



Devlins Bridge Wind Farm

Preliminary Visual Impact Assessment

Acknowledgement of Country

Moir Landscape Architecture acknowledge the traditional custodians of the lands and waters of Australia, most notably the Awabakal Nation in which our office resides and the Wiradjuri Nation, the traditional owners of the lands on which this Project resides. We acknowledge their contribution to our community and their deep connection to the land. We pay our respects to Elders both past and present.



Styphelia trifora

Devlins Bridge Wind Farm

Preliminary Visual Impact Assessment

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Stromlo Energy

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Contents

1.0	Introduction	6			
1.1	Background	6	5.4	Key Landscape Features and Viewpoints	19
1.2	Background	6	5.5	Preliminary Landscape Character Units & Scenic Quality	21
1.3	Overview of Preliminary Visual Impact Assessment	7	5.6	Preliminary Landscape Character Units	22
2.0	Study Method	8	6.0	Preliminary Assessment Tools	26
2.1	Study Method	8	6.1	Overview of Preliminary Assessment Tools	26
2.2	Report Structure	9	6.2	Visual Magnitude	26
3.0	Project Overview	10	6.3	Results of the Visual Magnitude Tool	26
3.1	Project overview	10	6.4	Multiple Wind Turbine Tool	28
3.2	Project Area	10	6.5	Result of the Multiple Wind Turbine Tool	28
3.3	Study Area	10	7.0	Preliminary Zone of Visual Influence	30
3.4	The Project	11	7.1	Overview of Preliminary Zone of Visual Influence	30
3.5	Other Definitions	11	7.2	Summary of Preliminary Zone of Visual Influence	30
4.0	Community Consultation	13	8.0	Preliminary Assessments	32
4.1	Overview of Community Consultation Process	13	8.1	Preliminary Assessment of Public Viewpoints	32
4.2	Results of Community Consultation	13	8.2	Preliminary Assessment of Non-Associated Dwellings	32
5.0	Existing Landscape Character	14	9.0	Cumulative Visual Impact Assessment	34
5.1	Overview of Bioregion	14	9.1	Overview of Cumulative Visual Impacts	34
5.2	Land Zoning	15	9.2	Nearby Renewable Energy Projects	34
5.3	Land Use	17	9.3	Cumulative Impact on Broader Landscape Character	34
			10.0	Summary and Next Steps	36
			10.1	Summary of the Preliminary Visual Impact Assessment	36



Figures

Figure 01 – Steps in Visual Impact Assessment	7
Figure 02 – Regional Context	10
Figure 03 – Project Layout	12
Figure 04 – Riverina Bioregion	14
Figure 05 – Land Zoning	16
Figure 06 – Land Use	18
Figure 07 – Existing Landscape Features	20
Figure 08 – Preliminary Landscape Character Units (LCUs)	25
Figure 09 – Visual Magnitude	26
Figure 10 – Visual Magnitude	27
Figure 11 – Multiple Wind Turbine Tool	28
Figure 12 – Multiple Wind Turbine Tool	29
Figure 13 – Zone of Visual Influence	31
Figure 14 – Preliminary Public Viewpoint Locations	33
Figure 15 – Nearby Renewable Energy Projects	35

Tables

Table 01 – Overview of Report Structure	9
Table 02 – Scenic Quality Frame of Reference	21
Table 03 – Overview of Landscape Character Units	22
Table 04 – Preliminary Non-Associated Dwelling Assessment	32

Images

Image 01 – Murrumbidgee River, Murrumbidgee Valley Nation Park	14
Image 02 – Flat Open Grassland Plains	14
Image 03 – Dense River Red Gum planting	23
Image 05 – Flat open pastures utilised for grazing	23
Image 07 – Low depression in landscape supporting water tolerant plants	23
Image 04 – Dense River Red Gum on the banks of the Murrumbidgee River	23
Image 06 – Flat open plains utilised for cropping	23
Image 08 – Newell Highway transecting Gillenbah State Forest	24
Image 10 – Scattered woodland with interlocking canopies	24
Image 09 – Dense native plantation	24
Image 11 – Scattered woodland with open grasslands	24

1.0 Introduction

1.1 Background

Moir Landscape Architecture (Moir LA) has been commissioned by Stromlo Energy (the Proponent) to prepare a Preliminary Visual Impact Assessment (PVIA) for Devlins Bridge Wind Farm (the Project).

The PVIA for the Project has been prepared in accordance with the *Wind Energy: Visual Assessment Bulletin*, December 2016, (referred to hereafter as 'the Bulletin'). The PVIA will form part of the Scoping Report seeking the Secretary's Environmental Assessment Requirements (SEARs).

1.2 Background

The Bulletin states: *'the proponent is expected to engage professionals from relevant natural resource management and design professions (for example environmental planners, geographers, landscape architects, or other visual resource specialists) with demonstrated experience and capabilities in visual assessment to carry out a wind energy project visual assessment'*. Moir LA is a professional design practice and consultancy specialising in the areas of Landscape Architecture, Planning and Landscape and Visual Impact. Our team has extensive experience in undertaking Landscape and Visual Impact Assessments for large-scale infrastructure projects.

In the context of our experience and with guidance from the Bulletin we have developed methodologies to ensure a comprehensive quantitative and qualitative assessment of the Project.

Relevant experience includes the preparation of Preliminary Visual Impact Assessments (PVIAs) and Landscape Visual Impact Assessments (LVIAs) for the following Wind Energy Projects:

- Ungula Wind Farm LVIA (Wellington, NSW)
- Hills of Gold Wind Farm LVIA (Nundle, NSW)
- Thunderbolt Energy Hub Stage 1 (Kentucky, NSW)
- Valley of the Winds Wind Farm LVIA (Coolah, NSW)
- Jeremiah Wind Farm PVIA (Gundagai, NSW)
- Barneys Reef Wind Farm PVIA (Gulgong, NSW)
- Winterbourne Wind Farm LVIA (Walcha, NSW)
- Paling Yards Wind Farm PVIA (Paling Yards, NSW)
- Burrawong Wind Farm PVIA (Balranald, NSW)
- Keri Keri Wind Farm PVIA (Keri Keri, NSW)

1.3 Overview of Preliminary Visual Impact Assessment

The purpose of this PVIA is to provide a preliminary assessment of the potential visual impacts of the Project. The report has been prepared in accordance with the Bulletin.

The visual assessment process is broken into two main stages (see Figure 01):

Stage 1: Preliminary Environmental Assessment; and

Stage 2: Environmental Impact Statement (EIS)

This PVIA forms a part of Stage 1: Preliminary Environmental Assessment to be submitted to the Department of Planning, Housing and Infrastructure (DPHI) together with the Scoping Report for the request for SEARs.

The requirements of Stage 1: Preliminary Environmental Assessment are as follows:

At the Preliminary Environmental Assessment stage, a process consisting of community consultation regarding key landscape values and application of preliminary assessment tools has been developed. The tools include consideration of the potential impact of the proposals on dwellings and key public viewpoints.

The preliminary assessment tools have been designed to assist proponents to drive better outcomes. They will assist in identifying, early in the process, the locations where wind turbines may have impacts that warrant further consideration. This in turn provides an opportunity to refine the proposed wind turbine layout to avoid or minimise impacts or justify the proposed design prior to lodgement of the application.

Proponents will be required to submit, with the request for SEARs, a Preliminary Environmental Assessment that includes a map with key information, results of community consultation and the application of the preliminary assessment tools. This will form the basis for the issue of the SEARs that will identify the matters that must be addressed in the EIS.

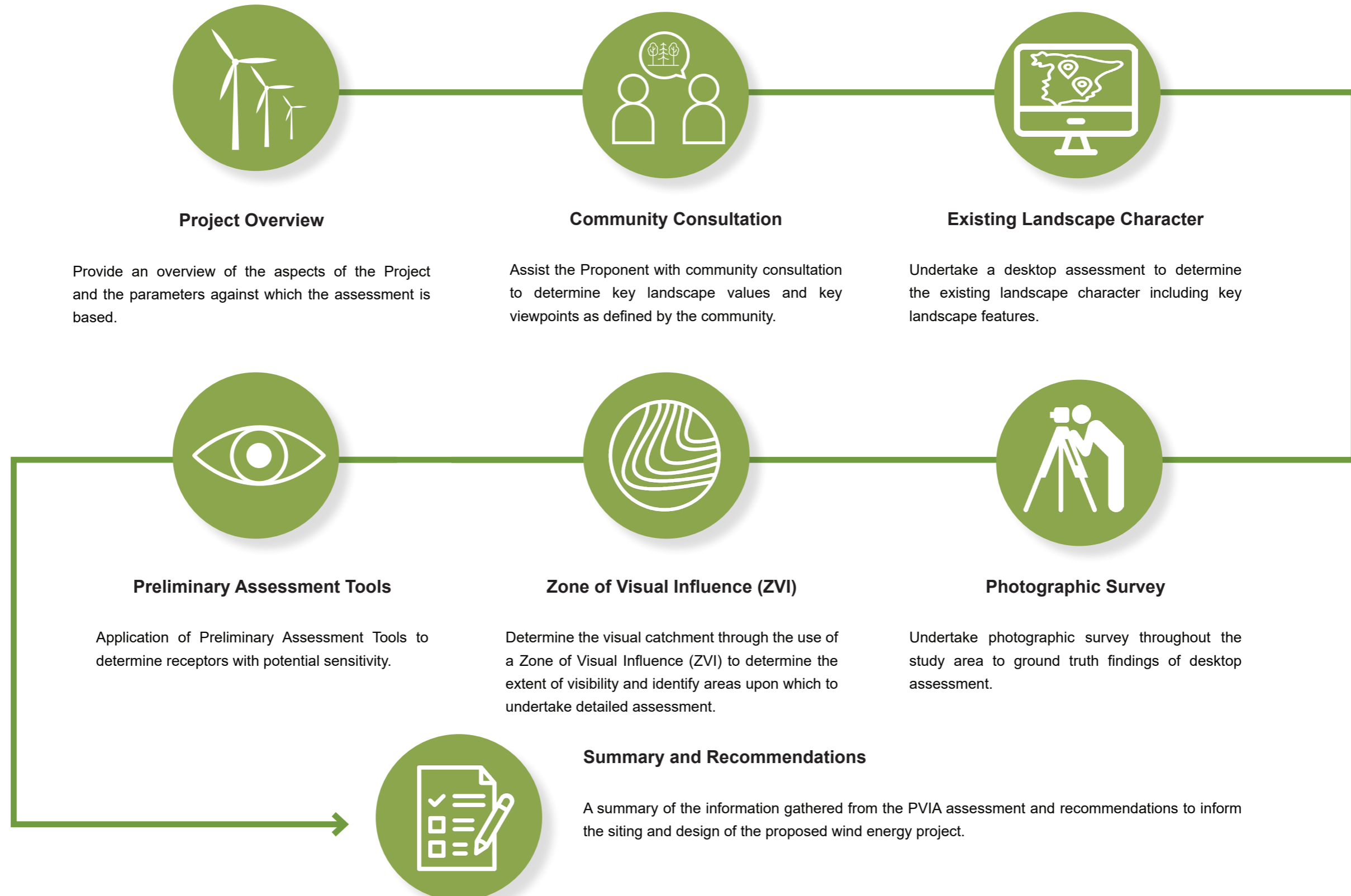


Figure 01 – Steps in Visual Impact Assessment
Source: DPE, 2016

2.0 Study Method

2.1 Study Method

The following steps have been undertaken to develop this PVIA:



Desktop Assessment:

- Application of Preliminary Assessment Tools as outlined in the Bulletin to determine non-associated dwellings and key publicly accessible locations requiring further assessment.
- Preparation of a preliminary ZVI to establish a theoretical zone of visibility of the Project.
- Identification of key public viewpoints and landscape features using available mapping and background documentation.

Onsite Fieldwork:

Fieldwork for the assessment was undertaken in April 2024 and included a photographic survey and preliminary assessment of the existing landscape character from publicly accessible land within the Study Area (as defined in Section 3.3). The findings of the fieldwork have been included in the PVIA and will form the basis for discussion with the community in the EIS Phase of the Project.

Community Consultation:

The Proponent has undertaken community consultation through the scoping phase of the Project. The results of the community consultation have also been used to gain perspective on the landscape values held by the community and inform the PVIA. Community consultation will be continued through the EIS phase of the Project. Refer Section 4.2 Overview of Community Consultation Process for Community Consultation outcomes.

2.2 Report Structure

The following table provides an overview of the requirements of the Bulletin and where these have been address in this PVIA:

Preliminary Visual Impact Assessment Report Structure:

PVIA Report:	Bulletin Requirements:
Refer to Section 3.0: Project Overview	
Refer to Section 4.0: Community Consultation	<i>Undertake community consultation to establish key landscape features valued by the community, key viewpoints in the area (both public and private) along with information about the relative scenic quality of the area.</i>
Section 5.0 : Existing Landscape Character	<i>Production of a map detailing key landscape features (informed by community consultation and any ground-truthing undertaken), the preliminary wind turbine layout, the location of dwellings and key public viewpoints, and an overlay of the wind resource.</i>
Section 6.0: Preliminary Assessment Tools	<i>Results of the preliminary assessment tools for both the visual magnitude and multiple wind turbine parameters.</i>
Section 7.0: Preliminary Zone of Visual Influence	<i>The use of Geographic Information Systems (GIS) to facilitate the application of the tools will streamline the evaluation phase of a project during the pre-lodgement stage. Most GIS systems can establish the theoretical 'zone of visual influence' of the proposal (the area from which the proposal is theoretically visible or the 'visual catchment').</i>
Section 8.0: Preliminary Dwelling and Viewpoint Assessment	<i>The visual assessment will involve the combination of desktop and field evaluations of the proposed wind energy project and its various components, turbines and ancillary facilities. The visual performance objectives form the principal framework and guide for assessing the proposed wind energy project when applied to individual viewpoints. All key public viewpoints and individual dwellings within the visual catchment should be identified and assessed.</i>
Section 9.0: Cumulative Visual Impacts	<i>Address potential cumulative impacts of wind energy projects in the region (the proposed wind energy project, as well as existing and approved projects)</i>
Section 10.0: Summary and Recommendations	

Table 01 – Overview of Report Structure

3.0 Project Overview

3.1 Project overview

The Proponent is seeking development consent for the construction, operation, maintenance and decommissioning of a large-scale wind energy project. The Project will involve the construction, operation and maintenance of up to 94 wind turbines generators (WTGs) with ancillary infrastructure, substations and transmission line infrastructure. The Project will connect to the national grid via an on-site terminal cut in to the existing 330kV transmission line which runs from Darlington Point to Wagga Wagga, along the southern boundary of the Project and have a generating capacity of up to 680 megawatts (MW).

3.2 Project Area

The Project Area is situated approximately 22 km west of Narrandera, 18 km south on Leeton and is located 44 km east of the eastern boundary of the South-West Renewable Energy Zone (SW-REZ) in New South Wales (NSW). The Project Area covers an area of 7,300 hectares spanning 54 lots, and is owned across 12 land owners. The Project Area is primarily used for grazing and cropping and sits within the Riverina Bioregion. The project is located in the Narrandera Local Government Area (LGA) and borders the Murrumbidgee LGA to the west and Leeton LGA to the north, Refer **Figure 02**.

3.3 Study Area

For the purpose of this report and in accordance with the Bulletin, the Study Area refers to the Project Area and the surrounding land up to 8 km from the nearest turbine (Refer to **Figure 03**). The Bulletin identifies the Study Area as land up to 8 km from the proposed turbine locations. The nearest points of interest within and in close proximity to the Study Area include Yanco Weir and accessible campgrounds and day-trip areas within the Murrumbidgee Valley National Park (MVNP). Please Note: The landscape character assessment extends beyond the Study Area.

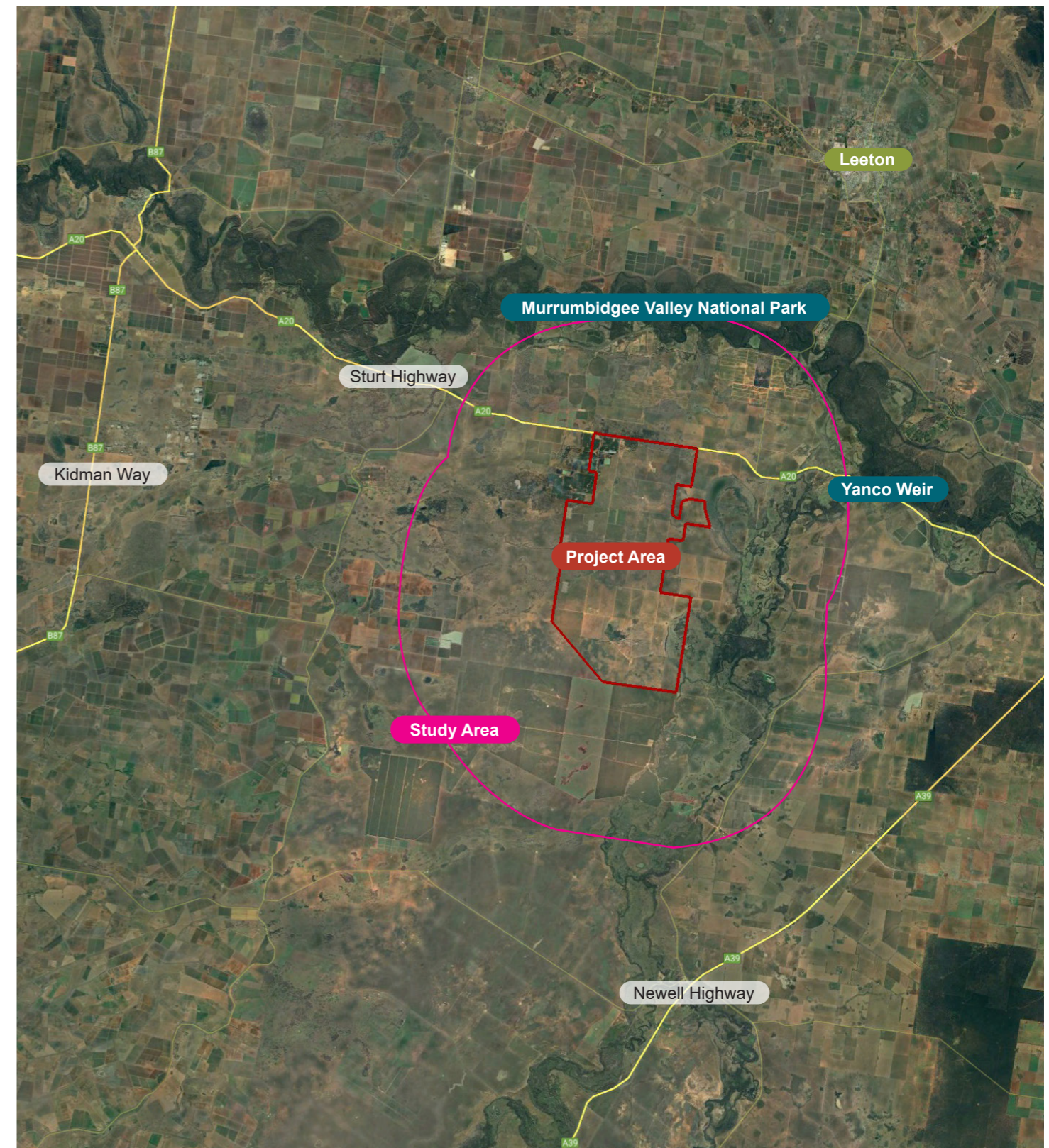


Figure 02 – Regional Context
Basemap Source: Google Earth 2023

LEGEND

Project Area ———
Major Roads ———



3.4 The Project

The WTGs to be used and other design parameters are subject to further design and a procurement process during the EIS and construction phases of the project. For the purposes of this assessment, a three-blade rotor and nacelle mounted onto a tower, with a maximum tip height of **290 m** above ground level, has been assessed as a worst-case scenario.

The layout of the Project is illustrated in **Figure 03** including:

- Up to 94 WTGs, each consisting of:
 - A generating capacity of up to 7.2 MW each,
 - A three-blade rotor and nacelle mounted onto a tower, with a maximum tip height of 290 metres,
 - A crane hardstand area,
 - A turbine laydown area.

- Electrical infrastructure, including:
 - A primary terminal station,
 - A collector substation and associated overhead power line,
 - Underground 33 kV reticulation network to transmit the electricity generated by the WTGs to the collector or terminal substation,
 - Overhead 330 kV reticulation to connect the collector station to the terminal station,
 - Connection to the 330 kV Transgrid transmission line which runs along the southern boundary of the site.

- Permanent ancillary infrastructure, including:
 - An operation and maintenance facility, including site offices and car park,
 - Up to six permanent meteorological masts, located close to a WTG location, with a maximum height of 190 metres,
 - Internal access tracks to, from and in between WTGs and substations.

- Temporary construction facilities including:
 - One construction compound with laydown areas,
 - Stockpile areas,
 - Up to two concrete batch plants adjacent to the construction compound,
 - Gravel borrow pits (if feasible),
 - Upgrades to local roads and crossings where required for the delivery, installation and maintenance of WTGs components and associated materials and structures.

3.5 Other Definitions

For the purposes of this assessment an 'associated dwelling' is defined as properties where the owners have entered into a financial agreement (landholder agreements) with the Proponent, and a 'non-associated dwelling' is defined as owners that have not entered into a landholder agreement with the Proponent.

Project Layout

Refer to 3.4 The Project

LEGEND

- Local Government Area
- Project Area
- Study Area (8,000 m from nearest WTG)
- Proposed Turbines (WTGs)
- Lot
- Existing Transmission Line
- Contours (2m)
- Dwelling Associated
- Dwelling Non-Associated

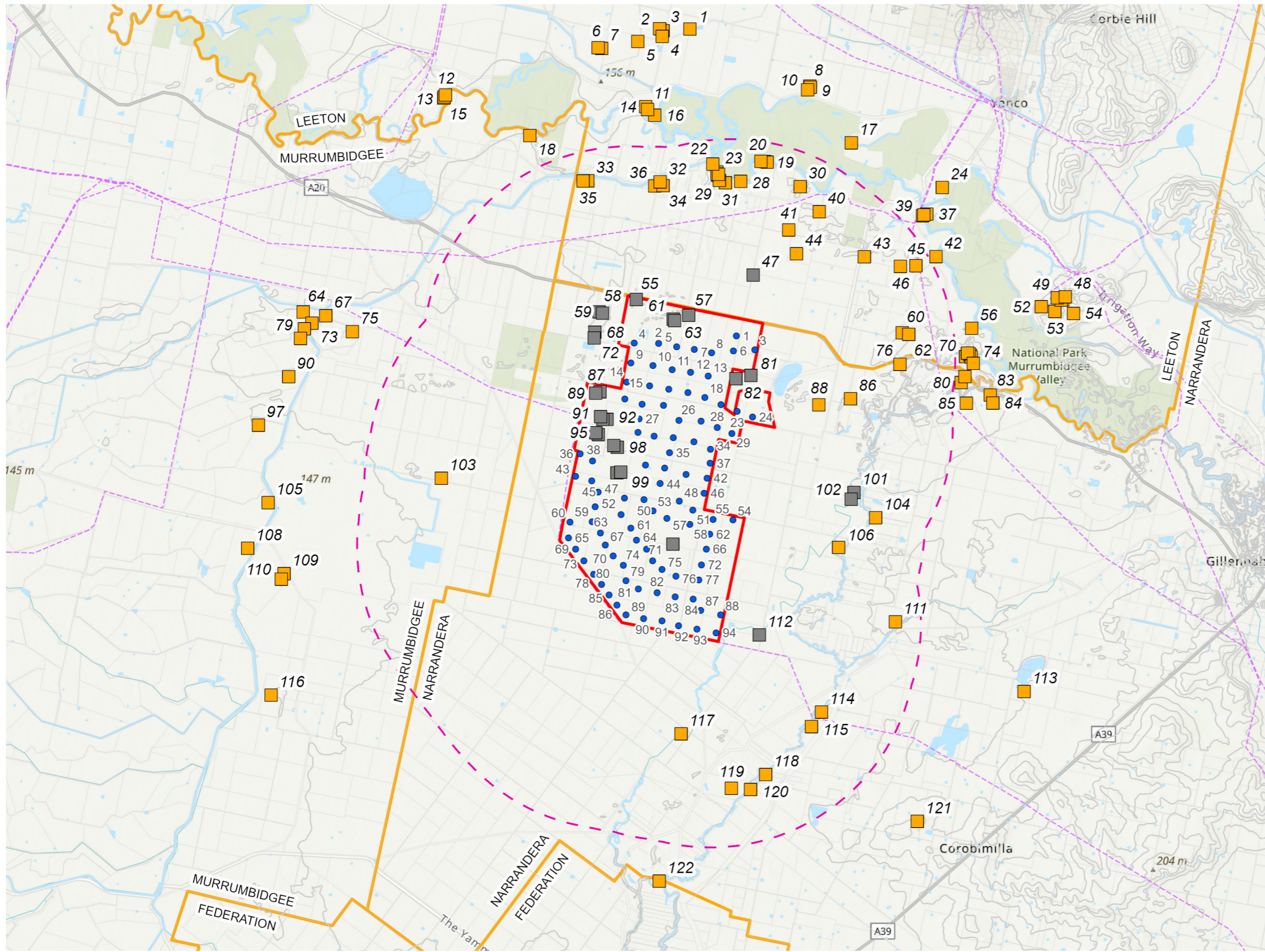


Figure 03 – Project Layout
 Basemap Source: Esri, 2023



4.0 Community Consultation

4.1 Overview of Community Consultation Process

In accordance with the Bulletin: *'Community consultation at this early stage may be broad, but should include discussions about the proposed Wind Farm Site, likely corridors of development, or preliminary turbine layouts and must involve people from the visual catchment'*. (DPHI, 2016)

The purpose of community consultation undertaken in the preparation of the PVIA is to:

- Establish key landscape features;
- Defined areas of scenic quality; and
- Identify key public viewpoints valued by that community.

