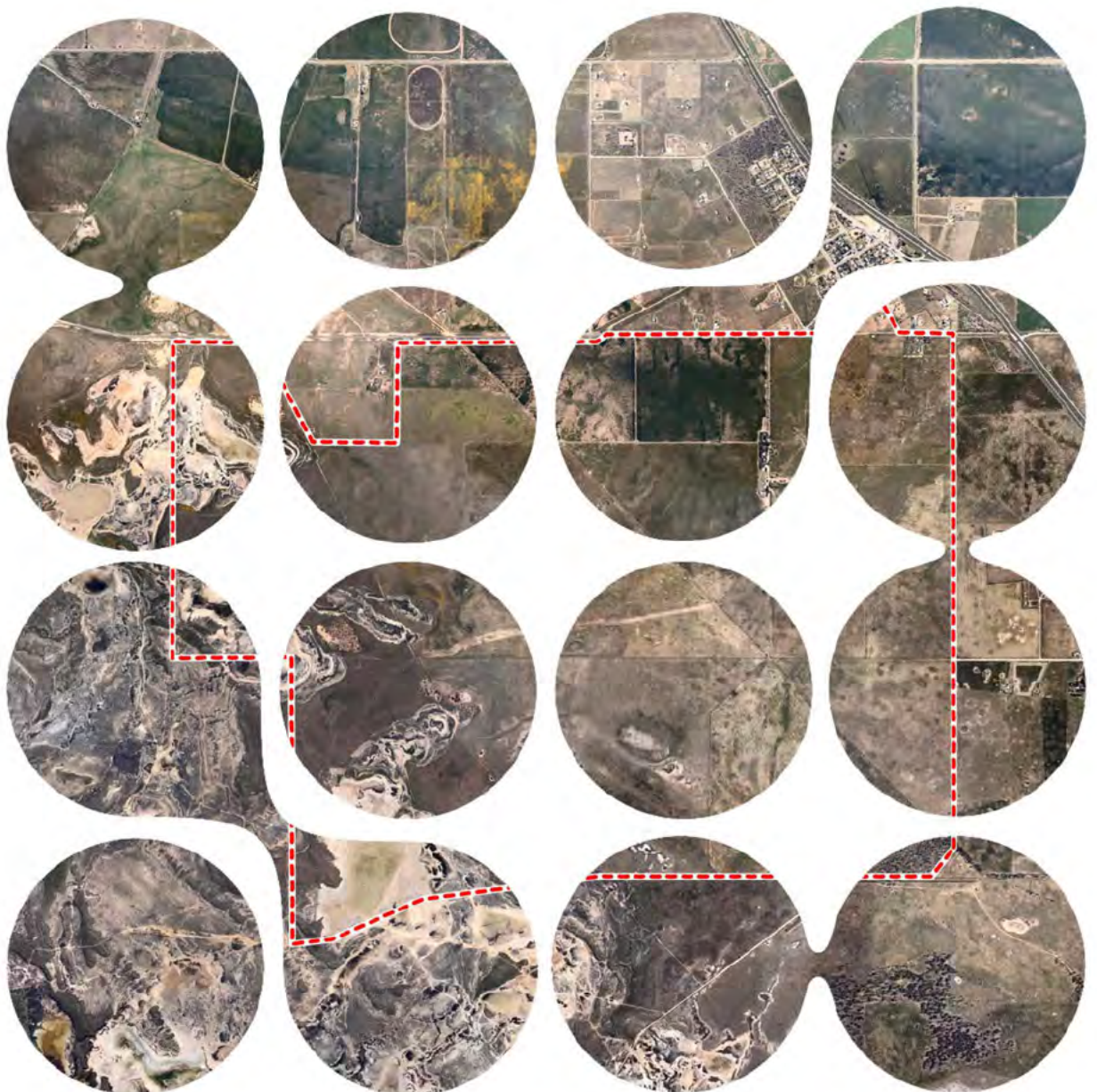
APPENDIX 4

Preliminary Land Economics Assessment, Deep End Services, October 2023

Dublin Urban Framework Plan

Preliminary land economics assessment

Prepared for:
Leinad Land Developments (Dublin) Pty Ltd
26 October 2023



Deep End Services

Deep End Services is an economic research and property consulting firm based in Melbourne. It provides a range of services to local and international retailers, property owners and developers including due diligence and market scoping studies, store benchmarking and network planning, site analysis and sales forecasting, market assessments for a variety of land uses, and highest and best use studies.

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Dublin preliminary land economics advice - 26 Oct 2023
26.10.23

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This report should be read in its entirety, as reference to part only may be misleading.

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1

Introduction

Dublin is a small town of less than 200 people on the Adelaide Plains approximately 50 km north of central Adelaide (refer Figure 1) .

Leinad Land Developments (Dublin) Pty Ltd (Leinad) controls about 1,450 hectares of land off Port Wakefield Road, directly south of the township (refer Figure 2).

Leinad is looking to prepare an Urban Framework Plan for its land holding which includes, amongst other things:

- An extension of the township for 1,300 dwellings in Stage 1 with further expansion potential in later stages.
- Employment lands (200 ha) for commercial and industrial purposes with an emphasis on uses and processes of the Circular Green Economy.
- Up to 220 ha set aside for mining purposes, subject to approval.

Leinad has sought preliminary advice to identify and demonstrate the future demand for Employment Lands in the area including key sectors where growth is anticipated in the region and an estimate of the land area likely to be required for long term development.

This preliminary report is a high-level review of the industrial land supply market in Adelaide's Outer North and the key sector and drivers that will influence the demand and take-up rates for an industrial estate at Dublin.

Figure 1—Regional context



X

Source: Deep End Services; Planning SA

Figure 2—Regional context



Source: Deep End Services; Planning SA

2

Proposal

2.1 Regional context

Dublin is located approximately 50 kilometres north of the Adelaide CBD, 35 kilometres south of Port Wakefield and 15 kilometres west of Mallala.

The town is bypassed by Port Wakefield Highway, a State Government declared road which connects Adelaide to the Yorke Peninsula (population 30,250), the Eyre Peninsula (pop. 59,000) and to the Northern Territory and Western Australia. It is a 4-lane divided arterial from its interchange with the North-South Motorway and the Northern Expressway at Bolivar through to the Augusta Highway – Copper Coast Highway junction, north of Port Wakefield.

Dublin and the Leinad land holding are situated within the Adelaide Plains Local Government Area and Planning SA's broader *Northern Plains & Barossa* planning region at Bolivar which extends from Dublin to the Barossa Valley including Nuriootpa and Tanunda.

The *Outer North* planning region lies to the south extending from Two Wells in the west to Gawler in the north and Elizabeth in the south. The region is currently home to much of Adelaide's current and future employment land and is a key area for analysis.

The *Greater Adelaide Regional Plan Discussion Paper* investigated four areas outside, or on the fringe of, metropolitan Adelaide for future housing and employment growth – one being the north-western spine which begins at the southern end of Port Wakefield Highway past the Riverlea development and north of Two Wells but stopping short of Dublin and Mallala.

It concluded that development should continue as planned for Riverlea and Two Wells and that Dublin and Mallala "...will keep their own separate identity but may expand locally to support township function and viability".

The Adelaide Plains Council published its *Growth Strategy and Action Plan* in May 2023. The key themes of the document are:

- The population of Adelaide Plains is set to double in the next 20 years.
- Most of the growth will be at Two Wells (progressing) and Mallala.
- Council supports further possible growth at Two Wells and Dublin, with these requiring investigations, rezoning, lifting of the Environment and Food Production Area, infrastructure planning and provision.
- Two Wells could ultimately grow to 13,400 people while Dublin could increase from 400 to 4,500.
- A three town service model comprising Two Wells, Mallala and Dublin with 12 coastal and rural settlements.
- Noting decisions enabling planned growth at Two Wells and Mallala, Dublin and the surrounding areas in the north west of the Council area are a focus for more investigations.
- Any decision to release land at Dublin requires State Government approval as the surrounding land lies within the Environment and Food Protection Area (EFPA). The State Planning Commission five yearly review of the EFPA is next due in 2026.

2.2 Existing Strategic Employment zone

An area of approximately 840 hectares straddling Carslake Road east of the Dublin township is zoned Strategic Employment. According to the SA Industrial Database approximately 339 hectares is occupied with three large scale uses including:

- Dublin Clean Grain (grain storage)
- South Australian Livestock Exchange (auction yards)
- Carslake Road quarry.

2.3 Concept

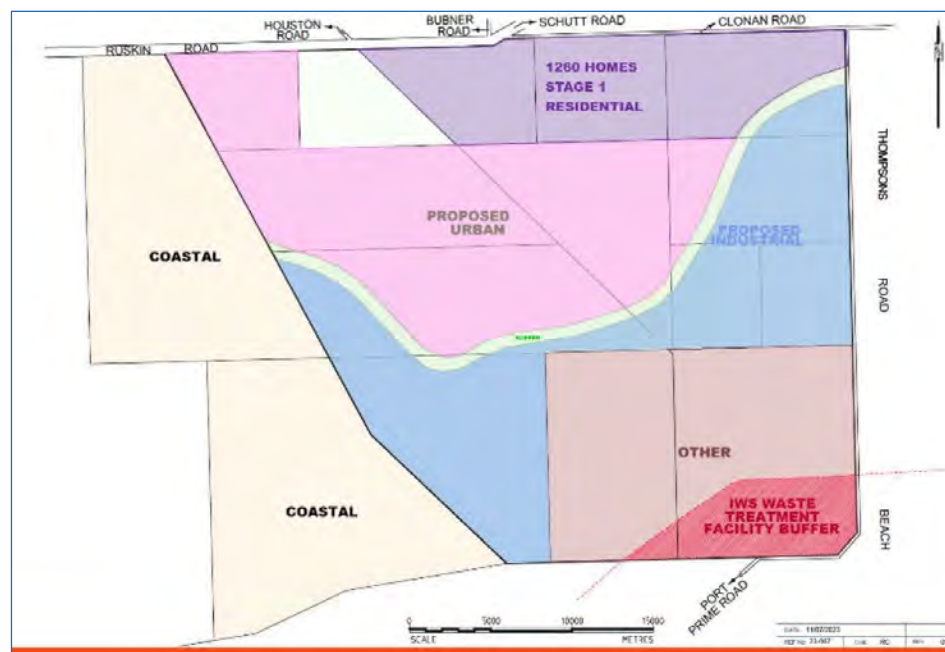
The vision is to develop 'Dublin Park' as a new master planned community including South Australia's first Circular Green Economy precinct.

The proposal is an integrated mixed use development (refer Figure 3) comprising:

- A residential community extending the township boundary south of Ruskin Road. The initial stages would be 1,300 dwellings with up to 5,000 in the long term.
- Industrial and employment land with opportunities on large lots for primary production, farming enterprises adopting vertical growing techniques, waste to energy projects including a 6.5 MW bioreactor, renewable energy support industries, infrastructure and defence support industries, manufacturing, logistics and warehousing.
- Mining opportunities facilitated and supported by sustainable infrastructure, energy, water and wastewater provision. A mining licence (indicated by 'Other' in Figure 3) is proposed over 220 hectares to act as a buffer at the interface with the existing IWS Waste facility. The Mining licences will extract approximately 4.7M Tonnes of clean fill and limestone from the site which can be backfilled with Waster Derived Fill (WDF) in line with the 'SA Waste Strategy'.

Figure 3— Dublin Park concept plan

Source: Leinad



2.4 Potential tenants

Leinad has provided details of a range of potential tenants who have shown interest in the proposed Dublin Park employment land.

Eight potential tenants / operations have expressed interest in a combined 74 hectares of land (refer Table 1). It represents a significant proportion of the approximate 200 hectares of proposed land and suggests an underlying shortage of available land elsewhere and / or perceived benefits of Dublin over other opportunities.

The average land requirement of the listed tenants is 9.3 hectares. Three of the eight tenants potentially require 12 hectares or more.

Table 1—Dublin Park expressions of interest

Source: Leinad

Potential tenant	Land requirement (ha)
Vertical Farming Vegetables	20.2
Vertical Farming Algae	20.2
Plastic and Specialised Recycling Technology	12.1
General Electric Vehicle Manufacturing	8.1
Bioreactor	4.0
Fertiliser Storage and distribution	4.0
Liquid CO2 and Hydrogen Distribution	4.0
Olive Oil Pressing Plant	1.2
Total	74.1
Average	9.3

2.5 Site advantages

The Dublin Park land holding presents a range of location and economic advantages for potential employment zone tenants including:

- Established employment uses (grain storage and sale yards) on Carslake Road to the east.
- Large individual lot sizes (up to 40-50 hectares) not readily available in the Outer North.
- Cheaper land for start-ups and low cost operations needing larger sites.
- Close proximity to Adelaide to service a metropolitan customer base, draw on skilled workers and access materials, transport companies and other industrial support services.
- Port Wakefield Highway access to South Australia's renewable power and infrastructure projects in regional areas, generally north or west of Adelaide.
- Delivery of long, high or wide loads via B-doubles or road trains to field sites in regional South Australia via Port Wakefield Highway and other routes without transiting through Adelaide.
- Within 30 minutes' drive of waste streams and biomass crops on the Adelaide Plains and Barossa Valley.
- A rail hub at Mallala 15 km east of Dublin or 30 minutes' drive to the SCT Intermodal Freight Terminal at Penfield.
- 45 minutes' drive to the inner harbour, Port Adelaide shipping and container yards and connecting freight networks and defence industry sites at Osborne.

3

Demand drivers

The key demand drivers for the take up of industrial land at Dublin will be:

- Employment growth in the industrial sector and specifically the Outer North.
- A lack of supply and land value increases for certain industrial categories.
- Growth in the renewable energy sector in areas north and west of Adelaide.
- Growing interest and investment in biomass energy production.

3.1 Population growth

The SA Government publishes population forecasts by Local Government Area. The last available set predates the 2021 Census with 2021 being an estimate only and growth projections based on known or estimated parameters in 2019.

While dated, the forecasts show the four local government areas across the Outer North and Adelaide Plains planning districts were projected to grow from **161,920** people in 2021 to over **205,000** in 2026.

The forecasts show only a small increase in the population of Adelaide Plains over the next 15 years. Council's *Growth Strategy Plan (2023)* however has adopted a medium series forecast based on actual and anticipated developments in its townships. The 2041 population estimate by Council is about 18,000 people. If delivered, it could significantly increase the regional population level.

Table 2—
Population
projections

Source: SA
Government

Local Government Area (LGA)	Population projection for 30 June.				
	2016	2021	2026	2031	2036
Adelaide Plains (DC)	8,912	9,425	9,598	9,759	9,924
Gawler (T)	23,352	26,770	30,004	33,583	37,246
Barossa (DC)	24,210	25,373	26,481	27,532	28,428
Playford (C)	90,549	100,356	109,691	119,671	130,080
Total	147,023	161,924	175,774	190,545	205,678

Irrespective of the final forecast, there will be significant growth in the region's population which will lead to higher demands for employment land for population serving activities.

3.2 Outer North employment

In 2021, Plan SA released its latest "*Land Supply Report For Greater Adelaide*". Part 3 of that report addresses employment land detailing the existing and planned future supply by planning region.

Jobs growth for employment land within the Outer North region of Adelaide is detailed by broad industry category (refer Figure 4). Between 2020 and 2030 employment is forecast to grow from 6,400 to 9,100 (+2,700 or +42%). Most of the growth (81%) is expected to be in the Traditional and Population Serving sectors.

Figure 4—Jobs growth in Outer North

Source: Plan SA - Land Supply Report For Greater Adelaide, June 2021



3.3 Industrial land absorption

The *Land Supply Report* provides a stocktake of employment land at June 2020 and employment land consumption between 2008 and 2018. The key findings for the Outer North region were:

- The region had 1,214 hectares of zoned employment land, of which 893 hectares or 74% was occupied. Based on 6,400 people employed in the occupied zones in 2020, there was approximately 7.2 employees per hectare.
- 151 hectares (or 12% of the 1,214 ha.) of zoned land was vacant, accounting for just under 8% of all vacant employment land in Greater Adelaide. Of the identified employment precincts in the Outer North, Edinburgh North had the largest vacant land supply with 50 hectares.
- 170 hectares (or 14%) of zoned land at Roseworthy is currently used for primary production purposes (other use). It is important to differentiate this from vacant land, given future development would require higher levels of investment and infrastructure before becoming 'market ready'.
- 33.4 hectares of employment land was consumed in the region between 2008 and 2018. Whilst consumption rates are noticeably lower than other regions, it is anticipated demand will increase steadily across the next 10 years.
- Recent evidence suggests land sales within the Edinburgh North precinct have increased over the last couple of years. Completion of the Northern Connector,

which is directly accessible from the Northern Expressway, is a key driver of demand, providing more efficient access to key trade gateways and distribution networks.

Looking forward, should the number of people working on employment land within the Outer North region grow by **2,700** in the next 10 years (refer Figure 4) then an additional **377** hectares will be required over the next decade, based on 7.2 employees per hectare.

This requirement is in excess of the current vacant land stocks (151 hectares) and would draw on the future employment (but not zoned) land stock of **1,732** hectares. These reserves make up 95% of all future (unzoned) employment land in Greater Adelaide with most of the land supply within the Edinburgh Parks area.

The 2020 report based on 2018 data confirms that the Outer North has a relatively small supply (or choice) of vacant zoned employment land which could also have limitations for future occupiers by virtue of the land area and orientation of available lots.

3.4 Agent demand research

Research by CBRE of the Industrial & Logistics sector in Q2 2023 indicates that Adelaide's industrial market has performed well for land developers and owners. The report concludes:

- An industrial building vacancy rate of 0.9% across Adelaide has resulted in continued rental growth during 2023.
- Growth in super prime net rents is highest in the Outer North (refer Figure 5).
- Strong growth in land values is due to a lack of serviced industrial zoned land released to market across Adelaide's industrial precincts.

Figure 5—Super prime asset financial indicators 2Q23 by precinct

Source: CBRE

	Super Prime Net Rents (AUD / sqm)			Super Prime Average Incentives			Super Prime Average Market Yield		
	2Q23	Q-o-q Change	Y-o-y Change	2Q23	Q-o-q Change	Y-o-y Change	2Q23	Q-o-q Change	Y-o-y Change
North West	130	4.0%	8.3%	10.0%	Stable	Stable	5.50%	+50bps	+123bps
Outer North	115	4.5%	21.1%	15.0%	Stable	Stable	5.63%	+35bps	+125bps
West	140	Stable	Stable	10.0%	Stable	Stable	5.13%	+25bps	+98bps
South West	130	4.0%	8.3%	10.0%	Stable	Stable	5.50%	+50bps	+123bps

3.5 Circular Green Economy

The circular economy is a system that prioritises the preservation of energy, labour, and materials by promoting reuse, remanufacturing, and recycling. In accordance with strategic directions of Council and Government, Dublin Park will transform an underutilised site into South Australia's first green industrial, residential, and clean energy economy using sustainable technologies (refer Figure 6).



At the time of the report, bio-energy plants had been installed in SA at:

- various SA Water wastewater treatment plants with anaerobic digestion.
- Landfill gas – various small scale electricity generation facilities.
- Thomas Food International - Murray Bridge anaerobic digestion.
- Tarac Technologies – Nuriootpa anaerobic digestion.
- AR Fuels – Largs Bay.
- Forestry processing - Mt Gambier heat and power generation.
- Swimming pool heating - Mt Gambier.
- Sita-Resource Co. – Wingfield anaerobic digestion.

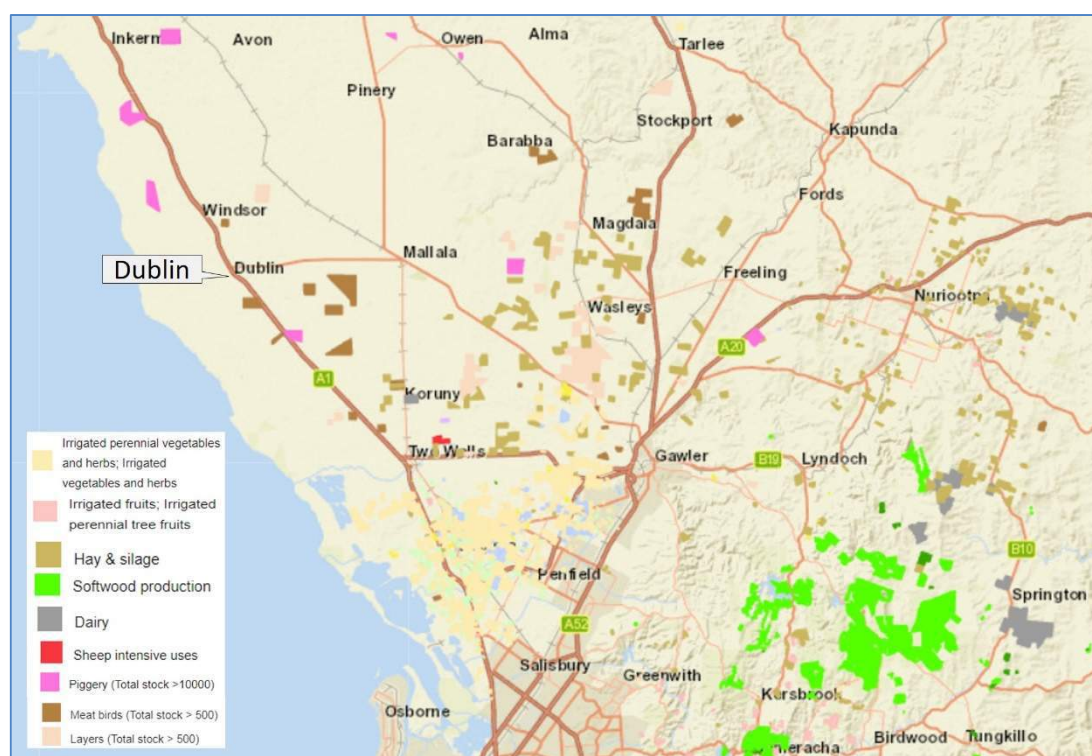
The report found that local investigations indicate numerous potential supply and demand opportunities, mostly around localised waste materials available and "end of line" demands. In addition to existing biomass potential supplies there is opportunity to grow alternative vegetative crops.

Capturing local waste streams or growing complementary plants species locally is an advantage to delivering cheap energy alternatives. Logistically, the shorter the collection and delivery distances of waste or purpose grown crops to the energy plant, the lower the energy production costs. As a typical rule a production distance of no more than 40 - 50km radius from the energy plant is preferred.

Figure 7 reproduces a section of the current Bio-energy Roadmap for South Australia published on the SA Energy & Mining website. It shows the Dublin site has access to a wide range of waste streams within 50km including horticulture, broadacre farming, pig farming and poultry.

Figure 7—Bio-energy roadmap for SA waste streams

Source: Government of South Australia. Energy & Mining.

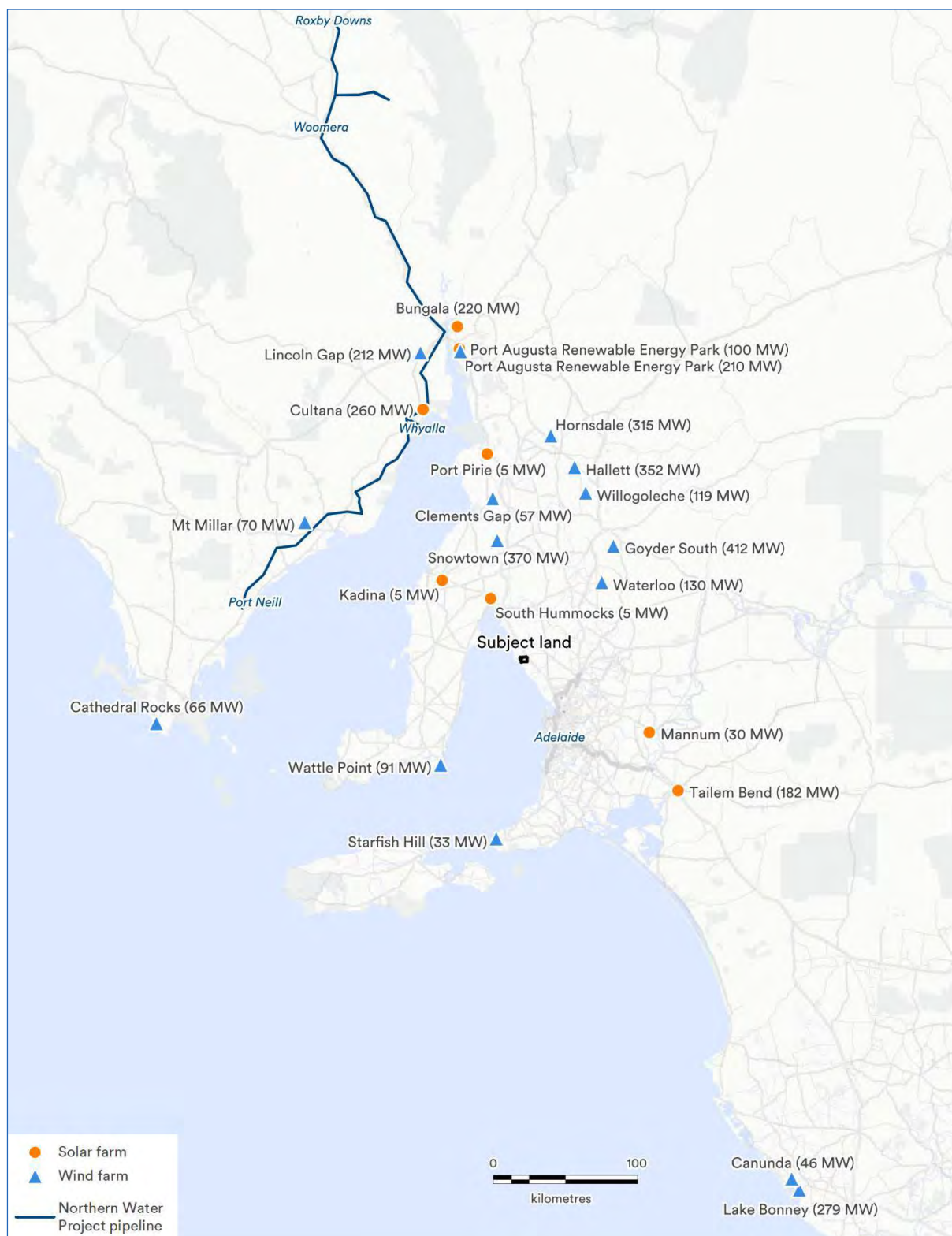


3.6 Renewable energy sector

South Australia generates about 70% of its energy needs from renewable sources. By 2025/26, the Australian Energy market Operator (AEMO) forecasts this could rise to 85%.

Figure 8 shows the distribution wind and solar farms in South Australia with 18 of the 23 sites north or west of Dublin Park where the Leinad land site could be an attractive option for component manufacturers, transporters, builders or servicing companies.

Figure 8—South Australian wind farms, solar farms and Northern Water Project pipeline



Source: Deep End Services

Wind farms

South Australia's abundant wind and solar resources have underpinned a rapid expansion of renewable energy generation in the past two decades. Wind power is the fastest growing source of energy in the world today and is poised to play an even greater role in future energy systems.

While wind provides a tiny fraction of global electricity supply, this source of renewable energy is expected to expand strongly. Transformational growth in electricity demand in South Australia is conceivable towards the end of the decade, making offshore wind farm development a potential reality. By 2030, South Australia is intending to be a net 100% renewable energy generator.

South Australia is also being targeted for investment in off shore wind farms because:

- The unique marine environment of the gulf waters provide an opportunity for offshore wind farms greater than 3 nm from the coast.
- Certain areas are identified as having strong wind resources and are relatively close to transmission lines and have suitable sea bed profiles.

There is no wind turbine manufacturing capability in Australia, representing an opportunity for South Australia to utilise its expertise in marine construction and engineering with access to suitable port areas. There appears to be just one manufacturer of blades in Australia, an assembly plant at Geelong and limited companies manufacturing wind towers – the nearest being Keppel Prince at Portland.

Solar farms

South Australia has some of the best solar resources in the world and a well-developed solar photovoltaic (PV) industry contributing over 20% of electricity generated in the state in 2020–21.

The state currently has over 2 gigawatts of solar PV generating capacity with one in three households having solar panels, four large scale solar farms and a range of smaller farms in operation. Other new farms and extensions to existing farms are proposed.

Figure 8 shows that six of the 8 solar farms in South Australia are north of the site reached from Adelaide via Port Wakefield Road.

Australia has only one small manufacturer of solar panels though the solar panels themselves are made in China.

Dublin Park is very well positioned to land to manufacture, assemble, transport or maintain components or services for the solar and wind renewable sectors with access to appropriate road networks.

3.7 Hydrogen Projects

The South Australian Government is investing more than half a billion dollars in hydrogen projects, shipping infrastructure and modelling tools for investors and developers. Led by the Department for Energy and Mining, the government will continue to deepen its engagement with key hydrogen industry stakeholders and coordinate the state's efforts in scaling up its hydrogen industry.

The Office of Hydrogen Power South Australia, established in 2022, is attached to the Department for Energy and Mining and reports to the Minister for Energy and Mining. It is responsible for overseeing the design and delivery of the Government's Hydrogen Jobs Plan, facilitating the Port Bonython Hydrogen Hub and industry development to accelerate South Australia's emerging hydrogen economy.

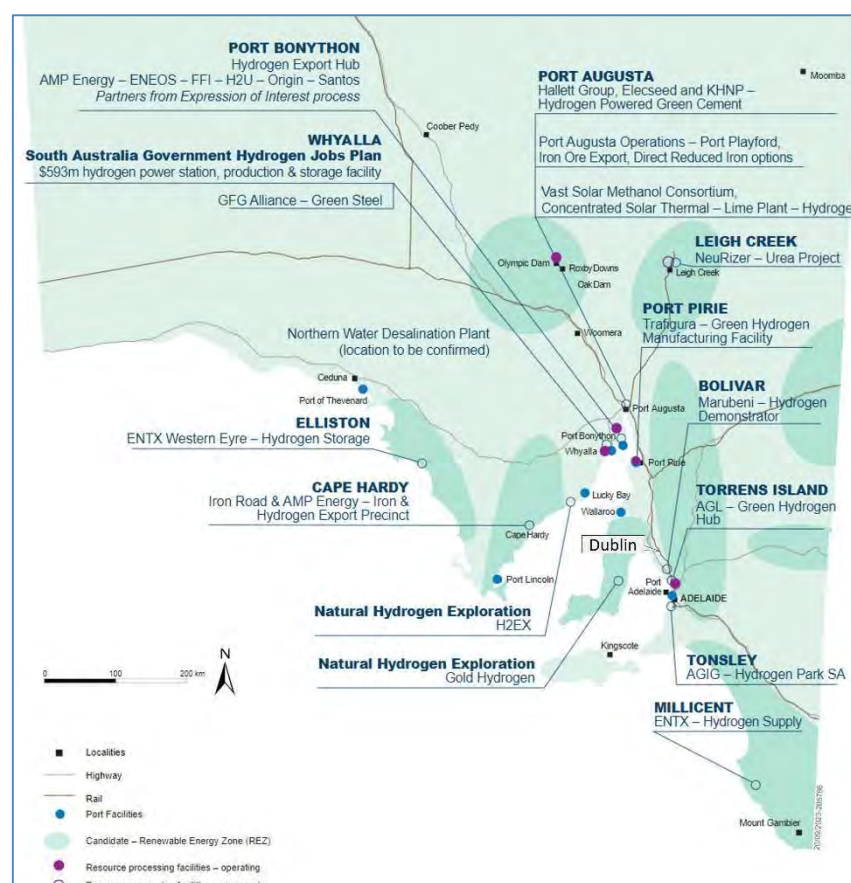
The priorities are:

- Building a world-leading grid-scale hydrogen power plant, electrolyzers and associated hydrogen storage in the Whyalla region.
- Facilitate development of South Australia's first large-scale clean hydrogen precinct for both export and domestic markets.
- Lead a coordinated approach to activate emerging hydrogen industry to realise the scale of opportunities from South Australia's leadership in renewable energy.

Dublin Park is well positioned as a logistical or maintenance precinct, as most of the hydrogen projects are located north or west of Dublin via Port Wakefield Road.

Figure 9—SA Hydrogen Projects

Source: Government of South Australia



3.8 Northern Water Project

Northern Water aims to provide a new, climate independent water source for the Far North, Upper Spencer Gulf and Eastern Eyre Peninsula regions of South Australia, to enable the growth of industries crucial to achieving net-zero goals, including the emerging green energy and hydrogen industries.

This would involve construction and operation of a 260ML/day seawater desalination plant (in two stages) in the Spencer Gulf connected to northern South Australia via up to 600km of pipeline. The proposed route is shown in Figure 8.

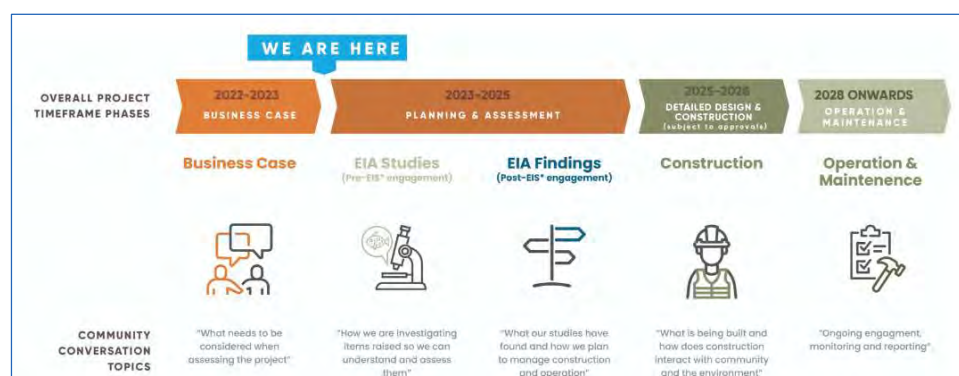
It will unlock economic growth in industries and regions that are crucial to achieving net-zero targets and will reduce reliance on precious water resources like the Great Artesian Basin and the River Murray.

The desalination plant and the transfer pipeline will require support infrastructure such as pumping stations, large storage facilities, flow regulation valves, control facilities, and staff amenities. Additional road connections, telecommunications lines, and electricity infrastructure will also be needed.

The timeline (Figure 8) with possible design and construction in 2025-2028 would align well with the rezoning of the Leinad land and possible establishment of construction or servicing companies.

**Figure 10—
Northern Water
project time frame**

Source:
www.northernwater.supply.sa.gov.au



3.9 Defence contracts

South Australia is at the forefront of the nation's defence and space industries. Renowned for its innovation, world-class research and development, and a highly skilled workforce, the state's defence industry has a history of delivering some of Australia's largest and most complex defence projects.

Defence SA is South Australia's lead government agency for all defence matters. Working closely with Defence and industry, Defence SA targets investment and expansion opportunities, drives and supports the delivery of major defence projects and facilities, and pursues the location of additional Defence units and capabilities within the state. Defence SA also plays a key role in supporting the Australian Government's strategic defence policy through increasing local industry participation and ensuring state-of-the-art infrastructure and a highly skilled, industry-ready workforce is in place to underpin defence projects.

Current construction and maintenance projects include:

- Arafura Class Offshore Patrol Vessels (Osborne Shipyard)
- Collins Class submarines maintenance and support (Osborne Shipyard)
- Hunter Class Frigate program (Osborne Shipyard)
- Hobart Class Destroyer combat upgrades (Osborne Shipyard)
- Short-range ground-based air defence system (Mawson Lakes)
- Stationing, support and maintenance of existing and newly acquired aircraft at RAAF Base Edinburgh

Adelaide is home to three dedicated defence industry precincts and some of Australia's most important Defence training, test and evaluation ranges. The three industry precincts – Osborne Naval Shipyard, Edinburgh Defence Precinct and Technology Park Adelaide – house clusters of innovative companies with a critical mass of defence expertise.

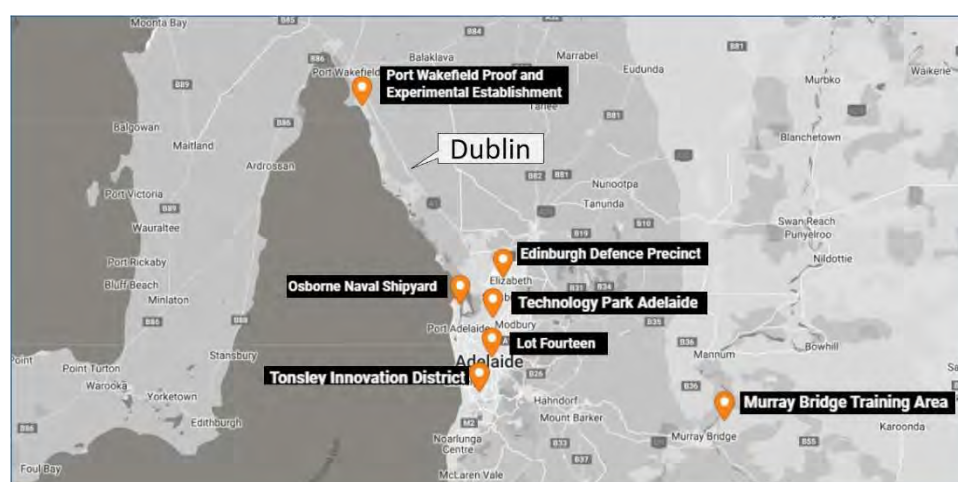
Australia's leading innovation hub, Tonsley Innovation Precinct, is also located in South Australia, and the nation's first creation and innovation neighbourhood, Lot Fourteen, which is in Central Adelaide.

Regional South Australia is home to the world's largest land-based test range – Woomera Range Complex and the critical Cultana Training Area. Each precinct is close to core Defence facilities and home to major Defence projects, fostering unique collaboration opportunities.

Dublin is well-placed to support Defence precincts and training facilities at Cultana Training Area, Port Wakefield, RAAF Edinburgh and Osborne Shipyard.

Figure 11—Defence industry precincts & training grounds close to Adelaide

Source:
defencesa.com



The following projects underway could be serviced by the proposed employment land at Dublin Park:

- Facilities to support Short Range Ground Based Air Defence.
- Cultana Training Area Redevelopment Phase 2.

- The Port Wakefield Proof and Experimental Establishment hosts weapons trials, munitions proofing and environmental testing for the Royal Australian Navy, Australian Army and Royal Australian Air Force.

4

Employment Land Supply

4.1 Employment land snapshot

The South Australian Government's Industrial Database was established to provide information on the use of industrial zones, show the availability of land for various industrial purposes, identify the location of various types of land for potential investors and ultimately, to ensure an adequate supply of suitably located and serviced land for industry and employment in Adelaide.

The mapped cadastre has been matched to the current zone and further categorised as vacant, occupied, other use or future (refer Figure 13).

'Other use' refers to land primarily used for primary production purposes while 'Future' refers to land identified within the *30 Year Plan for Greater Adelaide* as future employment land that is not currently zoned for employment.

As detailed in Table 3 there is currently **153** hectares of vacant land zoned employment in the Outer North region. Should the additional 377 hectares be required over the next decade as described earlier in this report, there is an apparent shortfall of 224 hectares of appropriately zoned land – although some of the Future land reserves could be rezoned and released for employment use.

The **153** hectares of vacant zoned land comprises 93 parcels with an average of **1.6** hectares per lot. Importantly, only four of the vacant parcels would meet the average size of 9.3 hectares identified for the potential tenants at Dublin Park and only two would satisfy the larger lot requirement of 12+ hectares.

This highlights a mismatch between the current vacant land stocks and the expressed interest by large land occupiers at Dublin.

Table 3—Outer North industrial land supply

Source: Government of South Australia

Hectares (ha)	Vacant	Occupied	Other use	Future	Total
Employment zone					
Employment	14	108	79	-	201
Employment (Bulk Handling)	-	39	11	-	50
Strategic Employment	139	454	376	40	1,009
Sub-total employment	153	602	466	40	1,260
Other zone					
Commonwealth Facilities	-	-	-	90	90
Recreation	-	-	-	70	70
Residential Park	-	-	-	12	12
Rural	-	-	-	224	224
Rural Horticulture	-	-	-	1,240	1,240
Sub-total other	-	-	-	1,636	1,636
Total	153	602	466	1,676	2,896

Further north, the Industrial Database shows only **22** hectares of vacant employment-zoned land in the Northern Plains & Barossa region (refer Table 4) comprising 39 parcels at an average of 0.6 hectares per lot. Critically, none of the vacant parcels would meet the average size of 9.3 hectares identified by prospective tenants at Dublin Park with only three lots of 1 to 4 hectares.

Table 4— Northern Plains & Barossa industrial land supply

Source: Government of South Australia

Hectares (ha)	Vacant	Occupied	Other use	Future	Total
Employment zone					
Employment	1	67	54	-	122
Employment (Bulk Handling)	1	70	4	-	75
Strategic Employment	19	507	569	-	1,096
Sub-total employment	22	644	628	-	1,293
Other zone					
Commonwealth Facilities	-	-	-	-	-
Recreation	-	-	-	-	-
Residential Park	-	-	-	-	-
Rural	-	-	-	-	-
Rural Horticulture	-	-	-	-	-
Sub-total other	-	-	-	-	-
Total	22	644	628	-	1,293

4.2 Waterloo Corner – Bolivar Corridor

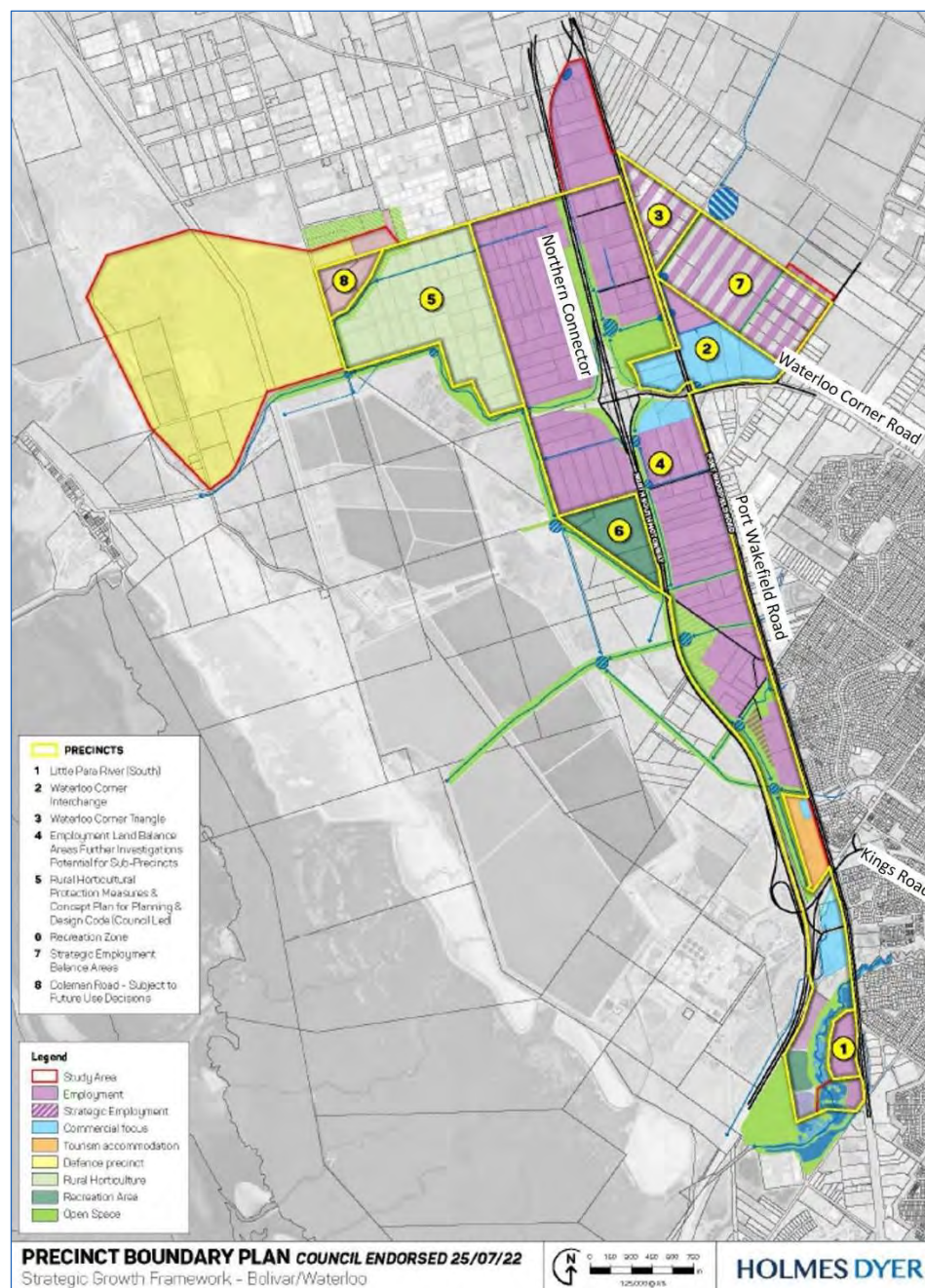
The City of Salisbury has prepared and exhibited a Strategic Growth Framework plan for 950 hectares of land adjacent to Port Wakefield Road and North South Motorway, known as the Waterloo Corner and Bolivar Corridor.

The plan identifies eight precincts (refer Figure 12) for potential Code Amendments to the Planning and Design Code reflecting the infrastructure needs, landowner feedback and development timeline of between 20 and 35 years. The potential area available for employment use is approximately 500 hectares.

Interest in the area for new employment land has been driven by the opening of the Northern Connector and research identifying a strong upswing in demand for commercial and industrial land across Adelaide with a lack of market-ready land available. The demand analysis supporting the plan assumes an average absorption of 15-25 hectares per annum informing the 20-35 year development timeframe.

**Figure 12—
Strategic Growth
Framework –
Bolivar Waterloo**

Source: Key
Findings Summary



In relation to the potential for the Bolivar / Waterloo land to undermine or weaken demand for employment land at Dublin, the following is noted:

- Bolivar – Waterloo is almost 40 km south of Dublin and inward of the Edinburgh Parks employment land. The area has different location characteristics to Dublin with the background research indicating it could command a premium price to Edinburgh Parks translating to a significantly higher land value per sqm than Dublin.

- The area is defined as part of the Inner and West Industrial market but will also compete with larger lots in the Outer North at Edinburgh Gardens. Employment land release, when it occurs, is likely to be in the smaller lot range – or less directly competitive with the Dublin.
- The realisation of large areas of the Framework Plan for employment use requires significant State Government, Local Government, other authorities and private landowner investment to deliver the necessary infrastructure upgrades. Infrastructure, co-ordination and site delivery may only happen in small precincts (as proposed) resulting in slow, relatively small land releases to the market.
- The area has a small subdivision pattern which will need to be consolidated in many areas to offer large lots or a multi-lot subdivision.

In conclusion, while the Bolivar- Waterloo Framework Plan will significantly increase the long term supply of employment land in the northern suburbs, its location, positioning, likely price and lot areas and extended time frame will little or effect on the prospects for Dublin.

4.3 Agent supply research

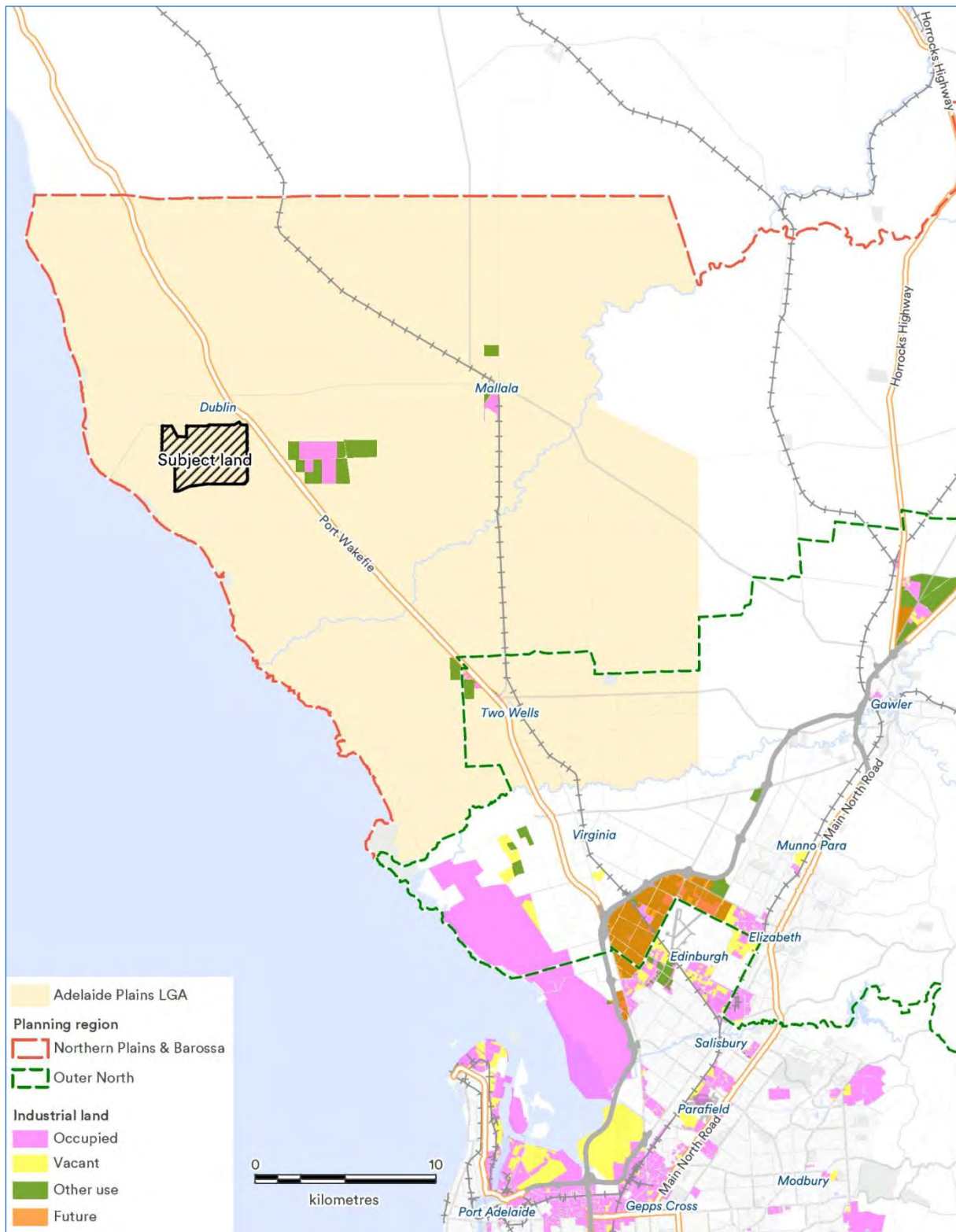
Research by CBRE of the Industrial & Logistics sector in Q2 2023 indicates that the industrial floorspace supply pipeline over 2023-26 is expected to average 65,000 sqm per annum, slightly below the 10-year average of 76,000 sqm.

This projected floorspace is expected to be added mainly in the Outer North (47% share) and North West (35% share) precincts.

Confirming the importance of the northern region of Adelaide, CBRE state that developments are focused within the northern precincts of Adelaide as these locations provide efficient connectivity to major road infrastructure, Port Adelaide for shipping, as well as the Osborne Naval precincts for current and future Defence projects.

Again, Dublin Park is well positioned to service the needs of these strategically important industrial land users.

Figure 13—Industrial land supply



Source: Deep End Services; Government of South Australia

4.4 Current industrial land listings

A review of the major on-line commercial sales web sites at Edinburgh Parks provides an indication of the industrial land areas now available for sale and whether, on size criteria, they meet the expressed interest for large sites at Dublin.

Table 5 shows the current on-line listings with approximately 36 parcels on the two main sites. The two subdivisions with multiple sites are at Kauma Avenue Edinburgh with 4 sites for sale by Renewal SA of between 2-3 ha each and at 506-524 Waterloo Corner Road Burton with a 27 lot subdivision of between 0.27-0.53 ha per lot. In both estates, larger lots can be aggregated although the proposed subdivisions suggest demand is in the smaller size range.

The aggregate of all land for sales is approximately 29 ha with the average lot size being **1.84 ha**.

**Table 5—
Employment land
listed for sale (24
Oct 2023)**

Source: Commercial
real estate web sites

Source	Address	Suburb	Ha.
commercialrealestate.com.au	133-136 Kaurna Ave	Edinburgh	2.98
commercialrealestate.com.au	133-136 Kaurna Ave	Edinburgh	3.10
commercialrealestate.com.au	133-136 Kaurna Ave	Edinburgh	2.13
commercialrealestate.com.au	133-136 Kaurna Ave	Edinburgh	2.17
commercialrealestate.com.au	21-25 Caribou Drive	Direk	1.25
commercialrealestate.com.au	296-304 Diment Road	Burton	1.33
commercialrealestate.com.au	506-524 Waterloo Corner Road (27 lots)	Burton	0.53
commercialrealestate.com.au	14-15 Deuter Road	Burton	0.62
commercialrealestate.com.au	7-9 Bradpole Road	Edinburgh	0.29
realcommercial.com.au	47-71 Edinburgh Road	Direk	4.00
realcommercial.com.au	93-111 Edinburgh Road	Direk	1.80
Total			29.11
Average			1.84

Renewal SA is also marketing three larger sites of 8 hectares for upcoming sale in Edinburgh Parks at:

- Lote 131 Kaurna Avenue, Edinburgh
- Lot 502 Gidgie Court, Edinburgh
- 105-110 Purling Avenue, Edinburgh (shown as a 7-lot subdivision)

Renewal SA has completed three precincts at Edinburgh (East, West and South) with limited allotments remaining, however their web site indicates combined parcels of over 10ha can still be secured.

Renewal SA is currently in the process of finalising its planning for the North precinct, expected to deliver flexible allotment sizes from 2,500sqm to 2.8 hectares, with combined parcels of 5 hectares or larger, also possible.

The current and upcoming employment sites for sale in Edinburgh Parks indicate:

- Most of the available land is in the sub 2 hectare range which is unsuited to the larger land requirements expressed by interested operators at Dublin.
- There is a limited choice of larger lots (up to 8 ha) however these are likely to have higher price expectations than at Dublin with different location attributes.

Further analysis may be required on average sales rates (per sqm) per block size achieved at Edinburgh Parks compared to price expectations at Dublin.

5

Conclusion

The conclusions of this report are:

1. There is a strong case for a significant proportion of the 1,450-hectare Dublin land holding to be designated for employment uses.
2. The land can accommodate a range of employment uses and processes not suited to, or priced out of, the smaller and more expensive industrial sites in Edinburgh Parks which are targeting more intensive manufacturing, food processing and warehouse and logistics operations.
3. Dublin has attractive attributes for larger scale, low intensity uses which can leverage:
 - Port Wakefield Highway access with short travel times back to the workforce and industrial support services of Outer North Adelaide.
 - Nearby rail corridors with loading facilities.
 - The growing regional population including projected growth in the Adelaide Plains local government area.
 - Emerging interest in Green Circular Economy projects and processes stimulated by South Australia's investment in renewable energy generation with ready regional sources of biomass and other inputs.
 - Strong linkages to the agricultural sector of the Northern Plains, the renewable energy and infrastructure projects of regional South Australia (to the north & west) and to a lesser extent, defence contracts and related work.
 - Support from Adelaide Plains Council and their planning strategy based on a three towns service model including residential growth at Dublin.
 - Cheaper and larger land parcels.

4. The sectors which appear to be well-suited to the site based on the location and expressed interest from occupiers are:
 - The circular processes of a local Green Economy including innovative farming and food production methods, recycling industries, energy production from biomass, fertiliser harvesting and distribution and links or interdependencies with residential and industrial uses.
 - Manufacturing, fabrication or logistics for the renewable (wind, solar and hydrogen) energy sector in metropolitan and regional SA.
 - Defence and infrastructure contractors or sub-contractors requiring more land extensive sites.
 - Manufacturing or transport uses hauling long, wide or high freight to destinations using Port Wakefield Highway.
5. The Dublin employment land may differentiate itself from metropolitan industrial areas as it attracts uses requiring flexibility, mobility and even temporary facilities for operations to be scaled up and down as industry demand requires, as well as a permanent location for businesses seeking a competitive edge in entry pricing.
6. There is no model-driven formula at this stage for the calculation of industrial land needs for a per-urban location such as Dublin, based on the expressions of interest received to date, the larger land area requirements, existing Strategic Employment land reserves to the east, the long term nature of the estate and the need for an area to develop a critical mass and provide a range of land options, between **300 to 400** hectares of employment land can be justified and planned for. This is less than half the area of the existing Strategic Employment Zone east of Dublin.

Abstract white line art on a light beige background. It includes a large semi-circle on the left, a horizontal line extending from its base, a vertical line, and a diagonal line forming a triangle-like shape on the right.

APPENDIX 5
Cultural Heritage
Desktop Assessment,
Australian Cultural
Heritage Management,
November 2012



Cultural Heritage Desktop Assessment for the Leinad Land Developments, Dublin, South Australia

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Cultural Heritage Desktop Assessment for the Leinad Land Developments, Dublin, South Australia

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The professional advice and opinions contained in this report are those of the consultants, Australian Cultural Heritage Management Pty Ltd, and do not represent the opinions and policies of any third party.

The professional advice and opinions contained in this report do not constitute legal advice.

Abbreviations

Term	Meaning
ACHM	Australian Cultural Heritage Management Pty Ltd
AHA	<i>Aboriginal Heritage Act 1988 (SA)</i>
DPC-AARD	Department of the Premier and Cabinet - Aboriginal Affairs and Reconciliation Division
KNCHA	Kaurna Nation Cultural Heritage Association Inc.
NTA	<i>Native Title Act 1993 (Cwth)</i>
LLD	Leinad Land Developments (Dublin) Pty Ltd
PAD	Potential Archaeological Deposit
SAM	South Australian Museum

Executive Summary

This report documents the results of an Aboriginal cultural heritage desktop analysis for Leinad Land Developments (Dublin) Pty Ltd (LLD) investigation area, Dublin, South Australia. The investigation area is in the traditional lands of the Kurna people, who have an active native title claim, listed as the Kurna Peoples Native Title Claim (SC00/1; SAD6001/00).

This report details relevant project information, heritage protection legislation, research into previously recorded Aboriginal cultural heritage sites in the project area and recommendations in relation to any potential impacts the proposed activities could have on heritage sites congruent with responsibilities under heritage protection legislation.

The main heritage instrument with relevance in the State of South Australia is the *Aboriginal Heritage Act 1988* (AHA), which provides protection for all Aboriginal heritage in South Australia.

Whilst this desktop report did not identify any specific Aboriginal cultural heritage sites within the investigation area and subject site, this does not necessarily indicate that there are no Aboriginal cultural heritage sites within the project area. It is likely the lack of sites is representative of a lack of survey through the area. The number of Aboriginal cultural sites recorded in the vicinity of the investigation area (Table 6-1), and previous skeletal finds in the general vicinity (Table 6-2) indicates a high potential for the discovery of similar heritage features within the project area. If future ground disturbing activities are contemplated there are two options recommended to manage potential Aboriginal sites, which are identified below.