Community consultation will continue through the EIS phase of the Project, and this will further assist in determining the key landscape features and values prevalent in the region.

4.2 Results of Community Consultation

Understanding the community's perception towards the Project is an intrinsic component of the Landscape and Visual Impact Assessment process. A CSIRO study published in 2012 *'Exploring community acceptance of rural wind farms in Australia'*, provides a snapshot of community acceptance levels regarding Australian Wind Farms from a variety of stakeholder perspectives. It found that levels of acceptance among the public are highly subjective and can differ depending on location, local context and place attachment (Hall, Ashworth, and Shaw, 2012).

In accordance with the Bulletin, ongoing community consultation was undertaken by the Proponent. Eight (8) community events were conducted in the towns of Narrandera, Leeton and Euroley from December 2023 to April 2024 which included a mix of presentations, community drop-in sessions, and project information booths. From these sessions, 116 face-to-face interactions were recorded and 12 feedback forms were filled.

No major objections to the Project were presented. Themes of enquiry range from Project location and status and commitment to community and neighbour benefit programs. The Proponents approach to both neighbour benefit and community programs was well received by all attendees. Issues of concern to the community include the impact of the project on housing affordability and commitment to local jobs and businesses.

Key landscape features and scenic qualities of the Project locality identified by participants included: Yanco Creek, Murrumbidgee River, Sandhills (north of Sturt Highway) and Fivebough Swamp in Leeton.

5.0 Existing Landscape Character

5.1 Overview of Bioregion

The Project is situated within the Riverina Bioregion (see **Figure 04**) in South-West NSW. The bioregion is characterised by extensive saltbush plains with small depressions and low isolated rises.

Topography is generally flat with very minor and isolated rises of coarse-textured aeolian material (Land System, 2016). Grey cracking clays, red brown earths and compact brown clays are predominant in this region (NPWS, 2003). The plains are dominated by Saltbush and Bluebush with Old Man Saltbush, Cottonbush, Myall and other native grasses. Vegetation communities on associated channels and swamps include Black Box (*Eucalyptus largiflorens*) and Lignum (*Muehlenbeckia florulenta*). **Images 01 & 02** illustrate the typical character of the landscape within the Study Area.



Image 01 – Murrumbidgee River, Murrumbidgee Valley Nation Park



Image 02 – Flat Open Grassland Plains

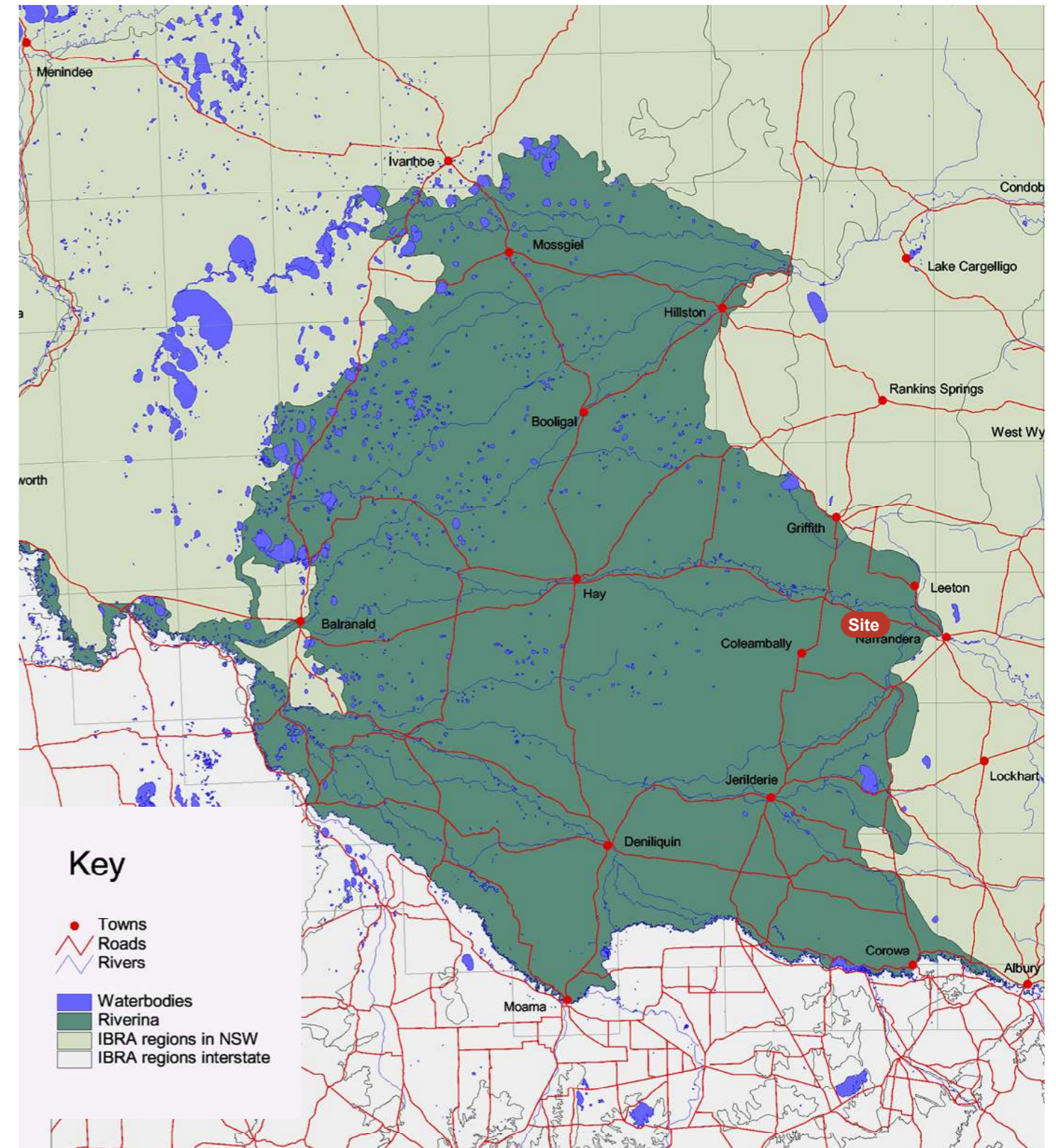


Figure 04 – Riverina Bioregion
Basemap Source: NPWS, 2003

5.2 Land Zoning

The Project is located within the Narrandera Shire LGA. This LGA utilises Narrandera Environment Plan (LEP) 2013 to identify where different types of development may be permitted. The Project Area is wholly classified as primary production, RU1. The following gives an overview of the relevant land zoning types within the Study Area (see **Figure 05**):

C1 - National Parks & Nature Reserve

The Study Area encompasses portions of land zoned C1 National Parks and Nature Reserves. This land forms part of the Murrumbidgee Valley National Park.

The MVNP Statement of Management Intent outlines the park's role in protecting threatened fauna species, including the endangered Southern Bell Frog (*Litoria raniformis*) and Plains Wanderer (*Pedionomus torquatus*). The park also protects endangered ecological communities, such as Sandhill Pine Woodland.

The objectives of the C1 zoning include:

- *To enable the management and appropriate use of land that is reserved under the National Parks and Wildlife Act 1974 or that is acquired under Part 11 of that Act.*
- *To enable uses authorised under the National Parks and Wildlife Act 1974.*
- *To identify land that is to be reserved under the National Parks and Wildlife Act 1974 and to protect the environmental significance of that land.*

RU1 - Primary Production

The Project Area and the majority of the Study Area land are zoned as RU1 - Primary Production. The LEP objectives applicable to this zone include:

- *To encourage sustainable primary industry production by maintaining and enhancing the natural resource base;*
- *To minimise the fragmentation and alienation of resource lands;*
- *To minimise conflict between land uses within this zone and land uses within adjoining zones;*

RU4 - Primary Production Small Lots

A portion of land within the Study Area is zoned as RU4 – Primary Production Small Lots.



















The LEP objectives relevant to the Project Area and to the PVIA are:

- *To enable sustainable primary industry and other compatible land uses.*
- *To encourage and promote diversity and employment opportunities in relation to primary industry enterprises, particularly those that require smaller lots or that are more intensive in nature.*
- *To minimise conflict between land uses within this zone and land uses within adjoining zones.*

Land Zoning

Refer to 5.2 Land Zoning

LEGEND

-  Local Government Area
-  Project Area
-  Study Area (8,000 m from nearest WTG)
-  Proposed Turbines (WTGs)
-  Dwelling Non-Associated
-  Dwelling Associated
-  Lot
-  Existing Transmission Line
-  Contours (2m)
-  C1 - National Parks and Nature Reserves
-  E1 - Local Centre
-  E3 - Productivity Support
-  R1 - General Residential
-  R2 - Low Density Residential
-  R5 - Large Lot Residential
-  RE1 - Public Recreation
-  RU1 - Primary Production
-  RU3 - Forestry
-  RU4 - Primary Production Small Lots
-  RU5 - Village
-  SP2 - Infrastructure
-  W1 - Natural Waterways
-  W2 - Recreational Waterways

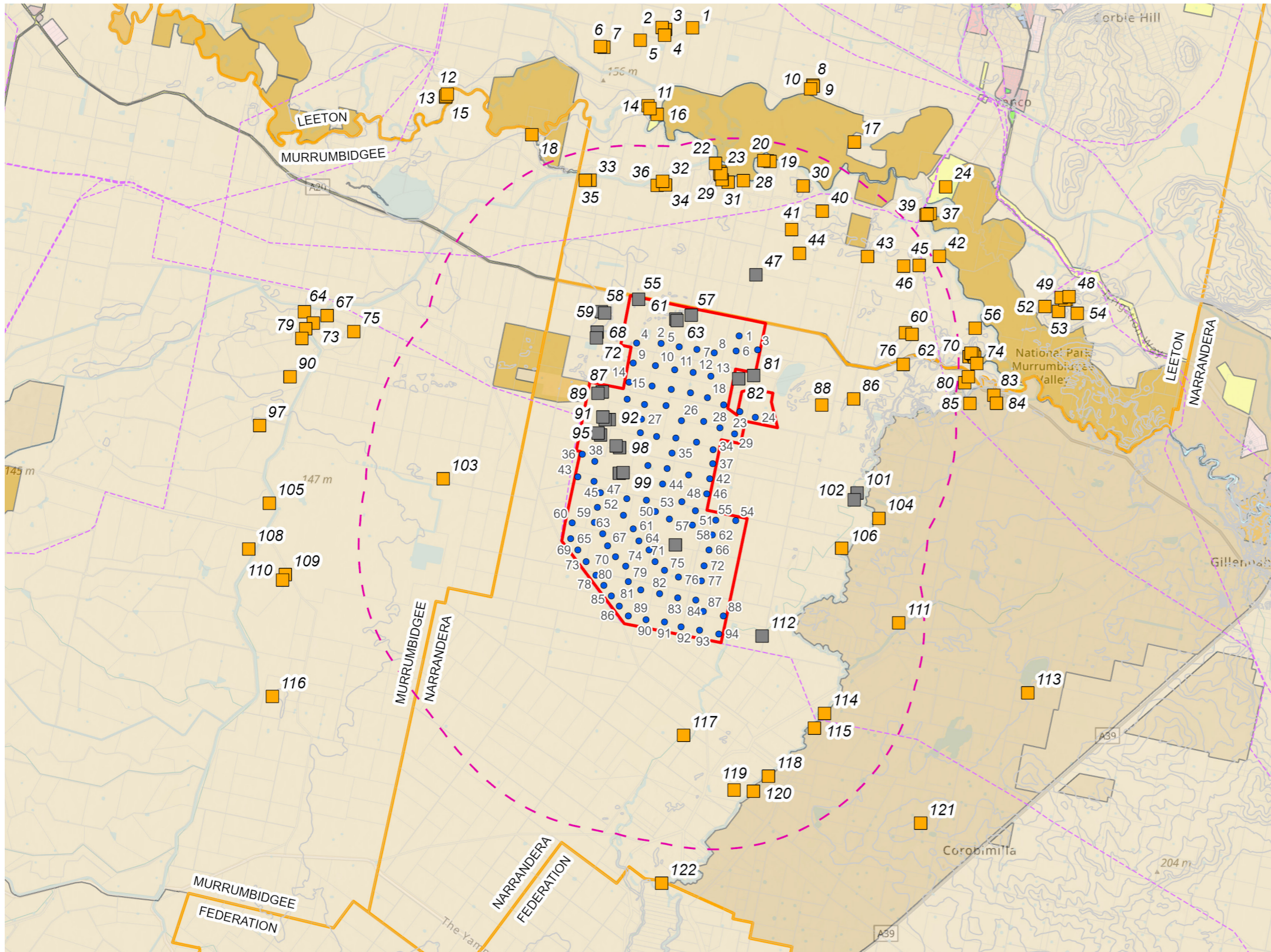
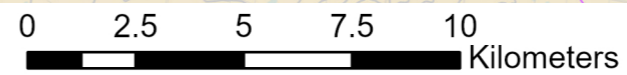


Figure 05 – Land Zoning

Basemap Source:



5.3 Land Use

Land use within the Project Area is predominantly dedicated to agricultural production activities, specifically dryland cropping and grazing, but also including irrigated cropping, irrigated perennial horticulture, grazing of native and modified pastures and intensive animal production.

Land uses within the Study Area are largely similar, with the addition of nature conservation associated with the MVNP and the South West Woodland Nature Reserve (SWWNR). Notable land uses outside of the Study Area include areas of productive native forest along the Newell Highway, east of the Study Area.

Creeklines, lakes, and lagoons are present to the east of the Project, complimenting agricultural activities, as well as supporting large swathes of native vegetation.

Sturt Highway serves as an important road corridor, connecting the towns of Balranald, Hay and Narrandera and creating a link to the regional centre of Wagga Wagga. Minor road connections are provided by Devlins Bridge Road, Cuddle Road and Mundarra Road.

Land Use

Refer to 5.3

LEGEND

- Local Government Area
- Project Area
- Study Area (8,000 m from nearest WTG)
- Proposed Turbines (WTGs)
- Dwelling Non-Associated
- Dwelling Associated
- Lot
- Existing Transmission Line
- Contours (2m)
- 1.1.0 Nature conservation
- 1.2.0 Managed resource protection
- 2.1.0 Grazing native vegetation
- 2.2.0 Production native forests
- 3.1.0 Plantation forests
- 3.2.0 Grazing modified pastures
- 3.3.0 Cropping
- 3.4.0 Perennial horticulture
- 3.5.0 Seasonal horticulture
- 3.6.0 Land in transition
- 4.1.0 Irrigated plantation forestry
- 4.2.0 Grazing irrigated modified pastures
- 4.3.0 Irrigated cropping
- 4.4.0 Irrigated perennial horticulture
- 4.5.0 Irrigated seasonal horticulture
- 4.6.0 Irrigated land in transition
- 5.2.0 Intensive animal production
- 5.3.0 Manufacturing and industrial
- 5.4.0 Residential and farm infrastructure
- 5.5.0 Services
- 5.6.0 Utilities
- 5.7.0 Transport and communication
- 5.8.0 Mining
- 5.9.0 Waste treatment and disposal
- 6.2.0 Reservoir/dam
- 6.3.0 River
- 6.4.0 Channel/aqueduct
- 6.5.0 Marsh/wetland

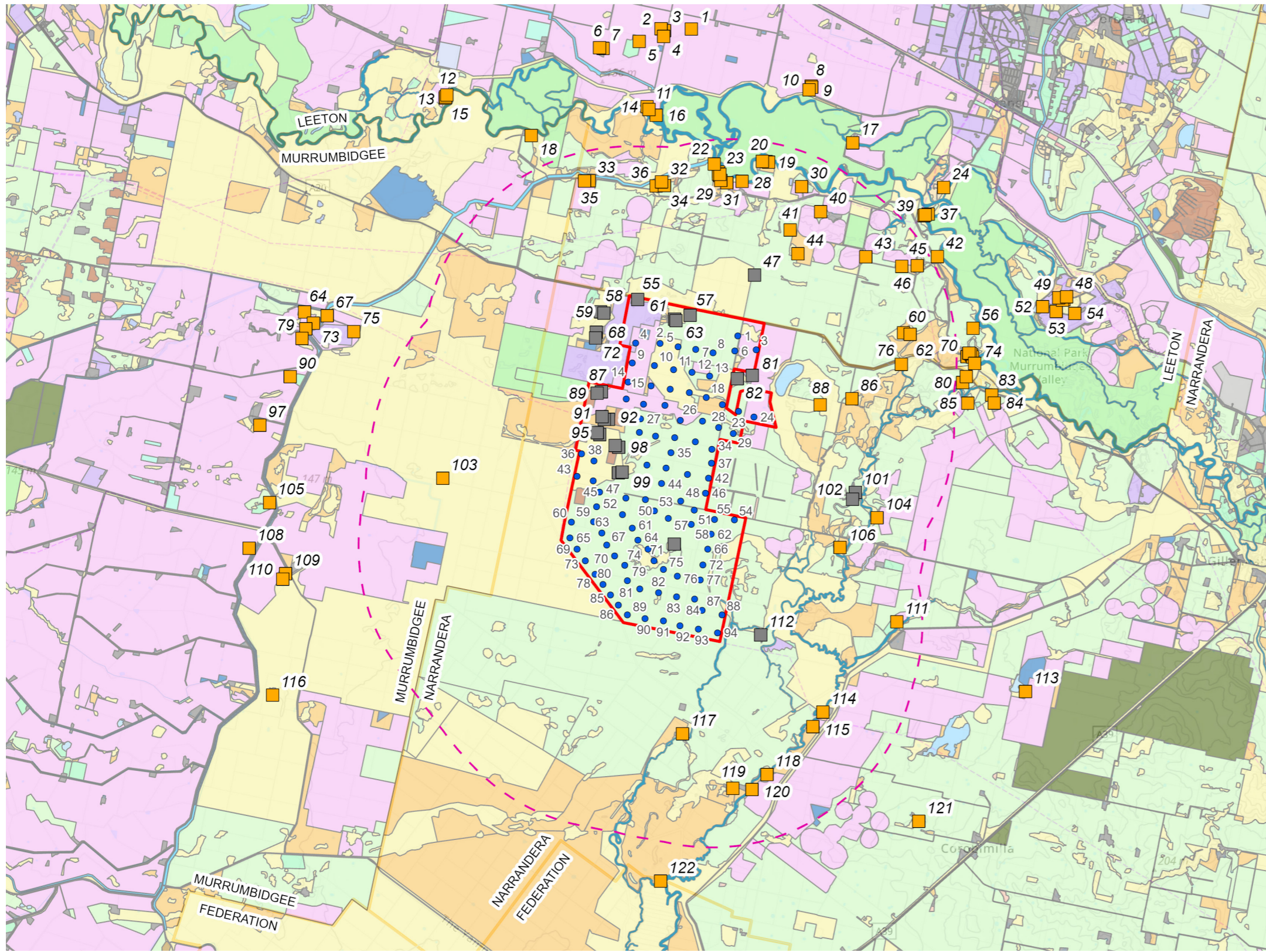
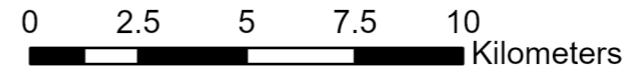


Figure 06 – Land Use
 Basemap Source: Esri, 2023; NSW SEED, 2017



5.4 Key Landscape Features and Viewpoints

The Bulletin states that *'proponents must identify key landscape features, dwelling locations, and key public viewpoints'*. The following section provides an overview of the key features identified within the Study Area.

5.4.1 Geology and Landform

The region comprises quaternary alluvial sediments with shallow and small depressions that are as deep as two (2) metres (Environment NSW, 2011). These depressions form a number of dry lakes studded in the landscape. In some areas, these depressions form large-scale swamps/flood plains. The landform is also characterised by isolated low rises formed by aeolian processes, i.e, through wind action (Environment NSW, 2011). The landform is generally flat with dry distributary channels and floodplains (NPWS, 2003).

5.4.2 Vegetation Character

Lack of water and dry arid conditions support scattered stands of Belah trees, Saltbush and Speargrass communities (NPWS, 2003). A number of Saltbush and Cottonbush varieties dominate the region with sparse numbers of tree communities, resulting in open and expansive views. The lack of tall canopy species allows higher wind speeds with continual wind movement within the landscape. Mid-canopy species such as Lignum and Nitre Goosefoot are occasionally visible in the landscape and are favoured by emus for grazing. The predominance of low-storey vegetation allows for easier grazing opportunities for livestock. Much of the canopy coverage within the Study Area is located along the banks of Bareena Creek, Coleambally Canal, Murrumbidgee River and areas surrounding the Yanco and Back Creeks. Additionally, the Banandra Precinct of the MVNP provides large area of scattered canopy.

5.4.3 Rivers, Creeks & Lakes

Given the dry and arid conditions of the region, many of the lakes and creeklines remain dry most of the year. The most significant hydrological feature within the Study Area is the Murrumbidgee River, which flows westerly towards the Murray River. Other notable hydrological features include the Coleambally Canal, Yanco Creek, Back Creek and Dry Lake.

Lakes or shallow depressions are generally defined by low scrubby vegetation such as Saltbush and Canegrass species (Environment NSW, 2011). These areas have the capacity to hold water and are generally favoured for livestock grazing. Watercourses on the other hand are defined by a denser vegetation character with scattered clumps of remnant vegetation. The region also presents swamps and pans consisting of Dillon Bush, Canegrass and Nitre Goosefoot that are spread across extensive plains (Environment NSW, 2011).

5.4.4 Roads and Highways

The Project borders the Sturt Highway to the north, which serves as an important road corridor, connecting Balranald, Hay, Darlington Point, Narradera and Wagga Wagga. Minor road connections are provided by Devlins Bridge Road, Cuddle Road and Mundarre Road.

5.4.5 Nature Reserves, State Conservation Area and National Park

The MVNP is located on the Banks of the Murrumbidgee River. The MVNP comprises of fragmented parcels of land that begins at Narrandera, and stretches to the Yarradda Campgrounds to the west. Publicly accessible areas of the MVNP are located approximately five (5) km north of the Project, and a non-public accessible area of the SWWNR is located on the western boundary of the Project. The River Red Gum (*Eucalyptus camaldulensis*) are widespread throughout the MVNP, with the Saltbush (*Atriplex nummularia*) being the dominant shrub species.

5.4.6 Campgrounds and Points of Interest

No key public viewpoints or campgrounds were identified within the Project Area or Study Area. Public viewpoints and campgrounds located in close proximity to the Study Area include Jurambula Beach Campground (Maccas Beach) Seven and a half (7.5) km north west of the Project Area, Sandy Beach Campground 13.5 km east of the Project Area, Gogeldrie Weir Campground nine (9) km north of the Project Area, and Yanco Weir 10 km east of the Project Area.

Jurambula Beach Campground, known locally as Maccas Beach, is located in the MVNP on the banks of the Murrumbidgee River. The campground is characterised by a wide sandy riverbank and dense stands of River Red Gums. It offers recreational uses such as fishing and kayaking but does not offer any built-form facilities.

Gogeldrie Weir Campground is located on the northern side of the Murrumbidgee River, opposite the Gogeldrie Weir. It is characterised by well-kept turf sites dotted with large shade trees. The Campground is adjacent to the Gogeldrie Riverside Park, which is a popular recreational space for locals and tourists.

Sandy Beach Campground is located within the MVNP and comprises 17 unpowered campsites approximately 100 m from the Murrumbidgee River. The Sandy Beach Campground can be characterised by dense stands of River Red Gums with open lawn areas to facilitate camping.

Yanco Weir consists of two separate weir structures, Yanco Weir South Wall and Yanco Weir North Wall, which are separated by a small island. The weir structures are constructed of concrete and control the flow of the Murrumbidgee River.