Archaeological Survey of all Ground Disturbance Locations

As the best risk mitigation tool, a comprehensive heritage survey, consisting of anthropological and archaeological components, of all areas proposed for ground disturbance should be considered. This may identify anthropological and/or archaeological sites at or near works locations, based upon surface indications, identification of significant cultural sites by Kurna participants and analysis of landforms in relation to previous discoveries. Heritage surveys may directly identify the presence of previously unreported heritage sites, or at the very least, physical inspections of the proposed ground disturbance areas will provide the basis for assigning the most effective and appropriate monitoring and mitigation measures for the work program.

Kurna Monitoring or Earthworks with Limited Archaeological Survey

If an on ground heritage survey is not deemed necessary LLD should engage at least two Kurna heritage monitors to monitor any earthworks, with an archaeologist engaged to be 'on call' during the excavations in the event specialised archaeological input is required for potential Aboriginal site discovery. This should also include an Aboriginal Site Discovery Procedure to be used during earthworks (the recommended site discovery procedure is included in Appendix 1).

Risk Management and Mitigation

It is noted that there is no legal requirement to do an Aboriginal heritage survey; however, an Aboriginal heritage survey is often undertaken during the planning stage of a project as a risk minimising and due diligence strategy to reduce the prospect of costly delays during construction.

The assessment of heritage risks and appropriate mitigation strategies can only be effectively achieved through a heritage survey or inspection of project areas involving ground disturbing activities, by qualified and experienced anthropologists and archaeologists and where required in consultation with traditional owner representatives from the Kurna Nations Cultural Heritage Association Inc. (KNCHA). The further management of the risk of disturbance to previously unrecognised heritage sites or objects, which lie buried and cannot be detected through surface inspection can be managed in medium-high risk locations through the employment of Aboriginal heritage monitors for those ground disturbing activities, with an archaeologist on call for any to assess and potential heritage sites or objects found. In very high risk cases, it may be recommended to incorporate an intermediate sub-surface assessment of a works location either through archaeological test excavations (often machine assisted) or remote sensing techniques (such as ground penetrating radar).

The monitoring/on call recommendations are more suitable for situations where there is no ground visibility whatsoever prior to earth moving (this includes, but is not limited to, paved footpaths). Even then, this is an inherently less satisfactory process with higher risk of causing damage to sites, objects and remains (punishable

under the terms of the AHA), because without at least a short archaeological and anthropological inspection, there will be no expert guidance available regarding the actual need for monitoring or the likely nature of discoveries that might occur (for example, Kurna monitors are not trained archaeologists).

Furthermore, Aboriginal heritage site locations have a high degree of association with water features - including streams, wetlands and coastal dunes. The Samphire Coast area, with its proximity to coastal resources and trade routes was for thousands of years part of a highly populated Aboriginal landscape with a relatively high density of sites, objects and remains. Consequently, development in this area has a high probability of encountering Aboriginal heritage sites and potentially burials.

The recommended mitigation measures described in this report will ensure that any ground disturbing works associated with this project does not result in any offences under the AHA, or damage to significant Aboriginal heritage. However, consultation on this matter should take place with KNCHA before such measures are implemented, to ensure that they satisfy their legitimate cultural heritage and native title interests.

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1 Introduction

Australian Cultural Heritage Management Pty Ltd (ACHM) has been engaged by Leinad Land Developments (Dublin) Pty Ltd (LLD) to carry out a desktop study of Aboriginal cultural heritage in the proposed project area in Dublin, South Australia approximately 3 km northeast of Thompsons Beach. The investigation area is in the traditional lands of the Kurna people, who have an active native title claim, listed as the Kurna Peoples Native Title Claim (SC00/1; SAD6001/00).

The purpose of this report is to inform LLD of the presence of previously registered and/or known Aboriginal cultural heritage sites within the general vicinity of the proposed project areas, the likelihood of any items and/or sites of Aboriginal cultural heritage being situated within the areas, and areas and/or landscape features considered more likely to contain Aboriginal cultural heritage items and/or sites. This report also addresses LLD's responsibilities under current heritage protection legislation.

Information in this report relating to Aboriginal cultural heritage was located by searching the Central Archive and Register of Aboriginal Sites and Objects maintained by Department of Premier and Cabinet - Aboriginal Affairs and Reconciliation Division (DPCC-AARD), the South Australian Museum (SAM) Collection Database, and the ACHM corporate archives. Aboriginal cultural heritage survey reports and literature relating to mythologies and oral histories were reviewed to provide the background history of Aboriginal culture and a further understanding of the likely cultural heritage issues within the proposed Dublin project area.

This report assesses the potential risk with regards to conducting work that could impact upon Aboriginal cultural heritage. The information identified during the research process will also guide recommendations regarding the management of Aboriginal cultural heritage during the development process.

Desktop Research Method

This study employed the following methods:

1. Searches for previously recorded heritage sites in the study areas (within 5 km of the investigation area) in the following archives; the Register of Aboriginal Sites and Objects and the Central Archive held by DPC-AARD, the SAM Sites Register, as well as the corporate archives of ACHM.
2. Examination of previous research regarding Aboriginal cultural heritage in the general vicinity of the investigation area, to provide an indication of the types and degrees of cultural heritage issues that may be present for the general area.
3. Identification of both State and Commonwealth legislative requirements relating to Aboriginal heritage and Native Title.
4. Identification of the Aboriginal cultural group with traditional cultural interests in the locality, and their representative and interests with respect to Aboriginal heritage and Native Title issues.
5. Identification and provision of contact details for the legal representative of the Aboriginal group with interests in the area, for the purposes of developing Work Area Agreements etc.

2 Project Description & Project Survey Area

2.1 Project Description

LLD is seeking to develop a residential housing estate at Dublin, located approximately 73 km north of Adelaide on the Port Wakefield Road (Map 2-2).

2.2 Project Survey Area

The investigation area is just southwest of the current Dublin Township and approximately 3 km northeast of Thompsons Beach. The survey area falls within the Kurna Peoples Native Title Claim area (SC00/1; SAD6001/00) (Map 2-1).

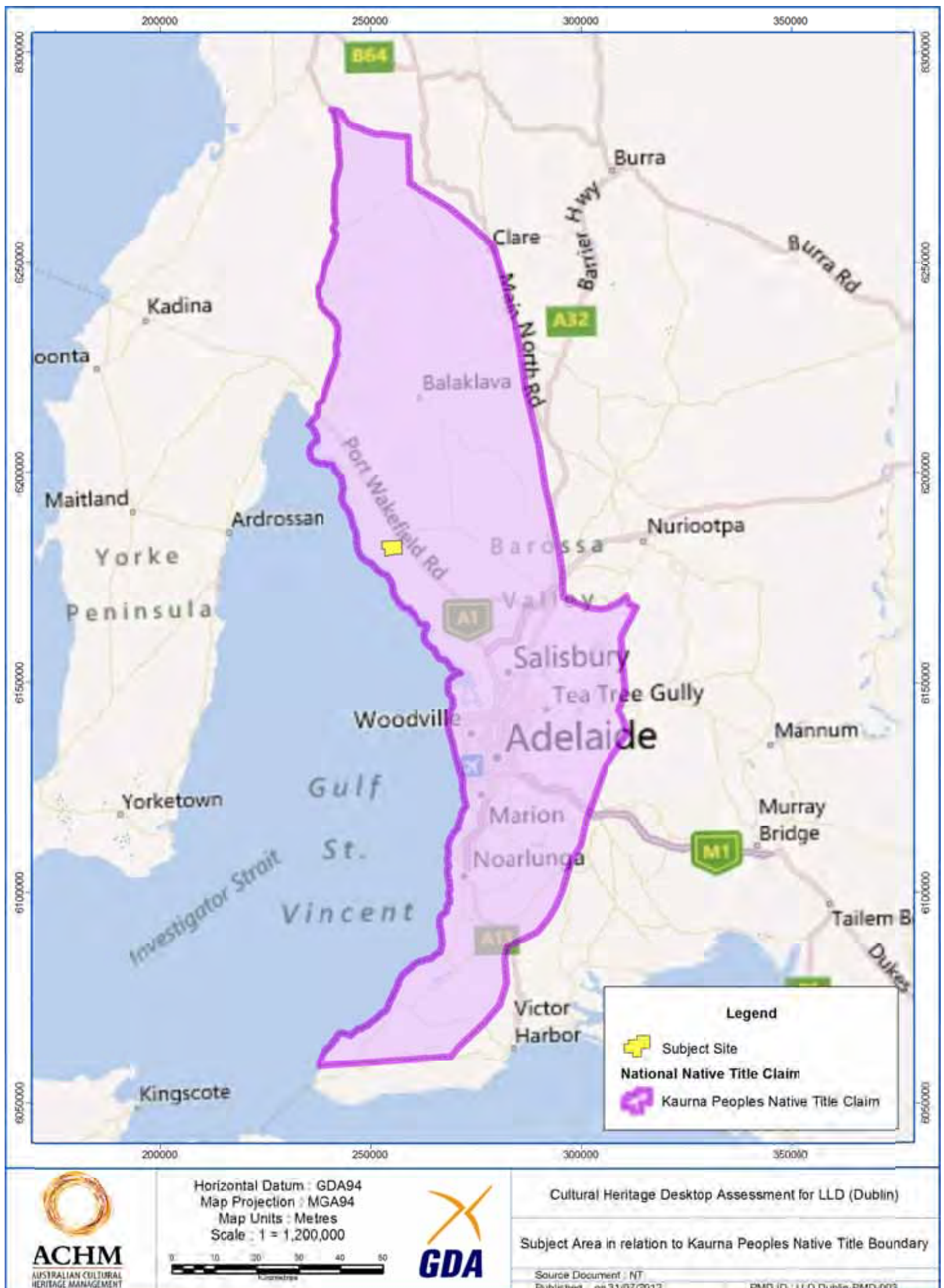
2.3 Project Limitations

This is a desktop report only and as such there is no expectation that field survey or stakeholder engagement be undertaken. Consultation with Kurna could lead to further and more in depth cultural knowledge of the study area. The contact details for the Kurna Nation Cultural Heritage Association Inc. (KNCHA) for all survey requests or any other correspondence are as follows;

Ms Emma Riggs
Legal Clerk
Camatta Lempens Pty Ltd Lawyers
Level 1
345 King William Street
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F: 8410 0566
E: eriggs@camattalempens.com.au

Ms Riggs will ensure the KNCHA Chairperson and executive board are notified as required.



Map 2-1: Subject Area in relation to Kaurna Peoples Native Title Boundary



Map 2-2: Site Location

3 Kurna Background

This section of the report summarises previous literature detailing the Aboriginal occupation of the Northern Adelaide Plain and Samphire Coast of Gulf St Vincent.

3.1 Kurna

The Northern Adelaide Plains and associated coastal region are located within the Ancestral lands of the Kurna Aboriginal group (Edwards 1972; Tindale 1974). In pre-colonial times there were more than 20 local Kurna clans along the plains, from Crystal Brook in the north to Cape Jervis in the south. In the summer months large-scale gatherings and ceremonial progressions took place along the coastline. This included fishing, meeting and trading with visitors from other Aboriginal clans, and following and celebrating the creation journeys of Kurna Creation Ancestors, such as Tjirbruki (Tindale 1987). During the winter, Kurna moved inland to sheltered locations in the Mount Lofty Ranges foot hills (Tindale 1987) and in villages along coastal streams such as the Gawler and the Para Rivers. Places of particular cultural significance exist throughout the greater Adelaide area and particularly along the watercourses and the coastline. Some of these are related to the creation stories of Ancestors such as Tjilbruke, while others are archaeological campsites and burial sites that indicate historic occupation of Aboriginal people.

Kurna people engaged with the wide range of ecosystems available within the Adelaide region, which included "coastal sand dunes, marshes and lagoons, riverine estuaries and littoral zones, the plains and undulating foothills to the north and the Mount Lofty Ranges to the east" (Wood 1994:9).

There is a high correlation between Aboriginal archaeological sites and major water courses in South Australia (Thorley 2001). Modelling studies have demonstrated that the availability of fresh water correlates directly with important traditional living places in Australia (Draper, Builth, Mott, Czerwinski and Maland 2001; McDonald 1997). Areas with plentiful water supplies and associated natural resources (such as bark for implements, animals etc.) were prime locations for camping grounds and are often associated with extensive archaeological resources. Hearths, food remains and stone tools are representative but not exclusive of the archaeological resources most commonly found in these locations (Blair 1997; Gara and Turner 1982). Creek overflow areas were also targeted for burial grounds for their soft sandy and easy to excavate soils (Gara and Turner 1982). Water sources are also anthropologically significant, as they feature in various creation and ancestor mythologies (Tindale 1987) and may have imposed social restrictions such as those related to gender or age placed upon their access or use. Areas in the vicinity of major water courses have an elevated risk of containing buried archaeological material, including human remains. (Blair 1997; Gara and Turner 1982; Tindale 1987).

There is historical evidence of Aboriginal occupation throughout the northern plains of Adelaide and the Gawler region. This is supported by numerous archaeological discoveries throughout the area. The Gawler region was an environment rich in food and water resources needed for regular Aboriginal seasonal occupation prior to colonial contact. The evidence of archaeological sites and artefacts, including human remains, demonstrate that both the northern Adelaide Plains and Gawler region were well utilised over a long period. Colonel Light and other explorers mentioned the presence of Kurna people as they travelled across the Para district and up to the Barossa (Whitelock 1989:12).

In 1840, Dr Matthew Moorhouse, the then Protector of Aborigines in South Australia, estimated the populations of the tribes with which he had communication, including the Muliakki tribe of Port Gawler (in Howchin 1934: 3):

- 1) *Inhabiting Muliakki, Milner Estate [aka Port Gawler Station] (Port Gawler).....20*
- 2) *The Wirra Tribe, or those inhabiting the border of the Para River.....120*
- 3) *The Adelaide Tribe, or those inhabiting a district from 10 miles north of Adelaide, to the foot of Mount Terrible (Myponga)80*

Newspaper articles report findings of Aboriginal sites in the Northern Adelaide Plains region from the early 1900s through to the 1960s. One correspondent wrote to the Editor of the Adelaide Advertiser newspaper in January 1906 about the Aboriginal history and archaeological sites of the northern plains:

...the tribe of Aborigines afterwards known as the Adelaide tribe, because their haunts embraced the plains between the neighbourhood of Brighton and that of Gawler, used to make the Little Para, which runs through Salisbury, a rendezvous. Early settlers have often told stories of their meetings with companies of natives in the district, on their way north...There are few localities where better evidence of the popularity of the place as a native resort in the early days can be found than along

the banks of the serpentine watercourse, and even trees bear testimony to the boatbuilding industry of the coloured race...Further evidence of the fact that the natives used to congregate there has been found on many occasions by the turning over of small hillocks on the slopes near the creek, which had been built up by generations in the process of baking the game and fish on which the blacks used to live. The remains of numerous Aboriginal ovens have been unearthed, and the soil, which was little else than decomposed vegetable matter and ashes, has been spread over many of the gardens as manure... ..In addition to these facts the discovery of Aboriginal skeletons and skulls at various times along the Para has proved beyond a doubt that the place was a burial ground also long before the white man took possession of the country. (Advertiser 22/1/1906)

The 'Aboriginal ovens' referred to in this excerpt are now known as 'mounds' to contemporary archaeologists. In 1926 the Register reported that the remains of six Aboriginal people were discovered at a quarry six miles from Two Wells. A Mr E. A. Brooks of Two Wells told the reporter that:

...it was not unusual for the remains of aboriginies [sic] to be found in the district. Many skulls and even complete skeletons had been discovered by the Gawler River, and in the vicinity of the town there were a number of mounds, measuring up to 25 ft. in length and about 2 ft. broad, akin to the larger "barrows" found in England and other parts of Europe, which are thought to have served for burial places for the people that lived there in prehistoric times. (Register 22/4/1926:9)

The Adelaide Plains were also subjected to 'firestick farming' (Whitelock 1989), the practice of controlled burning to ensure a continual supply of food by creating favourable conditions for preferred vegetation as well as driving out game (Wood 1994:9). It is likely that this annual practice would have altered the structure of the soil, "further selecting for and against specific types of vegetation" (Wood 1994:9).

The Adelaide region was the focus of early colonial settlement and the Kaurna were among the first Aboriginal groups in South Australia to suffer the impacts of colonisation and widespread alienation from their traditional lands and resources. This disruption to their usual subsistence practices saw the Kaurna rely more heavily on European settlers for rations (Wood 1994).

3.2 Burials and Mound Sites

When European colonisation of South Australia commenced in 1836, Kaurna settlements on the Adelaide Plains near coastal streams and wetlands featured numerous large, semi-permanent habitation sites. Through the accumulation of occupation debris and the incorporation of burials, these sites became distinctive artificial mounds on the landscape. Rapid expansion of European settlement and accompanying landscape changes displaced traditional Kaurna settlement and subsistence practices although Aboriginal camps were still in existence in the mid-19th century (see Figure 3-1 below for a painting of an Aboriginal settlement in what is now North Adelaide. Note the old Adelaide Bridge on the left and Aboriginal camps along the river banks - already the trees have thinned, and there is a field of tree stumps at centre rear).



Figure 3-1: Robert Davenport watercolour of Adelaide from the north bank of the River Torrens, 1843-49, Adelaide. Courtesy of the Art Gallery of S.A.

Mounds have been subjected to intense scientific investigation over recent years and are considered to be of national and international archaeological significance (Draper, Czerwinski and Mott 2000). Mound sites occur as low accumulations of sediment saturated with white ash and charcoal, containing rock material that acts as a heat retainer, such as baked clay fragments, calcrete nodules and river cobbles (Wood 2005). Mound sites often

contain low numbers of artefacts and small amounts of faunal remains, and are commonly 20 m to 30 m in diameter and less than a metre high. Burials are often located in larger mounds (Wood 2005). In some cases, evidence of Aboriginal occupation spanning periods of thousands of years can be found within mounds (Draper, Czerwinski and Mott 2000).

Tindale recognised that mounds have a high archaeological significance through this request for a site inspection:

The most noticeable feature of the two acre area appears to be two oblong mounds standing approximately 3ft. above the general surface of the plain and composed in large part of ash and other aboriginal camp debris. ... The earth of the two mounds is similar to the earth used by glasshouse tomato growers and others as a fertilizer.situation of the mounds and their relationship to the water hole suggests to me that it was a living place of the local aborigines, that it seems probable that when the land was being first surveyed the small 2 acre area was made a reserve because the aborigines were still in occupation. Since aborigines bury their dead in their camps it is not unlikely that it was also a place of burial, but there is little to indicate that this was the case. One can only assume that it was a normal camping site for the aborigines and that one or more burials may be present. ...It is the experience of those who have gathered this material commercially that it is seldom that aboriginal bones are found in it and that it is as a rule, the result of the occupation of the site by people and of the burning of many fires. (Tindale 1957:421)

The mounds referred to by Tindale were subject to physical investigative sounding and produced archaeological material. Further accounts of mound disturbance in the general indicate the potential for mound features to contain archaeological deposits including correspondence by the SAM:

We are glad to receive such remains of the Australian aborigines. I would be glad if you were willing that our Ethnologist (Mr N.B. Tindale) should visit the site sometime in the near future, and recover any further remains which may be available. We understand, from Mr Segnit, that many aboriginal bones were disturbed when a mound was being removed, and the bones found were reburied in a hole on the site. We would be grateful to know whether the position of this re-burial is exactly known, and if so whether it would be possible for us, readily, to recover the specimens. (Hale 1950: letters)

Not all reused camp sites will be mound sites. For example, sites in coastal dunes in Moana are an example of reused camp sites that are not mound sites. Some mound sites may be predominantly oven sites, while other mound sites may not contain burials; certainly, burials occur in other settings also. Mound sites that contain ovens and burials are most likely to be camp sites - semi permanent or at least frequently reoccupied villages. Debris from shelters and huts (such as timber, earth, mud, grass and reeds) undoubtedly forms part of the bulk of the ashy, organic-laden dark earth which comprises the mounds, and is the most clearly identifying feature of the mounds.

Mound sites have also been identified in the Murray and Darling Rivers and the lower Murray Lakes. It is possible these may be ubiquitous on major riverine floodplains and wetland margins and thus associated with most major Australian capital cities and large regional centres located in these geographic situations.

Over the last 20 years, the cumulative results of archaeological, historical and ethnographic research are beginning to provide some understanding of these sites, as well as the identification and protection of remaining mound sites on the margins of the expanding city (Draper et al. 2000, for details see Greenfields Burial Site section below).

The coastal strip west of Port Wakefield Road, between the alluvial and estuarine habitats, contains numerous mounds and other sites (Wood 2005). Burials also occur further to the east. The following research is an overview of the Greenfields burial site.

3.3 Greenfields Burial Site

A number of mound sites have been located within the Adelaide Plains area. One of the most significant mound sites on the Adelaide Plains is the Greenfields site (Draper, Czerwinski and Mott 2000). The information in this section of the report is drawn from the Draper, Czerwinski and Mott 2000.

The site is located just north of the Greenfields wetlands area. It is a low mound (about 80m in diameter and up to a metre higher than the surrounding plain) on the flood plain of Dry Creek. The food remains found at the site were very well preserved and included fish (snapper, mulloway and bream), birds, shellfish (freshwater mussels, abalone, cockles), crabs, reptiles, kangaroo, wallabies, bettongs, bandicoots, several smaller mammals and fragmented emu shell and dingo bones. Two burials of complete dingoes were found, which signifies a very different status for those particular canines. The stone artefacts found at the site include larger cobble grindstones, hammers, and anvils, as well as a variety of cutting tools such as cobble choppers, knife like flakes

of quartz and quartzite, small chisels and adzes of quartz and imported chert and small, mass-produced barbs for spears and saw-knives, made from quartz, quartz crystal, silcrete and chert.

The mound also contains many traditional indigenous burials. Some of these burials were accidentally damaged and partially or entirely removed during construction of a factory. Part of the mound was removed by earthmoving machinery for garden fill. Most of these remains have been reburied.

In archaeological and anthropological terms, the Greenfields site has world class significance. The archaeological materials from the Greenfields excavations have enormous scientific potential for the Kurna people and the world at large. The materials are unique record (in terms of preservation and availability for study) of a permanent Kurna settlement on the northern Adelaide plains and wetlands before European colonisation, for perhaps the preceding 3,000 years. The broader significance of the site lies not only in the extensive and well preserved archaeological record, but also in the major contribution to scientific knowledge, which it offers with respect to traditional hunter-gatherer settlement systems and the nature and role of permanent living places, and the relationship of such places to hunter-gatherer use of wetland ecosystems.

3.4 Discussion

The evidence presented in this section of the report demonstrates that a range of archaeological artefacts, human remains, dwelling places, and painting sites have been identified in the Northern Adelaide plains and the coastal region north of Adelaide where the Dublin proposed project area is located. Levels of activity were higher around water sources and courses, as these geographical features were critical to the survival of Aboriginal populations. Water sources and courses are considered culturally and spiritually significant by the Kurna people and alluvial soils have the potential to contain burial sites.

4 Aboriginal Heritage Protection Legislation

This section outlines information on relevant Aboriginal and Non-Aboriginal heritage protection legislation

4.1 *Aboriginal Heritage Act 1988 (SA)*

The AHA is administered by the DPC-AARD. Any Aboriginal site, object or remains, whether previously recorded or not, is covered under the blanket protection of the AHA. The Act provides the following definition of an Aboriginal site in Section 3.

“Aboriginal Site” means an area of land

(a) That is of significance according to Aboriginal tradition; or

(b) That is of significance according to Aboriginal archaeology, anthropology or history.

It is an offence under Section 23 of the AHA to damage, disturb or interfere with an Aboriginal site, objects or remains unless written authorisation from the Minister for Aboriginal Affairs and Reconciliation has been obtained. Penalties for an offence under this section are up to \$10,000 or six months imprisonment in the case of an individual, or \$50,000 in the case of a corporate body.

The AHA is highly relevant given the potential to encounter Aboriginal sites in the project area. The AHA provides no legal requirement to do an Aboriginal heritage survey; however, an Aboriginal heritage survey is often undertaken during the planning stage of a project as a risk minimising and due diligence strategy to reduce the prospect of delays during construction. In the case of the current investigation area, the Kurna peoples are the appropriate Traditional Owners to consult under the terms of the AHA. Consultation with Kurna peoples via the Kurna Nation Cultural Heritage Association Inc. (KNCHA) will satisfy the consulting requirements of the AHA.

4.2 *Aboriginal & Torres Strait Islander Heritage Protection Act 1984 (Cwth)*

The Commonwealth *Aboriginal and Torres Strait Islander Heritage Protection Act 1984* provides a mechanism for the Commonwealth Minister for Sustainability, Environment, Water, Population and Communities to make declarations regarding the protection of an Aboriginal area when the Minister is satisfied that, under State or Territory law, there is ineffective protection of the area from a threat of injury or desecration. Declarations made under this Act may involve restricting activities and/or access to an Aboriginal site.

Under section 22 of the *Aboriginal and Torres Strait Islander Heritage Protection Act 1984*, it is an offence to conduct behaviour or partake in an action that contravenes a declaration made by the Minister. Where this relates to an Aboriginal place, the penalties applicable under this section are \$10,000 or imprisonment for five years, or both, for an individual, and \$50,000 for a corporate body. Where an Aboriginal object is concerned, the penalties are \$5000 or imprisonment for two years, or both, for an individual, and \$25,000 for a corporate body.

If the requirements of the AHA are adhered to, the *Aboriginal and Torres Strait Islander Heritage Protection Act 1984* will likely have no relevance for Aboriginal sites found to exist within the project area.

4.3 *Environment Protection & Biodiversity Conservation Act 1999 (amended 2003) (Cwth)*

The Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (amended 2003) (EPBC Act) protects places of national cultural and environmental significance from damage and interference by establishing a National Heritage List (for places outside of Commonwealth land) and a Commonwealth Heritage List (for places within Commonwealth land). Under the EPBC Act any action that has, will have or is likely to have a significant impact on a place of national cultural and/or environmental significance must be referred to the Minister for Sustainability, Environment, Water, Population and Communities for approval. The EPBC Act sets out a procedure for obtaining approval, which may include the need to prepare an environmental impact statement for the proposed action (an action is defined in section 523 of the Act to include a project, a development, an undertaking, or an activity or series of activities).

The EPBC Act is only relevant in relation to an Aboriginal site if the site is entered onto the National Heritage List or the Register of the National Estate. There is currently no requirement for referral to the Commonwealth Department for Environment and Heritage under the EPBC Act if the site is not entered onto one of these registers, and the Act will have little relevance for any such Aboriginal site existing within the project area.

4.4 *Native Title Act 1993 (Cwth)*

The Commonwealth *Native Title Act 1993* (NTA) is part of the Commonwealth's response to the High Court's decision in *Mabo v Queensland (No.2)* and adopts the common law definition of native title, defined as the rights and interests that are possessed under the traditional laws and customs of Aboriginal people in land and waters, and that are recognised by the common law. These rights may exist over Crown Land but do not exist over land held as freehold title.

The NTA recognises the existence of an Indigenous land ownership tradition where connections to country have been maintained and where acts of government have not extinguished this connection.

The project area is within the claimed traditional lands of the Kurna people, who have registered a native title claim over the area (SC00/1; SAD6001/00). However, given that the entire Dublin investigation area is freehold title, LLD is not legally required to consult with the Kurna people under the NTA should the area be subjected to ground disturbing activities at a later date.

4.5 *Native Title (South Australia) Act 1994*

As stated above, the Commonwealth Native Title Act 1993 is part of the Commonwealth's response to the High Court's decision in *Mabo v Queensland (No. 2)* and adopts the common law definition of native title defined as the rights and interests that are possessed under the traditional laws and customs of Aboriginal people in land and waters, and that are recognised by the common law. Provisions within the Commonwealth NTA allow for the States to develop their own native title legislation, provided the State legislation does not conflict with the Commonwealth Act.

South Australia has enacted an alternative State right to negotiate scheme as authorised by the Commonwealth under section 43 of the NTA. This scheme is operative and to date comprises the Native Title (South Australia) Act 1994, Land Acquisition (Native Title) Amendment Act 1994, Mining (Native Title) Amendment Act 1994, Opal Mining Act 1995 and the Environment, Resources and Development Court (Native Title) Amendment Act 1995. Regulations are in force for all these Acts together with Rules of Court for the Environment, Resources and Development Court.

4.6 Discussion

From this overview of statutory requirements, it has been identified that the heritage protection legislation with most relevance for the Dublin investigation area is the South Australian AHA. If LLD adheres to the requirements of the AHA, no other heritage protection legislation should have operational relevance to the proposed works.

5 Environmental Background

This section of the report provides a brief overview of the relevant details regarding environment, natural history and land use of the project area. The area is situated on a plain characterised by agricultural land, natural samphire shrub and the coastal dunes characteristic of the natural coastline of Gulf St Vincent.

5.1 Geography

The proposed project area is immediately west of the South Australian town of Dublin, 60 km north of Adelaide. The proposed project area lies at the meeting of the Northern Adelaide Plains and the Samphire Coast of the Gulf St Vincent.

5.2 Soils

The plains are situated on the St Vincent Sedimentary Basin. The sediments are composed of clayey sand and marl, limestone and gravel (Henschke 1976:4). The sediments forming the basin are underlain by a Precambrian basement (Henschke 1976:4). Additionally, the plains contain aquifers of varying depth (Bulmer 1985:2).

5.3 Climate

The Samphire Coast lies in a temperate zone, with hot dry summers and cold and often wet winters.

5.4 Vegetation

Prior to European occupation of the land, the coastal areas of South Australia were vegetated with such species as Swamp Paper-bark (*Melaleuca hamaturorum*), Marsh Saltbush (*Atriplex paludosa* ssp. *paludosa*), Berry Saltbush (*Atriplex semibaccata*), Ruby Saltbush (*Enchylaena tomentosa* var. *tomentosa*), Short-leaf Bluebush (*Maireana brevifolia*), Salt Bluebush (*Maireana oppositifolia*), Seaberry Saltbush (*Rhagodia candolleana* ssp. *candolleana*) and Coast Bonefruit (*Threlkeldia diffusa*) (Kraehenbeuhl 1996). Nitre-bush (*Nitraria billardierei*) can also be found on higher ground (Berkinshaw 2009:34). Human activity has extensively cleared these species. Introduced aggressive weeds African Boxthorn (*Lycium ferocissimum*) and Tree Mallow (*Lavatera maritima*) are encroaching on the area particularly around Thompsons Beach (Purnell, Peter and Clemens 2011:28).