Existing Landscape Features

Refer to 5.4

LEGEND

- Local Government Area
- Project Area
- Study Area (8,000 m from nearest WTG)
- Dwelling Non-Associated
- Dwelling Associated
- Lot
- Existing Transmission Line
- Contours (2m)
- Watercourses
- Points of Interest
- Rivers and Creeks

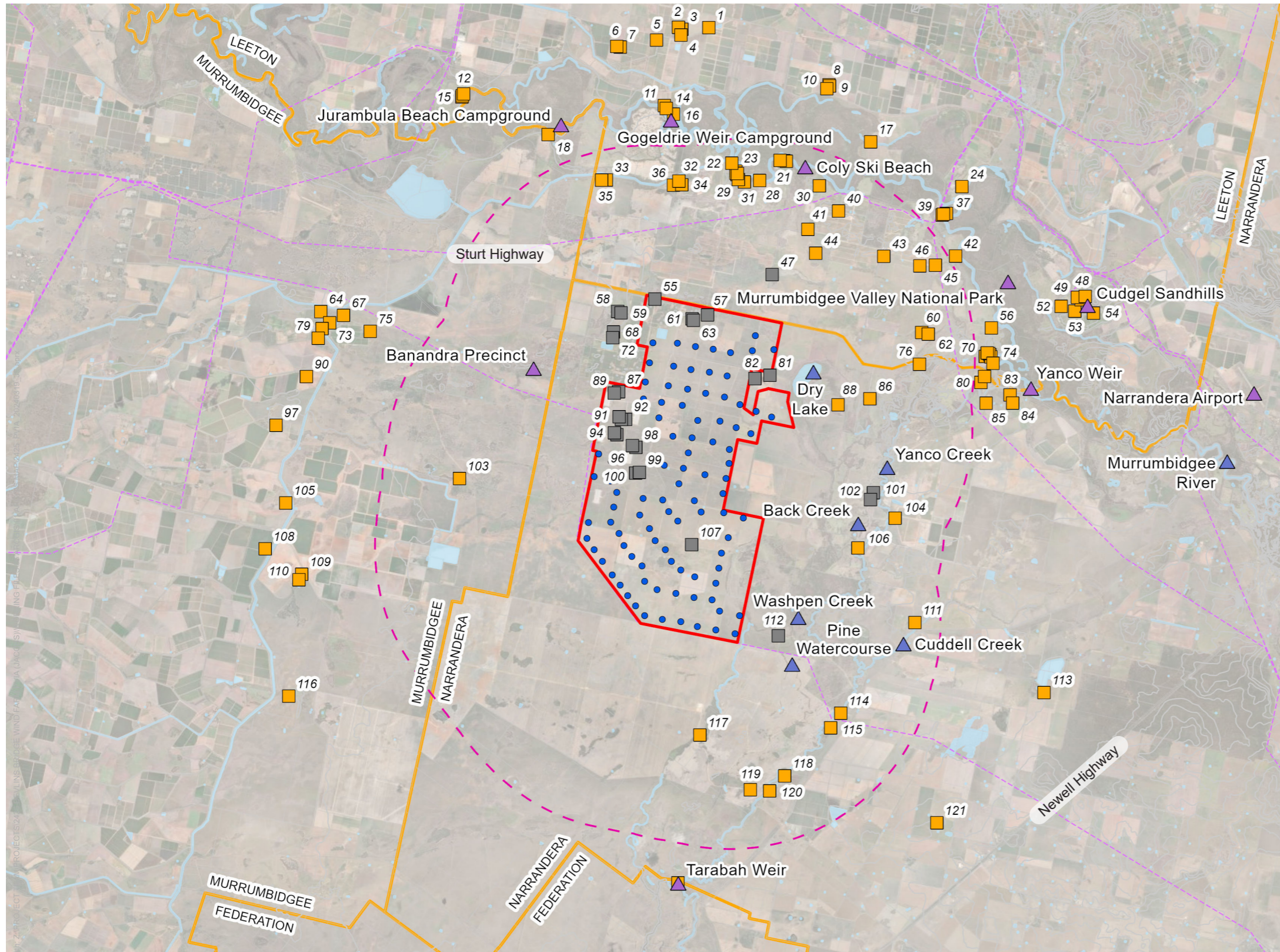
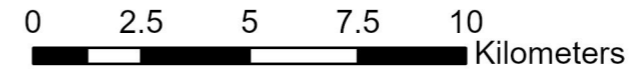


Figure 07 – Existing Landscape Features
 Basemap Source: Esri, 2023



5.5 Preliminary Landscape Character Units & Scenic Quality

The Bulletin states: ‘(...) the baseline study inputs, including key landscape features and sensitive land use designations, should lead to the identification of Scenic Quality Classes. Scenic quality refers to the relative scenic or aesthetic value of the landscape based on the relative presence or absence of key landscape features known to be associated with community perceptions of high, moderate or low scenic quality. It is both a subjective and complex process undertaken by experts in visual impact assessment, taking into account community values identified in early community consultation’. (DPHI, 2016)

Each category of the ‘Frame of Reference’ has been quantified for each Landscape Character Unit to determine a ‘Scenic Quality Rating’ of Low, Moderate or High. The resulting Scenic Quality Rating will be used during the EIS phase to assist in defining the Visual Influence Zones in accordance with the Bulletin.

Viewpoint Type	Low Scenic Quality	Moderate Scenic Quality	High Scenic Quality
Landform	<ul style="list-style-type: none"> Large expanses of flat or gently undulating terrain. Indistinct, dissected or unbroken landforms that provide little illusion of spatial definition or landmarks with which to orient 	<ul style="list-style-type: none"> Steep, hilly and undulating ranges that are not visually dominant Broad shallow valleys Moderately deep gorges or moderately steep valley walls Minor rock outcrops 	<ul style="list-style-type: none"> Isolated peaks, steep rocky ridges, cones or escarpments with distinctive form and/or colour contrast that become focal points Large areas of distinctive rock outcrops or boulders Well defined, steep sided valley gorges
Vegetation	<ul style="list-style-type: none"> Extensively cleared and cropped areas with very limited variation in colour and texture Pastoral areas, human created paddocks, pastures or grasslands and associated buildings typical of grazing lands 	<ul style="list-style-type: none"> Predominantly open forest or woodland combined with some natural openings in patterns that offer some visual relief Vegetative stands that exhibit a range of size, form, colour, texture and spacing including human influenced vegetation such as vineyards, and orchards 	<ul style="list-style-type: none"> Strongly defined patterns with combinations of native forest, naturally appearing openings, streamside vegetation and/or scattered exotics Distinctive stands of vegetation that may create unusual forms, colours or textures in comparison to surrounding vegetation
Waterbodies	<ul style="list-style-type: none"> Absence of natural waterbody Farm dams, irrigation canals or stormwater infrastructure 	<ul style="list-style-type: none"> Intermittent streams, lakes, rivers, swamps and reservoirs 	<ul style="list-style-type: none"> Visually prominent lakes, reservoirs, rivers, streams, wetlands and swamps Presence of harbour, inlet, bay or open ocean
Social & Cultural	<ul style="list-style-type: none"> Places of worship, cemeteries/memorial parks, private open spaces 	<ul style="list-style-type: none"> Local heritage sites Distinguishable entry ways to a regional city identified in the Transport and Infrastructure SEPP 	<ul style="list-style-type: none"> Culturally important sites, world heritage areas, national parks/reserves, Commonwealth and state heritage sites
Human Presence	<ul style="list-style-type: none"> Dominating presence of infrastructure, human settlements, highly modified landscapes and higher density populations such as regional cities, industrial areas, agricultural transport or electricity infrastructure 	<ul style="list-style-type: none"> Dispersed yet evident presence of human settlement such as villages, small towns, isolated pockets of production and industry, lower scale and trafficked transport infrastructure 	<ul style="list-style-type: none"> Natural/undisturbed landscape Minimal evidence of human presence and production

Table 02 – Scenic Quality Frame of Reference

Source: Adapted from the DPHI Technical Supplement - LVIA

5.6 Preliminary Landscape Character Units

As part of the Preliminary Landscape Character Assessment, a total of five (5) Landscape Character Units (LCUs) have been identified within the Study Area, refer to **Figure 09**.

Surveys completed during community consultation voiced particular value for farmlands and open plains, sandhills, national parks, the Murrumbidgee River, and Yanco Weir. Wetlands associated with Fivebough and Tuckerbil swamp were also mentioned but these exist further north, outside of the study area. Other sandhills in the area such as Bublebundie and those associated with Koonadan Aboriginal Place are also outside of the Study Area.

Table 03 provides an overview of the LCUs with preliminary Scenic Quality Ratings applied. These ratings have been developed using the Frame of Reference provided in **Table 02** and the Bulletin. The LCUs and Scenic Quality Ratings will be refined in the EIS Phase of the Project to reflect inputs provided by the community during ongoing consultation, and ongoing development of the Project.

Landscape Character Units			
LCU	Name	General Character	Rating
LCU01	Riverina Red Gum Forest	Comprises of dense woodlands of River Red Gum that spread along the Banks of the Murrumbidgee River and extend outwards adjoining agricultural lands.	High
LCU02	Flat Pastures & Grassy Plains	Vast open land parcels with minimum tree coverage and vast extents of Saltbushes, Speargrass, and Forbs.	Low
LCU03	Open Riverina Woodland Wetland	A mix of dense and scattered woodland prone to inundation and primarily located around creeks and low-lying areas. The dominant tree species is the River Red Gum, accompanied by water-tolerant grass and shrub species.	Moderate
LCU04	Gillenbah State Forest	Medium to dense pine forest consisting of Cypress Pine and a mix of Box species. The understory is sparsely vegetated with Wallaby and Spear grasses.	Low
LCU05	Grassy Woodland	Mix of scattered native tree species with small areas of dense interlocking canopy. Area is juxtaposed by open expanses populated by native grasses.	Moderate

Table 03 – Overview of Landscape Character Units

LCU01 - Riverina Red Gum Forest

The dominant tree species within this LCU is the River Red Gum, which grow in dense swathes and are widespread along the banks of Murrumbidgee River, extending outwards to adjacent agricultural lands. Dead fallen trees scatter the sandy banks of the Murrumbidgee creating habitat for endemic fauna and fish species. The understory of this LCU is primarily open, inhabited by low native grasses.



Image 03 – Dense River Red Gum planting



Image 04 – Dense River Red Gum on the banks of the Murrumbidgee River

LCU02 - Flat Pastures & Grassy Plains

The Flat Pastures and Grassy Plains LCU is defined by vast, open land parcels that are utilised for livestock grazing and irrigated and non-irrigated cropping. The LCU forms the most dominant character in the region. It comprises of open plains with minimum tree coverage and vast extents of Saltbushes, Speargrass, and Forbs. Common land uses include grazing, cropping, and irrigated cropping. The topography is primarily flat, allowing for expansive views to the horizon.



Image 05 – Flat open pastures utilised for grazing



Image 06 – Flat open plains utilised for cropping

LCU03 - Open Riverina Woodland Wetland

This LCU is defined by flat topography with a mix of open and heavily vegetated areas. This LCU is commonly inundated and supports a variety of water-tolerant vegetation. The understory of the LCU is sparsely vegetated with a mix of Lignum and River Cooba with occasional swathes of Dwarf Cherry. Tall to mid-high woodlands are common, comprising of a mix of River Red Gum and Black Box with interlocking to scattered canopies. This LCU is utilised for agricultural grazing with associated agricultural infrastructure such as wire fencing and gates being present.



Image 07 – Low depression in landscape supporting water tolerant plants

LCU04 - Gillenbah State Forest

The Gillenbah State Forest is a LCU located on the Newell Highway, approximately 14 km from the Project. This LCU is characterised by dense to semi-dense Cypress plantations, with scattered areas of the Western Grey Box. Low native grasses populate the understory with Acacia species growing along the edge of the Newell Highway. As an operational plantation, vegetation within this LCU is subject to ongoing harvesting.



Image 08 – Newell Highway transecting Gillenbah State Forest



Image 09 – Dense native plantation

LCU05 - Grassy Woodland

This LCU is characterised by open woodlands within the extents of the Banandra Precinct of the MVNP and parcels of land east and north of the Project. The land is subjected to primarily agricultural uses, with the Banandra Precinct being used exclusively for conservation with no human access. This area supports vegetation including dense Boree and Black box woodlands with a native grass understorey on flat topography.



Image 10 – Scattered woodland with interlocking canopies


















Image 11 – Scattered woodland with open grasslands

Preliminary Landscape Character Units

Refer to 5.6

LEGEND

-  Local Government Area
-  Project Area
-  Study Area (8,000 m from nearest WTG)
-  Proposed Turbines (WTGs)
-  Dwelling Non-Associated
-  Dwelling Associated
-  Existing Transmission Line
-  Contours (2m)
-  LCU01 Riverina River Red Gum Forest
-  LCU02 Flat Pastures and Grassy Plains
-  LCU03 Open Riverina Woodland Wetland
-  LCU04 Gillenbah State Forest
-  LCU05 Grassy Woodland
-  Wetland
-  Watercourses

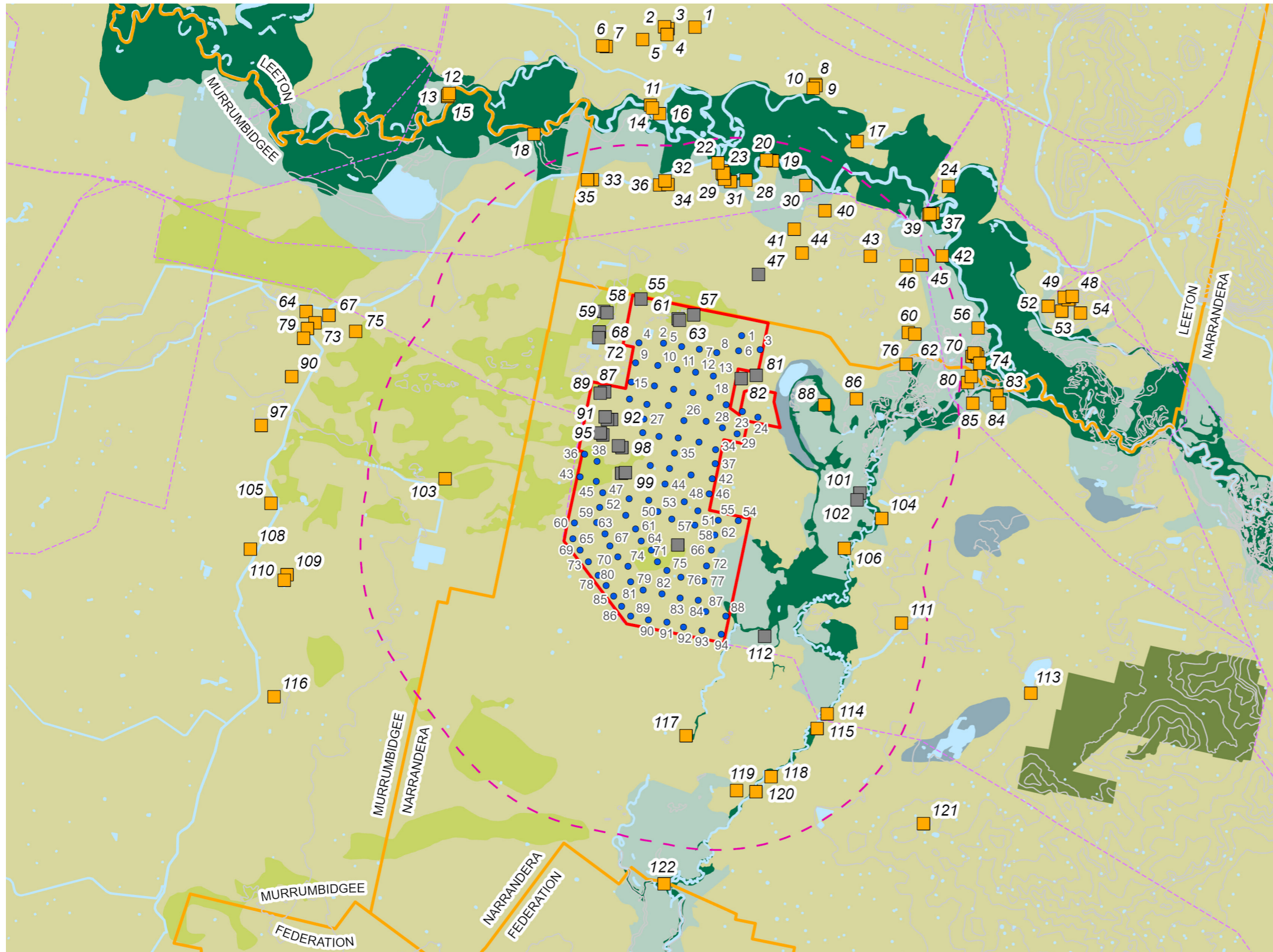


Figure 08 – Preliminary Landscape Character Units (LCUs)
 Basemap Source: Esri, 2023

0 2.5 5 7.5 10
 Kilometers



6.0 Preliminary Assessment Tools

6.1 Overview of Preliminary Assessment Tools

To assist in defining the visual catchment - preliminary assessment tools have been developed in the Bulletin. In accordance with the Bulletin, the purpose of the preliminary assessment tools are: *‘to provide an early indication of where turbines require careful consideration because of potential visual impacts. The tools apply to both dwellings and key public viewpoints in the study area. The tools provide an early indication of where placement of turbines will require further assessment and justification, and where consultation with potentially affected landowners needs to be focused – including discussions for landholder agreements’.* (DPHI, 2016)

The Bulletin also states: *‘Further assessment and justification for placement of turbines located in these sensitive areas in the EIS will be required, along with a description of mitigation and management measures being employed to reduce impacts. This assessment may identify that factors such as topography, relative distance and existing vegetation may minimise or eliminate the impacts of the project’.* (DPHI, 2016)

The preliminary assessment tools involve analysis of two key visual parameters:

1. Visual Magnitude (refer to **Section 6.2**); and the
2. Multiple Wind Turbine Tool (refer to **Section 6.4**)

Non-associated dwellings identified through the application of the Preliminary Assessment tools have been assessed in detail in **Section 8.2** of this PVIA.

6.2 Visual Magnitude

The Visual Magnitude threshold is based on the maximum turbine height and the distance from the non-associated dwellings or key public viewpoints.

In accordance with the Bulletin, *‘proposed turbines below the black line must be identified along with the dwellings or key public viewpoints as part of the request for SEARs’.*

The proposed WTGs are based on a worst case scenario with a tip height of **290 m**.

The **‘Black’** line intersects at a distance of **3,900 m**;

The **‘Blue’** line intersects at **5,700 m**; and

The **‘Study Area’** is defined as **8,000 m**.

For the purpose of the Preliminary Assessment, the Visual Magnitude thresholds are based on a 2D assessment of the Project alone. Further assessment considers factors including topography, relative distance and existing vegetation that may minimise or eliminate the visual impacts of the Project from nearby non-associated dwellings.

6.3 Results of the Visual Magnitude Tool

A total of **26** associated dwellings and **39** non-associated dwellings have been identified within the Study Area. In accordance with the Bulletin, associated dwellings do not require further assessment.

The application of the Preliminary Assessment Tools (refer **Figure 10**) to the Project identified the following results for non-associated dwellings within the Visual Magnitude thresholds:

- Three (3) non-associated dwellings are located within the Black Line of Visual Magnitude (3,900 m from nearest turbine);
- Eight (8) non-associated dwellings are located between the Black and Blue Lines of Visual Magnitude (between 3,900m - 5,700 m from the nearest turbine); and
- 28 non-associated dwellings have been identified between 5,700 m - 8,000 m from the nearest turbine, that are outside the blue line of visual magnitude yet within the 8,000 m.

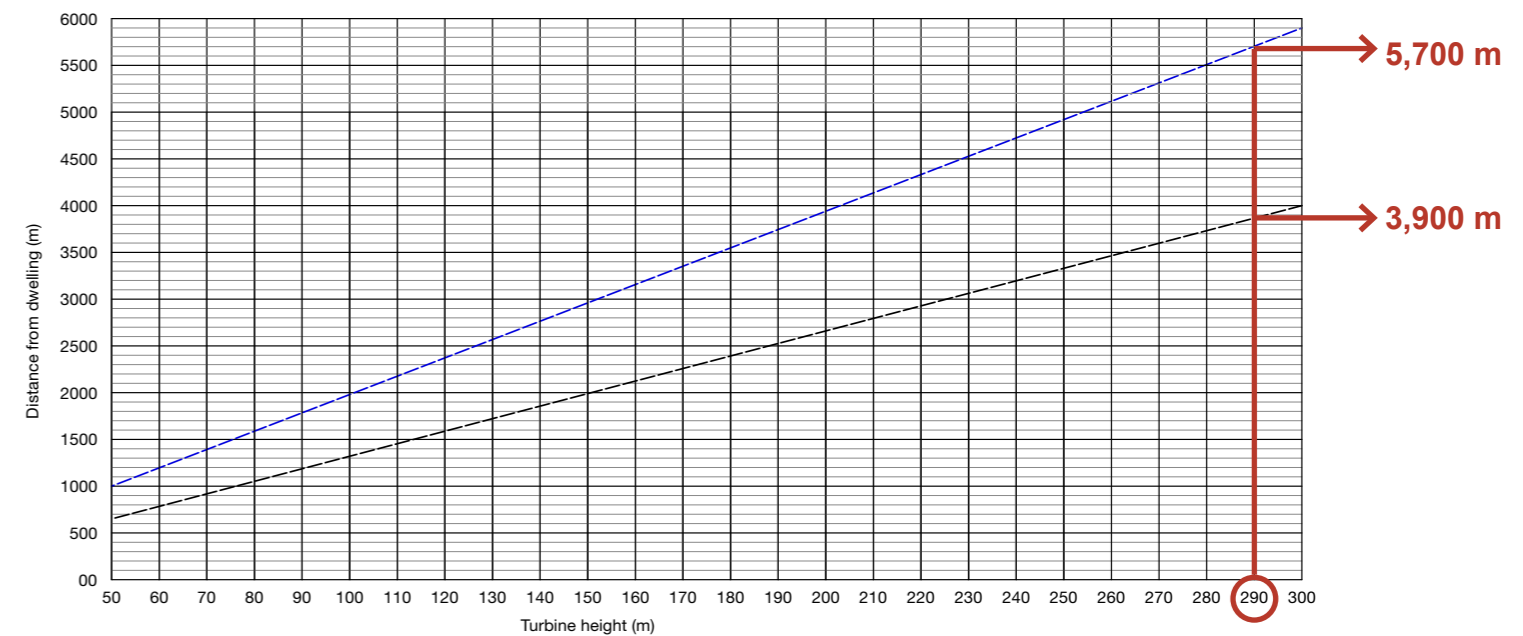













Figure 09 – Visual Magnitude
Source: The Bulletin, 2008

Visual Magnitude

Refer to 6.3

LEGEND

-  Local Government Area
-  Project Area
-  Study Area (8,000 m from nearest WTG)
-  Black Line of Visual Magnitude (3,900m from nearest WTG)
-  Blue Line of Visual Magnitude (5,700m from nearest WTG)
-  Proposed Turbines (WTGs)
-  Dwelling Non-Associated
-  Dwelling Associated
-  Lot
-  Existing Transmission Line
-  Contours (2m)

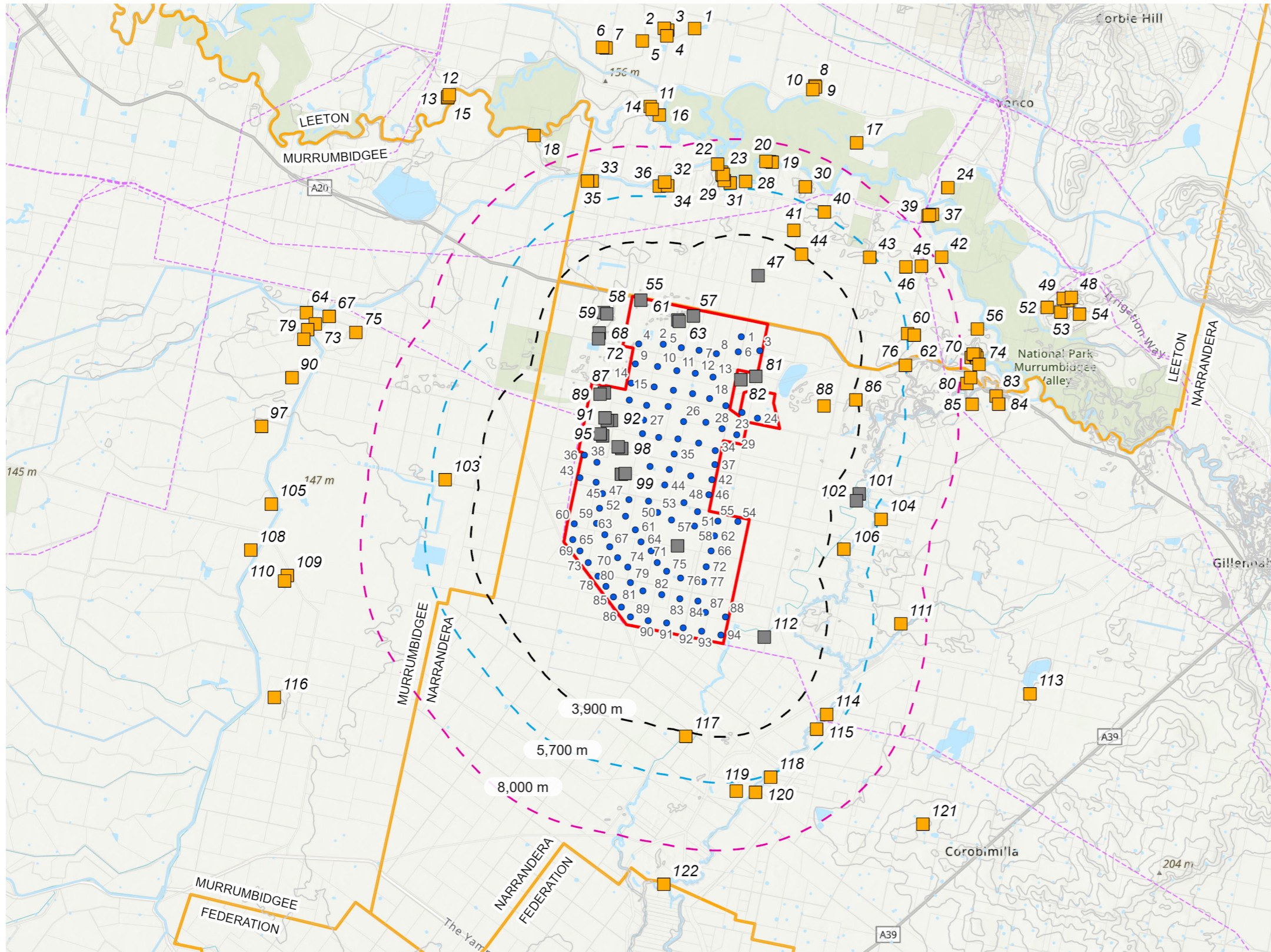


Figure 10 – Visual Magnitude
 Basemap Source: Esri, 2023

0 2.5 5 7.5 10
 Kilometers



6.4 Multiple Wind Turbine Tool

The Bulletin states, 'The Multiple Wind Turbine Tool provides a preliminary indication of potential cumulative impacts arising from the proposed Project. To establish whether the degree to which dwellings or key public viewpoints may be impacted by multiple wind turbines, the proponent must map into six sectors of 60° any proposed turbines, and any existing or approved turbines within eight (8) kilometres of each dwelling or key public viewpoint'. (DPHI, 2016)

The Multiple Wind Turbine Tool (MWTT) provides a preliminary indication of potential cumulative impacts arising from the proposed wind energy project. To establish the extent of non-associated dwellings or key public viewpoints may be impacted by the Project - the proponent must map into six sectors (60 degree sectors) any proposed turbines including the Project and any existing or approved turbines within eight (8) kilometres of each dwelling or key public viewpoint. **Figure 11** below provides examples of where a dwelling or key public viewpoint may have views to turbines in multiple 60° sectors.