The coastal area contains samphire flats which are covered by extremely high spring tides, intertidal mangroves (*Avicennia marina* var. *resinifera*) and intertidal sand and mudflats (PIRSA n.d). Some of the mudflats are colonised by garweed (*Zostera muelleri*). In the upper intertidal zone mangroves are reduced in size landwards and give way to a variety of samphire species, including Beaded Glasswort (*Tecticornia flabelliformis*) and Blackseed Glasswort (*Tecticornia pergranulata*) as well as saltbush on the salt flats of the supratidal zone.

5.5 Native fauna

Gulf St Vincent is of international significance in regard to its shorebird populations and habitats (Purnell, Peter and Clemens, 2011:6). Thompsons Beach and adjacent salt pans in particular are a critical high-tide roosting and feeding habitat for shorebirds (Purnell, Peter and Clemens, 2011:58). This habitat supports significant populations of Great Knot (*Calidris tenuirostris*), Red Knot (*Calidris canutus*), Red-necked Stint (*Calidris ruficollis*) and Bar-tailed Godwit (*Limosa lapponica*), among others (Purnell, Peter and Clemens, 2011: 38).

5.6 European Land Use

Prior to non-Indigenous occupation, the Northern Adelaide Plains were open country (Smith 1979:4). There may have been scattered stands of trees, however there is no reliable European record of this (Kraehenbeuhl 1996:151). This area is now characterised by agricultural land, sparse residential development and road infrastructure. Non-major roads and tracks allow access to the coast for fishing and small-scale recreational holiday activities with limited attendant infrastructure.

6 Heritage Register Searches

The following sections of this desktop report provide details of previously identified Aboriginal cultural heritage objects and/or sites within or adjacent to the current survey area as per the records of the available Aboriginal cultural heritage databases and the reports of previous Aboriginal cultural heritage surveys conducted in the general region.

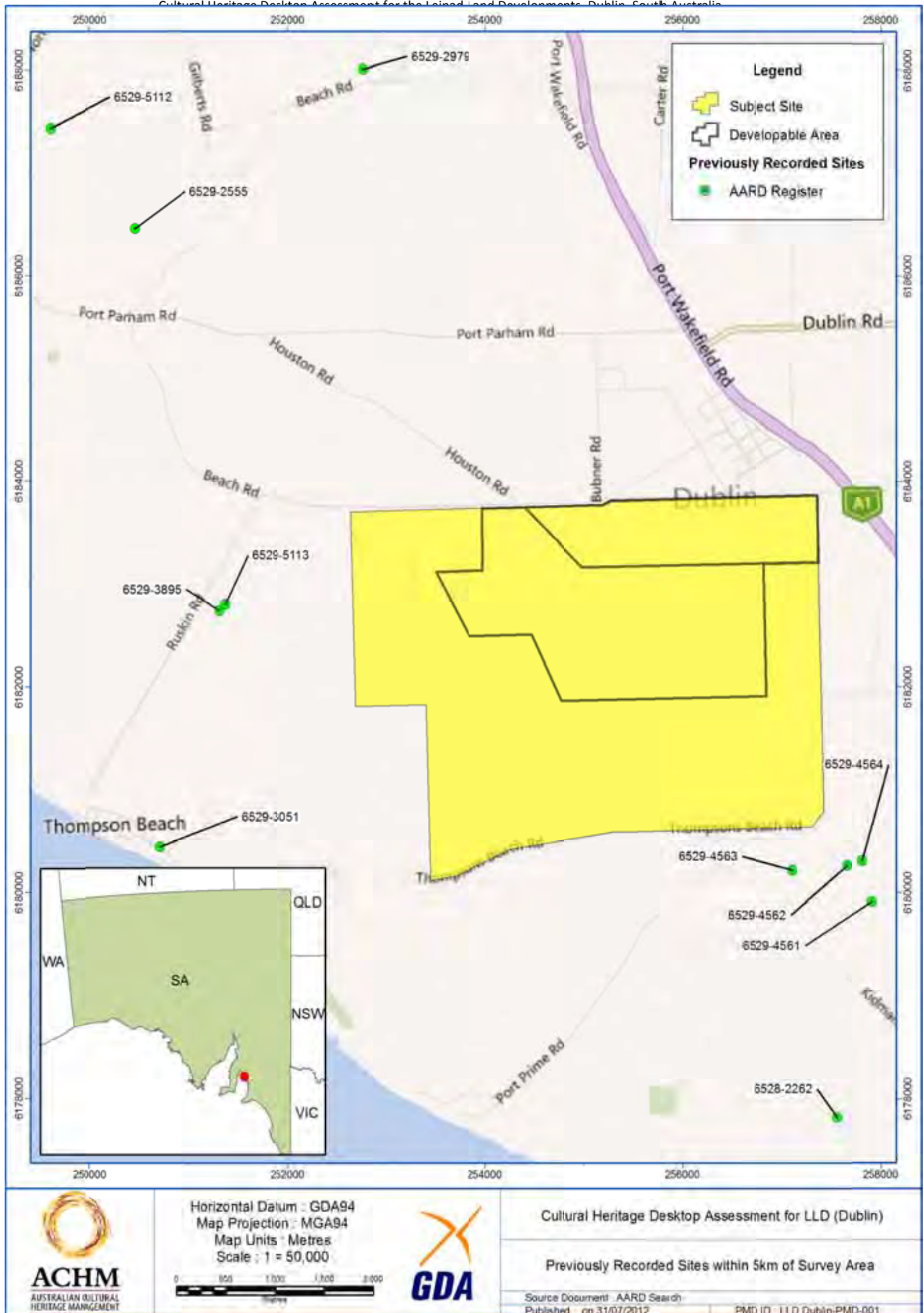
6.1 DPC-AARD Central Archive

The Central Archive, including the Register of Aboriginal Sites and Objects, is maintained by DPC-AARD. The archive is a database of previously recorded Aboriginal sites in the state. A search of the database allows previously recorded Aboriginal sites in a survey area to be identified before development activities or ground disturbing works are carried out. If a search of the database does not result in the identification of any previously recorded sites, unknown or unrecorded sites may still be present.

A search of the Central Archive revealed no recorded Aboriginal heritage sites within the immediate footprint of the Dublin investigation area (Map 6-1). However there are several recorded Aboriginal sites within close proximity of the subject site boundary. In particular, Dublin Artefact Site 3 (3747-4563), Dublin Artefact Site 2 (3746-4562) and Dublin Campsite 1 (3748-4564) are approximately 500 m from the southeast corner of the subject site boundary, as shown in Table 6-1 below. Map 6-1 also details adjacent Aboriginal sites in the Port Parham and Windsor areas including burial sites at Windsor (5484-2979), Thompson's Beach (5487-3051) and Light Beach (5472-2262). These sites provide both a confirmation of past Aboriginal activity in the general vicinity of the project area, and an indication of the types of sites that may be encountered.

AARD Site Number	AARD Site Name	AARD Site Type	AARD Site Status
5487-3051	Thompson Beach Burial 1	Burial	Registered
3121-3895	Dublin Dune Artefact Site	Artefact scatter	Reported
3745-4561	Dublin Artefact Site 1	Artefact scatter	Reported
3746-4562	Dublin Artefact Site 2	Artefact scatter	Reported
3747-4563	Dublin Artefact Site 3	Artefact scatter	Reported
3748-4564	Dublin Campsite 1	Campsite	Reported
5472-2262	Light Beach Burial Site 1	Burial Site	Registered
5477-2555	Port Parham Surface Site	No detail	Registered
5484-2979	Windsor Campsite/Burial Site	Campsite/burial	Registered
9466-5112	Port Parham Artefact Site 2	Artefact scatter	Reported
9468-5113	Port Parham Artefact Site 3	Artefact scatter	Reported

Table 6-1: Aboriginal sites on the DPC-AARD Central Archive within 5 km of the survey area



Map 6-1: Previously Recorded Sites within 5km of Survey Area

6.2 SA Museum Database

The SAM database documents Aboriginal cultural material and human remains held by the museum. The database contains information such as how and when materials and remains were acquired, and where they came from. Not all items have exact acquisition dates and/or precise details of the locations where they were found. Unfortunately, many of these details have been lost as the items were donated to the museum by members of the public. Due to these limitations, the records listed on the SAM database serve only as a guide to the types of Aboriginal cultural material and/or human remains which may be present in an area.

The SAM database was searched to see if any artefacts or skeletal remains have been located in the survey areas and the surrounding suburbs. The following keywords were used during the searches: Dublin and Windsor.

The search returned five results for Dublin: two of skeletal remains, one of cultural material, and the remainder unspecified. The search also returned six results for Windsor: two of skeletal remains and the remainder unspecified. Table 6-2 below gives details of these results.

Registry Number	Date Acquired	Description	Locality	Comments
A13194		Skull with jaw and partial skeleton	Dublin	Donated by Police
A38425	20/12/90	Skull, lower jaw and bones, almost complete skeleton	Dublin	
A47524	14/06/55		Dublin	Donated from estate of Rev J. C. Jennison
A47545		Grindstone	Dublin	
A50395	23/04/57		Dublin	Collected by Rev Jennison
G5857	1/01/84	Skull and partial skeleton	Windsor 2km west of Dublin, Section 333	Donor T. Williams. 200m north of old Parham Road. Recovered by Police
A29904	1/12/89		Windsor	Donated W. Simons. Found on eroded sand dune
A38836	1/08/59	Skull, jaw and partial skeleton	Windsor	One mile west of Windsor in sand hills
A4753	14/06/55		Windsor	Donated from estate of Rev J. C. Jennison
A47533	14/06/55		Windsor	Acquired by the Rev J. C. Jennison in 1928
A48096	20/06/55		Windsor	Purchased Ashley, C. S.

Table 6-2: Aboriginal Artefacts from the SAM Database

6.3 ACHM Corporate Archive

The ACHM corporate archive holds records of all heritage surveys conducted by ACHM consultants since the company commenced operation more than ten years ago. The archive was searched for details of previous cultural heritage survey reports and/or desktop reports concerning survey areas relevant to the Dublin development site. It should be noted that while an excellent resource, the ACHM corporate archives are by no means definitive.

The following is a review of the most relevant investigations that have been previously undertaken in the vicinity of the survey area.

6.3.1 N.K. Butler, Furniss and N.J. Butler (2010)

ACHM was engaged by SA Water to undertake an archaeological and anthropological cultural heritage survey along the proposed route of the Port Wakefield Water Supply Upgrade, South Australia.

A search of the SAM Database revealed many entries for archaeological material found within the area surrounding Port Wakefield; however, these entries included very little detail as to what the finds consisted of, or their specific location.

No new sites of anthropological or archaeological significance were recorded within the project area during the surveys. However, KNCHA participants present on the anthropology survey indicated that the general area is of cultural significance to the Kurna people because of several Creation Ancestors (or 'Dreaming') stories that pass through the area. Based on an assessment of the proximity to and elevation above the Wakefield River, and the presence of previously recorded Aboriginal sites within the survey area, there was considered to be a medium to high risk of encountering subsurface archaeological sites and/or objects during the proposed ground disturbance along the pipe alignment.

6.3.2 Liebelt and Morley (2007)

This report focuses on Aboriginal heritage issues in relation to the proposed Lower Gawler River Flood Mitigation and Riparian Rehabilitation works. During the two day Aboriginal cultural heritage survey the complete length of the Lower Gawler River levee alignments was walked, including both the northern and southern bank levees. An area of land between the north levee alignment and the banks of the Gawler River (flanked by the Pt Wakefield highway to the west and the Old Pt Wakefield road to the east) was also considered in relation to a proposed rehabilitation wetland area. During the survey three Aboriginal sites were identified. Additional to the locations where Aboriginal sites were recorded, landforms with the potential to contain buried archaeological sites were identified.

6.3.3 Houghton et al. (2008)

This report documents the Aboriginal cultural heritage survey of a development site at Buckland Park, northern Adelaide, South Australia. The development site was approximately 1,308 hectares, between Port Gawler and Virginia, and is bordered to the north by the Gawler River. The Aboriginal heritage survey of the Buckland Park Development site identified three previously recorded Aboriginal sites and six previously unrecorded Aboriginal sites within the survey area.

These sites, although not displaying any recognisable stratigraphy in their current state, show evidence of extensive Aboriginal land use of the area. These sites included artefact scatters of flaked stone, scarred trees and the identification of land forms (see sections 3.1 and 3.2 above) suggesting the potential for sub-surface archaeological deposits that would require monitoring by Traditional Owners during the proposed excavation works.

6.3.4 Hobbs et al. (2011)

ACHM in conjunction with KNCHA undertook an Aboriginal cultural heritage consultation and inspection of the entirety of the proposed Buckland Park Development in northern Adelaide, South Australia; following on from earlier work undertaken in 2008 (see 6.4.3 above).

As a result of the Aboriginal cultural heritage inspection and consultation, no new Aboriginal sites were recorded within the limited survey area specifically addressed within this report, however one previously recorded potential archaeological deposit (PAD 5), was rerecorded with more defined boundaries; this PAD now encompasses the ETSA land parcel. In addition, a previously recorded site, WAL01-012, intersects with Precinct 1.

6.3.5 N.J. Butler and Sivak (2011)

ACHM was engaged by the South Australian Department of Planning and Local Government (via Connor Holmes Pty Ltd) to undertake a desktop study of Aboriginal and European cultural heritage for the township of Virginia Development Plan Amendment, South Australia.

Historical records show that the land immediately surrounding the investigation area has been home to intense cultural activities both prior to European colonisation as well as since. When European immigrants first began to settle on the northern plains of Adelaide, the area, particularly in the vicinity of Buckland Park, was home to known tribes of Aboriginal people who were sub-groups of the larger Kurna nation. Archaeological discoveries over recent years have confirmed this occupation, and excavations of 'mounds' (the accrued sedimentary remnants of traditional ovens, see sections 3.2 and 3.3 above) suggest continual occupation and cultural activity, in some cases, for thousands of years. Larger mounds have also been known to contain human burials. It must also be noted that other burials have been discovered to the north, east and south of the investigation area, but these are commonly situated adjacent to watercourses. There were no registered DPC-AARD sites within the area researched.

6.4 Discussion

This section of the report summarises the previously identified Aboriginal cultural heritage objects and/or sites within or adjacent to the current project area as per the records of the available Aboriginal cultural heritage databases and the reports of previous Aboriginal cultural heritage surveys conducted throughout the general region.

Whilst this desktop report did not identify any specific cultural heritage sites within the investigation area, this does not necessarily indicate that there are no cultural heritage sites extant. The number of Aboriginal cultural heritage sites recorded in the vicinity of the investigation area (Table 6-1), and previous skeletal finds (Table 6-2) indicates a high likelihood for the discovery of Aboriginal heritage sites within the project area.

Additionally, existing evidence suggests that the entire Samphire Coast of Gulf St Vincent was once a place of intense cultural activity by local Kurna peoples. Consequently, there is a strong likelihood of the investigation area containing features of Aboriginal cultural significance, including artefact scatters, campsites and human remains. Burials in particular, may be encountered in coastal dunes and along the banks of creeks draining into the sea.

7 Recommendations

If future ground disturbing activities are contemplated, there are two options recommended to manage potential Aboriginal sites and heritage value concerns, which are identified below.

Aboriginal Cultural Heritage Survey of all Ground Disturbance Locations

Cultural heritage surveys are not specified as a requirement under the rubric of consultation in the AHA. However, a cultural heritage survey consisting of Kurna participants and anthropological and archaeological components of all areas proposed for ground disturbance should be considered as the best risk mitigation tool. A survey may identify anthropological and/or archaeological sites at or near works locations, based upon surface indications, identification of significant cultural sites by Kurna participants and analysis of landforms in relation to previous discoveries. Heritage surveys may directly identify the presence of previously unreported heritage sites, or at the very least, physical inspections of the proposed ground disturbance areas will provide the basis for assigning the most effective and appropriate monitoring and mitigation measures for the work program.

Kurna monitoring or Earthworks with limited archaeological survey

If an on ground heritage survey is not deemed necessary it is recommended that LLD should engage at least two Kurna heritage monitors to monitor any earthworks, with an archaeologist engaged to be 'on call' during the excavations in the event specialised archaeological input is required for potential Aboriginal site discovery. This should also include an Aboriginal Site Discovery Procedure to be used during earthworks (the recommended site discovery procedure is included in Appendix 1). This monitoring/on call recommendation is more suitable for situations where there is no ground visibility whatsoever prior to earth moving (this includes, but is not limited to, paved footpaths).

The recommended mitigation measures described in this report will ensure that any ground disturbing works associated with the investigation area do not result in any offences under the AHA, or damage to significant Aboriginal heritage. However, consultation on this matter should take place with KNCHA before such measures are implemented, to ensure that they satisfy their legitimate cultural heritage and native title interests.

8 Conclusion

Whilst this desktop report did not identify any specific cultural heritage sites within the investigation area, this does not necessarily indicate that there are no cultural heritage sites extant. The number of Aboriginal cultural heritage sites recorded in the vicinity of the investigation area (Table 6-1), and previous skeletal finds (Table 6-2) indicates a high likelihood for the discovery of Aboriginal heritage sites within the project area.

Furthermore, Aboriginal heritage site locations have a high degree of association with water features, including streams, wetlands and coastal dunes. The Samphire Coast area, with its proximity to coastal resources and trade routes was for thousands of years part of a highly populated Aboriginal landscape with a relatively high density of sites, objects and remains. Consequently, development in this area has a high probability of encountering Aboriginal heritage sites and potentially burials.

The main piece of heritage protection legislation with regards to the investigation area is the South Australian AHA. Although there is no legal requirement within this Act for a developer to undertake an Aboriginal heritage survey, an Aboriginal heritage survey is often undertaken during the planning stage of a project as a risk minimising and due diligence strategy to reduce the prospect of costly delays during construction.

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Legal Case

Mabo v Queensland (No 2) (1992) 175 CLR 1

Legislation

Aboriginal Heritage Act 1988 (SA)

Aboriginal and Torres Strait Islander Heritage Protection Act 1984 (Cwth)

Environment Protection & Biodiversity Conservation Act 1999 (amended 2003) (Cwth)

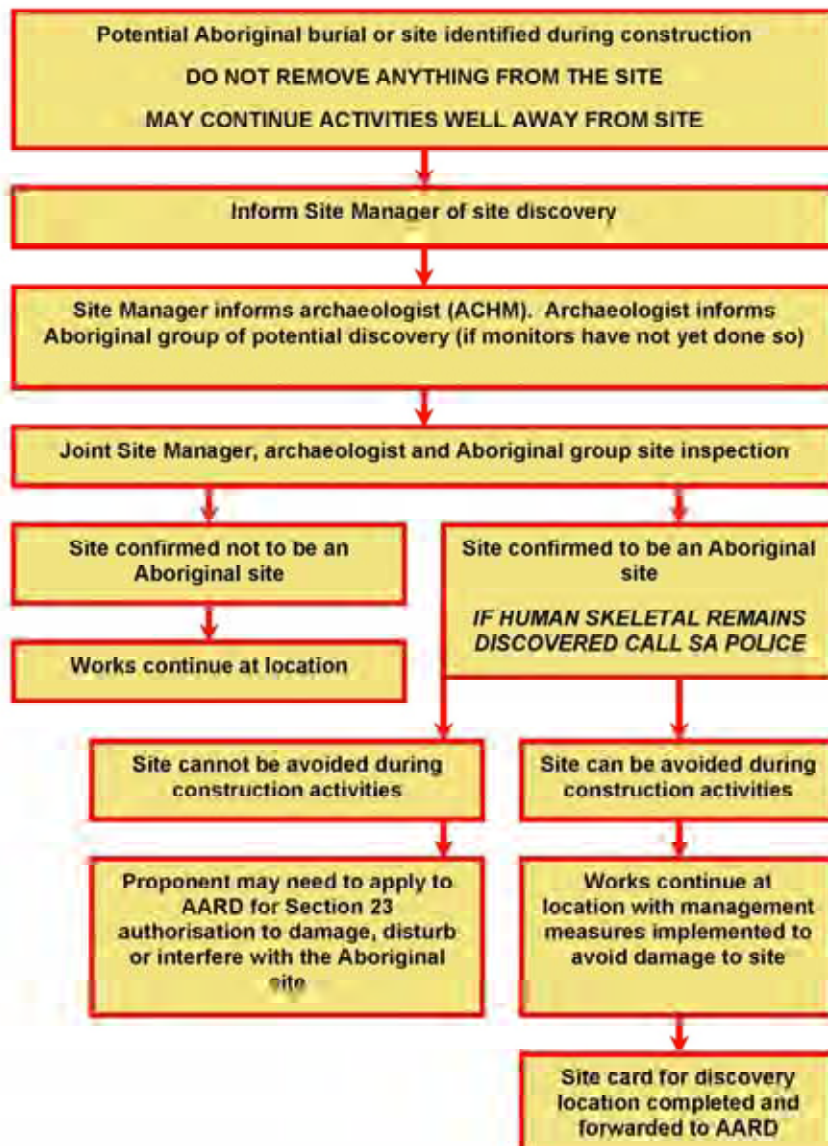
Native Title Act 1993 (Cwth)

Native Title (South Australia) Act 1994

10 Appendix 1

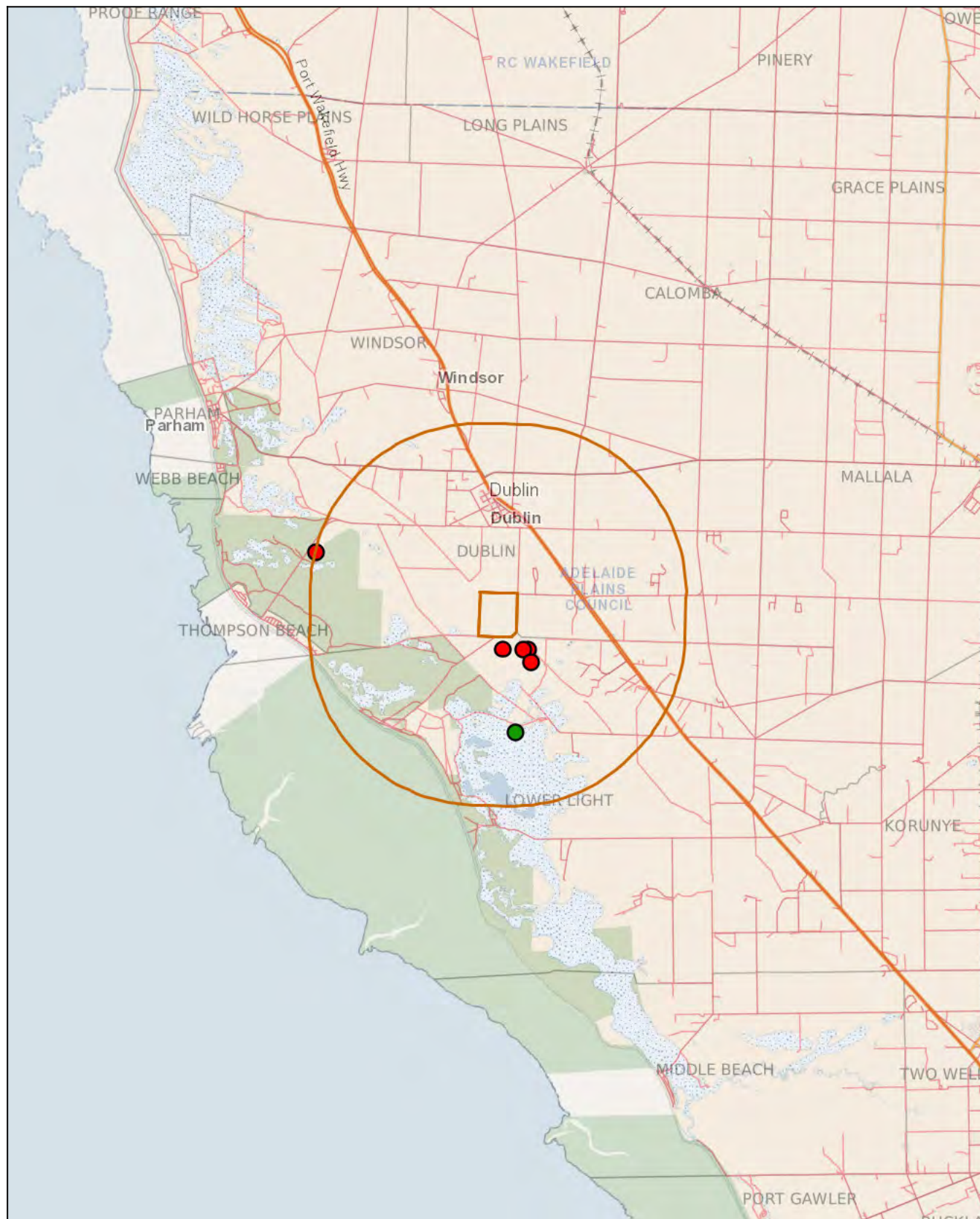


Procedure to follow if potential Aboriginal skeletal remains and/or an archaeological site are found



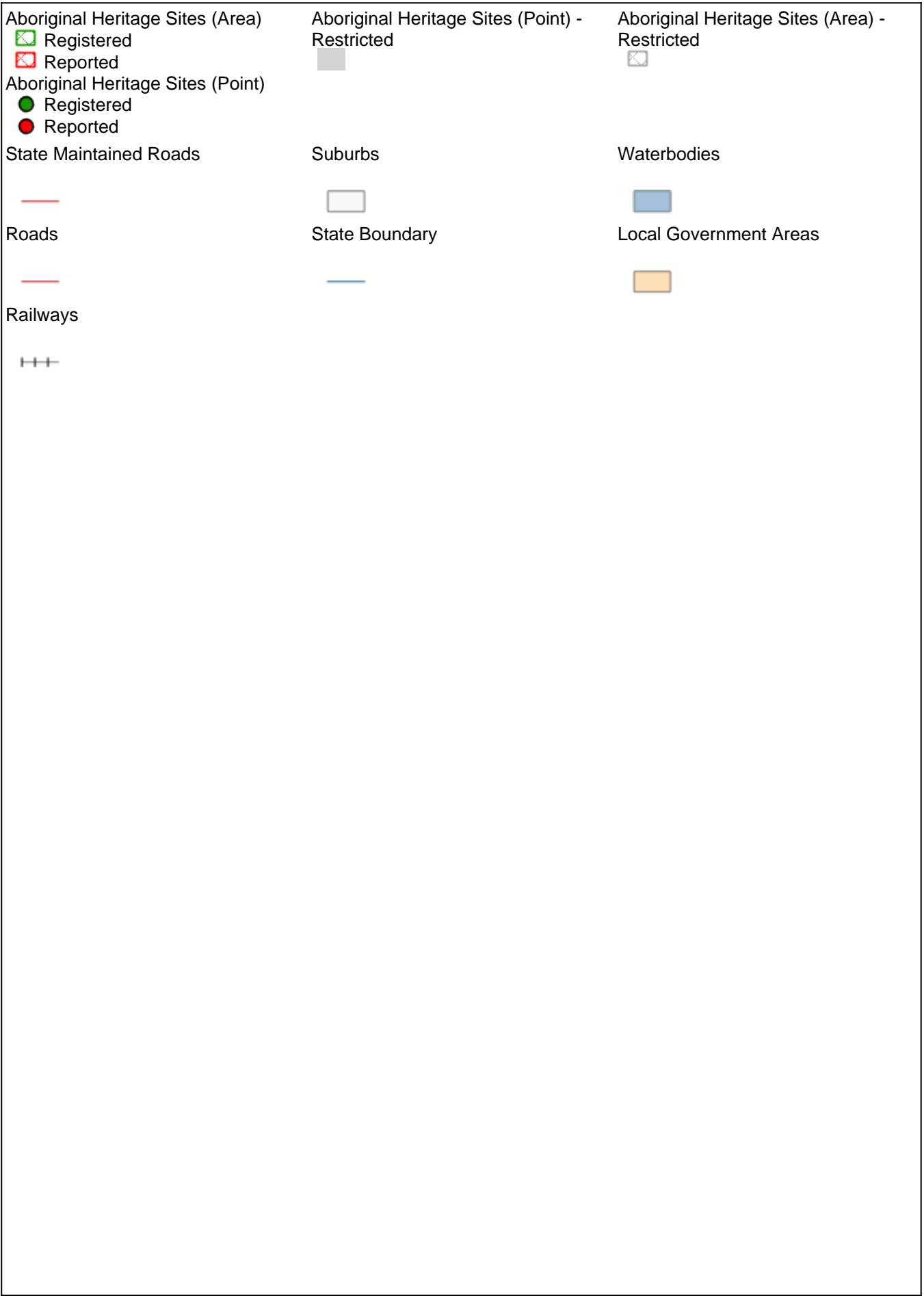
ABORIGINAL HERITAGE SITES

Reference Number:	4489
Buffer Distance (m):	5000



Metres 2,500 5,000 7,500

EPSG:3107 projection



Mackenzie Bensch
Groundwork Plus
16 Second Street
Nuriootpa 5355 South Australia

Dear Mackenzie

Thank you for the search request dated 13 Feb 2023. The search was based on the title details - Title Type: CT, Volume: 5633, Folio: 660. The address for this parcel is: 25 RUSKIN RD DUBLIN SA 5501. Your reference is 4489.

I advise that the central archive, which includes the Register of Aboriginal Sites and Objects (the Register), administered by Aboriginal Affairs and Reconciliation (AAR), has entries for Aboriginal sites within 5000m of this location.