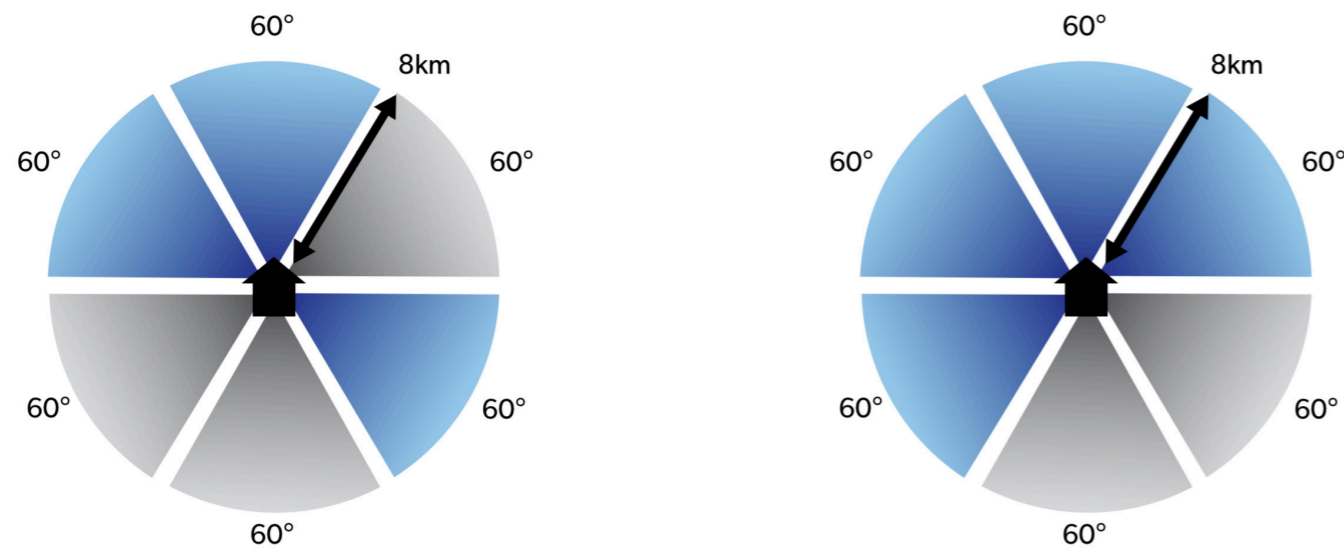


Figure 11 – Multiple Wind Turbine Tool
Source: The Bulletin, 2008

6.5 Result of the Multiple Wind Turbine Tool

When applying the MWTT (refer **Figure 12**) to the non-associated dwellings within the Study Area, the following results were identified (refer **Figure 13**).













- Two (2) non-associated dwellings within 3,900 m of the Project had two (2) 60 degree sectors within the Study Area.
- One (1) non-associated dwelling between 3,900 & 5,700 m of the Project had two (2) 60 degree sectors within the Study Area.
- All remaining non-associated dwellings within 8,000 m of the nearest turbine have in up to one (1) 60 degree sectors. This is deemed an acceptable level in accordance with the Bulletin and no further assessment is required.

Existing screening factors (including vegetation and structures) may reduce visibility of the turbines. This will be discussed further in the EIS phase. Refer to **Appendix B** for the MWTT results for all public viewpoints.

Multiple Wind Turbine Tool

Refer to 6.4

LEGEND

-  Local Government Area
-  Project Area
-  Study Area (8,000 m from nearest WTG)
-  Black Line of Visual Magnitude (3,900m from nearest WTG)
-  Blue Line of Visual Magnitude (5,700m from nearest WTG)
-  Proposed Turbines (WTGs)
-  Dwelling Non-Associated
-  Dwelling Associated
-  Lot
-  Existing Transmission Line
-  Contours (2m)
-  Non - associated dwellings with WTGs in up to two (2) 60 degree sectors
Dwelling no:
88, 86 & 106

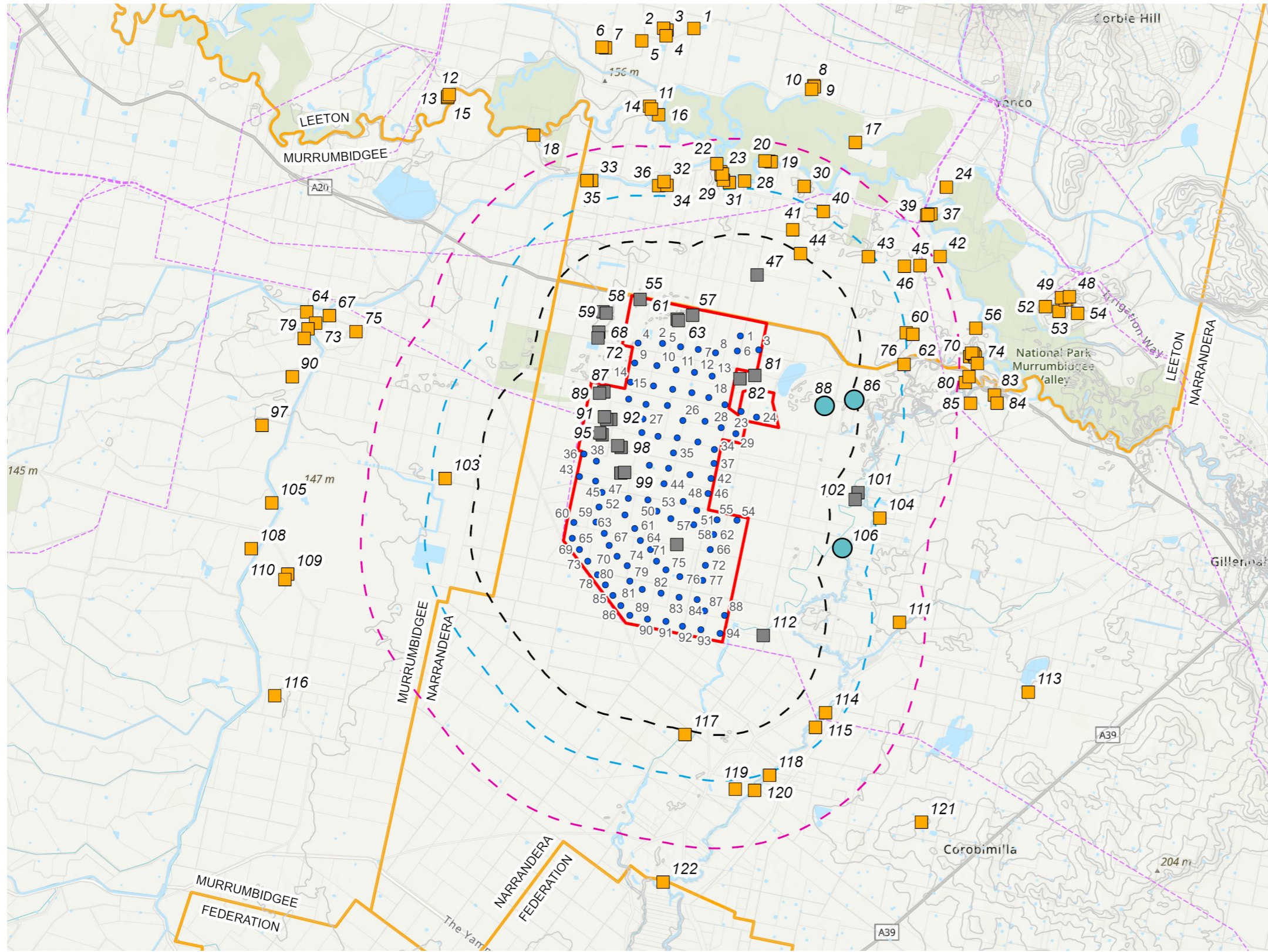


Figure 12 – Multiple Wind Turbine Tool
Basemap Source: Esri, 2023

0 2.5 5 7.5 10
Kilometers



7.0 Preliminary Zone of Visual Influence

7.1 Overview of Preliminary Zone of Visual Influence

The Bulletin states, *'the use of Geographic Information Systems (GIS) to facilitate the application of the tools will streamline the evaluation phase of a project during the pre-lodgement stage. This can also assist in refining the number of turbines and viewpoints that will ultimately need more detailed assessment'*. (DPHI, 2016)

To address this requirement stated in the Bulletin, a Zone of Visual Influence (ZVI) diagram has been prepared for the Project to illustrate the theoretical visibility of the Project.

The ZVI represents the area over which a development can theoretically be seen based on a Digital Terrain Model (DTM). The ZVI usually presents a bare-ground scenario - a landscape without screening, structures or vegetation (Scottish Natural Heritage, 2017).

Figure 13 depicts the areas in which the Project may be visible. Colour coding on this figure provides an indication of the number of turbines visible, based on a tip height of **290 m**. This diagram helps identify dwellings that are likely to have views towards the Project. These dwellings will be assessed further in the EIS.

The ZVI has been determined using DTM and 3D modelling software, 'Windpro'.

7.2 Summary of Preliminary Zone of Visual Influence

The following provides a brief summary:

- Due to the relatively flat topography - the majority of the WTGs associated with the Project are likely to be visible from most areas within the Study Area;
- Views to the majority of WTGs associated with the Project are likely to be available from all dwellings within eight (8) kilometres of the Project. This assessment is based on a consideration of topography alone which does not consider intervening elements including but not limited to vegetation and existing structures.
- Further assessment from these areas identified in the ZVI will be undertaken in the EIS Phase of the assessment.

It is important to note that the ZVI is based on a worst-case scenario where the assessment does not consider vegetation or structures. Ground truthing during field work will ascertain potential visibility from non-associated dwelling and key public viewpoints. This will be taking into account structures and vegetation in the form of a viewpoint analysis and detailed dwelling assessment.

Zone of Visual Influence

Blade Tip Height - 290 m

Refer to Section 7.1

LEGEND

- Local Government Area
 - Project Area
 - Study Area (8,000 m from nearest WTG)
 - Black Line of Visual Magnitude (3,900m from nearest WTG)
 - Blue Line of Visual Magnitude (5,700m from nearest WTG)
 - Proposed Turbines (WTGs)
 - Dwelling Non-Associated
 - Dwelling Associated
 - Lot
 - Existing Transmission Line
 - Contours (2m)
- Zone of Visual Influence
- 0 - 12
 - 12 - 35
 - 35- 60
 - 60 - 80
 - 80 - 95

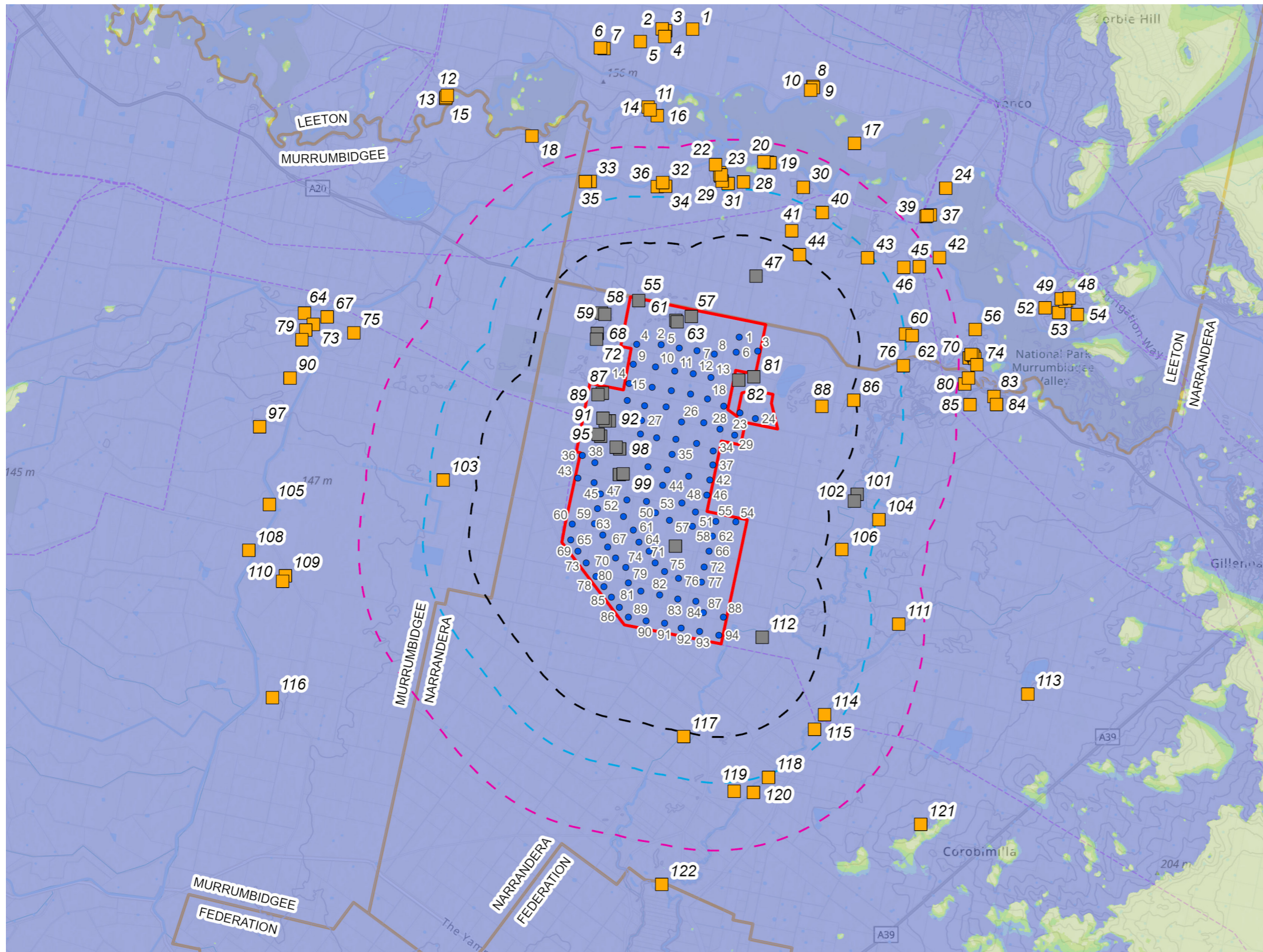


Figure 13 – Zone of Visual Influence
 Basemap Source: Esri, 2023

0 2.5 5 7.5 10
 Kilometers



8.0 Preliminary Assessments

8.1 Preliminary Assessment of Public Viewpoints

Appendix B provides a preliminary assessment of the Project from public viewpoints. A total of 17 public viewpoints have been selected to illustrate the different landscape character typologies within the Study Area and are generally taken from key publicly accessible viewing locations (Refer **Figure 14**).

8.2 Preliminary Assessment of Non-Associated Dwellings

The purpose of the preliminary assessments are to provide a high level assessment of the dwellings for the scoping phase of the Project. Where suitable, Moir LA have provided representative dwelling assessments for clusters of dwellings.

Of the 39 non-associated dwellings that were identified the preliminary assessment tools were applied to 16 non-associated dwellings within 8,000 m of the Project. Results are provided below.

Three (3) non-associated dwellings were identified within the black line of visual magnitude (3,900 m). A preliminary assessment of each of the three (3) non-associated dwellings has been undertaken.

Eight (8) non-associated dwellings were identified between the black line (3,900 m) and the blue line (5,700 m) of visual magnitude. Of these, seven (7) representative preliminary assessments have been undertaken, with one assessment being a representative assessment of two (2) non-associated dwellings.

28 non-associated dwellings were identified outside of the blue line of visual magnitude (5,700 m) and within the 8,000 m study area. Six (6) representative dwelling assessments were prepared to represent clusters of dwellings, all sharing similar view corridors and distances from the Project.

Further assessment and individual onsite inspections of these non-associated dwellings deemed as a 'sensitive receiver' be undertaken during the EIS phase.

Refer **Appendix B** for detailed analysis of each identified dwelling.

Non-Associated Dwellings (with turbines within Black Line 3,900 m)							
Dwelling ID:	Elevation of Receiver: (m)	Distance to Nearest WTGs: (m)	Nearest WTGs:	Number of 60° Sectors:	Number of WTGs 3,900 m from dwelling	Number of WTGs between 3,900 m & 5,700 m:	Number of WTGs between 5,700m & 8,000m:
R44	141 m	4,007 m	T1	1	0	5	19
R88	141 m	2,650 m	T24	2	5	16	32
R86	142 m	3,925 m	T24	2	0	9	30

Non-Associated Dwellings (with turbines within Black Line 3,900 m & Blue Line 5,700 m)							
R103	134 m	5,287 m	T43	1	0	4	15
R41	139 m	4,650 m	T1	1	0	3	15
R43	140 m	5,650 m	T3	1	0	1	7
R76	144 m	5,735 m	T3	1	0	0	11
R106	140 m	4,300 m	T54	2	0	7	37
R114*	141 m	5,198 m	T94	1	0	2	12
R117	133 m	4,172 m	T93	1	0	12	17

Non-Associated Dwellings (with turbines between Blue Line 5,700 m and the Study Area 8,000 m)							
R35*	133 m	6,696 m	T4	1	0	0	6
R34*	138 m	6,216 m	T2	1	0	0	16
R31*	144 m	6,034 m	T1	1	0	0	13
R40*	145 m	5,875 m	T1	1	0	0	7
R60*	144 m	5,832 m	T3	1	0	0	9
R111*	141 m	6,883 m	T88	1	0	0	7

* Representative viewpoints of areas with multiple dwelling clusters. (worst case scenario chosen as representative viewpoint)

Table 04 – Preliminary Non-Associated Dwelling Assessment

Preliminary Public Viewpoint Locations

Refer to Section 8.1

LEGEND

- Project Area
- Black Line of Visual Magnitude (3,900m from nearest WTG)
- Blue Line of Visual Magnitude (5,700m from nearest WTG)
- Study Area (8,000 m from nearest WTG)
- Lot
- Existing Transmission Line
- Contours (2m)
- Proposed Turbines (WTGs)
- Dwelling Associated
- Dwelling Non-Associated
- Public Viewpoints

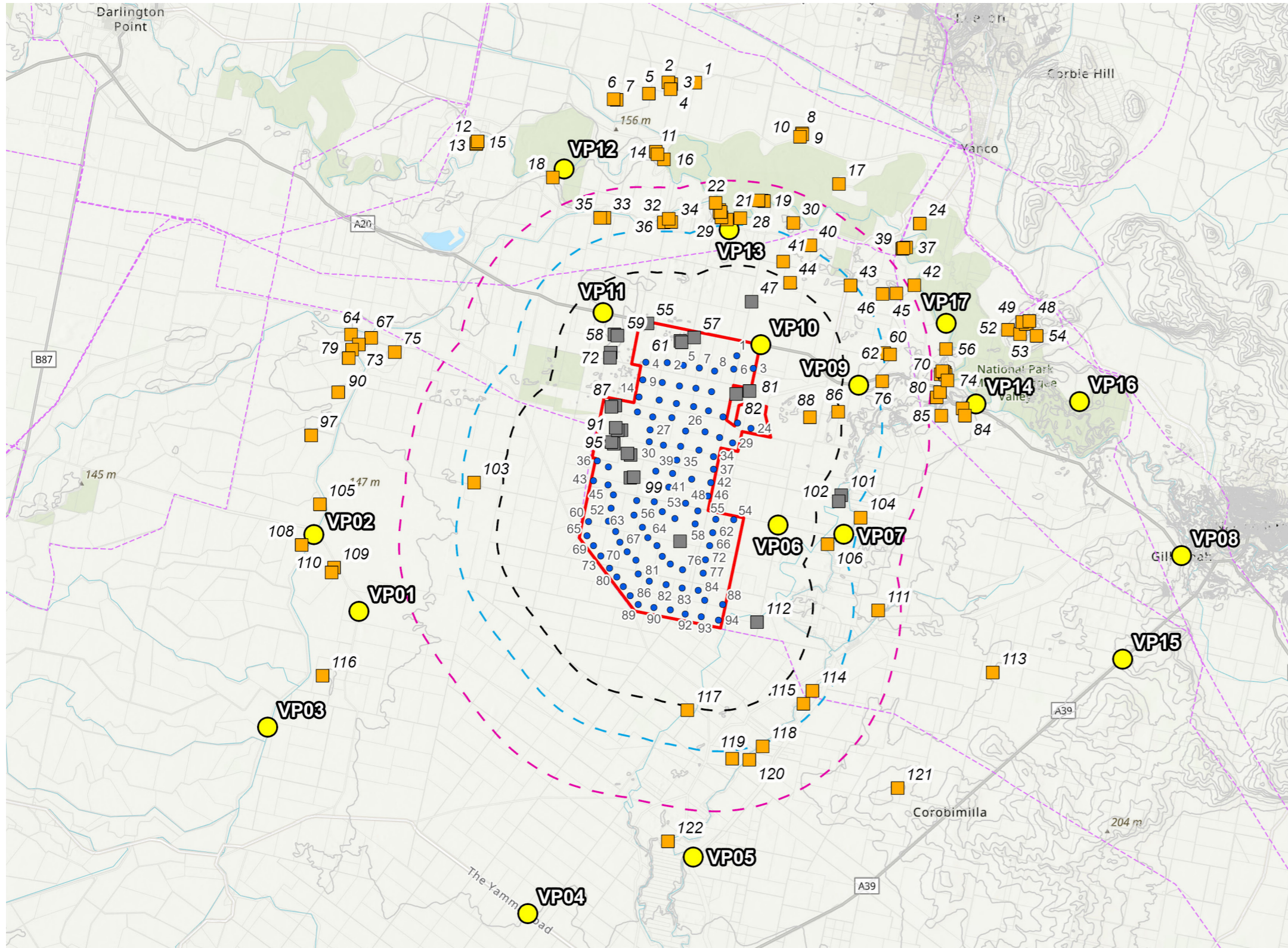


Figure 14 – Preliminary Public Viewpoint Locations
 Basemap Source: Esri, 2023



9.0 Cumulative Visual Impact Assessment

9.1 Overview of Cumulative Visual Impacts

The Project is located 44 km east of the South West Renewable Energy Zone (REZ). The REZ has been identified by the NSW Government where the REZ is expected to play a vital role in the delivery of affordable energy to the communities of NSW (Energy NSW, 2021).

The existing landscape character of the region allows for the optimum harvest of wind energy due to the flat terrain and large expanses of uninhabited land. These characteristics are beneficial to the output of wind energy and as such, it is highly likely that over time this region will be utilised for the development of multiple renewable energy projects. **Figure 16** shows the proposed renewable energy projects that are within the region. Majority of these projects are in the central and eastern parts of the REZ near the towns of Hay, Balranald and Coleambally.

9.2 Nearby Renewable Energy Projects

To date, 21 renewable energy projects have been identified within 45 km of the Project area (refer **Figure 15**). Of these, one (1) proposed renewable energy project is located within 8km of the Project. Consideration of cumulative impacts of Yarrabee Solar Farm (YSF), are required for this Project as part of the EIS phase.