Cultural Heritage Sites (Point) in the property:

Map Number	Site Number	Site Type	Site Status
6528	2262	Burial	Registered
6529	4561	Archaeological	Reported
6529	4562	Archaeological	Reported
6529	4563	Archaeological	Reported
6529	4564	Archaeological	Reported
6529	5113	Archaeological	Reported

Cultural Heritage Sites (Area) in the property:

Map Number	Site Number	Site Type	Site Status
6529	4561	Archaeological	Reported
6529	4562	Archaeological	Reported
6529	4563	Archaeological	Reported

The enclosed map identifies the approximate site location. It should be noted however that the site indicator does not reflect the actual area of the site; as this will vary from site to site, depending on the site information contained in the Central Archive.

The applicant is advised that sites or objects may exist in the proposed development area, even though the Register does not identify them. All Aboriginal sites and objects are protected under the *Aboriginal Heritage Act 1988* (the Act), whether they are listed in the central archive or not. Land within 200 metres of a watercourse (for example the River Murray and its overflow areas) in particular, may contain Aboriginal sites and objects.

Pursuant to the Act, it is an offence to damage, disturb or interfere with any Aboriginal site, object or remains (registered or not) without the authority of the Premier. If the planned activity is likely to damage, disturb or interfere with a site, object or remains, authorisation of the activity must be first obtained from the Premier under Section 23 of the Act. Section 20 of the Act requires that any Aboriginal sites, objects or remains, discovered on the land, need to be reported to the Premier. Penalties apply for failure to comply with the Act. It should be noted that this Aboriginal heritage advice has not addressed any relevant obligations pursuant to the *Native Title Act 1993*.

Please be aware in this area there are Aboriginal groups/organisations/traditional owners that may have an interest. These may include:

Kaurna Yerta Aboriginal Corporation
Chairperson: Les Wanganeen

Address: C/- South Australian Native Title Services Level 4 345 King William Street ADELAIDE SA 5000

Telephone:

Email:

Contact Officer: Tom Jenkin

Telephone: 08 81102800

Email: tomj@nativetitlesa.org info@nativetitlesa.org

Terms and conditions for use of information derived from the central archive:

- Information derived from the central archives is confidential under section 10 of the *Aboriginal Heritage Act 1988* (the Act)
- Under section 35 of the Act, information derived from the central archives must not be divulged contrary to Aboriginal tradition unless authorised under these terms and conditions.
- Breaches of sections 10 and 35 of the Act may attract fines of up to \$10,000 or imprisonment for 6 months.
- The Applicant agrees to use the confidential information solely for the approved purpose in line with the specified current or contemplated approved use, subject to any restrictions of use detailed on this request form.
- The Applicant agrees that they are only authorised to disclose or transfer the confidential information to parties listed on this form and in accordance with any restrictions of use detailed on this request form.
- The Applicant agrees that all confidential information must remain marked "confidential", including where the information is shared in accordance with the approved use detailed on this request form.
- The Applicant will keep all information derived from the central archives (either digital or hard copy) in a secure location/format.
- If there has been any unauthorised release or use of any information derived from the central archives other than for the approved purpose and/or approved use in accordance with the restrictions of use, the Applicant will notify AAR immediately.
- All information derived from the central archives (both digital and any hard copies) must be destroyed once no longer required for the approved purpose, unless an updated central archives access information request form has been approved by AAR.

If you require further information, please contact the Aboriginal Heritage Team on telephone (08) 8303 0738 or send to our generic email address AAR.HeritageSites@sa.gov.au

Yours sincerely,

**HERITAGE INFORMATION TEAM
ABORIGINAL AFFAIRS & RECONCILIATION**

20 April 2023

Abstract white line art on a light beige background. It includes a large semi-circle on the left, a horizontal line extending from its base, and a series of geometric shapes (a U-shape, a vertical rectangle, and a parallelogram) at the bottom.

APPENDIX 6

Preliminary Traffic Assessment, MFY, November 2023

MLM/23-0246

6 November 2023

Mr. Richard Dwyer
Ekistics
Level 3, 431 King William Street
ADELAIDE SA 5000



Traffic • Parking • Transport

Unit 6, 224 Glen Osmond Road
FULLARTON SA 5063

T: +61 8 8338 8888

F: +61 8 8338 8880

E: mfya@mfy.com.au

W: mfy.com.au

MFY Pty Ltd

ABN 79 102 630 759

Dear Richard,

**POTENTIAL LAND REDEVELOPMENT, DUBLIN
REVIEW OF TRAFFIC CAPACITY**

I refer to investigations relating to the potential for residential development on land south of Clonan Road in Dublin, South Australia. You have sought my view as to the potential yield of allotments which could be realised on the site without changing the nature or function of the adjacent road network or requiring infrastructure works at existing arterial road intersections.

Dublin is a township located north of Adelaide, adjacent the Port Wakefield Highway. The highway, which is part of National Highway 1 is a controlled access road. It has a four lane divided carriageway with a wide median and a daily traffic volume in the order of 10,400 vpd. It is a major freight route to which a 110km/h speed limit applies.

A sealed service road (Old Port Wakefield Road) provides access to the Dublin township. Two authorised access points to the service road have been proclaimed. These access points intersect with the highway at the southern and northern ends of the town. Both intersections are treated with channelised left and right turn lanes on Port Wakefield Highway. Acceleration lanes are not provided at either intersection.

A due diligence assessment which considered potential development on the subject site was completed in 2012. This assessment considered a large landholding (in the order of 1445 Ha) and considered the intersection and road capacity for various yield and growth scenarios for development on this site. The report also identified infrastructure requirements to cater for the potential yields.

As requested, I have now reviewed the subject development area as it relates to traffic capacity in order to identify the yield of residential allotments which could potentially be developed within the constraints of the existing road network. In order to complete this assessment, the following traffic parameters have been applied:

- a traffic generation rate of 7.5 trips per dwelling which is consistent with the rate applied in the 2012 assessment;
- an allocation of 25% local trips as per the recommendation in the RMS Guide to Traffic Generating Developments;
- traffic distribution consistent with the 2012 assessment;
- a growth rate of 1% pa on Port Wakefield Highway. This was calculated using historical traffic data on the highway which identified a growth rate of 0.91% pa for the ten year period between 2012 and 2022; and
- an allocation of all external trips to the southern service road intersection with Port Wakefield Road.

The critical movement in relation to capacity of the intersection is the right turn to Port Wakefield Highway. There is capacity to cater for a queue of three vehicles within the median which provides for a staged turning movement which improves capacity but, nonetheless, this turn has a reduced capacity when compared to other movements at the intersection.

Figure 1 illustrates the forecast traffic movements at the intersection during the morning and afternoon peak hours.

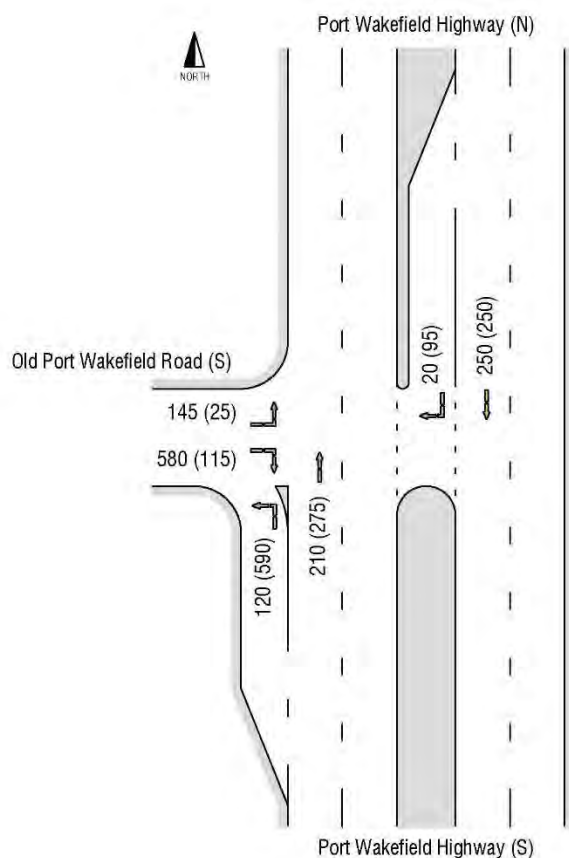


Figure 1: Forecast turning movements at the southern service road intersection with Port Wakefield Highway am (pm)



Sidra analysis was completed to assess the capacity of the existing intersection for various growth scenarios. The DIT modelling protocols were adopted for the model, albeit a more detailed assessment would require that it be validated on-site. Sidra output is included in Appendix A.

The modelling identified that there would be capacity at the existing intersection to cater for traffic generated by 1300 additional dwellings at the southern service road intersection to 2040. Given that the current design year adopted by DIT is 2041, it is appropriate to consider a potential yield of 1300 dwellings within the subject development area, based on existing conditions.

The balance of the subject land is identified for a potential mining tenement and employment (industrial) areas. These land uses should be accessed via Thompson Road to minimise any impact on the Dublin township created by large vehicles. The Thompson Road/Port Wakefield Highway intersection has been designed to cater for large commercial vehicles and currently provides access to and from the existing chicken farm.

Additional volumes generated by development in the employment and mining area will be dependent on the ultimate land use. As an example, however, the potential mining tenement is forecast to generate in the order of 20 trips a day which is very low and would have a negligible impact on the operation of the intersection. Further, the existing volumes at the intersection are low and there is therefore significant spare capacity. Accordingly, while each land use application would be subject to a separate assessment, there is potential for the intersection to cater for the envisaged development.

Yours sincerely,

MFY PTY LTD

A handwritten signature in black ink, appearing to read 'Melissa Mellen', written over a white rectangular background.

MELISSA MELLEN

Director

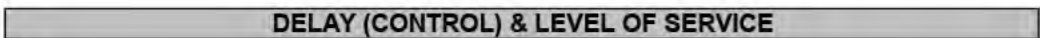


2010 NATIONAL WINNER
2010 TELSTRA SOUTH AUSTRALIAN
BUSINESS WOMAN OF THE YEAR

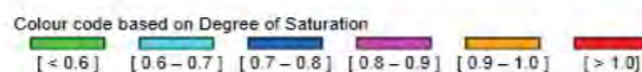
APPENDIX A

SIDRA ANALYSIS

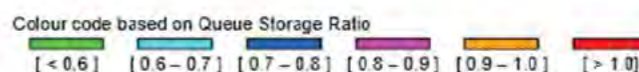
INTERSECTION LAYOUT



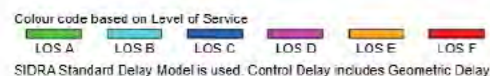
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95%ile QUEUE DISTANCE (metres)



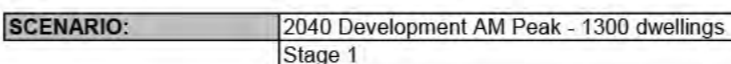
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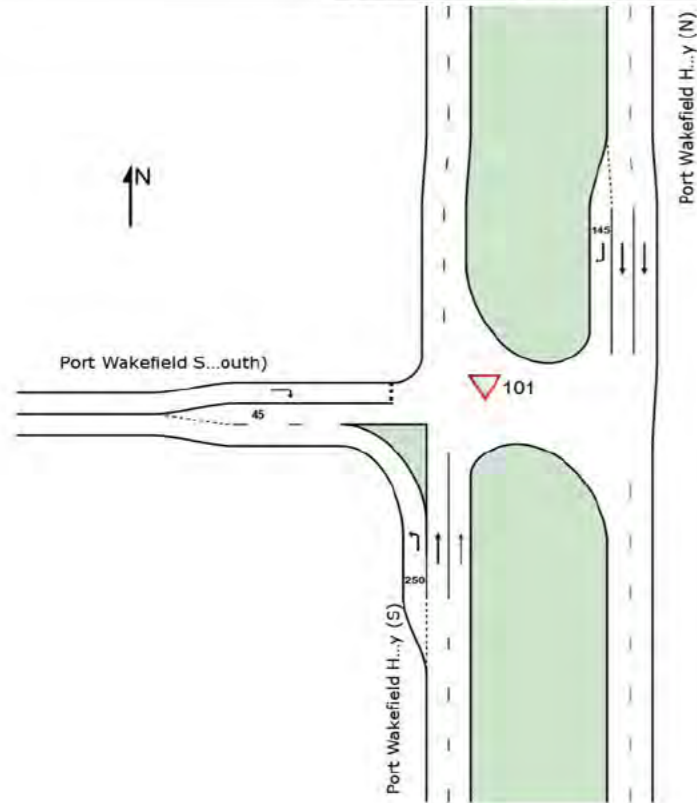
JOB NUMBER:	23-0246
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PROJECT NAME:	Leinad Land Urban Development
	Dublin

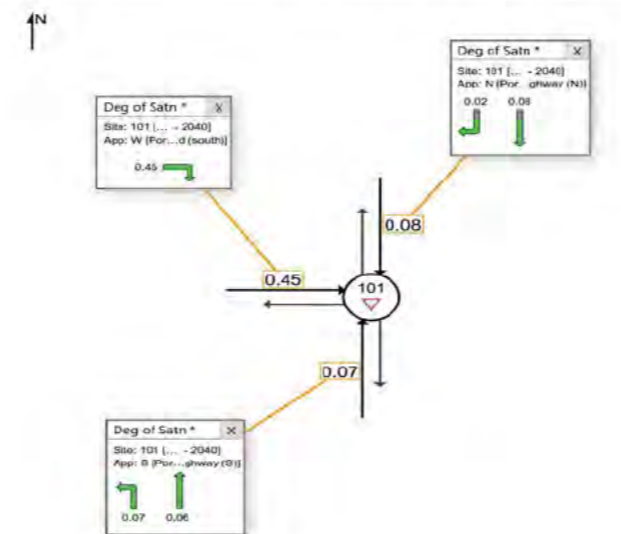
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INTERSECTION LAYOUT



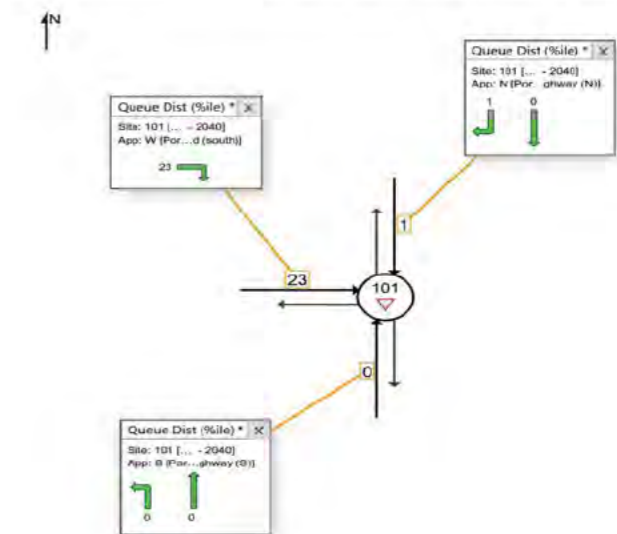
DEGREE OF SATURATION



Colour code based on Degree of Saturation

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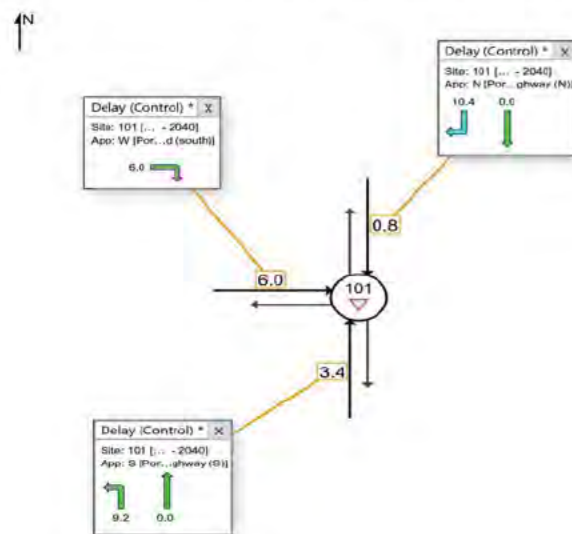
95%ile QUEUE DISTANCE (metres)



Colour code based on Queue Storage Ratio

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DELAY (CONTROL) & LEVEL OF SERVICE

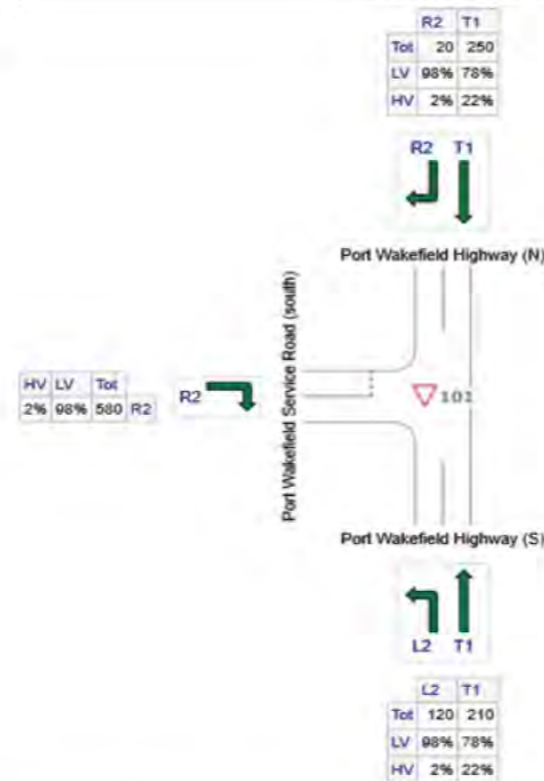


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SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

INPUT VOLUMES

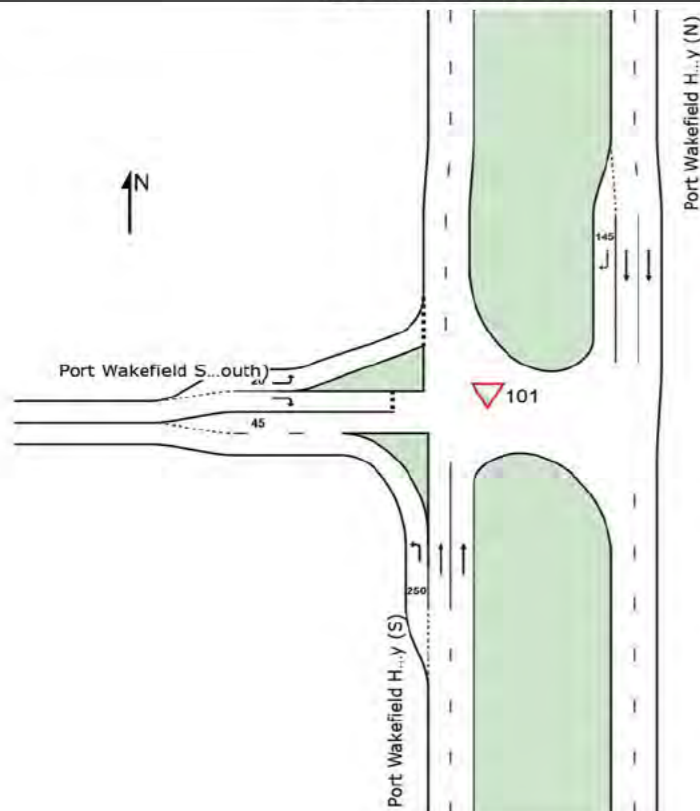


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PROJECT NAME:	Leinad Land Urban Development Dublin

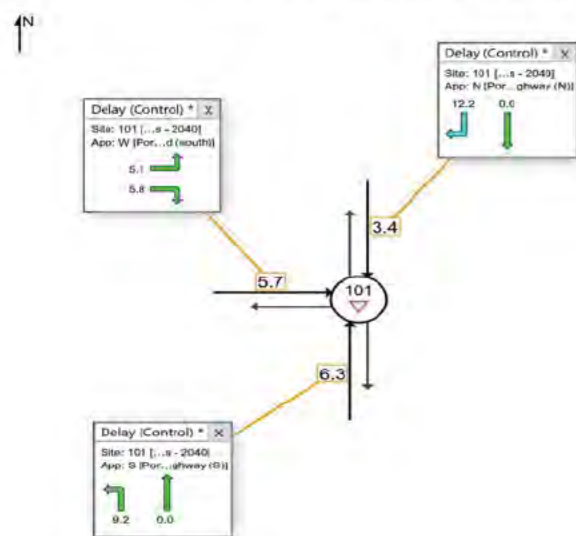
INTERSECTION:	Port Wakefield Highway - Old Port Wakefield Road (South)
SCENARIO:	2040 Development AM Peak - 1300 dwellings Stage 2



INTERSECTION LAYOUT



DELAY (CONTROL) & LEVEL OF SERVICE



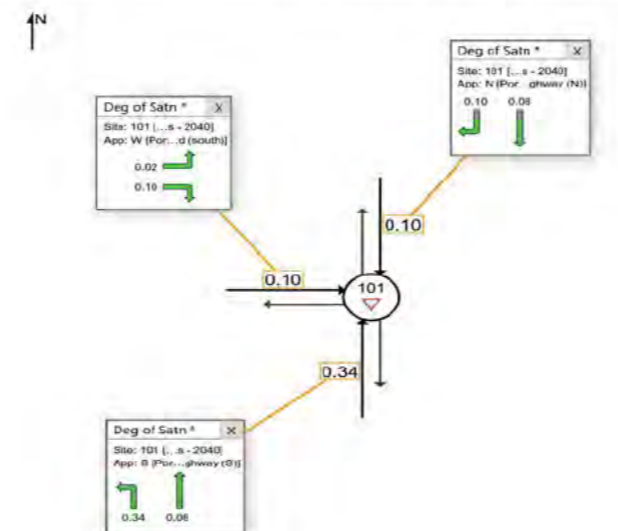
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LOS A LOS B LOS C LOS D LOS E LOS F

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

JOB NUMBER:	23-0246
PROJECT NAME:	Leinad Land Urban Development
	Dublin

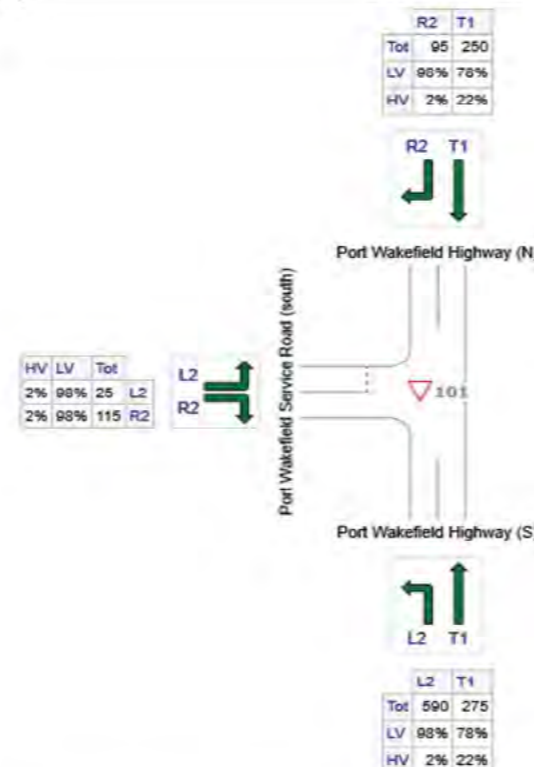
DEGREE OF SATURATION



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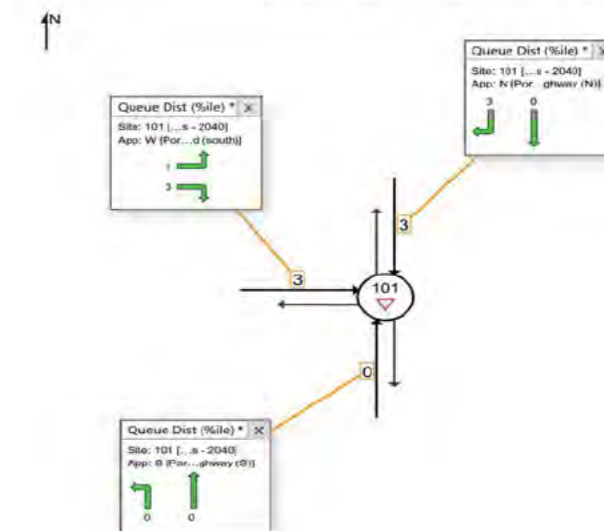
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INPUT VOLUMES



INTERSECTION:	Port Wakefield Highway - Old Port Wakefield Road (South)
SCENARIO:	2040 Development PM Peak - 1300 dwellings
	Stage 1

95%ile QUEUE DISTANCE (metres)

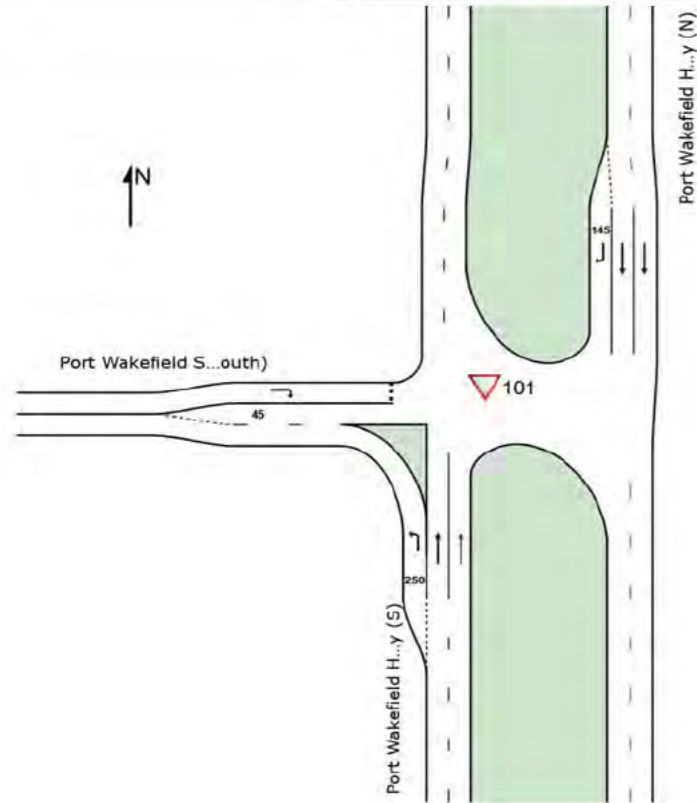


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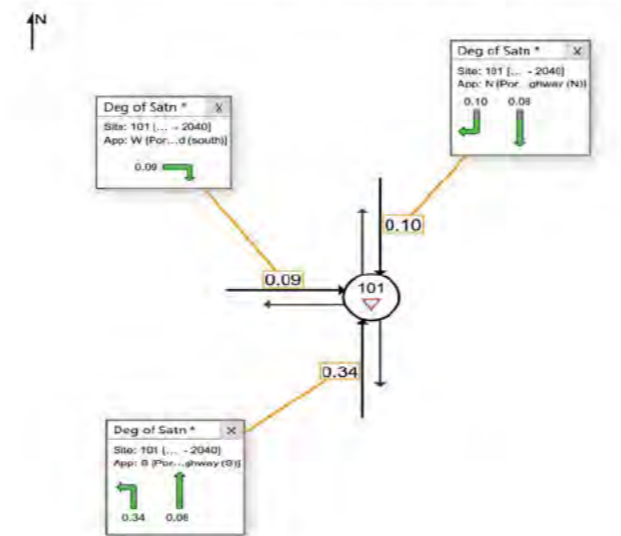
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INTERSECTION LAYOUT



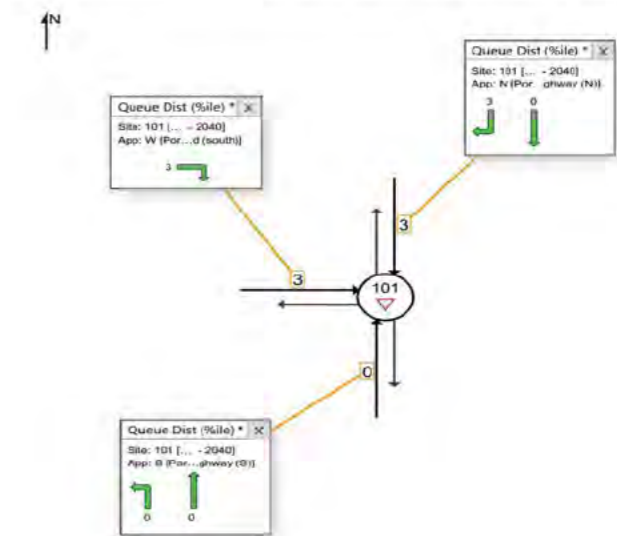
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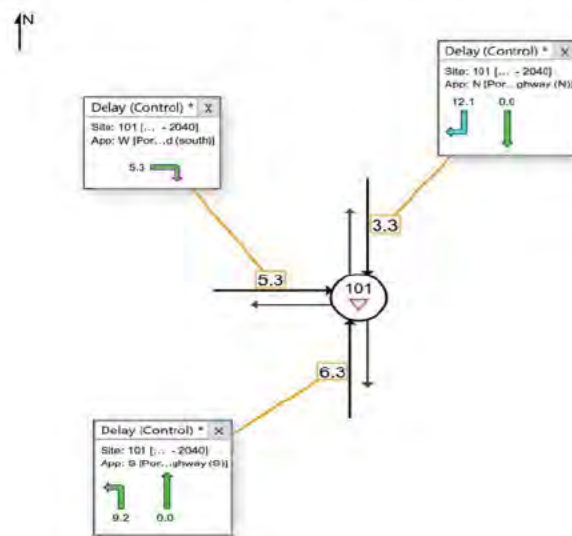
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DELAY (CONTROL) & LEVEL OF SERVICE