Located within 8km to the Project:

- Yarrabee Solar Farm - 0.3 km from nearest WTGs

Renewable energy Projects located within 45 km:

- Avonlie Solar Farm & BESS
- Boags Creek Solar Farm & BESS
- Comet Park BESS
- Coleambally Solar Farm
- Coleambally Solar Farm (Kidman Way)
- Coleambally Solar Farm & BESS (Macleay Road)
- Coleambally Solar Farm BESS
- Coleambally BESS (5MW)
- Coleambally East Solar Farm
- Corobimalla BESS
- Darlington Point Solar Farm
- Darlington Point Energy Storage System
- Fivebough Solar Farm
- Gillenbah Solar Farm
- Kerarbury Solar Farm & BESS
- Leeton Solar Farm
- Riverina Energy Storage System
- Sandigo Solar Farm & BESS
- Woodland BESS
- Yanco Solar Farm & BESS, Distributed
- Yanco BESS

9.2.1 Yarrabee Solar Farm

The Proposed YSF is a 900-Megawatt Alternating Current solar farm located 23 km southwest of Narrandera. The proposed site encompasses approximately 3000 Ha area and is proposed to operate for between 30 – 50 years. The YSF will be located the south of the Project Area and 330 m from the closest Project WTGs.

9.3 Cumulative Impact on Broader Landscape Character

The re-occurrence of renewable energy projects within the region has the potential to alter the perception of the overall landscape character irrespective of being viewed in a single viewshed. It is important to determine whether the effect of multiple wind farms and other major infrastructure within the region would combine to become a dominant visual element - altering the perception of the general landscape.

The Project is located on flat terrain and is surrounded by isolated rural dwellings. Due to the flat terrain, typical of the region and a lack of obtrusive elements, it is likely that there will be areas from which multiple Projects will be visible simultaneously. Further assessment of these cumulative impacts will be assessed in the EIS, along with a description of the potential mitigation and management measures being employed to reduce impacts if required.

Nearby Renewable Energy Projects

Refer to Section 9.2

LEGEND

- Project Area
 - Study Area (8,000 m from nearest WTG)
 - Lot
 - Existing Transmission Line
- Nearby Projects
- Avonlie Solar Farm
 - Avonlie Solar Farm BESS
 - Boags Creek Solar Farm
 - Boags Creek Solar Farm BESS
 - Coleambally BESS
 - Coleambally East Solar Farm
 - Coleambally Solar Farm
 - Coleambally BESS
 - Comet Park BESS
 - Corobimalla Solar Farm
 - Darlington Point Solar Farm
 - Darlington Point Energy Storage System
 - Fivebough Solar Farm
 - Gillenbah Solar Farm
 - Kerarbury Solar Farm
 - Leeton Solar Farm
 - Riverina Energy Storage System 1
 - Sandigo Solar Farm
 - Sandigo Solar Farm BESS
 - Woodland BESS
 - Yanco BESS
 - Yanco Solar Farm
 - Yanco Solar Farm BESS
 - Yarrabee Solar Farm

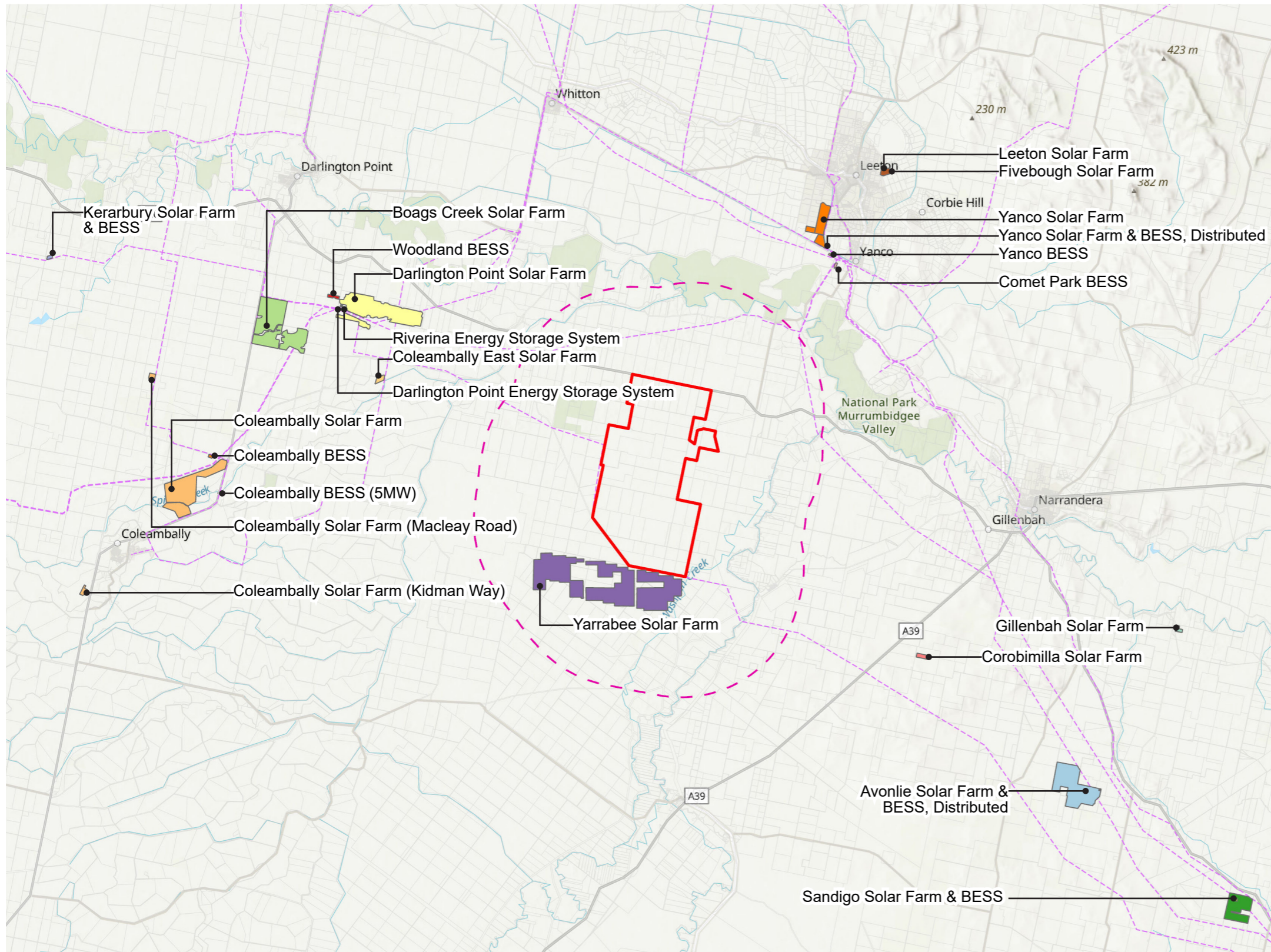


Figure 15 – Nearby Renewable Energy Projects
 Basemap Source: Esri, 2023, Boundary Data source: RenewMap.com



10.0 Summary and Next Steps

10.1 Summary of the Preliminary Visual Impact Assessment

This PVIA report has been undertaken in accordance with the Bulletin, and will be submitted as part of the Scoping Report in the request for a SEARs. The following provides a brief summary of the PVIA and outlines the steps that will be undertaken in the EIS Phase of the assessment. The LVIA component of the EIS will be prepared in accordance to the proposed New South Wales Wind Guidelines (currently in draft format) once enforced.

10.1.1 Community Consultation

The report outlined the findings of community consultation to date which assisted in establishing the following visual baseline:

- Key landscape features;
- Defined areas of scenic quality; and
- Identify key public viewpoints valued by that community.

Next Steps -

Community consultation will be ongoing throughout the EIS phase. Ongoing input from the community will assist with the preparation of the LVIA.

10.1.2 Existing Landscape Character

This PVIA provides a preliminary assessment of the existing landscape character within the Study Area. The following items have been addressed:

- Identified land uses, key landscape features and key viewpoints;
- Categorisation of preliminary LCUs;
- Application of preliminary scenic quality ratings to each of the LCUs; and
- A brief preliminary overview of the potential visual impacts has been provided for each LCU.

Next Steps -

- Utilise the landscape character assessment to prepare a detailed Visual Baseline Study;
- Identify any additional key features, key viewpoints valued by the community throughout the ongoing consultation process;
- Determine the scenic quality of the Landscape Character Units; and
- Determine the Visual Influence Zone of key viewpoints and assess the ratings against the objectives outlined in the Bulletin.

10.1.3 Application of the Preliminary Assessment Tools

The purpose of the Preliminary Assessment Tools in the PVIA phase is to identify 'sensitive receivers' for further assessment in the EIS Phase of the Project.

- MWTT was applied to all non-associated dwellings within 8,000 m of the nearest proposed WTG;
- Three (3) non-associated dwellings were identified as having up to two (2) 60 degree sectors within the Study Area; and
- Key public viewpoints located within the Study Area include Jurambula Beach Campground, known locally as Maccas Beach, Gogeldrie Weir Campground, Sandy Beach Campground and Yanco Weir. An assessment of the potential visual impact on these representative viewpoints are discussed in **AppendixB**.

Next Steps -

- Ground-truthing of all non-associated dwellings identified as a sensitive receiver requiring further assessment in the EIS phase;
- Undertake individual site inspection and detailed dwelling assessment of these sensitive receivers;
- The LVIA will assess each 'sensitive receiver' in detail to take into account topography, vegetation and other screening factors; and
- Determine the potential visual impact of each sensitive receiver and provide mitigation methods to reduce potential visual impacts.

10.1.4 Zone of Visual Influence

A ZVI diagram has been prepared to illustrate the theoretical visibility of the Project to assist in defining the visual catchment when conducting onsite fieldwork.

Next Steps -

- The LVIA will require further assessment from areas identified as having potential visibility in the ZVI provided; and
- Graphic representations of the Project in the form of wireframes and photomontages will be provided in the EIS phase using a combination of GIS technologies.

10.1.5 Cumulative Visual Impacts of Surrounding Renewable Energy Projects

The Project is located 45 km from the SW REZ and located within 8 km of the proposed Yarabee Solar Farm. It is important that the Project considers the potential cumulative effects on the immediate and broader regional landscape character.

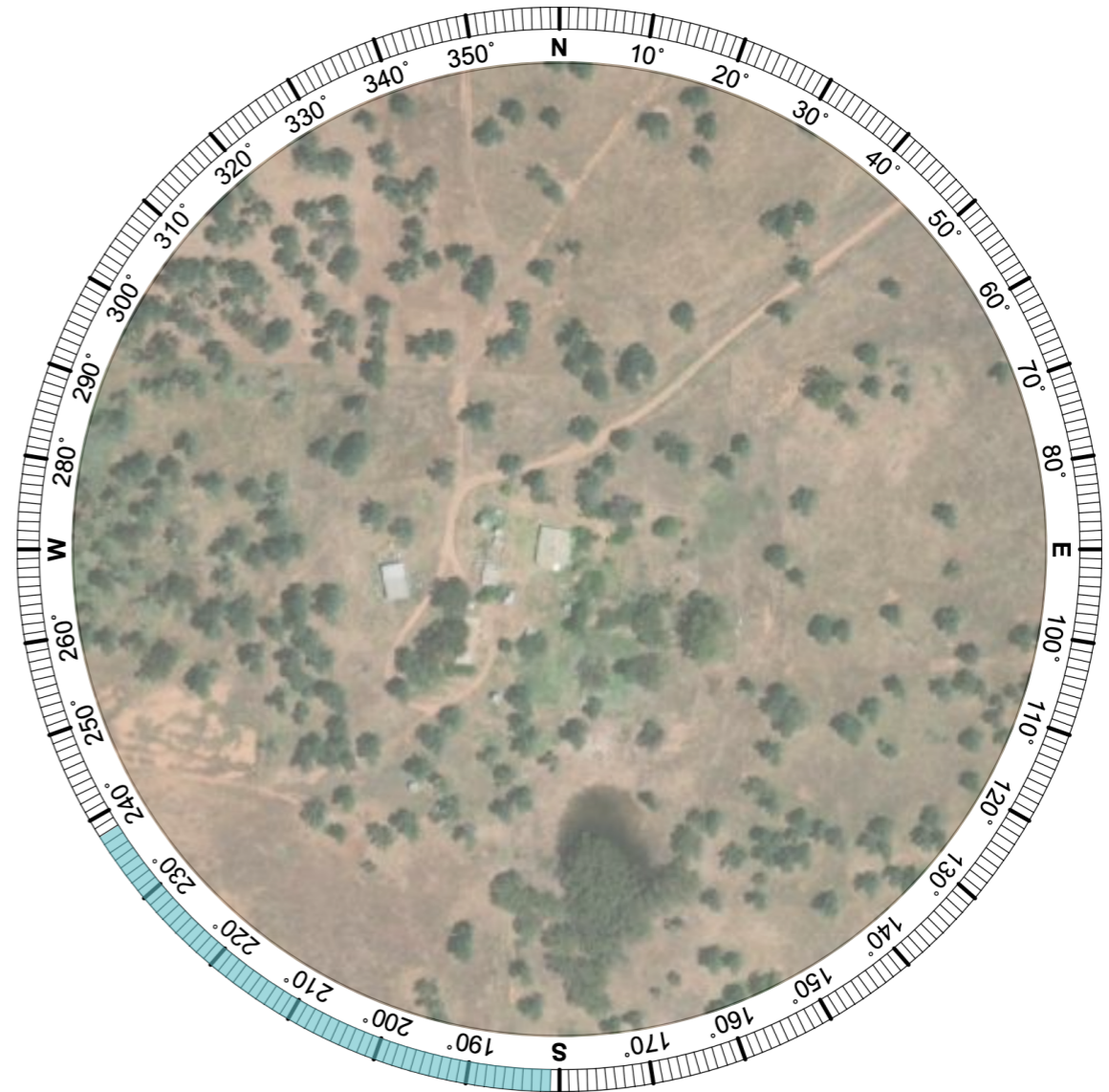
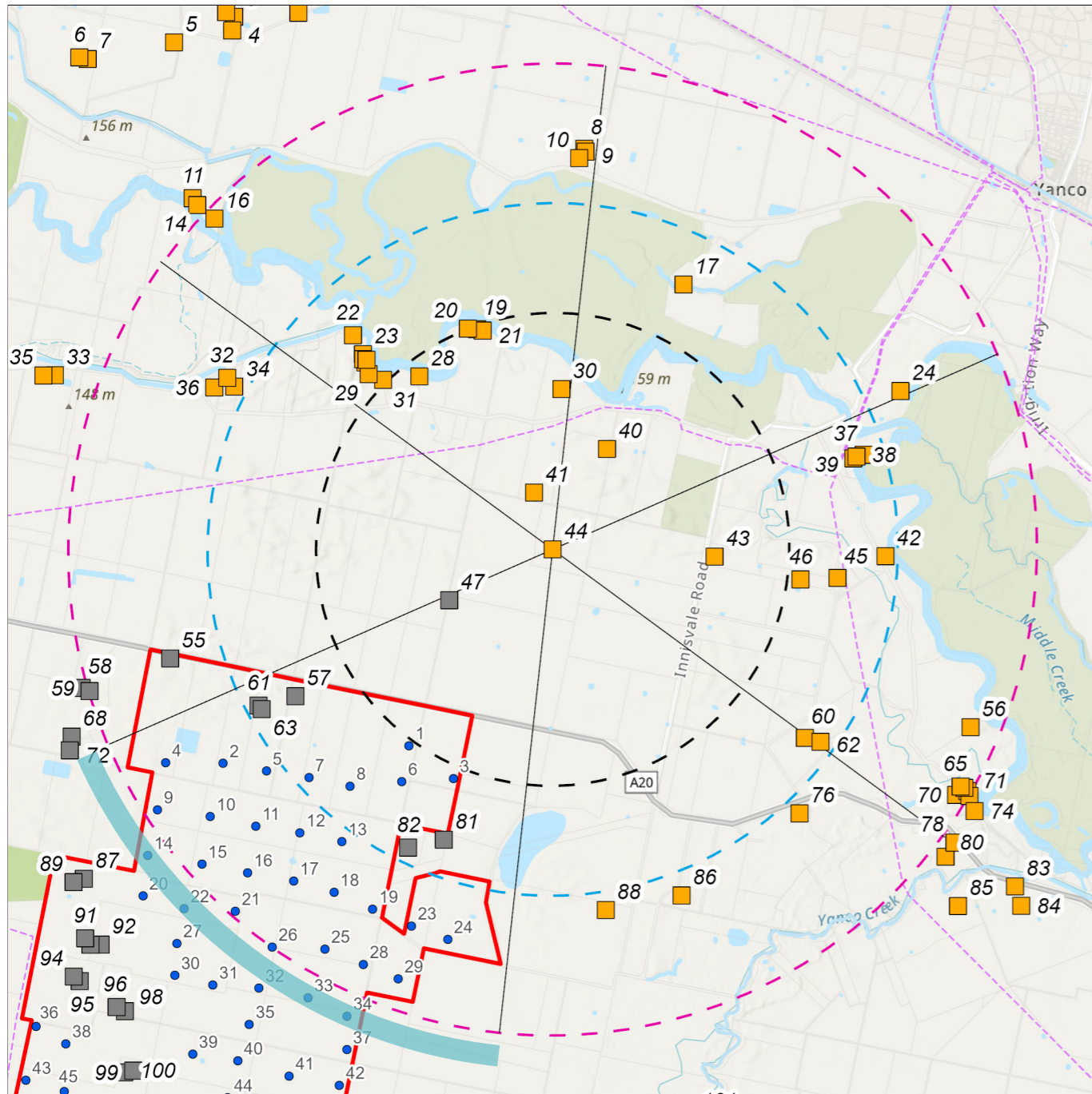


Appendix A

Preliminary Dwelling Analysis

Rev B
08.05.24

Dwelling:
44



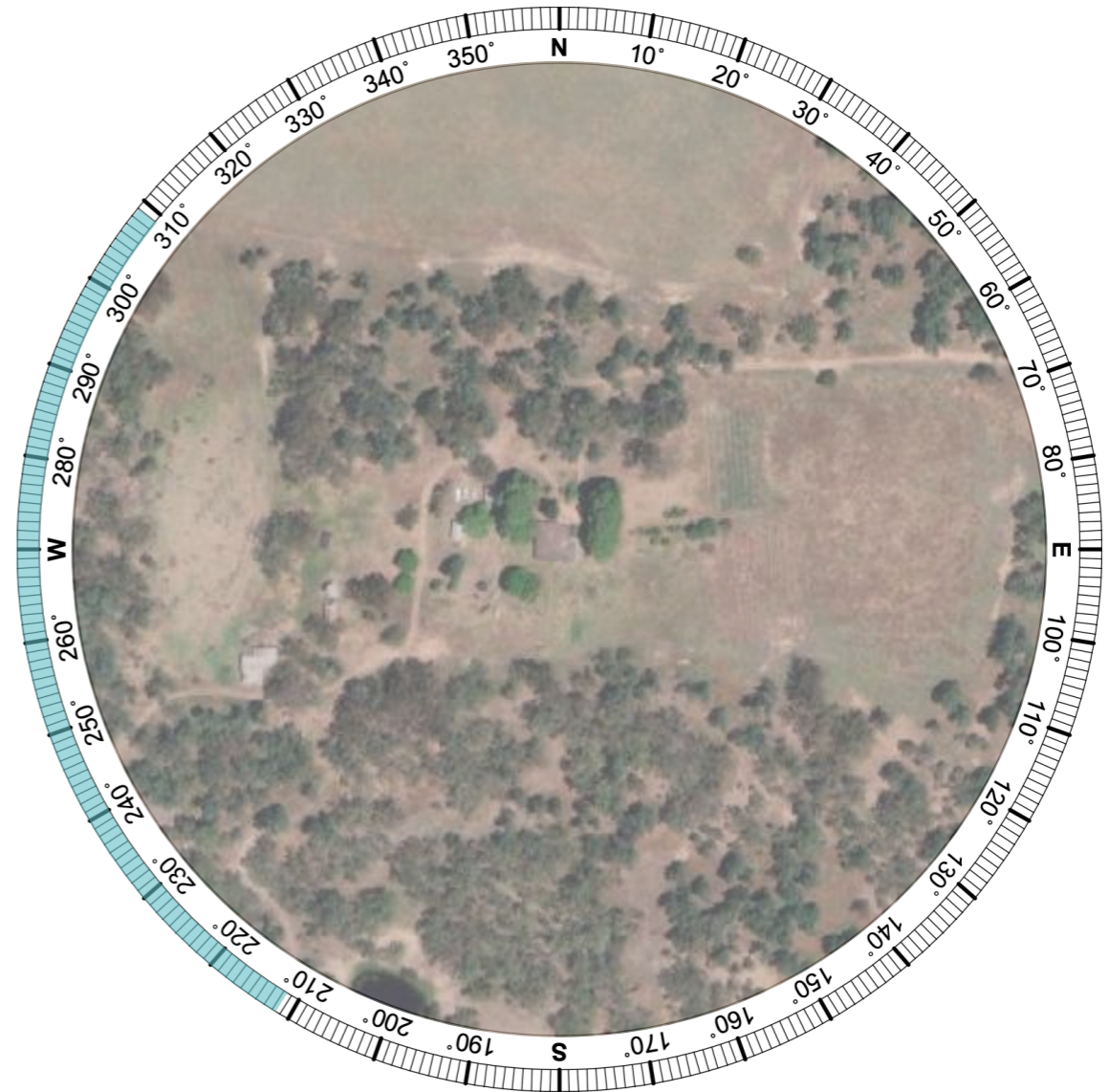
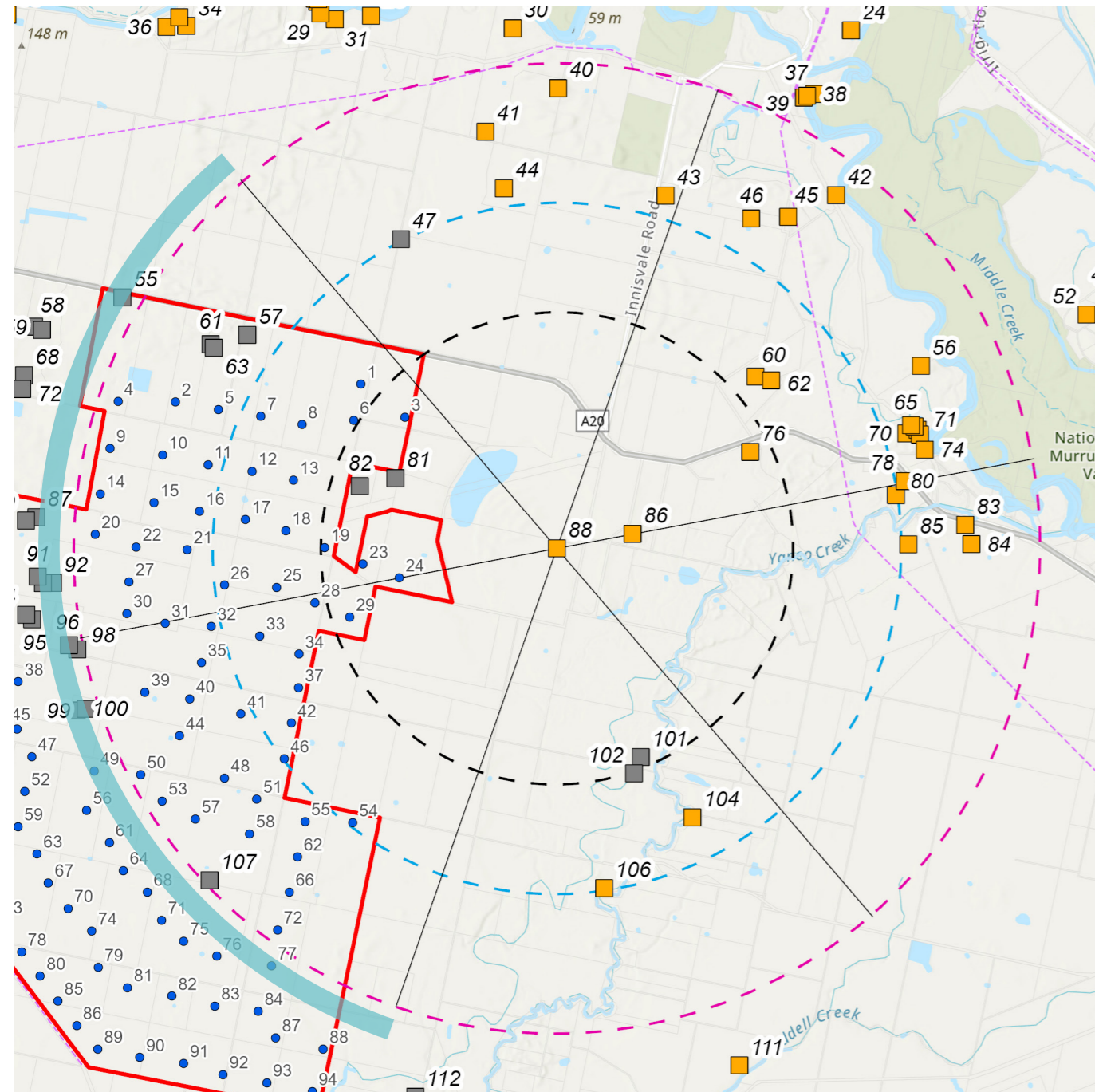
Aerial Source: Arc GIS, 2024
Extent of Potential Visibility (within 8,000 m)