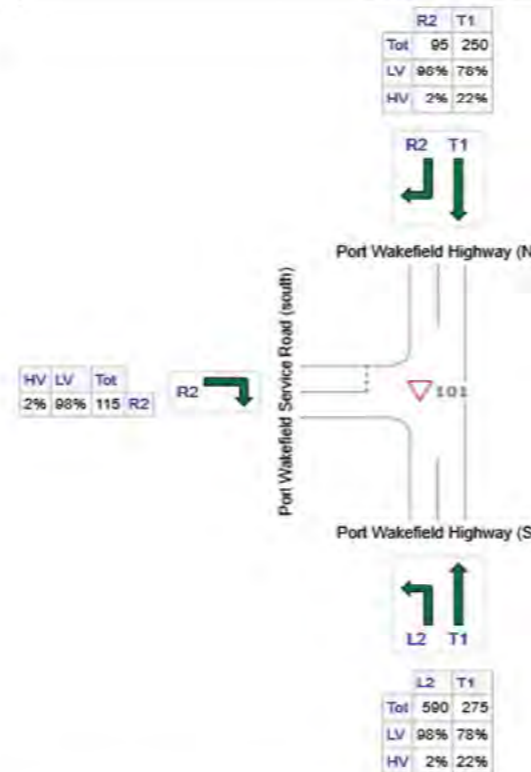


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SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

INPUT VOLUMES



JOB NUMBER:	23-0246
PROJECT NAME:	Leinad Land Urban Development Dublin

INTERSECTION:	Port Wakefield Highway - Old Port Wakefield Road (South)
SCENARIO:	2040 Development PM Peak - 1300 dwellings Stage 2



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APPENDIX 7

Broiler Farm Odour Emissions, Preliminary Assessment, October 2023



**Broiler Farm Odour Emissions
Residential Development – Dublin**

Preliminary Assessment - R23-0931a



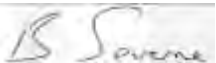
0408 831 088

info@enviroscan.com.au



**Broiler Farm Odour Emissions
Residential Development – Dublin
Preliminary Assessment - R23-0931a**

By

Disclaimer

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1. Background

EPA guideline “Evaluation distances for effective air quality and noise (2019)” specifies individual assessment of broiler farms with

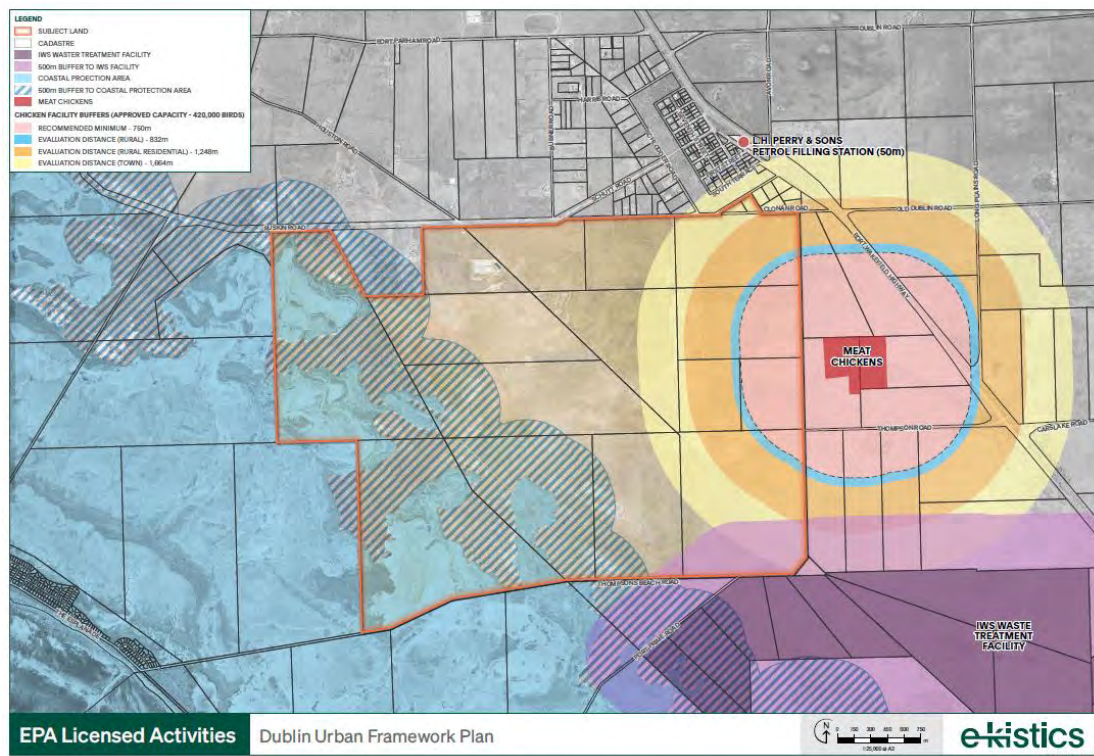


Figure 1

2. Determination of Buffer Zone

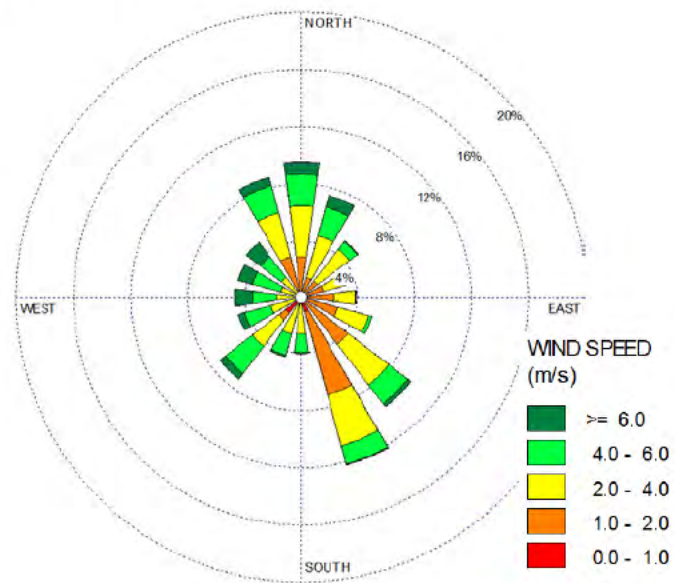
Table 1

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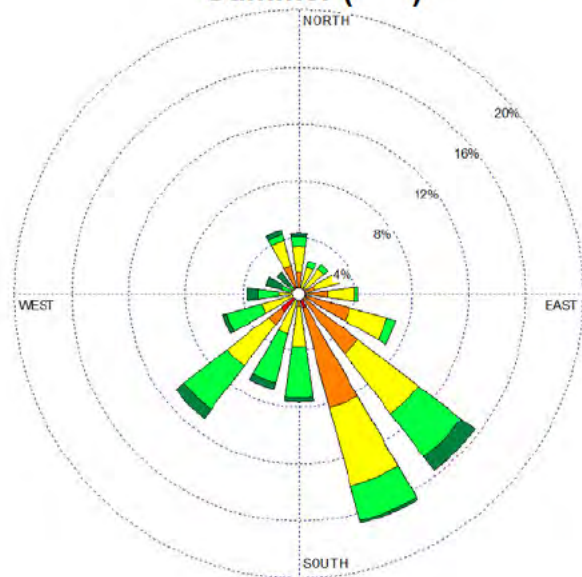
3. Dublin Meteorology

Hurley et al, 2008. TAPM V4 CSIRO Research Paper 25

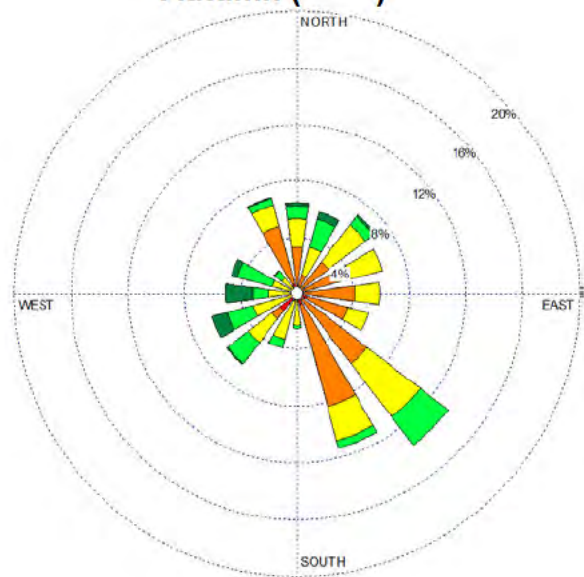
Annual Windrose 2009



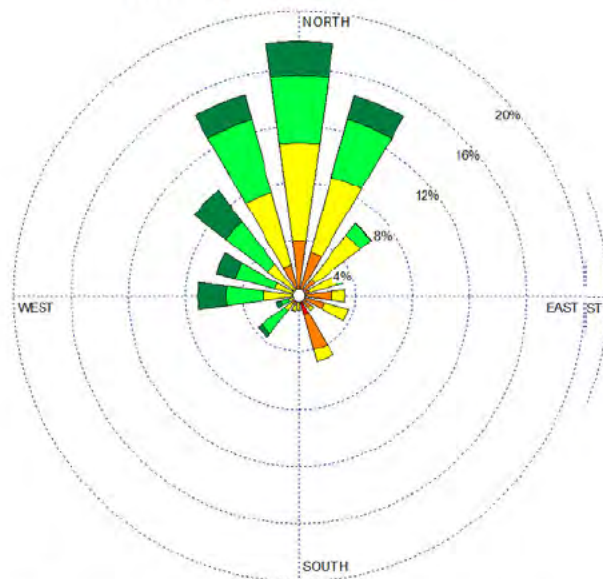
Summer ()



Autumn ()



Winter ()



Spring ()

Figure 2 Y2009 Seasonal Windroses for Dublin

4. Modelling Results

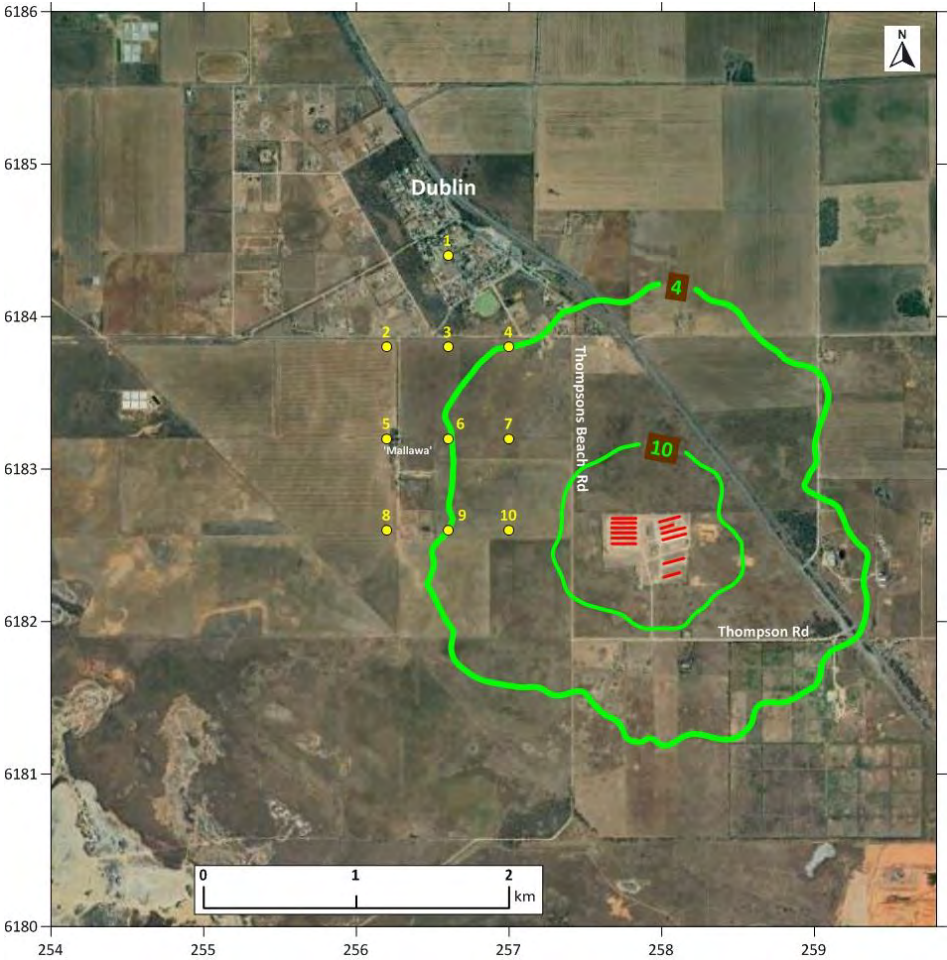


Figure 3

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Table 2

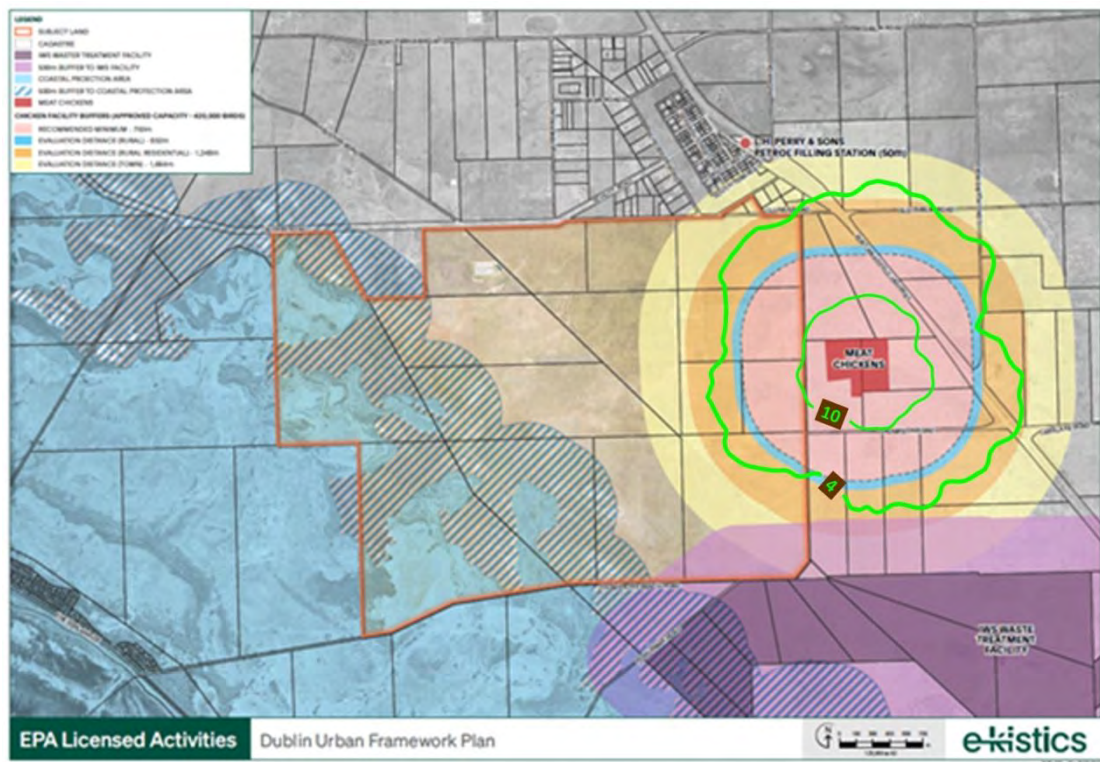


Figure 4

4 Recommendation

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APPENDIX 8

Letter from Adelaide Plains Council



**Adelaide
Plains
Council**

Principal Office
2a Wasleys Road
PO Box 18
Mallala SA 5502

P 08 8527 0200
E info@apc.sa.gov.au

ABN 58 384 968 672

19 December 2023

Reference: D23/57661
Your Reference 01571-003

Leinad Land Developments (Dublin) Pty Ltd
C/- Rick Hutchins
Associate
Ekistics
Email: rhutchins@ekistics.com.au

Dear Mr. Hutchins,

Proposed Dublin Employment Lands Code Amendment

Thank you for your letter of 29th November 2023, in which you outline that Leinad is seeking to commence a 'Proponent Initiated Code Amendment' to rezone approximately 400 hectares of land to accommodate a range of employment related land uses at Dublin.

I note your subsequent email of 14 December advising Lot 22 Ruskin Road CT 6090/419 is not included. I acknowledge receipt of your Urban Framework Plan and submission to the Greater Adelaide Regional Plan Discussion Paper, both updated to not include Lot 22 Ruskin Road.

Council Decision Noting CEO's No Objection

Council, at its meeting on 18 December 2023, resolved as follows 'that Council, having considered Item 14.5 – Proposed Dublin Employment Lands Code Amendment, dated 18 December 2023, receives and notes the report and in doing so notes the Chief Executive Officer's intention to advise Leinad Land Developments (Dublin) Pty Ltd that Council has no objection to the initiation of the Code Amendment seeking to investigate employment land to the south of Dublin, and notes advice dated 14 December 2023 from Ekistics for Leinad that the area affected does not include, Lot 22 Ruskin Road (CT 6090 419).



Background

We note your proposed 'Area Affected' for the purpose of the investigations and engagement on the Code Amendment is to the south of the existing Dublin township (Figure 1).

Area Affected for Dublin Employment Lands Code Amendment

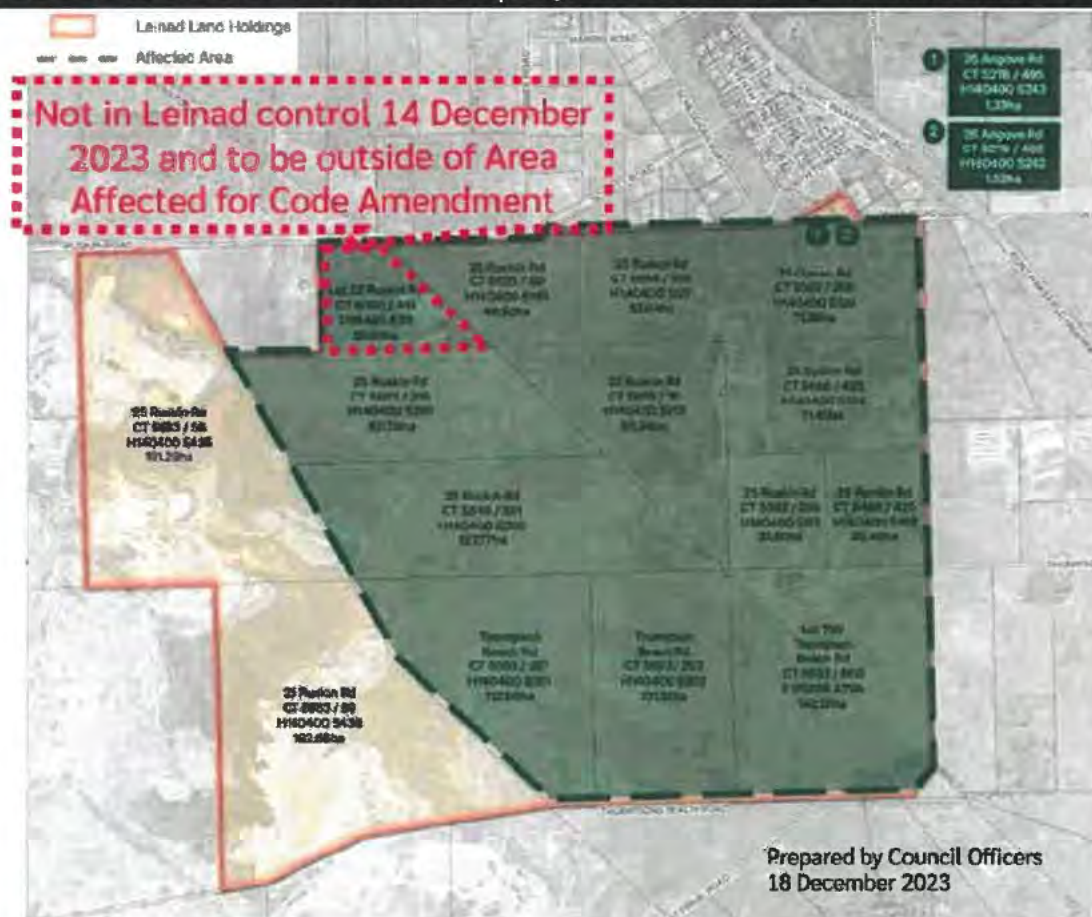


Figure 2 - Proposed Affected Area

Figure 1 Proposed Affected Area

We note based on various investigations undertaken to date, your high-level spatial framework for the area affected is entitled 'Dublin Urban Framework Plan' (Figure 2). We note this framework envisages a range of land uses, including residential which are not within the proposed scope of this Code Amendment.

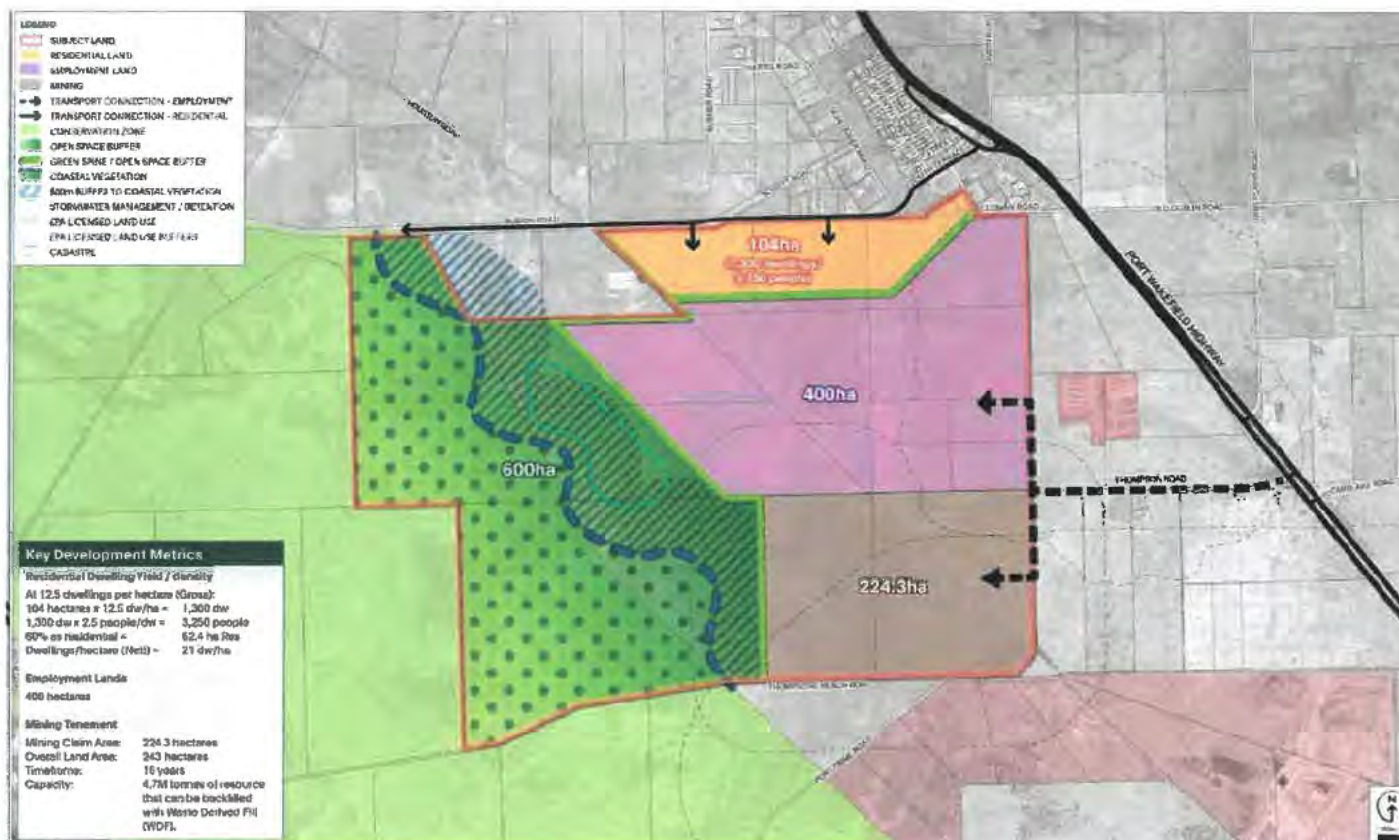


Figure 1.2 – Dublin Urban Framework Plan

Figure 2 Dublin Urban Framework Plan mid-December 2023

Support Proposed Investigations

We note you 'seek written confirmation from Council that the proponent has consulted with the Chief Executive Officer of the Adelaide Plains Council on the proposed Code Amendment and that the Chief Executive Officer of Council does not object to the initiation of a Proponent Initiated Code Amendment.'

Please be advised I do not object to the initiation of the Code Amendment seeking to investigate employment land to the south of Dublin.

Comments on Proposed Investigations

We note you:

- '... would welcome feedback on the investigations that are proposed to be undertaken in association with this Code Amendment including any additional investigations or analysis that may be recommended by Council.'



- ‘... would also welcome advice on any existing investigations, strategies or reports that may have already been undertaken by Council (or that are proposed or scheduled to be undertaken by Council) that should be taken into consideration when initiating and preparing the proposed Code Amendment.’

Acknowledging past investigations, the below table summarises your proposed investigations and our comments.

Proposed Investigations	APC Comments
Land economics	<p>Support.</p> <p>Scope should have regard to:</p> <ul style="list-style-type: none"> • Existing land zoned for employment purposes within Adelaide Plains, including but not exclusively the Carslake Road Employment Zone • Potential supply for more intense agribusiness employment type development in rural and rural horticulture type existing zones • New employment areas flagged for discussion in the Greater Adelaide Regional Plan (GARP) Discussion Paper. <p>Council’s Growth Strategy three town service model aligns with the intent in GARP about living locally. Investigations for further employment land should consider opportunities for living locally within Adelaide Plains or the nearby region for workers in the new employment land.</p>
Native vegetation and biodiversity	<p>Support</p> <p>We suggest you engage the Nature Conservancy noting their coastal areas interest. We also suggest you engage with National Parks and Wildlife Service associated with the Adelaide International Bird Sanctuary National Park - Winaityinaityi Pangkara (AIBSNP-WP).</p>
Flooding, hydrology and stormwater	<p>Support</p> <p>Water sensitive urban design approaches should form part of your investigation.</p>



Infrastructure and Utility Services	<p>Support</p> <p>We note the scope of your investigations around potable and recycled water and ‘Consideration of the circular economy model that may be adopted to generate energy (electricity and hydrogen) and water which will reduce infrastructure augmentation as a result of localised generation and distribution of power and potable water.’</p> <p>We suggest your investigations consider the potential for augmentation of utility services – in particular water and energy – with nearby established land uses (such as IWS as one example) as well as envisaged land uses (such as within the Carslake Road Employment Zone)</p>
Transport and Access	<p>Support</p> <p>Noting the traffic scope of your investigations and the long-term intent for live local at Dublin, we suggest the scope include investigating walking and cycling, as well as e-vehicles.</p> <p>Investigation should have regard to future trails to the coast. Council at its meeting on 27 November 2023 endorsed consultation occurring on the Thompson Beach – Parham and Webb Beach Discussion Paper. This paper includes Dublin’s potential growth as context information, and flags the long-term potential for trails connecting coastal settlements through AIBSNP-WP to Dublin itself, as well as north south along the coast.</p>

Your investigations should be aware of:

- Council adopted Growth Strategy and GARP submission, and Council adopted Tourism and Economic Development Strategy¹.
- Past studies² about primary production, horticulture and rural lands
- Council adopted Equine Strategy. Noting this Strategy envisages continuation of relatively low historic levels of horse activity in coastal areas proper, the potential for horse-based businesses, clubs, and use on trails should be considered

¹ apc.sa.gov.au/our-council/council-documents/councilplans is the link to the Tourism and Economic Development Strategy

² apc.sa.gov.au/council-services/development/strategicprojects contains a range of past studies



- The Barossa, Light and Lower Northern Region Regional Public Health Plan, in particular its intent around community, public and active transport.
- A 2016 open space strategy and 2022 Dublin Oval Concept Plan
- A proposed coastal adaptation study
- The interest of various groups in the future of Dublin:
 - Adelaide Plains Business Group
 - Northern Adelaide Plains Food Cluster
 - RDA Barossa
 - Businesses and community groups in the region, including, for example, Dublin History Group and Cricket Club, several Dublin traders, IWS (who have a reference group), Parham and Districts Action Group, Thompson Beach Progress Association, Coalition of Coastal Communities, Friends of Adelaide International Bird Sanctuary, National Parks and Wildlife Service.

Future Comments

We acknowledge your letter stating 'Importantly, confirmation that Chief Executive Officer of Council (Council administration) does not object to the initiation of a Code Amendment does not constitute a form of advocacy for the rezoning nor does it imply that Council will ultimately support the rezoning of the land. '

As investigations and the Code Amendment progresses, we look forward to the opportunity for Council to comment further.

If you require any further information, please contact David Bailey, Manager Growth & Investment on (08) 8527 0200 or dbailey@apc.sa.gov.au.

Yours sincerely,

James Miller
Chief Executive Officer

21109333

[REDACTED]

By email: [REDACTED]

Dear [REDACTED]

I write to advise that under section 73(2)(b)(vii) of the *Planning, Development and Infrastructure Act 2016* (the Act), I have considered the advice of the State Planning Commission (the Commission) and approved the Proposal to Initiate the Dublin Green Circular Economy Precinct (Employment Areas) Code Amendment.

A copy of the signed Proposal to Initiate is enclosed for your reference.

The initiation approval is on the basis that under section 73(4)(a) of the Act, Leinad Land Developments (Dublin) Pty Ltd be the Designated Entity responsible for undertaking the Code Amendment process.

I note that the Code Amendment is informed by the Proponent's Dublin Urban Framework, which includes a long-term residential expansion component. I note that this Code Amendment does *not* include residential rezoning, and advise that this Initiation should not be taken as support for such. Any proposals for residential land uses will need to be considered as part of a separate Proposal to Initiate in future.