- LEGEND**
- ▭ Project Boundary
 - Proposed Turbine (WTG)
 - Black Line of Visual Magnitude (3,750 m from nearest WTG)
 - Blue Line of Visual Magnitude (5,500 m from nearest WTG)
 - Study Area (8,000 m from nearest WTG)
 - Dwelling (Associated)
 - Dwelling (Non-Associated)

Number of Sectors (The Project)

Devlins Bridge Wind Farm (The Project)							
Dwelling ID:	Elevation of Receiver: (m)	Distance to Nearest WTG: (m) approx.	Nearest WTG:	Number of 60° Sectors:	Number of WTGs within 3,900m:	Number of WTGs between 3,900m - 5,700m:	Number of WTGs between 5,700m & 8,000m:
44	141 m	4,007 m	1	1	0	5	19

Dwelling:
88



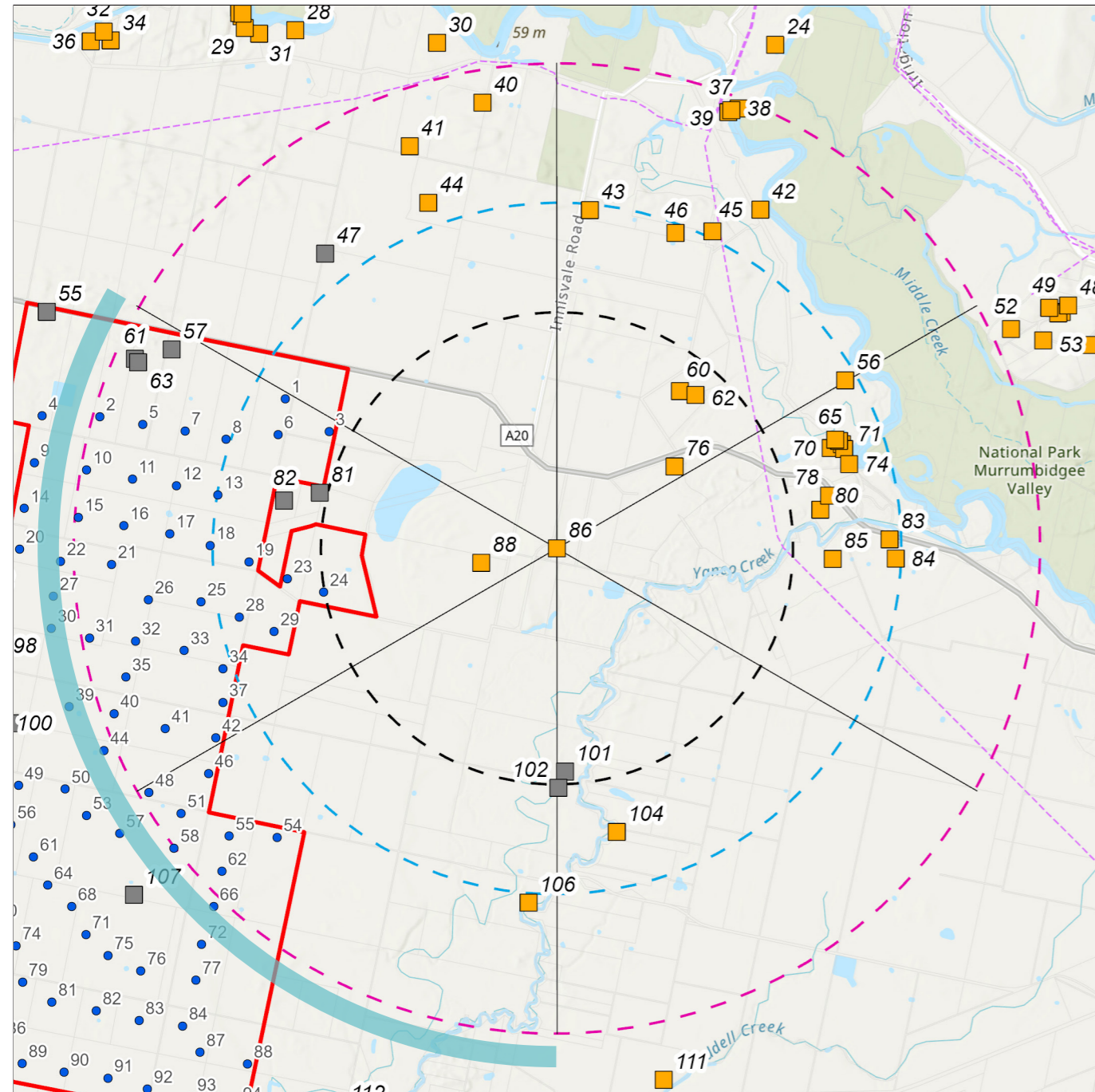
Aerial Source: Arc GIS, 2024
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88	141 m	2,651 m	24	2	5	16	32

Dwelling:
86



Aerial Source: Arc GIS, 2024
Extent of Potential Visibility (within 8,000 m)

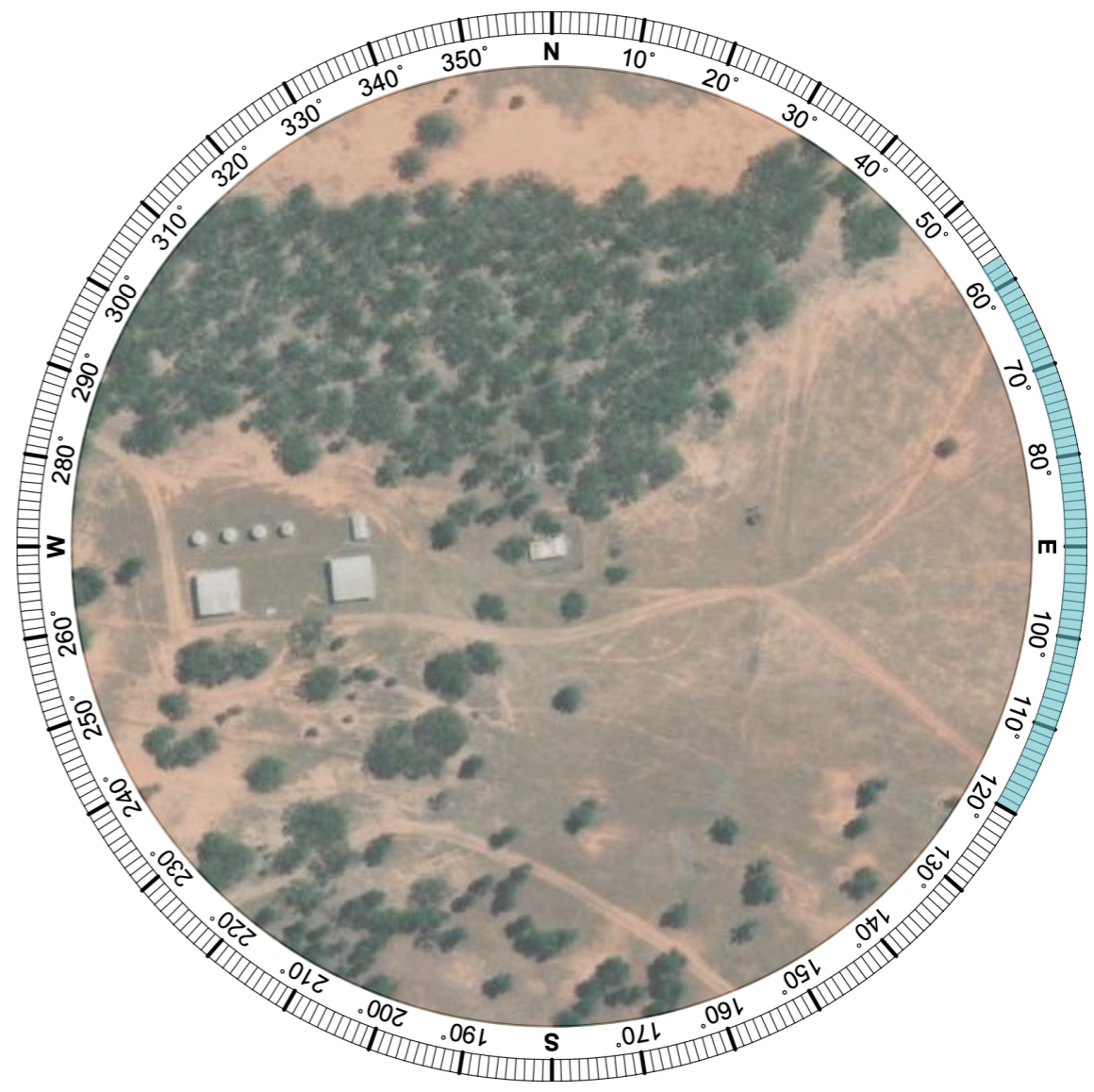
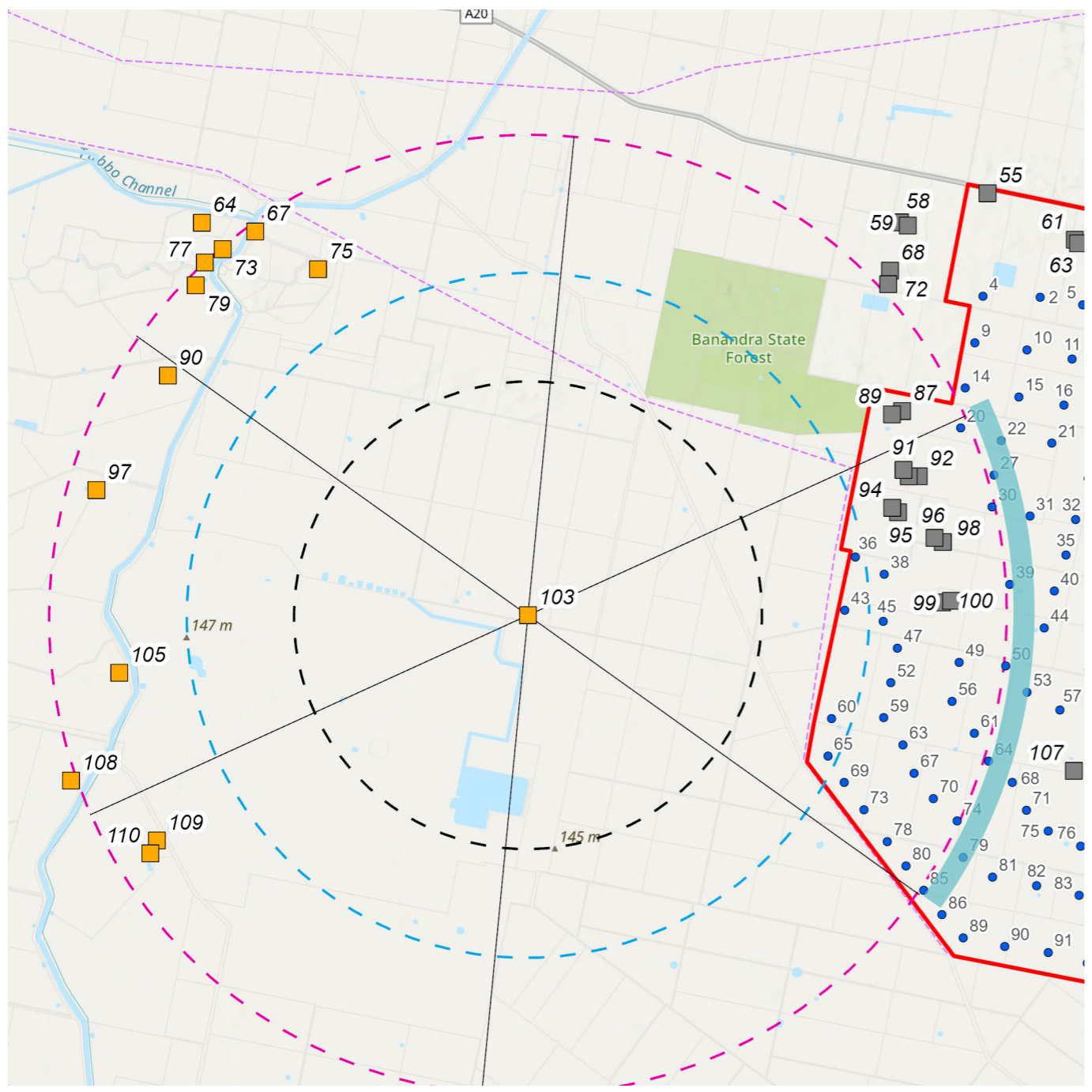
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86	142 m	3,925 m	24	2	0	9	30

Dwelling:
103



LEGEND

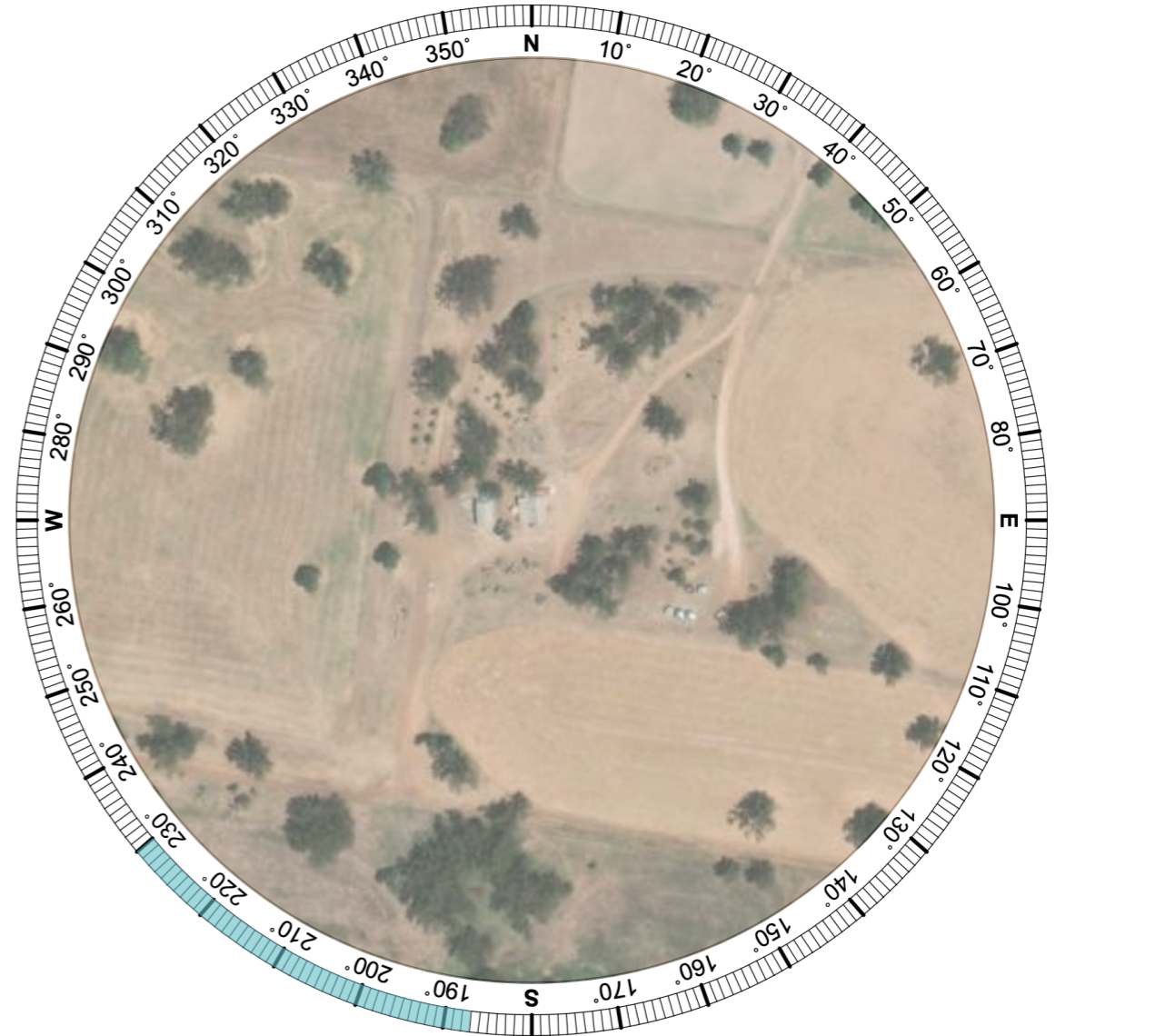
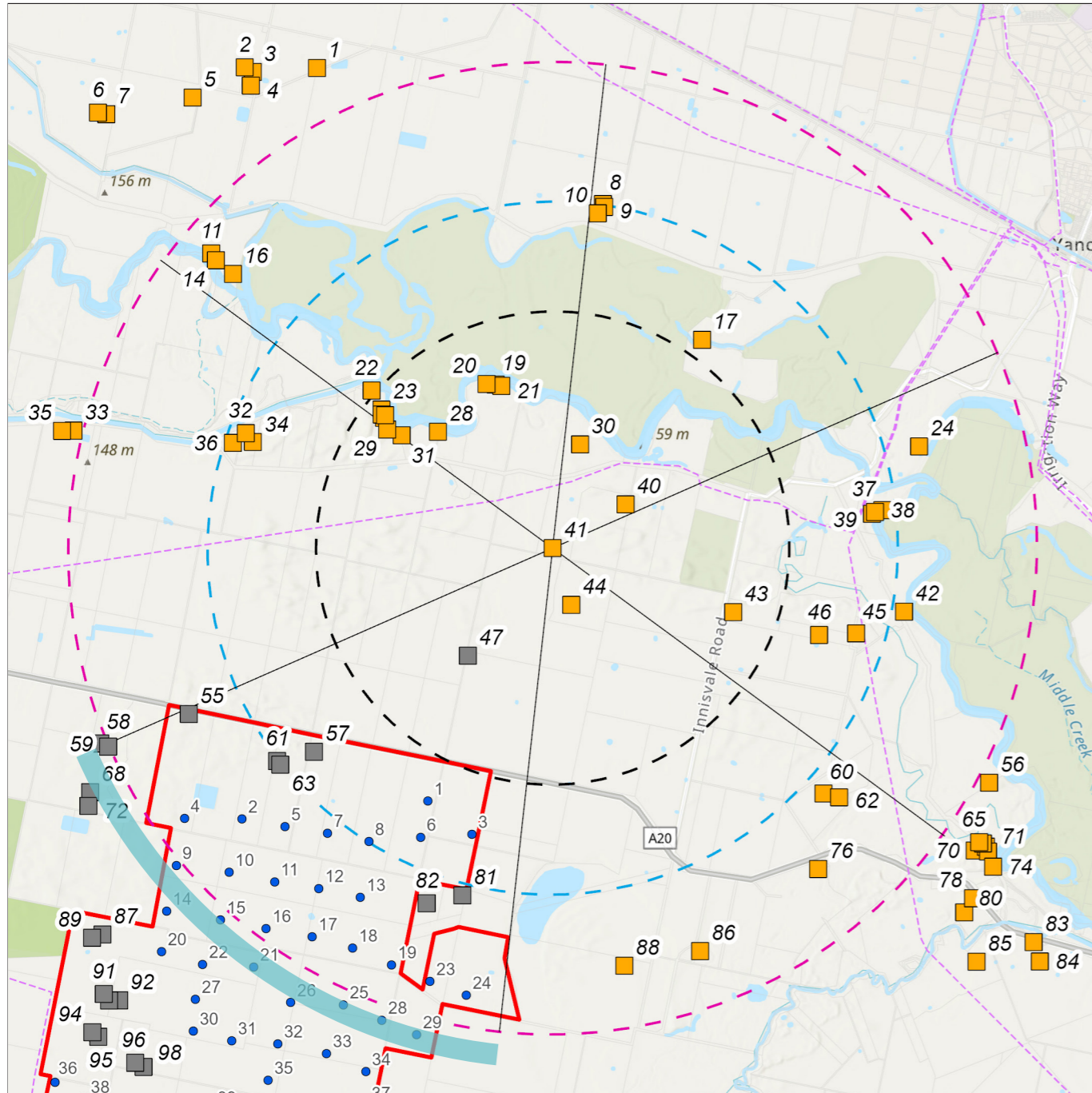
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Aerial Source: Arc GIS, 2024
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Dwelling ID:	Elevation of Receiver: (m)	Distance to Nearest WTG: (m) approx.	Nearest WTG:	Number of 60° Sectors:	Number of WTGs within 3,900m:	Number of WTGs between 3,900m - 5,700m:	Number of WTGs between 5,700m & 8,000m:
103	134 m	5,287 m	43	1	0	4	15

Dwelling:
41



LEGEND

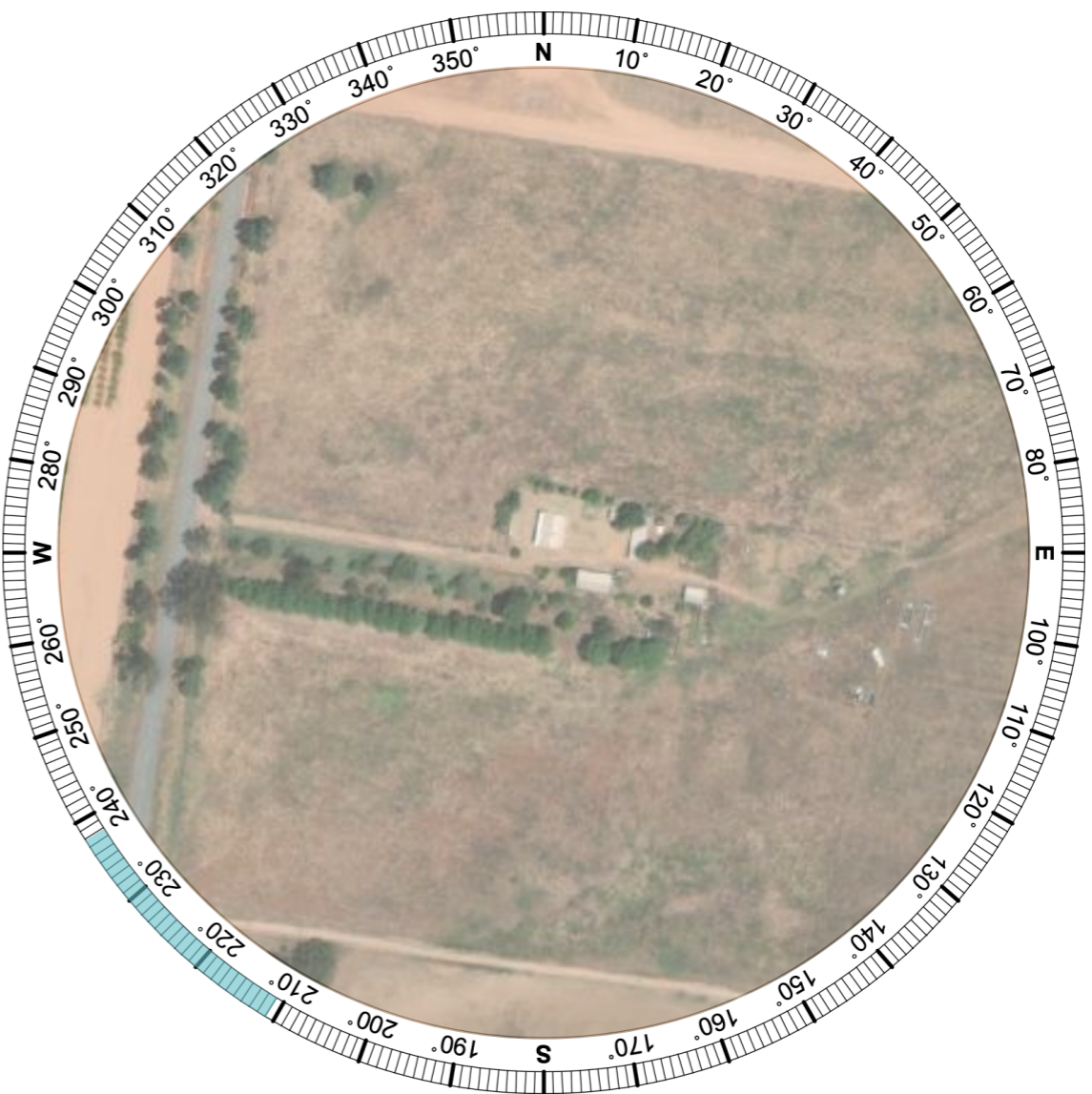
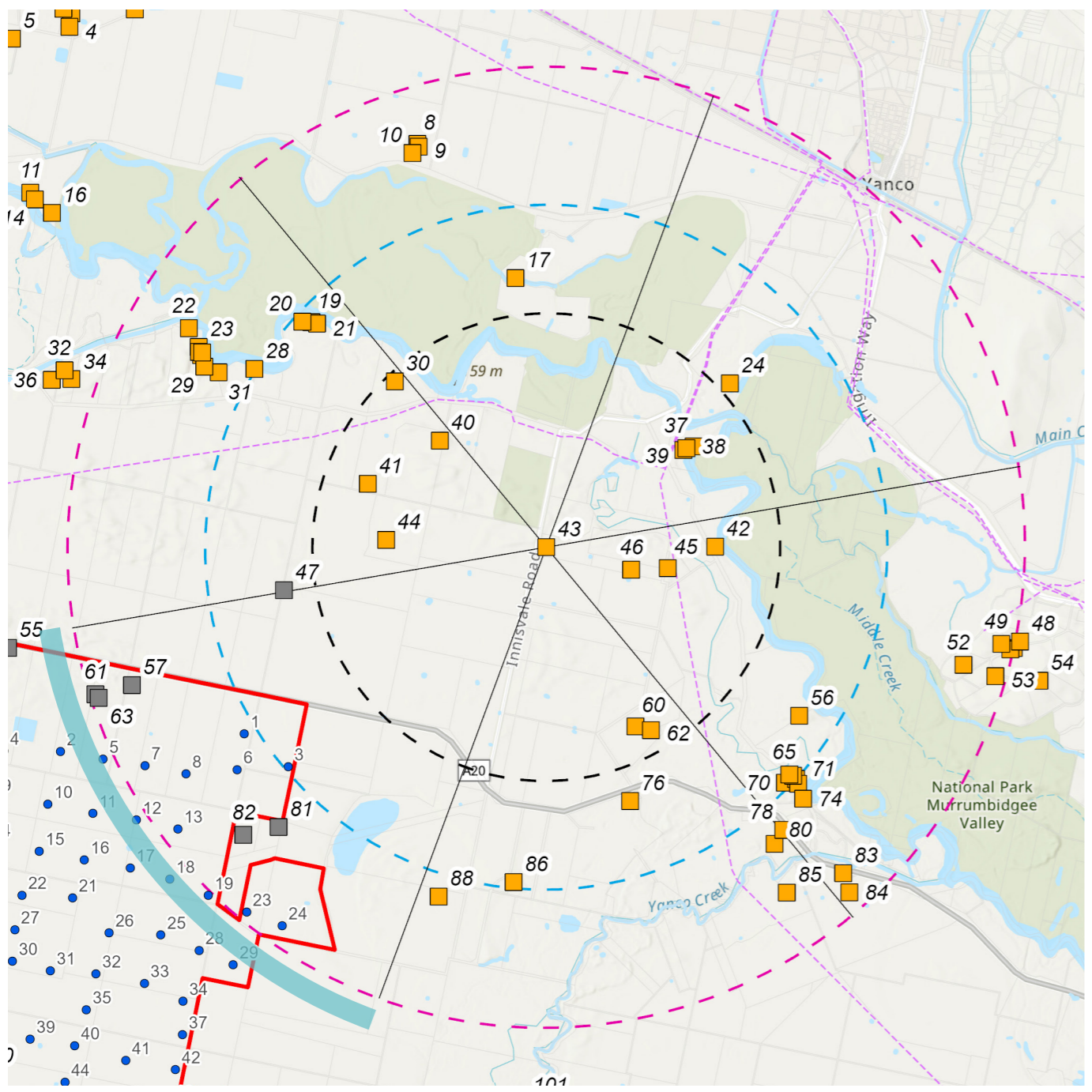
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Aerial Source: Arc GIS, 2024
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41	139 m	4,650 m	1	1	0	3	15