Furthermore, I note that this Code Amendment is only seeking to rezone the employment component of this Framework. This being the case, I suggest for clarity that the Code Amendment be renamed to the 'Dublin Employment Code Amendment' to minimise any risk of confusion in the community.

Pursuant to section 73(5) of the Act, the approval is also subject to the following conditions:

- Prior to adoption of the Code Amendment, the Designated Entity must demonstrate to the satisfaction of the Minister for Planning that all necessary agreements or deeds are fully executed as required to secure the funding and/or delivery of all infrastructure required to accommodate the development of the affected area, as proposed by the Code Amendment (to the satisfaction of all relevant infrastructure providers).
- The scope of the proposed Code Amendment does not include the creation of new planning rules, and is limited to the spatial application of zones, subzones, overlays, or technical and numerical variations provided for under the published Planning and Design Code (the Code) on the date the Amendment is released for engagement.

- The Code Amendment is prepared by a person with qualifications and experience that is equivalent to an Accredited Professional—Planning Level 1 under the Act.
- In respect to a review of bushfire hazard risk levels, that the Code Amendment does not include changes to the applicable Hazard – Bushfire Overlays. The State-wide Bushfire Hazards Overlay Code Amendment will establish an updated methodology for assessing bushfire risk levels across the state, following which the overlays will be updated as necessary via section 71 of the Act.

In addition, the Commission has specified under section 73(6)(e) of the Act that the Designated Entity must consult with the following stakeholders:

- Department for Energy and Mining
- Department for Environment and Water – Green Adelaide, Coast Protection Board, Native Vegetation Council, National Parks and Wildlife Service
- Department for Infrastructure and Transport
- Department of Primary Industries and Regions
- Environment Protection Authority
- Green Industries SA
- Integrated Waste Management Pty Ltd Reference Group
- Kaurna Yerta Aboriginal Corporation
- Kaurna Nation Cultural Heritage Association
- Regional Development Australia – Barossa, Gawler, Light and Adelaide Plains
- South Australian Country Fire Service
- South Australian Fire and Emergency Services Commission
- South Australian Metropolitan Fire Service
- State Members of Parliament for the electorates in which the proposed Code Amendment applies.
- Utility providers including SA Power Networks, ElectraNet, APA Group, SEAgas, SA Water, Epic Energy, NBN, Office of the Technical Regulator and other telecommunications providers.

Further, the Commission has, under section 73(6)(f) of the Act, resolved to specify the following further investigations or information requirements in addition to that outlined in the Proposal to Initiate:

- Considering existing, zoned employment land supply within the region, undertake detailed analysis that:
 - Investigates the quantity and type of employment land required in the region, in the context that the Carslake Road Strategic Employment Zone site is 880 hectares and 488 hectares is largely undeveloped with significant further development capacity.

When investigating this, consideration should be given to ability of land to be serviced ('development ready').

- Considers the capacity for the region to accommodate nearly 1,300 hectares of zoned employment land in the context of new employment areas flagged for discussion in the Greater Adelaide Regional Plan Discussion Paper.
- Identifies cumulative impacts of development on existing infrastructure (road, water, power, wastewater, gas) in the context of existing employment land supply within the region, and whether the Proposal will constrain the ability for such zoned land to be developed in the short-, medium- and long-term.
- Substantiate the concept and delivery of the 'Green Circular Economy', including commentary on whether supply chains have been established (including waste to fuel the bioreactor).
- Provide a comprehensive infrastructure analysis by an appropriately qualified expert (or experts), that identifies all future infrastructure works required to accommodate the development of the affected area as proposed by the Code Amendment and provide a strategy which offers a funding and delivery solution for all required infrastructure works. This should also take into consideration potential impact on, or integration with, existing employment and urban activities in the area (particularly Integrated Waste Services located south of the affected area). Undertake investigations into potential noise, odour and air quality interface impacts of intended development on the site (bioreactor, mining), both in terms of impacts on the Dublin township as well as potentially sensitive uses within the Affected Area and identify mitigation measures. This could include zoning / overlay choices and/or identification of mitigation measures on a Concept Plan.
- Undertake further investigations to confirm buffer requirements to address noise / odour associated with the existing chicken broiler and, where necessary, reflect in zone / overlay choice and identify on a Concept Plan.
- Consider the use of a Concept Plan to identify key matters such as access points and linkages within the affected area and to Dublin / public trails, interface management / buffer areas (including interfaces with existing urban, rural and conservation areas, as well as internal interfaces), open space and water retention / detention areas.
- Explore appropriateness of the Strategic Employment Zone recognising the need for waste management (stockpiling and processing).

In addition, it should be noted that further investigations may be required in response to feedback or advice received through the engagement process. PLUS will ensure that relevant outcomes of investigations to inform the Greater Adelaide Regional Plan will be made available to the Designated Entity.

Pursuant to section 44(6) and 73(6)(d) of the Act, consultation in writing must be undertaken with:

- Adelaide Plains Council

- Owners or occupiers of the land and adjacent land, in accordance with Regulation 20 of the *Planning, Development and Infrastructure (General) Regulations 2017*.

Engagement must be undertaken on the Code Amendment in accordance with the Community Engagement Charter. More information on the Community Engagement Charter is available in the Community Engagement Charter toolkit at:

plan.sa.gov.au/en/engagement-charter-toolkit.

I will make a determination on whether to approve the proposed amendments at the completion of the Code Amendment process.

For further information, please contact [REDACTED] Manager, Code Amendments, Planning and Land Use Services, on [REDACTED] or via email at: [REDACTED]

Yours sincerely

Hon Nick Champion MP
Minister for Planning

/ / 2024

Encl: Signed Proposal to Initiate the Dublin Green Circular Economy Precinct (Employment Areas) Code Amendment



TO: MINISTER FOR PLANNING

**RE: PROPOSAL TO INITIATE THE DUBLIN GREEN CIRCULAR ECONOMY PRECINCT
(EMPLOYMENT AREAS) CODE AMENDMENT BY LEINAD LAND
DEVELOPMENTS (DUBLIN) PTY LTD – FOR INITIATION**

PURPOSE

To recommend that you approve, with conditions, the Proposal to Initiate the Dublin Green Circular Economy Precinct (Employment Areas) Code Amendment (the Proposal).

BACKGROUND

Section 73(2)(b)(vii) of the *Planning, Development and Infrastructure Act 2016* (the Act) provides that a proposal to amend a designated instrument may be initiated by a Proponent with your approval, acting on the advice of the State Planning Commission (the Commission).

Leinad Land Developments (Dublin) Pty Ltd (the Proponent – care of Ekistics Planning and Design) has lodged a Proposal to Initiate the Dublin Green Circular Economy Precinct (Employment Areas) Code Amendment to amend the Planning and Design Code (the Code) as it relates to the affected area (**Attachment 1**).

The Commission considered the Proposal to Initiate at its meeting of 7 March 2024 and resolved to support the Code Amendment, subject to conditions.

DISCUSSION

The following sets out the strategic, policy and procedural considerations in relation to the Proposal to Initiate, including conditions that are recommended should you agree to initiate the Code Amendment.

Proposal

The Proposal seeks to rezone some 400 hectares of land located immediately south of the township of Dublin on the Northern Plains of Greater Adelaide. The 400 hectares is currently zoned Rural and forms part of a broader Affected Area under the ownership of the Proponent, comprising 986 hectares.

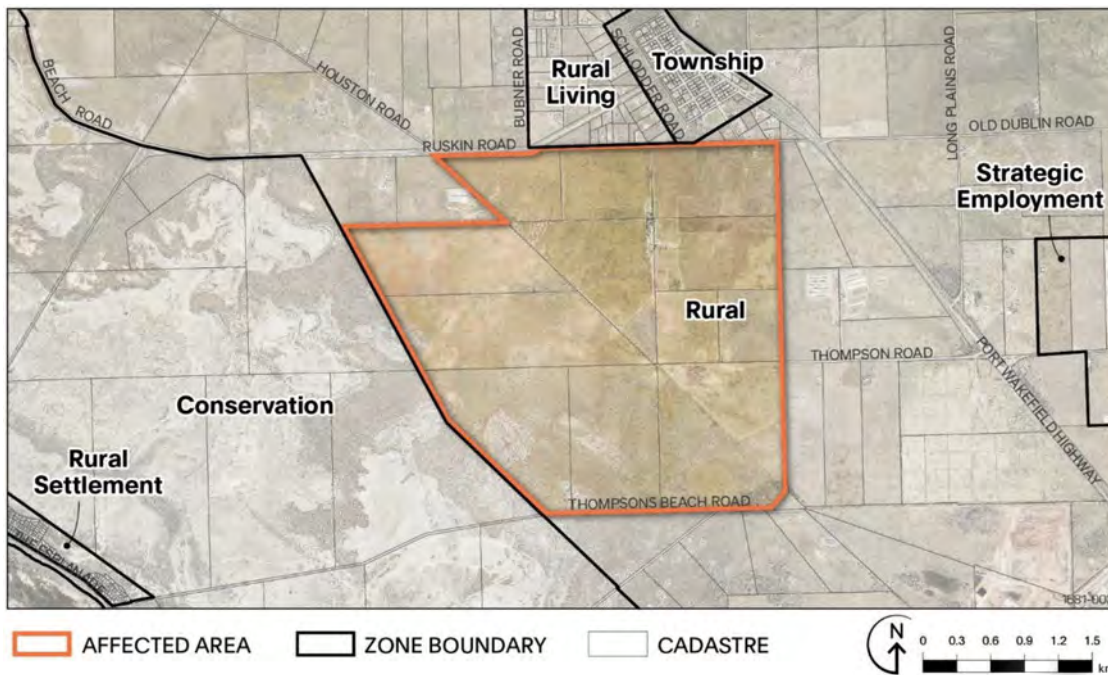
The Proponent has completed an *Urban Framework Plan 2023* (the Framework Plan) with a long-term vision to develop a Green Circular Economy Precinct comprising a new master planned community together with a range of green industry and mining operations. The proposed Code Amendment represents the first step in delivering this vision. The Framework Plan is contained in **Attachment 1**.

The land is currently zoned Rural. The Proposal is to apply an employment-type zone to 400 hectares of the Affected Area to deliver new employment opportunities across a range of sectors, including:

- Green Economy, including energy production from biomass, innovation in farming and food production methods, recycling industries, and fertiliser harvesting and distribution
- Manufacturing, fabrication and logistics, particularly for the renewable energy sector
- Defence and infrastructure.

The Affected Area is in the Adelaide Plains Council (the Council) on Kaurna Country.

The Affected Area and current zoning are shown in the figure below.



Planning and Design Code Zoning

The Affected Area is located within the Rural Zone.

The following Overlays apply to the land:

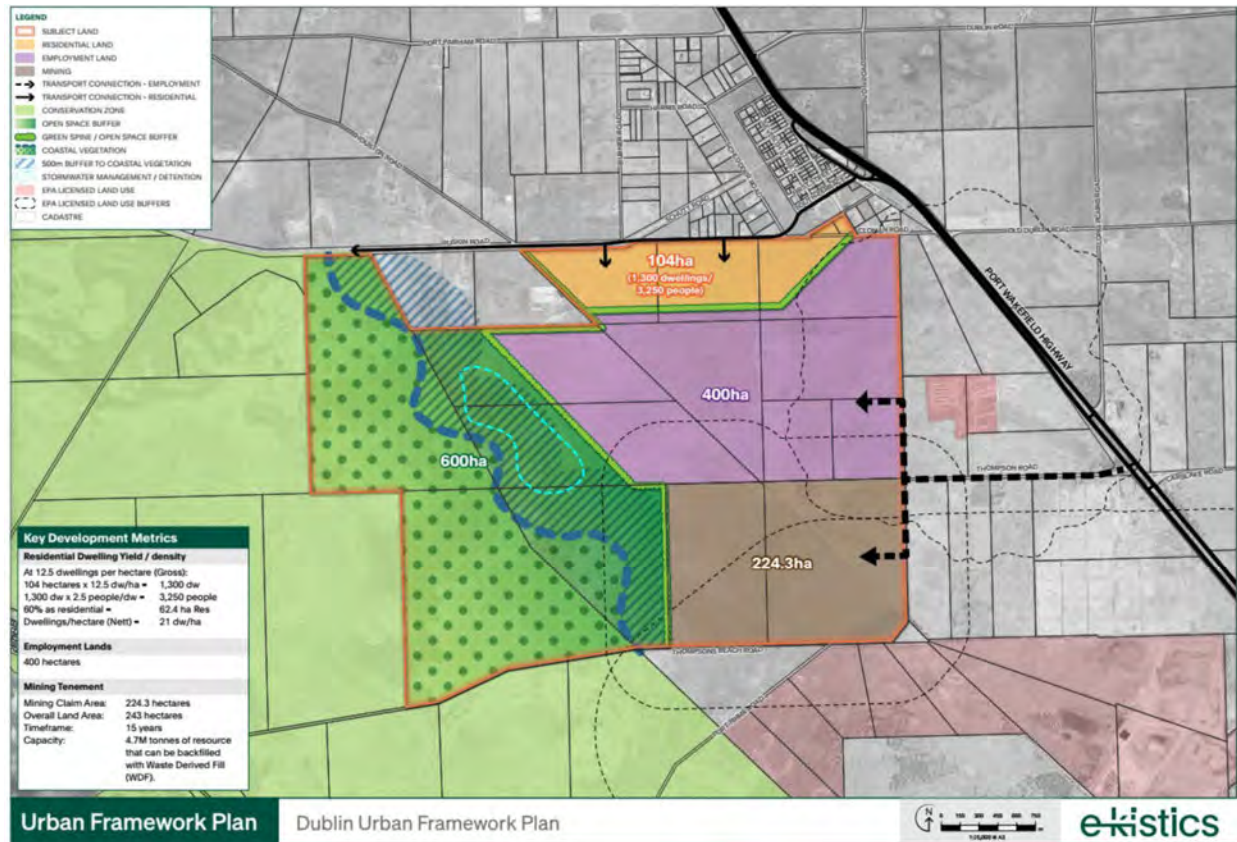
- Environment and Food Production Area
- Hazards (Acid Sulphate Soils)
- Hazards (Bushfire-General)
- Hazards (Bushfire-Medium Risk)
- Hazards (Flooding-Evidence Required)
- Interface Management
- Native Vegetation
- State Significant Native Vegetation
- Traffic Generating Development
- Water Resources.

Technical and Numerical Variations (TNVs) applying to the Affected Area:

- Minimum Site Area – 40 hectares.

Land surrounding the Affected Area is within the Rural Zone, Conservation Zone, Rural Living Zone and the Township Zone.

Importantly, exact identification of zone boundaries will be informed through further investigations proposed as part of the Code Amendment and the final configuration may or may not be reflective of the areas shown below, as per the Framework Plan. Indicatively, the focus of the Code Amendment is the purple area (400 hectares).



Strategic considerations

The following sets out the strategic considerations relating to this proposal and rationale for the Commission recommending support for the Code Amendment.

An assessment against the State Planning Policies (SPPs) and relevant Regional Plan are provided in **Appendix A**.

Strategic advice

The Proposal will support the establishment of new industries contributing to economic growth, the Green Circular Economy, and the renewable energy sector. It also proposes to support the defence industry, and key connectivity to transport freight routes along Port Wakefield Highway. In summary, the Proposal:

- Supports the clustering of land for key economic growth opportunities in energy and resources, primary industry, defence, and green industries.
- Encourages development of underutilised agricultural lands.

- Promotes new, latent, and alternative employment types, attracting new business investment and flexible land use opportunities (generation of new forms of energy, that is, converting waste to electricity).
- Enables potential connectivity and efficiency to supply chains in green industries, supporting the construction and development of renewable energy products across the State.
- Maximises use of existing transport infrastructure and services (Port Wakefield Highway).
- Looks to promote value adding activities to increase investment, while maintaining and protecting the Environment and Food Production Areas (EFPAs).

Key to the Proponent's intention to deliver a Green Circular Economy Precinct is the construction of a new 6.5 MW bioreactor that processes organic waste into gas and electricity, food grade CO₂ for vertical agriculture, water, and fertiliser. Outputs from this bioreactor are intended to be integrated with other employment activities within the Affected Area as well as surrounding rural land uses, future residential development (outlined in the Framework Plan and discussed below) and the existing Dublin township. A copy of the Framework Plan is provided in **Attachment 1**.

In this context, the Proposal meets key SPP and Regional Plan policy objectives in supporting the provision of sustainable energy options, creating jobs and in the development of new energy technologies and assets.

Environment and Food Production Areas and Residential Development

The Affected Area is located within the Environment and Food Production Areas (EFPA) and is considered to be of a degraded quality with a long history of clearance, grazing and cultivation and as of low primary production value. The proposed rezoning is intended to encourage new agri-business (for example, vertical agriculture) to establish within the region.

The Proponent's Urban Framework Plan indicates an intention to explore rezoning of 170 hectares of land for the purposes of residential development. Such a proposal would require significant investigations and justification to warrant consideration of a future Code Amendment and associated changes to the EFPA. To that end, the Proponent has confirmed that this current Code Amendment (and intended Circular Economy Precinct) is not contingent on residential development occurring.

Further strategic considerations and discussion in relation to the Proposal are provided below.

Employment land supply

The Affected Area is identified as within the Northern Plains and Barossa region.

Recent land supply reports indicate this region has sufficient supply of zoned employment land to accommodate projected growth, based on current needs for the next 15 years. To that end, it is noted that there is 488 hectares of largely undeveloped land within the exiting 880-hectare Strategic Employment Zone located 2 kilometres south of the Dublin Township (Carslake Road).

As such, should the Code Amendment proceed, it would result in nearly 1,300 hectares of zoned employment land within a 2-kilometre radius feeding onto Port Wakefield Road.

Whilst noting that the analysis undertaken to inform the land supply reports (specifically, the Commission's 2021 EFPA review) did not necessarily account for large scale projects such as that envisaged for the Affected Area, it is considered further justification is needed to demonstrate why additional employment land is required at this location. In particular, investigations should consider the quantity and type of employment land required in the region, in the context that the Carslake Road Strategic Employment Zone site is 880 hectares and 488 hectares is currently underdeveloped. When investigating this, consideration should be given to ability of land to be serviced ('development ready'), and the capacity for the region to accommodate the additional employment land in the context of new employment areas flagged for discussion in the Greater Adelaide Regional Plan Discussion Paper.

Further consideration also needs to be given to the cumulative impacts of development on existing infrastructure in the context of existing land supply, new employment areas flagged for discussion in the Greater Adelaide Regional Plan Discussion Paper and whether the Proposal will constrain the ability for such zoned land to be developed. Additional investigations are therefore recommended in this regard.

Land use characteristics

The Affected Area is currently used for ad-hoc agricultural purposes (low intensity grazing) on land of relatively poor condition and agricultural production value.

The Affected Area adjoins land zoned for Conservation to the east, comprising of intact samphire and saltmarsh vegetation consistent with the coastal proximity. There is also a Mineral Claim to the south-western corner of the site, on which the Proponent intends to undertake resource extraction. The town of Dublin is located immediately to the north of the Affected Area and abuts land zoned as Rural Living and Township. Other land uses and surrounding areas of significance include:

- Surrounding agricultural lands to the north-west, south and east
- The *Winaityinaityi Pangkara* Adelaide International Bird Sanctuary located along the western boundary of the land
- Intensive animal keeping (Chicken Broiler Farm) to the east
- IWS Waste Bale Fill Facility and Compositing Facility to the immediate south
- Carslake Road Strategic Employment land (on the opposite side of Port Wakefield Highway)
- Defence operations at the Proof and Experimental Establishment Port Wakefield (north-east of the Dublin township).

Infrastructure and Services

The Affected Area is in close proximity to Port Wakefield Highway and therefore presents an opportunity for transport, freight and logistics uses providing connectivity to the city and export facilities at Outer Harbor and the Adelaide International Airport.

However, as previously indicated, careful consideration will need to be given to the impacts of proposed development on the road network, particularly in the context of anticipated heavy vehicle movements and the cumulative impacts associated with the nearby Carslake Road employment area. Conditions are recommended to address this.

The Proposal indicates that potable water currently exists onsite via multiple SA Water metre connections. The Proponent has advised that it is working with Alano Utilities to plan and implement required infrastructure to service future development. Investigations undertaken by Alano have indicated that existing infrastructure can be utilised to establish a new network to service the site on demand and as demand progressively increases.

The Affected Area (and Dublin itself) is not serviced by sewer or a formal wastewater collection scheme. Again, the Proponent has indicated that it does not envisage services to be provided by SA Water, rather, an agreement will be established with Alano Utilities. The Proponent has also suggested that there will be opportunity for the existing Dublin township to connect to the private wastewater solution in due course.

With regards to electricity, investigations undertaken to date indicate that the Affected Area can likely be serviced by the existing 19KV powerline running along Ruskin Road. Preliminary engagement with SA Power Networks has identified augmentation works could be undertaken as demand increases. Notwithstanding and as previously discussed, the Proponent intends to develop a 6.5 MW Bioreactor to process organic waste into gas and electricity. As such, the need for significant augmentation may not be high, however, this will require further investigation.

Further investigations are also required to identify how stormwater and flooding risk will be managed for the affected area. These will assist in determining the services and infrastructure required to support the proposed rezoning of a substantial area of land.

In this context, the establishment of appropriate funding / delivery mechanisms are considered crucial to ensure the site can be appropriately serviced without impacting on the serviceability of other, existing urban growth fronts across the broader metropolitan region. Conditions have been recommended in this regard.

Aboriginal Heritage

The Proponent has completed a Cultural Heritage Desktop Assessment and undertaken a search of the Register of Aboriginal Sites and Objects (Taa Wika) which has identified that, whilst there are no known sites located within the Affected Area, a number of sites have been recorded in the vicinity. Given this, and the proximity to the coast, there is a high potential for cultural heritage finds within the affected area. Should this occur, protections are offered by way of the *Aboriginal Heritage Act 1988*. Notwithstanding, engagement with Traditional Owners is recommended by way of condition.

Interface Management

The Framework Plan provided as part of the Proposal indicates an intention to undertake extractive industries within the existing Mineral Claim located within the Affected Area, in addition to the construction of a bioreactor and other employment activities.

The Proposal does not include any investigations into potential interface impacts of such developments (noise, odour, and air quality), both in terms of impacts on the Dublin township as well as potentially sensitive uses within the Affected Area. It is therefore recommended that additional investigations be conditioned.

In addition, the Affected Area is located in close proximity to an existing chicken broiler farm. Investigations undertaken to date recommend a minimum buffer distance of 1000m to manage odour impacts. It is recommended that further investigations be undertaken to confirm buffer requirements for the management of odour and noise, and where necessary, these be reflected in Zone / Overlay choice and identified on a Concept Plan.

Procedural considerations

The following sets out the key procedural considerations that satisfy the legislative requirements. Pursuant to section 73(5) of the Act, approval for a Proposal to Initiate may be given on conditions prescribed by the regulations (there are none at this time) or as specified by you, as Minister for Planning. As such, a number of conditions are recommended by the Commission as set out below.

Information requirements

In accordance with *Practice Direction 2 – Preparation of Amendment of Designated Instruments*, the mandatory information requirements have been met, and therefore, the Proposal is of a suitable form to be considered by you.

Consistent with the State Planning Policies and Regional Plan

The Code must be consistent with the principles of the SPPs and should be consistent with the directions of the relevant Regional Plan, which, in this instance, is *The 30-Year Plan for Greater Adelaide: 2017 Update (the Update)*.

This assessment is provided in **Appendix A**. A more detailed analysis is also located in the Proposal. In summary, the Proposal is consistent with a number of the SPPs and targets/policies of the Regional Plan.

Designated Entity

As this proposal is by a private proponent, under section 73(4) of the Act, you may decide to enable the Proponent to be the Designated Entity and conduct the Code Amendment processes, or alternatively, you can give the Chief Executive of the Department for Trade and Investment the responsibility for undertaking the processes, in which case the Chief Executive can charge the person or entity reasonable costs associated with doing so (pursuant to section 73(4)(b)) of the Act. In this instance it is recommended that the Proponent be the Designated Entity.

Investigations to support the Amendment

The investigations undertaken to date are outlined in the Proposal (**Attachment 1**).

The Proponent has identified further investigations to support the Code Amendment, including:

- Site Survey
- Assessment of Native Vegetation and Biodiversity, including a review and update of the Ecological Assessment undertaken in 2012
- Land Economics
- Flooding, Hydrology and Stormwater
- Infrastructure and Utility Services
- Traffic Impact Assessment

The Commission has resolved that these investigations are suitable; however, has recommended that these be expanded in scope and further supported by additional investigations, under section 73(6)(f) of the Act, as discussed above and summarised below:

- Further justification and investigations into employment land supply, including consideration of cumulative impacts on infrastructure and the ability to service / develop existing, zoned land.
- Detailed infrastructure investigations, including identification of delivery and funding mechanisms.
- Identification of interface impacts associated with future development within the affected area on the Dublin township and within the affected area itself, including mitigation measures.

Given this proposal is only seeking to rezone the employment portion of the broader Precinct, it is suggested that the Code Amendment be renamed to the 'Dublin Employment Code Amendment'.

Application of the Code

The Proposal seeks to rezone land from the Rural Zone to an employment-type zone, with consideration being given to the Strategic Employment Zone – Significant Industry Subzone, Employment Zone, Employment (Enterprise) Zone or Infrastructure Zone. Subsequent removal of the Minimum Site Area – 40 hectares Technical and Numeric Variation (TNV), which is tied to the Rural Zone, is also proposed.

The Proposal does not seek to remove any existing Overlays from the site but will contemplate the application of the Significant Interface Management Overlay; this is supported.

The Commission notes that the Proposal also indicates a review of the Hazards (Bushfire – General) and Hazards (Bushfire – Medium Risk) Overlays. The State-wide Bushfire Hazards Overlay Code Amendment will establish an updated methodology for assessing bushfire risk levels across the state and as such, it is recommended that a condition be applied so that this matter is reserved for the Commission's Statewide Bushfire Hazards Overlay Code Amendment, which will apply an updated methodology for assessing bushfire risk across the State.

It is noted that the Proposal does not identify the inclusion of a Concept Plan; the Commission recommends that this be given consideration to identify matters such as access points and linkages, open space, interface management / buffers and the like.

Engagement

The Proponent has undertaken preliminary consultation with Adelaide Plains Council who have advised they have no objections to the initiation of the Code Amendment and support the investigations identified. However, they provide additional comment on the proposed investigations (refer **Attachment 1**), recommending the following:

- Land Economics – justification for rezoning of this area over use of existing, zoned employment land within the Council area and the region more broadly.
- Flooding, Hydrology and Stormwater – Water Sensitive Urban Design (WSUD) approaches.
- Infrastructure and Utility Services – identification of potential infrastructure augmentation needs (water and energy) including impacts on existing employment activities (Integrated Waste Services) and zone land.
- Transport and Access – consideration of e-vehicles, and linkages to walking trails / public open space / National Park (existing and future, as identified in various Council studies).

In addition, the council identified various groups, bodies and Agencies who have an interest in the future of Dublin and the adjacent Adelaide International Bird Sanctuary National Park – *Winaityinaityi Pangkara* to include as part of future engagement on the proposed Code Amendment.

In accordance with the Community Engagement Charter, the Designated Entity is required to prepare an Engagement Plan that will outline how, when and with whom it engages with regarding the proposed Code Amendment. Engagement is scheduled to commence in late September 2024, should the Code Amendment initiation be approved.

The Commission has determined to specify the following further persons or bodies that the Designated Entity must consult with in relation to the proposed Code Amendment, as permitted under section 73(6)(e) of the Act:

- Department for Energy and Mining
- Department for Environment and Water – Green Adelaide, Coast Protection Board, Native Vegetation Council, National Parks and Wildlife Service
- Department for Infrastructure and Transport
- Department of Primary Industries and Regions
- Environment Protection Authority
- Green Industries SA
- Integrated Waste Management Pty Ltd Reference Group
- Kaurna Yerta Aboriginal Corporation
- Kaurna Nation Cultural Heritage Association

- Regional Development Australia – Barossa, Gawler, Light and Adelaide Plains
- South Australian Country Fire Service
- South Australian Fire and Emergency Services Commission
- South Australian Metropolitan Fire Service
- State Members of Parliament for the electorates in which the proposed Code Amendment applies
- Utility providers including SA Power Networks, ElectraNet, APA Group, SEAgas, SA Water, Epic Energy, NBN, Office of the Technical Regulator and other telecommunications providers.

In addition, in accordance with sections 44(6) and 73(6)(d) of the Act, consultation must be undertaken with:

- Adelaide Plains Council
- Owners or occupiers of the land and adjacent land in accordance with the *Planning, Development and Infrastructure (General) Regulations 2017*.

RECOMMENDATIONS

It is recommended that you:

- | | |
|--|-------------------|
| 1. Note the advice of the State Planning Commission provided to you as required under section 73(2)(b) of the Act. | NOTED / NOT NOTED |
| 2. Note that the State Planning Commission has, under section 73(6)(e) of the Act, specified that the Designated Entity must consult with the following nominated individuals and entities, and advise the Designated Entity accordingly: | |
| <ul style="list-style-type: none">• Department for Energy and Mining• Department for Environment and Water – Green Adelaide, Coast Protection Board, Native Vegetation Council, National Parks and Wildlife Service• Department for Infrastructure and Transport• Department of Primary Industries and Regions• Environment Protection Authority• Green Industries SA• Integrated Waste Management Pty Ltd Reference Group | NOTED / NOT NOTED |

- Kaurna Yerta Aboriginal Corporation
 - Kaurna Nation Cultural Heritage Association
 - Regional Development Australia – Barossa, Gawler, Light and Adelaide Plains
 - South Australian Country Fire Service
 - South Australian Fire and Emergency Services Commission
 - South Australian Metropolitan Fire Service
 - State Members of Parliament for the electorates in which the proposed Code Amendment applies
 - Utility providers including SA Power Networks, ElectraNet, APA Group, SEAgas, SA Water, Epic Energy, NBN, Office of the Technical Regulator and other telecommunications providers.
3. Note that the State Planning Commission has, under section 73(6)(f) of the Act, resolved to specify the following further investigations to that outlined in the Proposal to Initiate, and advise the Designated Entity accordingly:
- NOTED / NOT NOTED
- Considering existing, zoned employment land supply within the region, undertake detailed analysis that:
 - Investigates the quantity and type of employment land required in the region, in the context that the Carlslake Road Strategic Employment Zone site is 880 hectares and 488 hectares is largely undeveloped with significant further development capacity. When investigating this, consideration should be given to ability of land to be serviced ('development ready').