Dwelling:
43



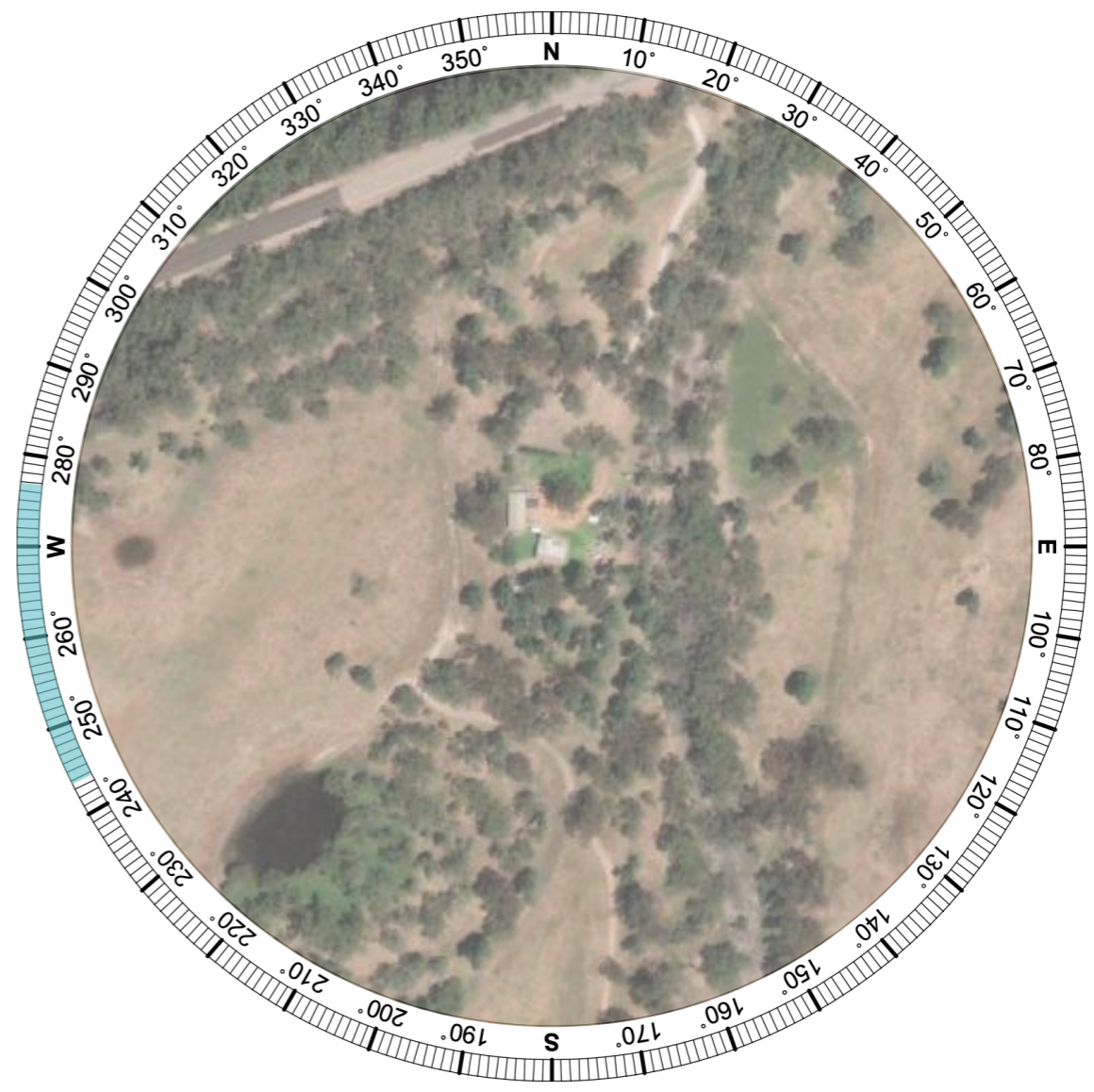
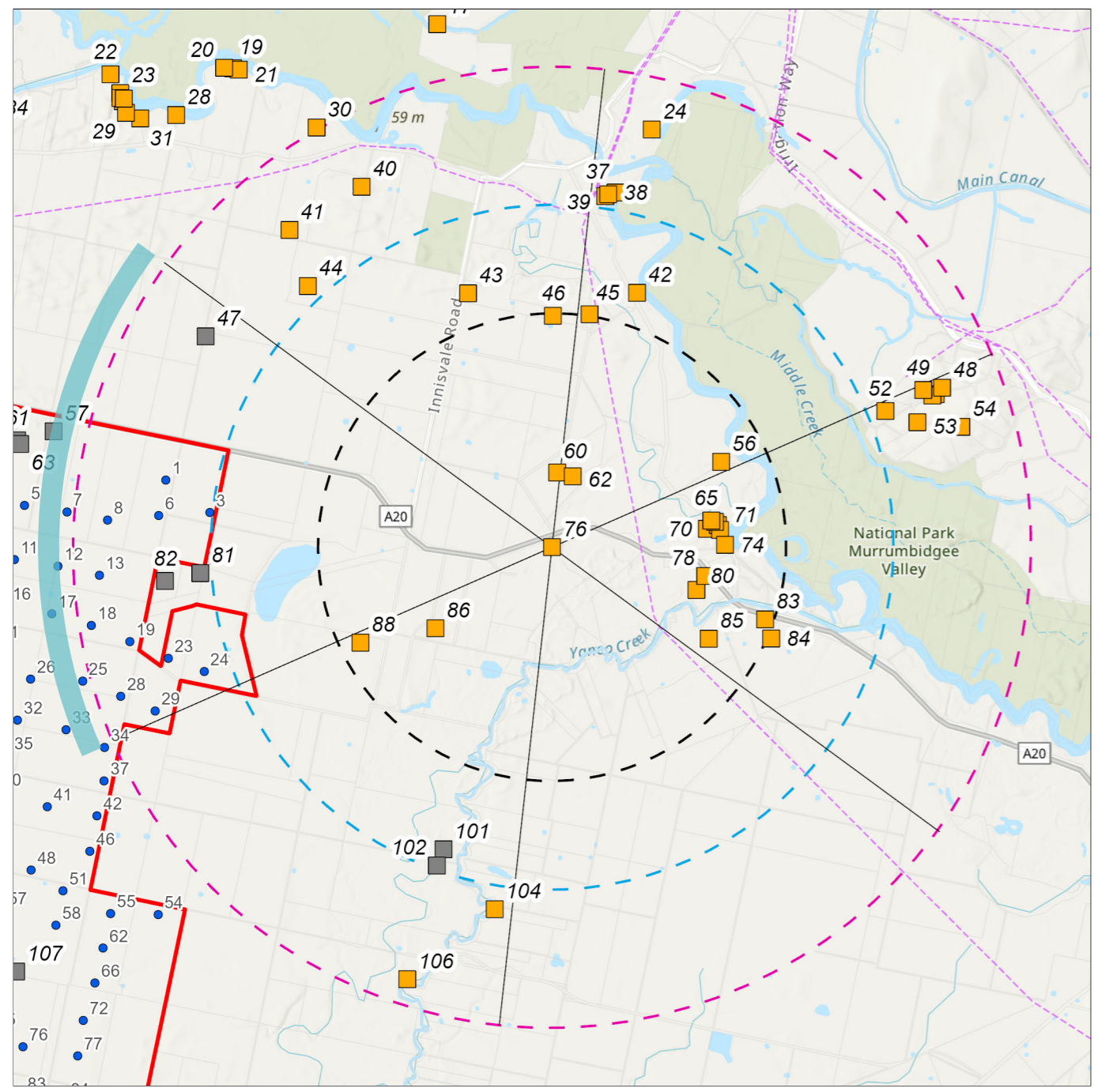
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43	140 m	5,650 m	3	1	0	1	7

Dwelling:
76



LEGEND

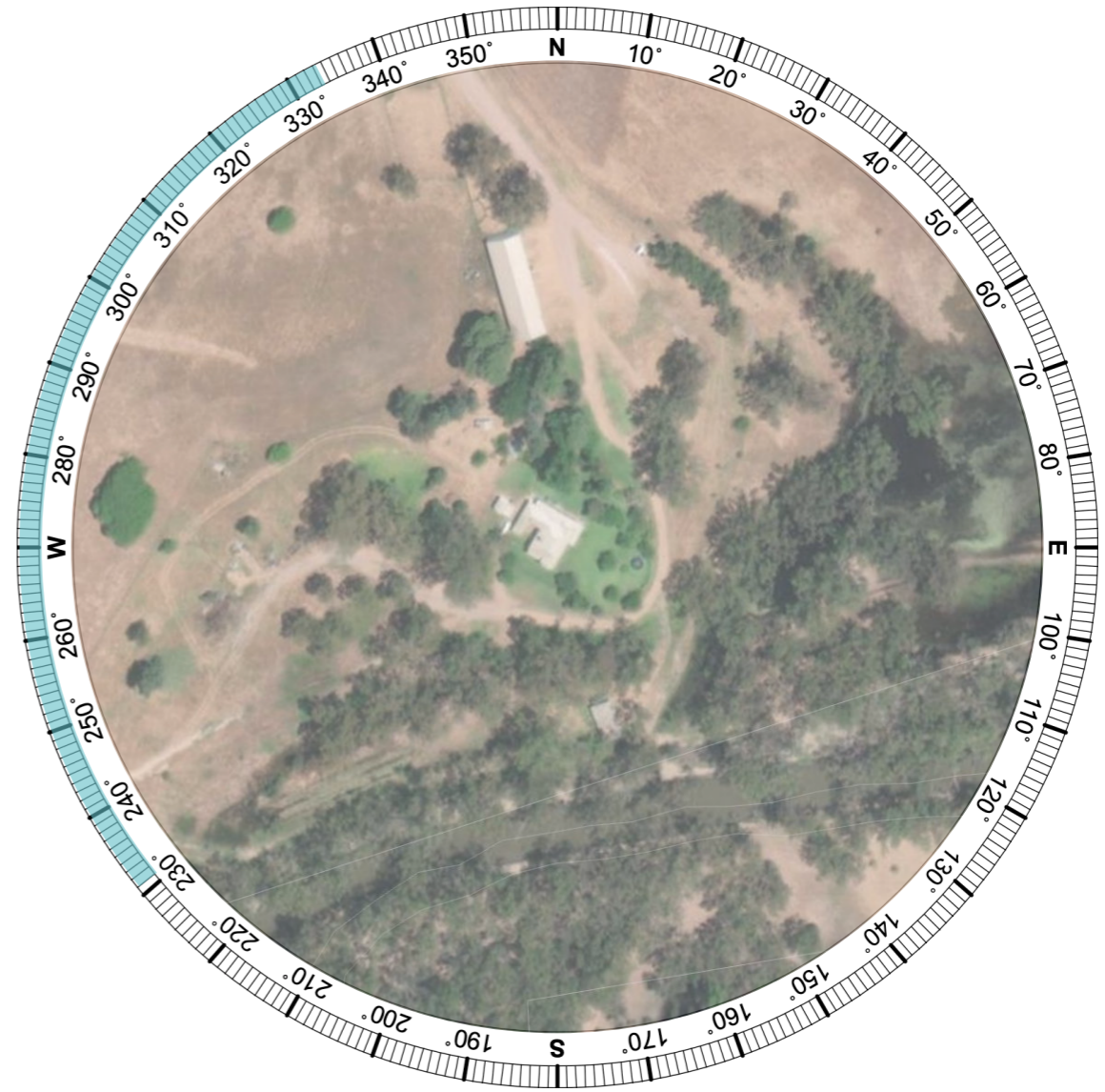
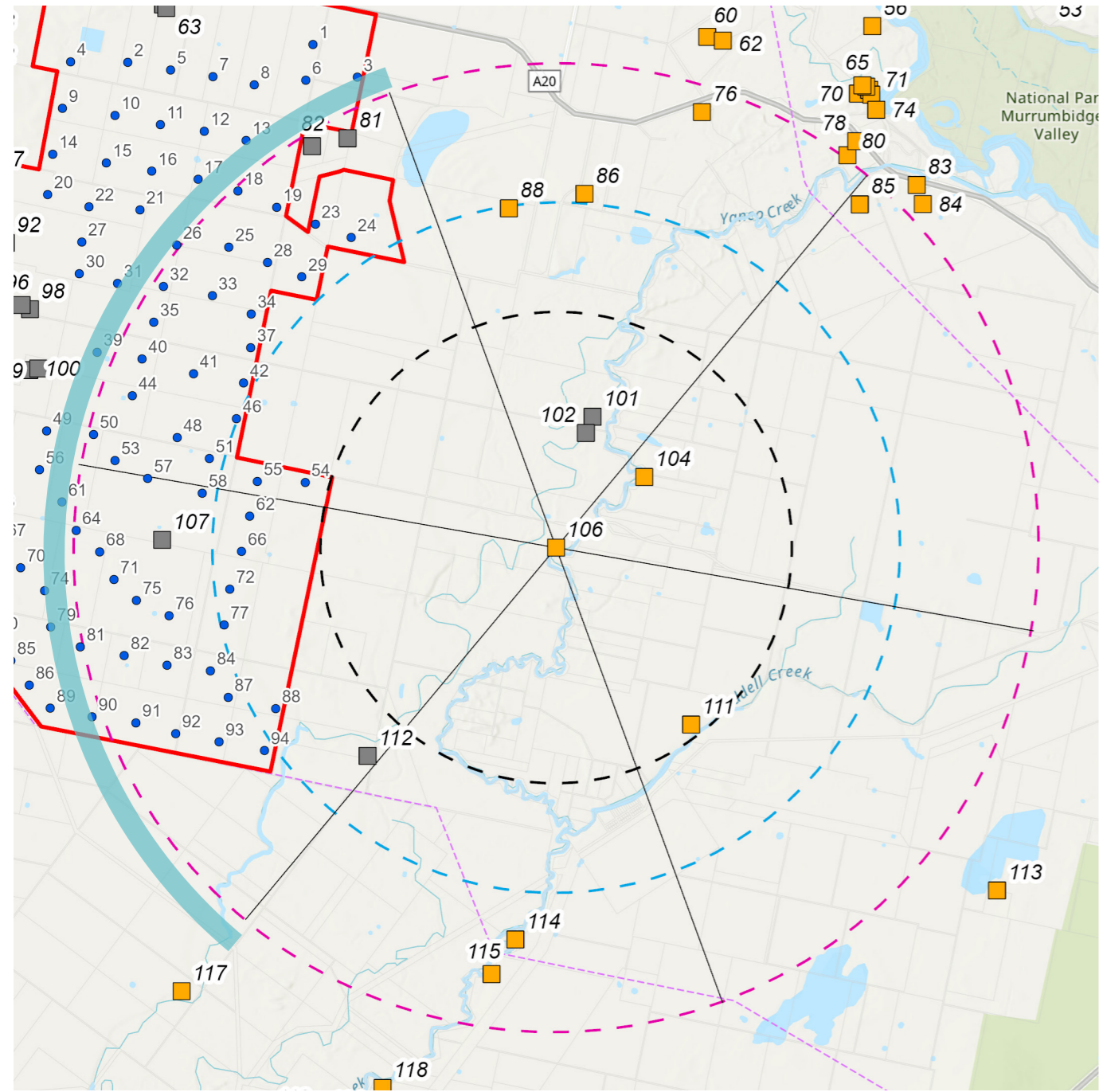
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Dwelling ID:	Elevation of Receiver: (m)	Distance to Nearest WTG: (m) approx.	Nearest WTG:	Number of 60° Sectors:	Number of WTGs within 3,900m:	Number of WTGs between 3,900m - 5,700m:	Number of WTGs between 5,700m & 8,000m:
76	144 m	5,735 m	3	1	0	0	11

Dwelling:
106



LEGEND

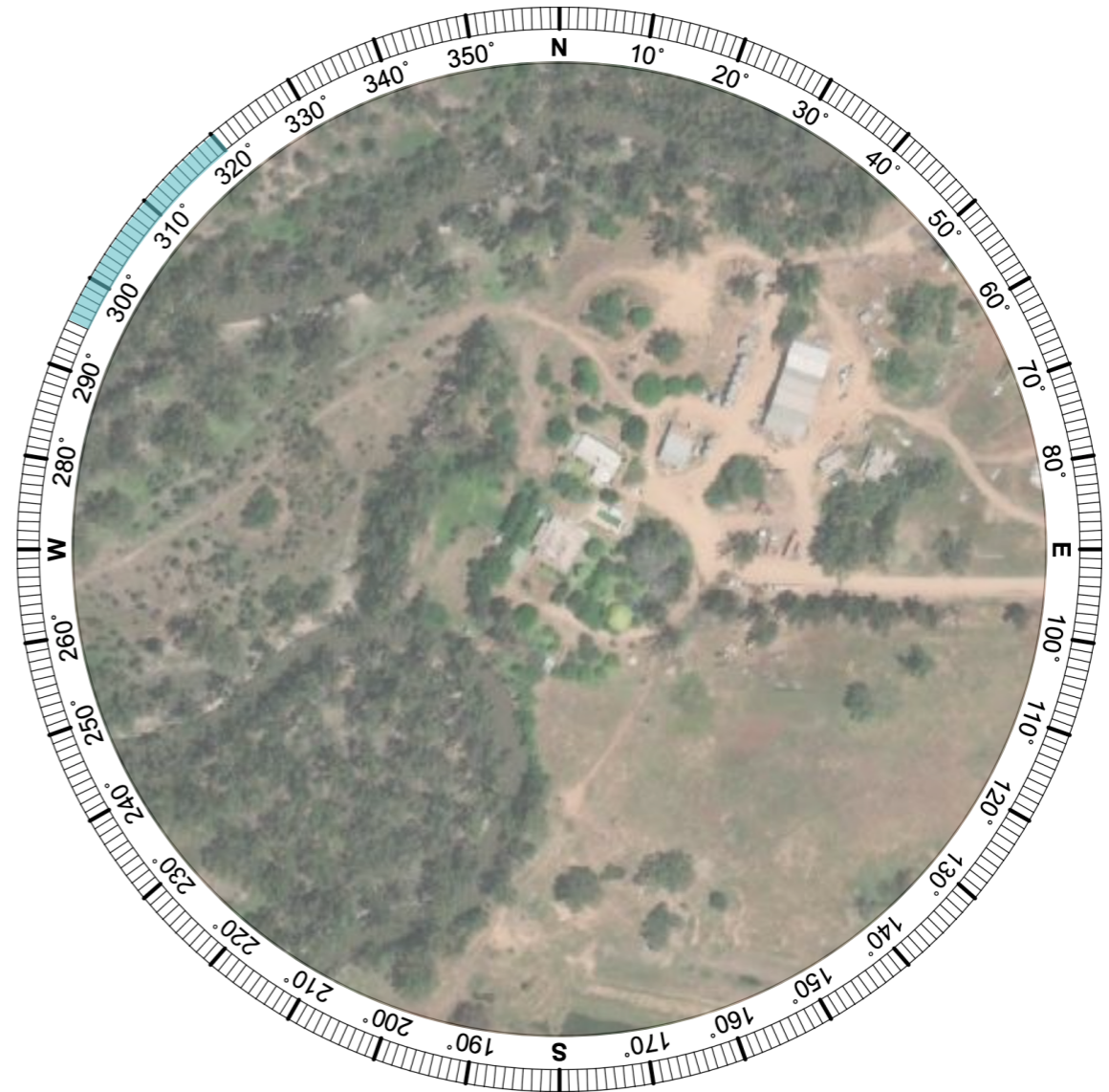
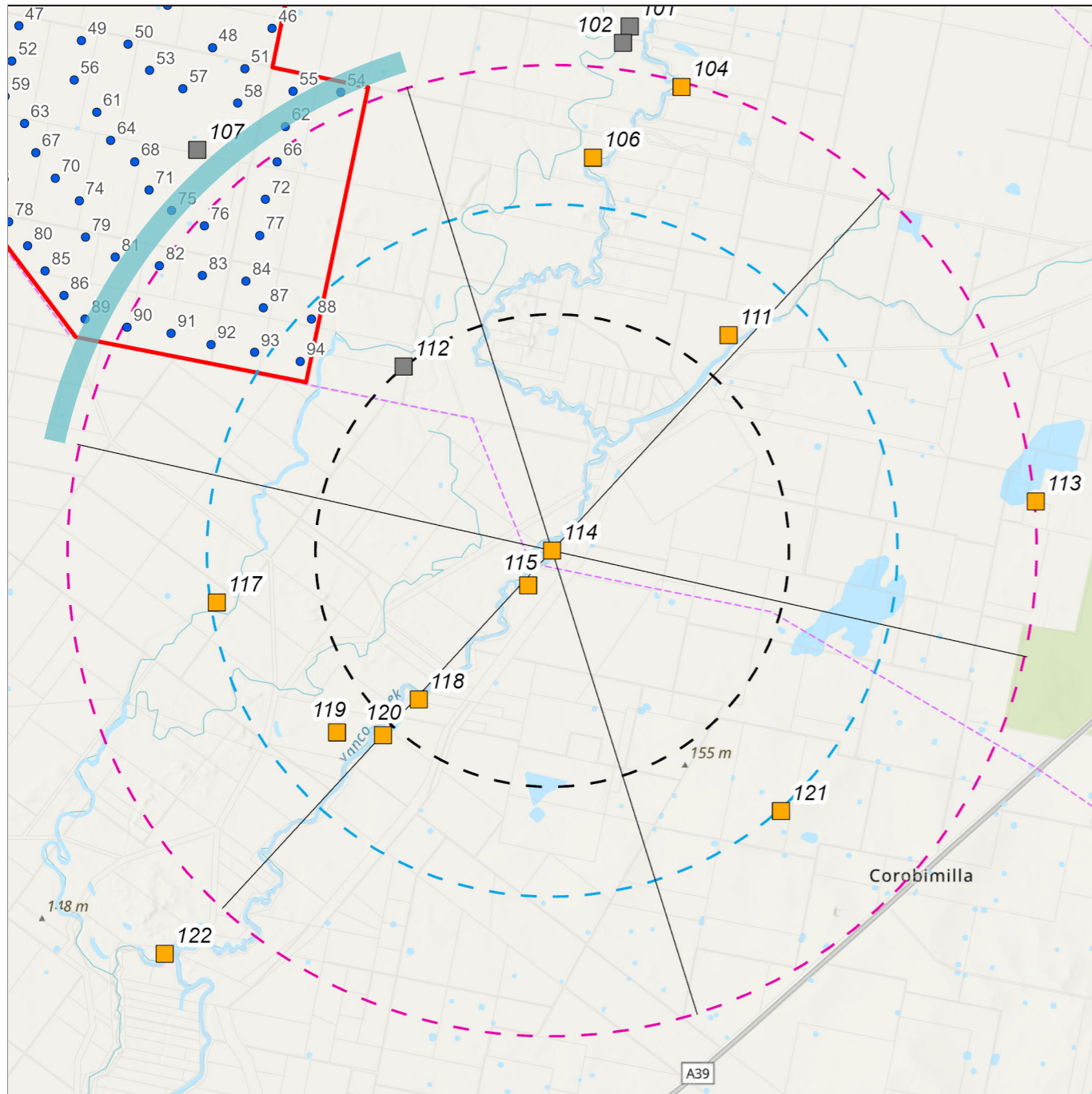
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Aerial Source: Arc GIS, 2024
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106	140 m	5,735 m	54	2	0	7	37