- Considers the capacity for the region to accommodate nearly 1,300 hectares of zoned employment land in the context of new employment areas flagged for discussion in the Greater Adelaide Regional Plan Discussion Paper.
 - Identifies the cumulative impacts of development on existing infrastructure (road, water, power, wastewater, gas) in the context of existing employment land supply within the region, and whether the Proposal will constrain the ability for such zoned land to be developed in the short-, medium- and long-term.
- Substantiate the concept and delivery of the 'Green Circular Economy', including commentary on whether supply chains have been established (including waste to fuel the bioreactor).
- Undertake investigations into potential noise, odour and air quality interface impacts of intended development on the site (bioreactor, mining), both in terms of impacts on the Dublin township as well as potentially sensitive uses within the Affected Area and identify mitigation measures. This could include zoning / overlay choices and/or identification of mitigation measures on a Concept Plan.
- Undertake further investigations to confirm buffer requirements to address noise / odour associated with the existing chicken broiler and, where necessary, reflect in zone / overlay choice and identify on a Concept Plan.
- Provide a comprehensive infrastructure analysis by an appropriately qualified expert (or experts), that identifies all future infrastructure works required to accommodate the development of the affected area and provide a strategy which offers a funding and delivery solution for all required infrastructure works.

This should also take into consideration potential impact on, or integration with, existing employment and urban activities in the area (particularly Integrated Waste Services located south of the affected area).

- Consider the use of a Concept Plan to identify key matters such as access points and linkages within the Affected Area and to Dublin / public trails, interface management / buffer areas (including interfaces with existing urban, rural and conservation areas, as well as future internal interfaces), open space and water retention/detention areas.
- Explore appropriateness of the Strategic Employment Zone recognising the need for waste management (stockpiling and processing).

4. Approve initiation under section 73(2)(b) of the Act, subject to the following conditions, under section 73(5) of the Act:

APPROVED / NOT APPROVED

- a) Prior to adoption of the Code Amendment, the Designated Entity must demonstrate to the satisfaction of the Minister for Planning that all necessary agreements or deeds are fully executed as required to secure the funding and/or delivery of all infrastructure required to accommodate the development of the affected area, as proposed by the Code Amendment (to the satisfaction of all relevant infrastructure providers).
- b) The scope of the proposed Code Amendment does not include the creation of new planning rules, and is limited to the spatial application of zones, subzones, overlays, or technical and numerical variations provided for under the published Planning and Design Code on the date the Amendment is released for engagement.

- c) The Code Amendment is prepared by a person with qualifications and experience that is equivalent to an Accredited Professional—Planning Level 1 under the Act.

In respect to a review of bushfire hazard risk levels, that the Code Amendment does not include changes to the applicable Hazard – Bushfire Overlays. The State-wide Bushfire Hazards Overlay Code Amendment will establish an updated methodology for assessing bushfire risk levels across the state, following which the overlays will be updated as necessary via section 71 of the Act.

5. Under section 73(4)(a) of the Act, approve the initiation of the Code Amendment on the basis that the Proponent will undertake the Code Amendment processes (as the Designated Entity) required under the Act.

APPROVED / NOT APPROVED

6. Agree to sign the Proposal to Initiate the Dublin Green Circular Economy Precinct (Employment Areas) Code Amendment (**Attachment 1**).

AGREED / NOT AGREED

7. Agree to sign the attached letters to the Leinad Land Developments (Dublin) Pty Ltd (**Attachment 2**) and the Adelaide Plains Council (**Attachment 3**) advising of your approval and conditions.

AGREED / NOT AGREED



CRAIG HOLDEN

Chair, State Planning Commission
18 / 03 / 2024

NICK CHAMPION MP
/ / 2024

Attachments:

1. Proposal to Initiate the Dublin Green Circular Economy (Employment Areas) Code Amendment (#21020669)
2. Suggested letter to the Leinad Land Developments (Dublin) Pty Ltd (#21109333)
3. Suggested letter to the Adelaide Plains Council (#21109348)

Appendices:

- A. Assessment against the State Planning Policies and Regional Plan (#21109308)

Contact:



Tel No:





Assessment against the State Planning Policies and Regional Plans

The Code must be consistent with the principles of the State Planning Policies (SPPs) and should be consistent with the directions of the relevant Regional Plan, which in this instance is *The 30-Year Plan for Greater Adelaide (2017 Update)* (the Regional Plan).

SPP Key Principles

The SPPs require that the Principles of Good Planning are considered in the preparation of any designated instrument. The following principles of good planning are considered most relevant to the Proposal:

- *Policy frameworks should be based around long- term priorities, be ecologically sound, and seek to promote equity between present and future generations.*
- *Policy frameworks should be able to respond to emerging challenges and cumulative impacts identified by monitoring, benchmarking and evaluation.*
- *Preference should be given to accommodating the expected growth of cities and towns through the logical consolidation and redevelopment of existing urban areas.*
- *The encroachment of urban areas on places of rural, landscape or environmental significance is to be avoided other than in exceptional circumstances.*
- *Urban renewal should seek to make the best use (as appropriate) of underlying or latent potential associated with land, buildings and infrastructure.*
- *Development should be designed to reflect the local setting and context, to have a distinctive identity that responds to the existing character of its locality, and strike a balance between built form, infrastructure and the public realm.*
- *Built form should be durable, adaptive (including the reuse of buildings or parts of buildings) and compatible with the relevant public realm.*
- *The public realm should be designed to be used, accessible and appropriately landscaped and vegetated.*
- *Built form and the public realm should be designed to be inclusive and accessible to people with differing needs and capabilities (including universal design practices).*
- *Cities and towns should be planned and designed to be well connected in ways that facilitate the safe, secure and efficient movement of people within and through them.*
- *Cities and towns should be planned, designed and developed to be sustainable.*
- *Particular effort should be focused on achieving energy efficient urban environments that address the implications of climate change.*
- *Policies and practices should promote sustainable resource use, reuse and renewal and minimise the impact of human activities on natural systems that support life and biodiversity.*
- *Planning and design should be undertaken with a view to strengthening the economic prosperity of the state and facilitating proposals that foster employment growth.*

- *The achievement of good planning outcomes should be facilitated by coordinated approaches that promote public and private investment towards common goals.*
- *Policies, including those arising outside the planning system, should be coordinated to ensure the efficient and effective achievement of planning outcomes.*
- *Planning, design and development should promote integrated transport connections and ensure equitable access to services and amenities.*
- *Any upgrade of, or improvement to, infrastructure or public spaces or facilities should be coordinated with related development.*

This Proposal to Initiate draws upon the existing Code Policy Library rather than creating new strategic policy settings. The Proposal is seeking to investigate the rezoning of some 400 hectares of 'Rural' zoned land as 'employment lands' (with the type of zoning yet to be specified) for a range of envisaged uses, innovation and activities associated with the Green Economy including manufacturing, food production and processing, recycling, transport and logistics and new emerging renewable energy production (bioenergy).

There are 16 SPPs that include Objectives, Policies and Principles for Statutory Instruments. The attached Proposal sets out how the SPPs will be considered in this Amendment. The most critical SPPs in this context are:

Integrated Planning:

- Objective:** To shape cities and regions in a way that enhances our liveability, economic prosperity and sustainable future.
- SPP 1.1** An adequate supply of land (well serviced by infrastructure) is available that can accommodate housing and employment growth over the relevant forecast period.
- SPP 1.2** Provide an orderly sequence of land development that enables the cost-effective and timely delivery of infrastructure investment commensurate with the rate of future population growth.
- SPP 1.3** Plan growth in areas of the state that is connected to and integrated with, existing and proposed public transport routes, infrastructure, services and employment lands.
- SPP 1.4** Protect areas of rural, landscape character, environmental importance, mining or food production significance from the expansion of urban areas, towns and settlements.
- SPP 1.5** Protect land corridors for expansion or augmentation of infrastructure.
- SPP 1.6** Plan for strategic infrastructure that helps to shape the pattern of settlement in a way that enhances quality of life and supports long-term sustainability.
- SPP 1.10** Include performance targets around land supply and demand in regional plans.

The Proposal is seeking to promote 'integrated planning' by way of establishing new employment lands that are well located within the Adelaide Plains (1-2km of Port Wakefield Highway) to take advantage of surrounding growth in renewable energy and circular economy processes, recycling industries, Defence support industries, food production and processing, infrastructure, transport and logistics.

The concept is to promote integration, expansion and the clustering of uses in food production and processing, defence, energy and resources and defence by making use of underutilised lands. These proposed new industries are to be integrated with the surrounding rural land uses, as part of the *Dublin Green Circular Economy Precinct* and wider, *Urban Framework Plan* prepared by the Designated Entity Leinad Land Developments (Dublin) Pty Ltd. Key to the concept is in supporting infrastructure investment in the locality.

The location is also targeted for use in transport logistics and warehousing, recognising its strategic location in accessing the north of the State and in proximity to a nearby mining claim located in the southeastern corner, again presenting potential opportunities to support future proposed mining operations.

Biodiversity:

Objective: To maintain and improve our state's biodiversity and its life supporting functions.

SPP 4.1 Minimise impacts of development on areas with recognised natural character and values, such as native vegetation and critical habitat so that critical life-supporting functions to our state can be maintained.

SPP 4.2 Recognise the value of modified landscapes and allow appropriately scaled development that can co-exist with and safeguard biodiversity values and critical functions.

SPP 4.3 Encourage the re-introduction of biodiversity or its components in development areas to provide life-supporting functions at low cost.

SPP 4.4 Enhance the biodiversity of urban areas and townships through a connected and diverse network of green infrastructure systems along streetscapes, major watercourses, linear parks, open space, the coast and other strategic locations.

The Proposal does not include the rezoning of land or habitat considered to be of high biodiversity value in that no land currently zoned as Conservation is included in the Affected Area. Further, it recognises the proximity of the Affected Area to those adjacent Conservation zoned lands to the west which are of high habitat value in particular, coastal environments including the Adelaide International Bird Sanctuary *Winaityinaityi Pangkara*.

Climate Change:

Objective: Provide for development that is climate ready so that our economy, communities and environment will be resilient to climate change impacts.

- SPP 5.1** Create carbon-efficient living environments through a more compact urban form that supports active travel, walkability and the use of public transport.
- SPP 5.3** Facilitate climate-smart buildings to reduce our demand for water and energy.
- SPP 5.4** Mitigate the impacts of rising temperatures by encouraging water sensitive urban design, green infrastructure and other design responses.
- SPP 5.5** Avoid development in hazard-prone areas or, where unavoidable, ensure risks to people and property are mitigated to an acceptable or tolerable level through cost-effective measures.
- SPP 5.6** Facilitate green technologies and industries that reduce reliance on carbon-based energy supplies and directly or indirectly reduce our greenhouse gas emissions.
- SPP 5.7** Protect and enhance areas that provide biodiversity and ecological services and maximise opportunities for carbon storage.
- SPP 5.8** Encourage decision-making that considers the impacts of climate change and that draws on the best available information.
- SPP 5.9** Encourage development that does not increase our vulnerability to, or exacerbate the impacts of climate change and which makes the fullest possible contribution to mitigation.
- SPP 5.10** Support the transition of traditional industries that rely on fossil fuels to climate smart initiatives to reduce greenhouse gas emissions.

The proposed rezoning supports a vision for establishing the *Dublin Green Circular Economy Precinct* toward facilitating green technologies and industries and transitioning away from industries that rely on fossil fuels as a primary energy source.

Preliminary investigations outlined in the Proposal (noting that additional investigations into flooding, hydrology and stormwater site constraints are proposed) have identified that the Affected Area is not unduly affected by flooding and bushfire constraints to not investigate its rezoning potential.

Cultural Heritage:

- Objective:** To protect and conserve heritage places and areas for the benefit of our present and future generations.
- SPP 7.1** The sensitive and respectful use of our culturally and historically significant places.
- SPP 7.2** Recognise and protect Indigenous cultural heritage sites and areas of significance.
- SPP 7.3** Recognise and protect places and areas of acknowledged heritage value for future generations.

There are no heritage listed places or known Aboriginal Cultural Heritage sites located within the Affected Area.

Primary Industry:

Objective: A diverse and dynamic primary industry sector making the best use of natural and human assets.

SPP 8.1 Identify and protect key primary production assets and secure strategic opportunities for future primary industry development.

SPP 8.2 Create local conditions that support new and continuing investment in primary industry while seeking to promote co-existence with adjoining primary industries and avoid land use conflicts.

SPP 8.3 Enable primary industry businesses to grow, adapt and evolve through technology adoption, intensification of production systems, business diversification, workforce attraction and restructuring.

SPP 8.4 Equitably manage the interface between primary production and other land use types, especially at the edge of urban areas.

The Proposal describes the Affected Area is underutilised, with 'ad hoc' agricultural activities (low intensity grazing) occupying the land, considered to be of relatively poor land quality and low agricultural value. The intent is to establish related land uses in food production and processing as well as the renewable energy sector, that create economic opportunities and advantages to value add to surrounding agricultural lands to the north-west, south and east. Additional employment land will meet demand for large scale, low intensity employment uses not necessarily considered suited to other locations.

Employment Lands:

Objective: To provide sufficient land supply for employment generating uses that supports economic growth and productivity.

SPP 9.1 Support the expansion and clustering of key economic growth areas including health; education; tourism; energy and resources; primary industry; defence; and knowledge and creative industries.

SPP 9.2 Enable opportunities for employment and encourage development of underutilised lands connected to, and integrated with, housing, infrastructure, transport and essential services.

SPP 9.4 Adaptable policies that allow commercial and industrial-focused employment lands to support local economies and evolve in response to changing business and community needs.

SPP 9.5 Promote new, latent and alternative employment types and attract new business investment by enabling a diverse range of flexible land use opportunities.

SPP 9.6 Protect prime industrial land for employment use where it provides connectivity to freight networks; enables a critical mass or cluster of activity; has the potential for expansion; is connected to skilled labour; is well serviced; and is not constrained by abutting land uses.

SPP 9.9 Support sustainable tourism where the social, cultural and natural assets underpinning the tourism developments are protected in line with sustainability principles.

- SPP 9.11** Encourage the development of integrated employment and residential mixed-use precincts where conflicts between uses can be managed.
- SPP 9.12** Plan for employment and industrial precincts in strategic locations that improve economic productivity; are protected from encroachment; connect to efficient supply chains; and are located to provide transport access and connectivity.
- SPP 9.13** Provide an appropriate supply of land for waste and resource recovery infrastructure and other related green industries to maximise resource use, support economic growth and service our communities.

The Affected Area is identified as within the Northern Plains and Barossa region.

Recent land supply reports indicate the Greater Adelaide and Northern Plains and Barossa region is considered to have sufficient supply of zoned employment land to accommodate projected growth, based on current needs for the next 15 years. However, the EFPA review conducted in 2021, did not in its analysis necessarily account for large scale projects, requiring additional land such as that envisaged for the Affected Area (that is, the broader plan to accommodate a bioreactor to support a green circular economy).

It is prudent to consider the envisaged development outcome against the supply of currently, zoned employment land particularly, the area 2km south-east of the Affected Area, the Carslake Road, Strategic Employment zoned land (880 hectares, with 480 hectares not currently developed for employment type activities). If the proposed rezoning proceeds, the resulting potential of 1,200 hectares of land, feeding into Port Wakefield Highway requires measured consideration in the context of the resultant amount of overall, potential land zoned for employment.

Notwithstanding the above, the Proposal meets key aspects of the State Planning Policies 9,10 and 12 (Employment Lands, Key Resources and Energy) Energy by enabling:

- the opportunity for new industries and technologies (bio reactor) to locate in an area that would/could service existing industries (primary production and utilising waste from farming activities)
- the establishment of employment lands in this location provides a strategic positioning for the supply and logistics of infrastructure associated with the renewable energy sector, with connectivity to other freight routes and supply chains
- opportunities for future employment along with the development of underutilised land, integrated with nearby housing (Dublin) and transport (Port Wakefield).

Mineral and Energy Resources:

Objective: To protect key resources that contribute to our state's economy and provide valued employment opportunities.

- SPP 10.1** Define and protect mineral resources operations, associated infrastructure and undeveloped mineral resources from encroachment by incompatible land uses.

- SPP 10.2** Plan for and encourage the development of energy resources, energy resources operations and associated infrastructure to ensure their ongoing safe and efficient operation.
- SPP 10.3** Identify and maintain key infrastructure that supports mineral and energy resource activities and supply chains, including strategic transport corridors and pipelines used for energy transportation.
- SPP 10.5** Promote decision making that maximises the long term benefits of different land uses to the economy, communities and the environment.

The Proposal refers to a mineral claim in the south-west corner of the Affected Area with the aim of the policy framework to protect future operation of the mining area and potentially integrate operations as part of the overall development vision that is, the *Dublin Green Circular Economy Precinct*.

Also, envisaged as an innovative development toward delivering the *Dublin Green Circular Economy Precinct*, the Proposal aims to enable connectivity by utilising new forms of bioenergy, with the land mix including a new 6.5 MW Bioreactor that processes organic waste into gas and electricity, food grade CO₂ for vertical agriculture, water and fertiliser. In this context, it is planning for and encouraging new energy resources and operations to establish in the location with connectivity to the township of Dublin.

Strategic Transport Infrastructure:

- Objective:** To integrate land use policies with existing and future transport infrastructure, services and functions to preserve and enhance safe, efficient and reliable connectivity for people and business.
- SPP 11.1** Facilitate an efficient, reliable and safe transport network that connects business to markets and people to places (i.e. where they live, work, visit and recreate).
- SPP 11.2** Development that maximises the use of current and planned investment in transport infrastructure, corridors, nodes and services
- SPP 11.3** Equitable contributions towards the funding and provision of transport infrastructure and services to support land and property development.
- SPP 11.4** Minimise negative transport-related impacts on communities and the environment.
- SPP 11.6** Allow for the future expansion and intensification of strategic transport infrastructure and service provision (corridors and nodes) for passenger and freight movements.
- SPP 11.7** Identify and protect the operations of key transport infrastructure, corridors and nodes (passenger and freight).
- SPP 11.8** Development that takes advantage of emerging technologies that contribute to livability, sustainability and economic productivity, including electric and alternative fuel vehicles, autonomous vehicles and on-demand transport opportunities.

Conceptually, the proposed rezoning of the Affected Area aims to take advantage the proximity of the location to Port Wakefield Highway as a strategic transport corridor and established freight movements, to the northern regions of the State. Overall, the strategic proximity and access to Port Wakefield Highway in terms of land availability to cater for future supply chains in the energy sector (wind and solar farm infrastructure) is an economic advantage.

Energy:

Objective: To support the ongoing provision of sustainable, reliable and affordable energy options that meet the needs of the community, business and industry.

SPP 12.1 Development of energy assets and infrastructure (including ancillary facilities) where the impact on surrounding land uses, regional communities and the natural and built environment can be minimised.

SPP 12.2 Facilitate renewable sources of energy supply, such as solar and wind, at the local level.

SPP 12.5 Enable industries to reduce carbon emissions by supporting energy efficient urban and building designs.

SPP 12.6 Facilitate energy technologies that support a stable energy market and continued energy supply and do not adversely affect the amenity of regional communities.

The Proposal envisages future land uses incorporating the generation of new energy (waste to electricity) as part of the *Dublin Green Circular Economy Precinct*. Proposed to be included in the land use mix is a new 6.5 MW Bioreactor that processes organic waste into gas and electricity., food grade CO2 for vertical agriculture, water and fertiliser. In this context, the Proposal meets with key SPP policy objectives in supporting the provision of sustainable energy options and in the development of new energy technologies and assets.

Coastal Environment:

Objective: To protect and enhance the coastal and marine environment and ensure that development is not at risk from coastal hazards.

SPP 13.1 Protect and enhance the natural coastal environment and its resilience to a changing climate, including environmentally important features, such as mangroves; wetlands; estuaries; marine-protected areas; sand dunes; cliff tops; beaches; native vegetation; living creatures; and other important habitats.

SPP 13.2 Development that is not at risk from current and future coastal hazards (including sea-level rise, coastal flooding, erosion, inundation, dune drift and acid sulfate soils) consistent with the hierarchy of 'avoid', 'accommodate' and 'adapt'.

SPP 13.3 Balance social and economic development outcomes in coastal areas with the protection of the environment.

- SPP 13.4** Locate development and infrastructure in areas that are not subject to coastal hazards unless the development requires a coastal location and appropriate hazard mitigation strategies are in place, taking into account projected sea-level rise and coastal retreat.
- SPP 13.5** Facilitate sustainable development that requires a coastal site, including eco-tourism, aquaculture, marinas and ports, in areas adjoining the foreshore where environmental impacts can be avoided or mitigated.
- SPP 13.6** Maintain or enhance the scenic amenity of important natural coastal landscapes, views and vistas.
- SPP 13.7** Development that enables and enhances public access to coastal areas with minimal impact on the environment and amenity.
- SPP 13.8** Locate low intensity recreational uses where environmental impacts on the coast will be minimal and can be managed.
- SPP 13.9** Recognise and protect the high carbon storage values of areas such as mangroves and salt marshes.
- SPP 13.10** Support development that does not contribute to sediment, nutrients and contaminants entering the coast and marine environment.

The Affected Area proposed for rezoning sits within a coastal proximity with nearby by Conservation zoned land and areas of intact samphire and saltmarsh vegetation. The Proposal does not include the rezoning of Conservation zoned land and proposes a review and update of a previous Ecological Assessment (2012) to assess the presence of native habitat, flora and fauna species of State conservation significance and threatened species within the Affected Area.

Water Security and Quality:

- Objective:** To ensure South Australia's water supply is able to support the needs of current and future generations.
- SPP 14.1** Protect the state's water supply to support a healthy environment, vibrant communities and a strong economy.
- SPP 14.2** Protect and recognise water supply catchments, including:
- Water Protection Areas under the *Environment Protection Act 1993* (including those located in the Mount Lofty Ranges, South East and River Murray)
 - The River Murray Protection Areas under the *River Murray Act 2003*
 - Prescribed water resources and wells under the *Natural Resources Management Act 2004*.
- SPP 14.3** Safeguard our water supply and supporting infrastructure to meet the needs of a growing population and economy while maintaining a healthy environment and enabling safe access to alternative water sources for 'fit-for-purpose' use.

- SPP 14.5** Development should incorporate water sensitive urban design principles that contribute to the management of risks to water quality and other risks (including flooding) to help protect people, property and the environment and enhance urban amenity and livability.
- SPP 14.6** Support development that does not adversely impact on water quality.
- SPP 14.7** Improve the alignment between urban water management and planning by adopting an integrated water management approach.

As part of proposed investigations, the Proposal looks to review and investigate existing infrastructure services available to determine if upgrades are required, including capacity and augmentation capability in supply of potable water, recycled water and wastewater. It is also recommended, as part of the proposed hydrological and stormwater investigations, that opportunities to consider Water Sensitive Urban Design (WSUD) be explored.

Proximity to sensitive uses along with investigations to determine the 'serviceability' of the Affected Area in terms of mains gas and sewer is required. Also, if the servicing of this land for employment purposes is cost effective and if it will require investment from the Government of South Australia?

Natural Hazards:

- Objective:** To build the resilience of communities, development and infrastructure from the adverse impacts of natural hazards.
- SPP 15.1** Identify and minimise the risk to people, property and the environment from exposure to natural hazards including extreme heat events; bushfire; terrestrial and coastal flooding; soil erosion; drought; dune drift; acid sulfate soils; including taking into account the impacts of climate change.
- SPP 15.2** Locate and design development in accordance with a risk hierarchy of 'avoid', 'accommodate' and 'adapt'.
- SPP 15.3** Avoid locating sensitive developments and communities in areas at high risk of hazards – namely hospitals, telecommunication towers, major transport infrastructure, energy base stations and water services – or ensure that these developments are subject to a higher level of assessment.
- SPP 15.5** Protect key coastal areas and critical infrastructure at risk from sea-level rise, coastal erosion and storm surges.
- SPP 15.6** Avoid development in high or extreme hazard risk areas (such as bushfire risk areas) that will necessitate the removal of native vegetation.

The Proposal, to date, having been informed by the *Urban Framework Plan* and *Dublin Green Circular Economy Precinct* seeks to avoid locating new employment lands on areas subject to higher hazard risk (flooding and bushfire).

Further refinement of the boundaries and exact identification of 'employment' type zone boundaries within the Affected Area (including hydrological studies) will be undertaken in the context of avoiding development in areas of high or extreme hazard risk.

Emissions and Hazardous Activities:

Objective: To protect communities and the environment from risks associated with emissions, hazardous activities and site contamination, whilst industrial development remains viable.

SPP 16.1 Protect communities and the environment from risks associated with industrial emissions and hazards (including radiation) while ensuring that industrial and infrastructure development remains strong through:

- a) supporting a compatible land use mix through appropriate zoning controls
- b) appropriate separation distances between industrial sites that are incompatible with sensitive land uses
- c) controlling or minimising emissions at the source, or where emissions or impacts are unavoidable, at the receiver.

SPP 16.2 Assess and manage risks posed by known or potential site contamination to enable the safe development and use of land.

The Proposal, to date, having been informed by the *Urban Framework Plan* and *Dublin Green Circular Economy Precinct* seeks to establish new employment lands to generate opportunities and support a wide range of industries namely, primary production and associated value-adding, processing, warehouse and distribution activities and energy generation from renewable resources. Consideration will be required in relation to boundaries and types of employment zoning and associated policy framework (potentially may be reflected in a Concept Plan for inclusion in the Planning and Design Code) in positioning future uses to mitigate potential impacts from hazardous activities, including consideration of proximity to the township of Dublin and existing, established sensitive uses.

The Regional Plan - 30 Year Plan for Greater Adelaide

In addition, the investigations undertaken to date and outlined in the Proposal to Initiate, will ensure that the proposed rezoning is largely consistent with the following key policies and targets of the Regional Plan:

Policy Theme: The economy and jobs –

- **Policy 56:** Ensure there are suitable land supplies for the retail, commercial and industrial sectors.
- **Policy 57:** Maintain and protect primary production and tourism assets in the Environment and Food Production Areas, while allowing for appropriate value-adding activities to increase investment opportunities.
- **Policy 58:** Ensure that the Environment and Food Production Areas, Character Preservation Districts and planning policies work in an integrated way to:
 - Protect key primary production assets and opportunities
 - Facilitate local operating and investment conditions that support primary production and related agri-business development
 - Enable timely business adjustment and climate change adaptation by primary producers.

- **Policy 59:** Enable major new primary production and agri-business development across the Northern Adelaide and Barossa regions and in the Mount Barker-Murray Bridge corridor and prevent ad hoc land use changes that may comprise those investments.
- **Policy 70:** Ensure planning controls for employment lands are flexible to allow new green technologies and industries to emerge and grow.
- **Policy 71:** Encourage the establishment and expansion of medium and large scale renewable energy generation within the region.
- **Policy 72:** Encourage the development of large scale habitat restoration and conservation projects to increase environmental and primary production values and add to local economies and employment opportunities.
- **Policy 73:** Provide sufficient strategic employment land options with direct access to major freight routes to support activities that require separation from housing and other sensitive land uses.

Policy Theme: Climate Change –

- **Policy 109:** Support a zero waste culture by reducing the waste footprint of new development.

Policy Theme: Water –

- **Policy 115:** Incorporate water-sensitive urban design in new developments to manage water quality, water quantity and water use efficiency and to support public stormwater systems.

The achievement of other SPPs and relevant policies and targets within *The 30-Year Plan for Greater Adelaide: 2017 Update (the Update)* are further outlined in the Proposal to Initiate. The Proposal is consistent with several relevant policies and targets, in that it proposes additional employment land that:

- Enables establishing value-adding activities in farming processing and production through the rezoning of the land creating new investment opportunities as part of a circular economy approach.
- Facilitates local operating and investment conditions that support primary production and related agri-business development.
- Establishes a planning framework (employment lands) that provides flexibility to allow new green technologies and industries to emerge and grow.
- Provides sufficient strategic employment land options with direct access to major freight routes to support activities that require separation from housing and other sensitive land uses.
- Supports a zero waste culture by reducing the waste footprint of new development.

Environment and Food Production Area (EFPA)

Section 7 of the Planning, Development and Infrastructure Act 2016

‘To ensure that areas of rural, landscape, environmental or food production significance within Greater Adelaide are protected from urban encroachment’.

The Affected Area is located within the Environment and Food Production Area (EFPA). The Proposal describes the Affected Area as of a degraded quality because of a long history of clearance, grazing and cultivation and as of low primary production value. The proposed rezoning seeks to encourage new agri-business (e.g., vertical agriculture) to establish within the region in the delivery of an overall vision namely, the *Dublin Green Circular Economy Precinct*.

To note, the Proposal flags an additional code amendment to run concurrently with, and be informed by, detailed investigations undertaken in association with this code amendment (the Dublin Circular Economy Precinct (Employment Areas) Code Amendment). This also includes a proposal to amend the EFPA boundary with the intent of rezoning land for residential purposes (some 170 hectares of land earmarked for township expansion) as part of the *Urban Framework Plan*. by the Proponent.