Dwelling:
114



LEGEND

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- Study Area (8,000 m from nearest WTG)
- Dwelling (Associated)
- Dwelling (Non-Associated)

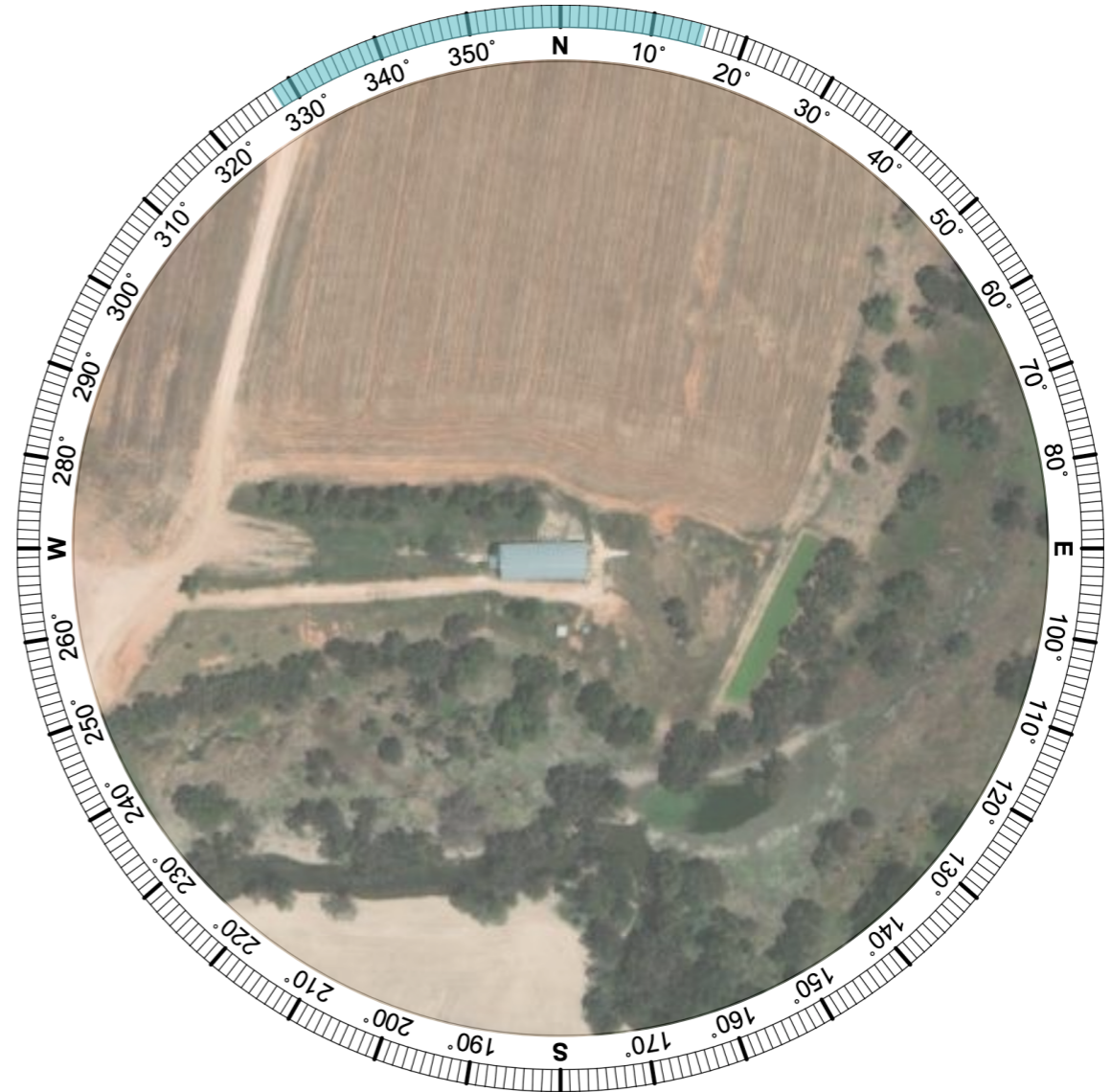
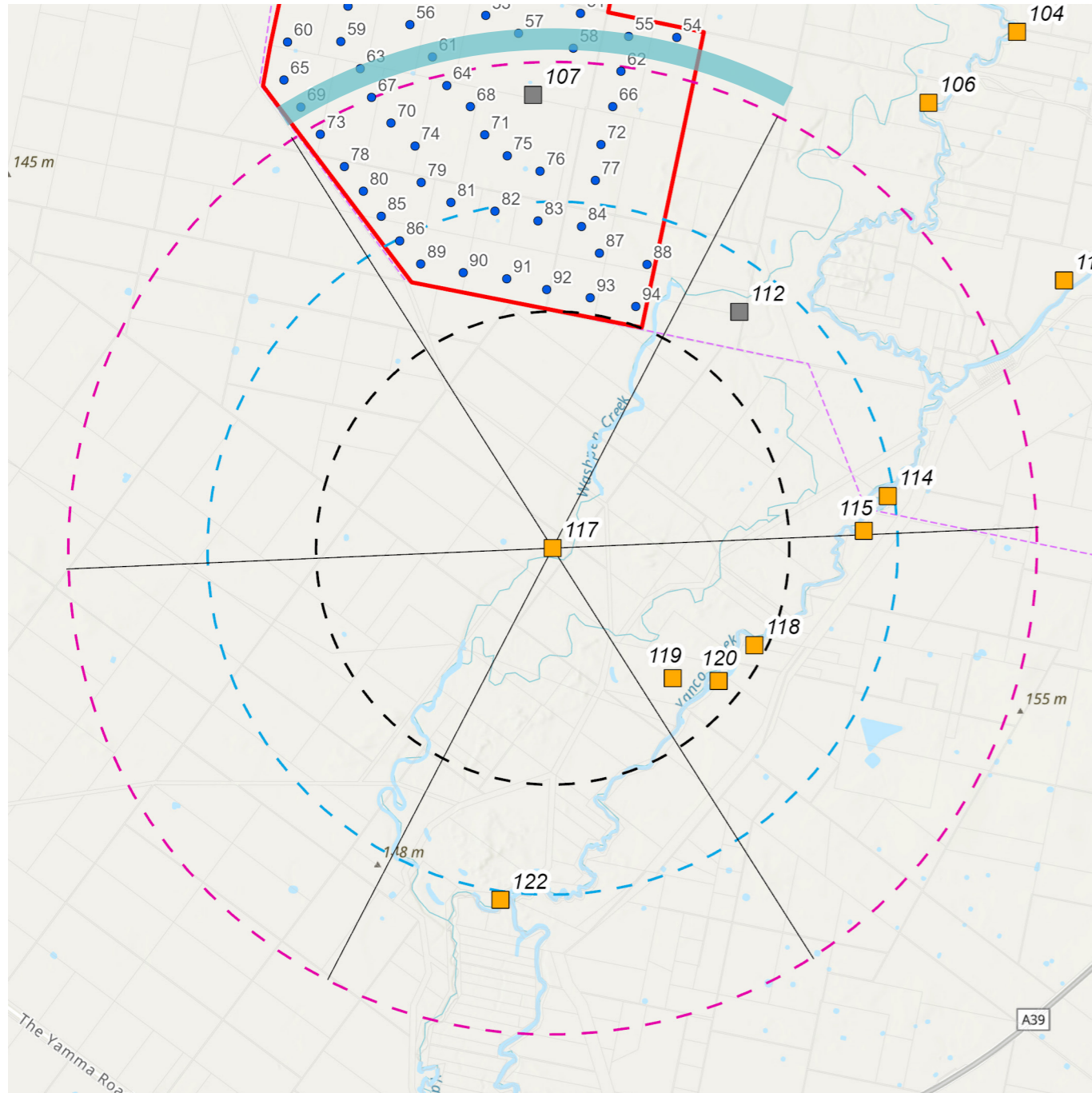
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Extent of Potential Visibility (within 8,000 m)

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114	141 m	5,198 m	94	1	0	2	12

Dwelling:
117



LEGEND

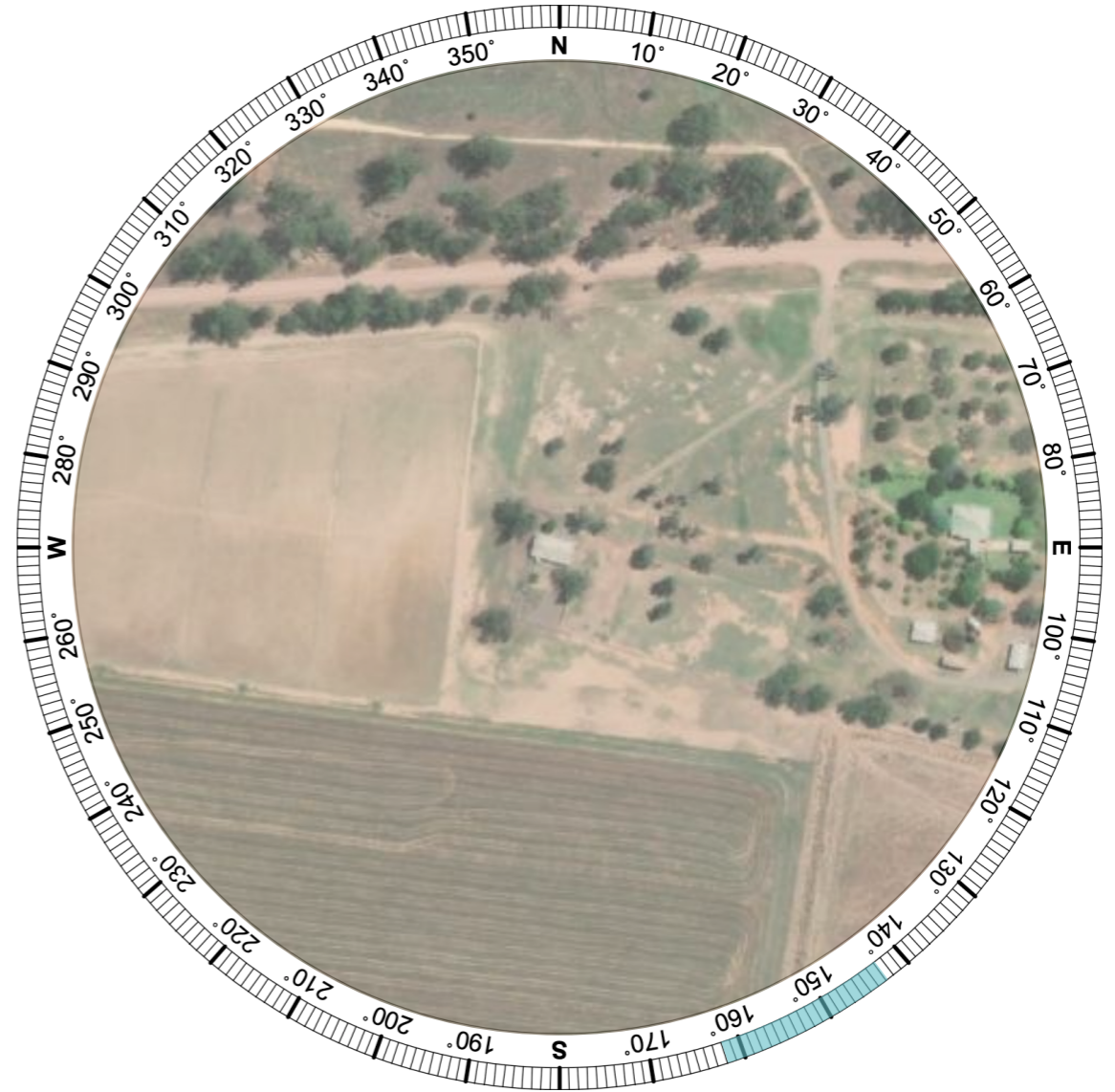
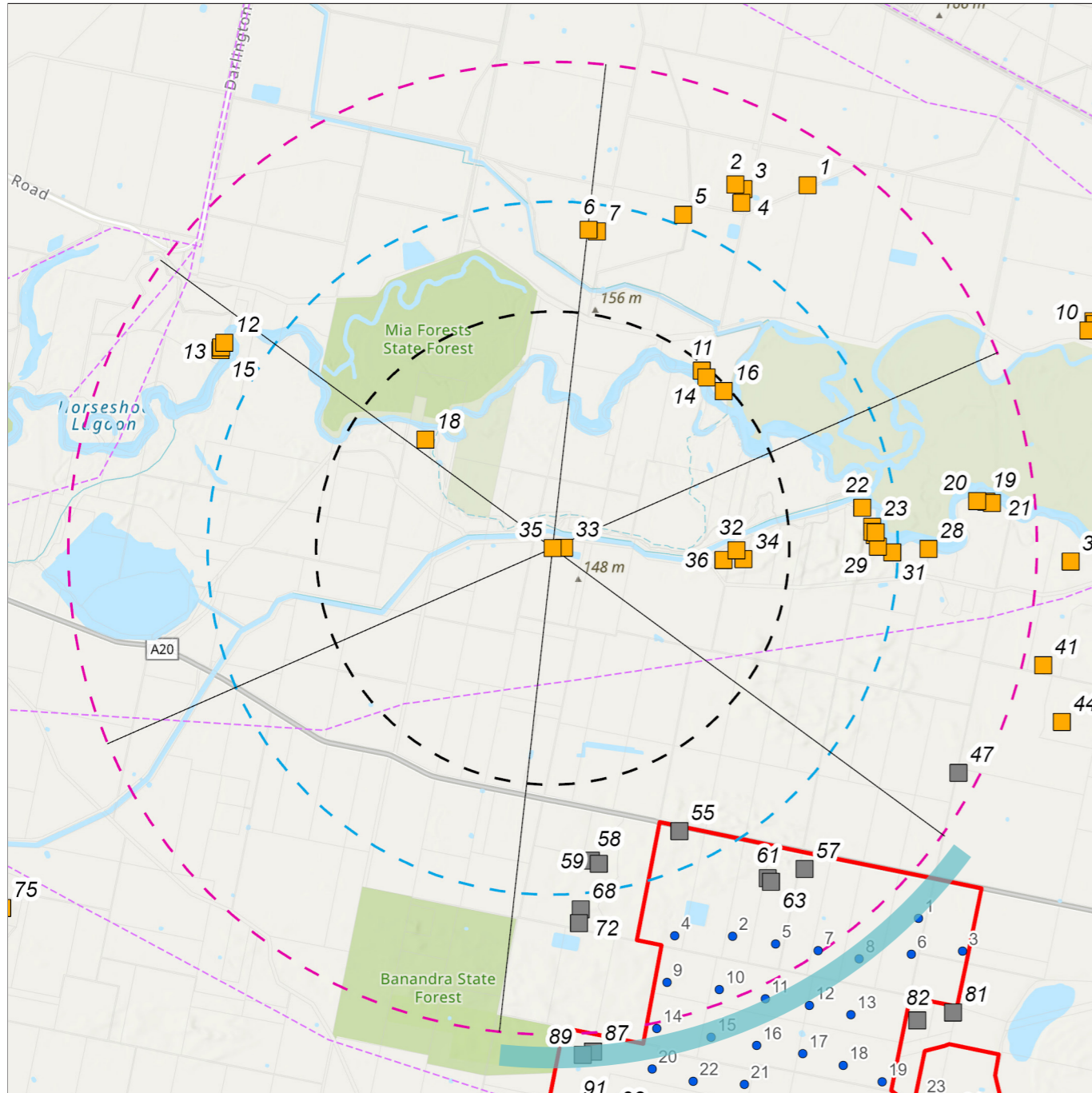
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117	133 m	4,172 m	93	1	0	12	17

Dwelling:
35



LEGEND

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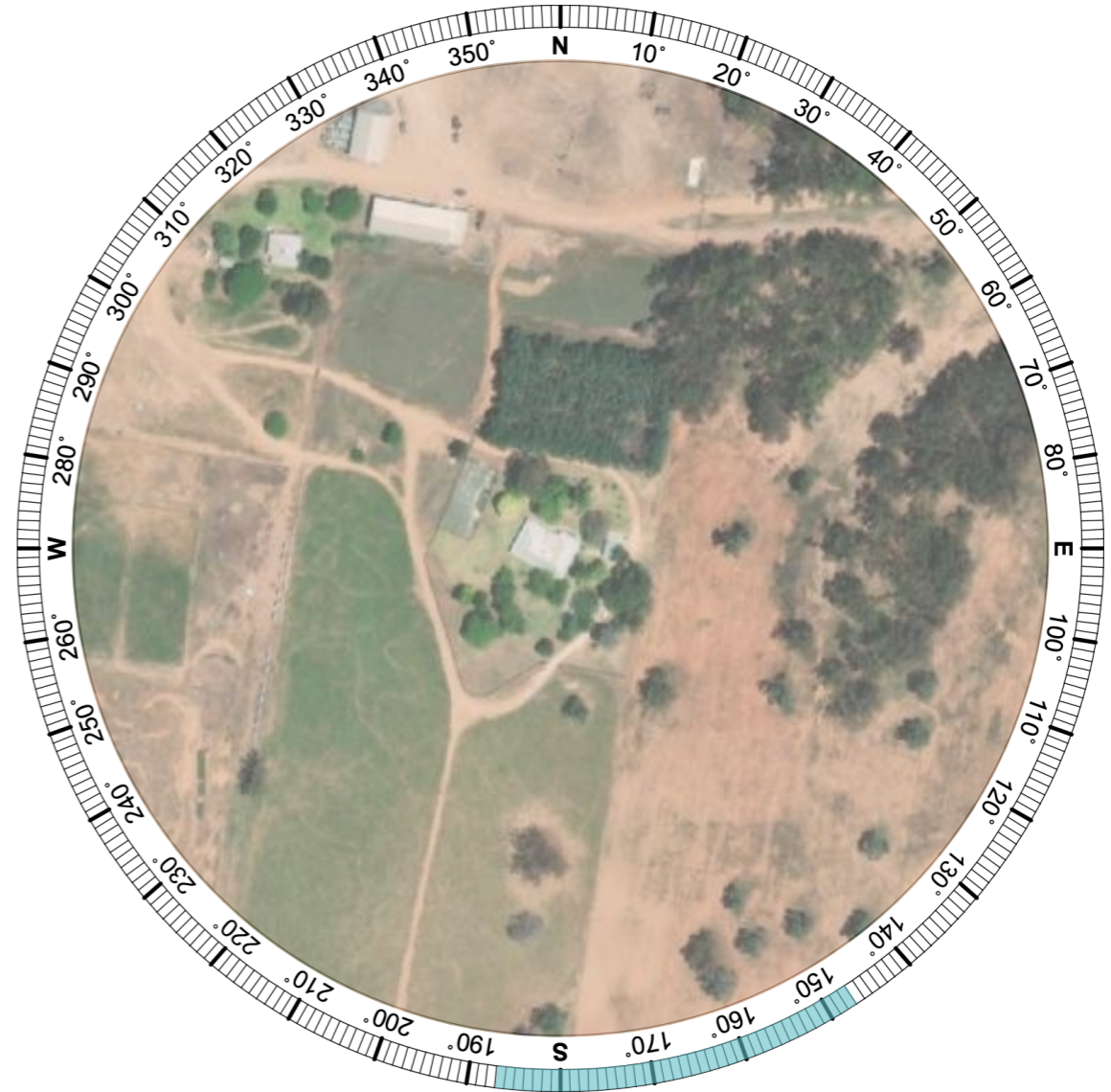
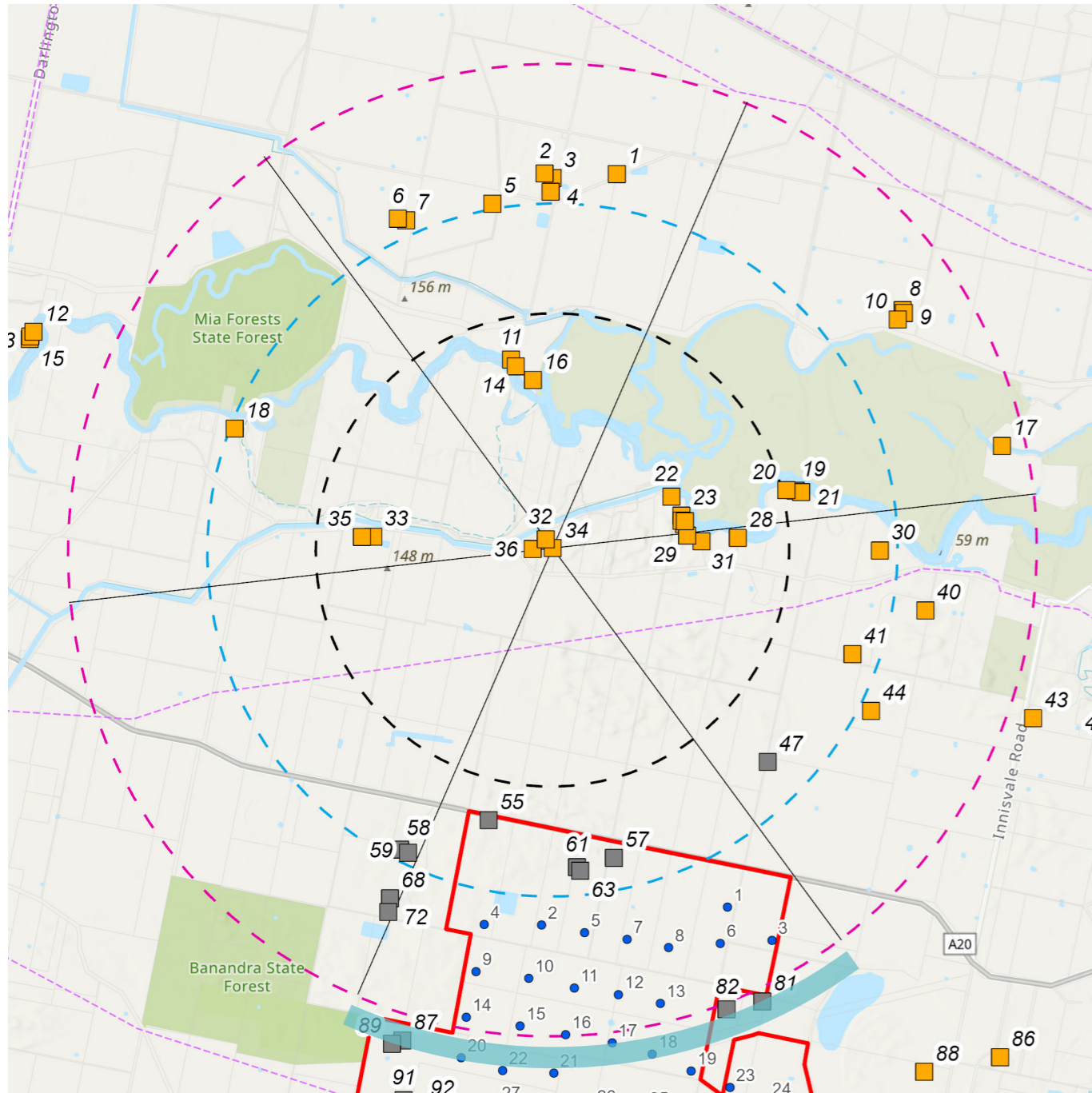
Aerial Source: Arc GIS, 2024

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Number of Sectors (The Project)

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Dwelling ID:	Elevation of Receiver: (m)	Distance to Nearest WTG: (m) approx.	Nearest WTG:	Number of 60° Sectors:	Number of WTGs within 3,900m:	Number of WTGs between 3,900m - 5,700m:	Number of WTGs between 5,700m & 8,000m:
35	133 m	6,696 m	4	1	0	0	6

Dwelling:
34



LEGEND

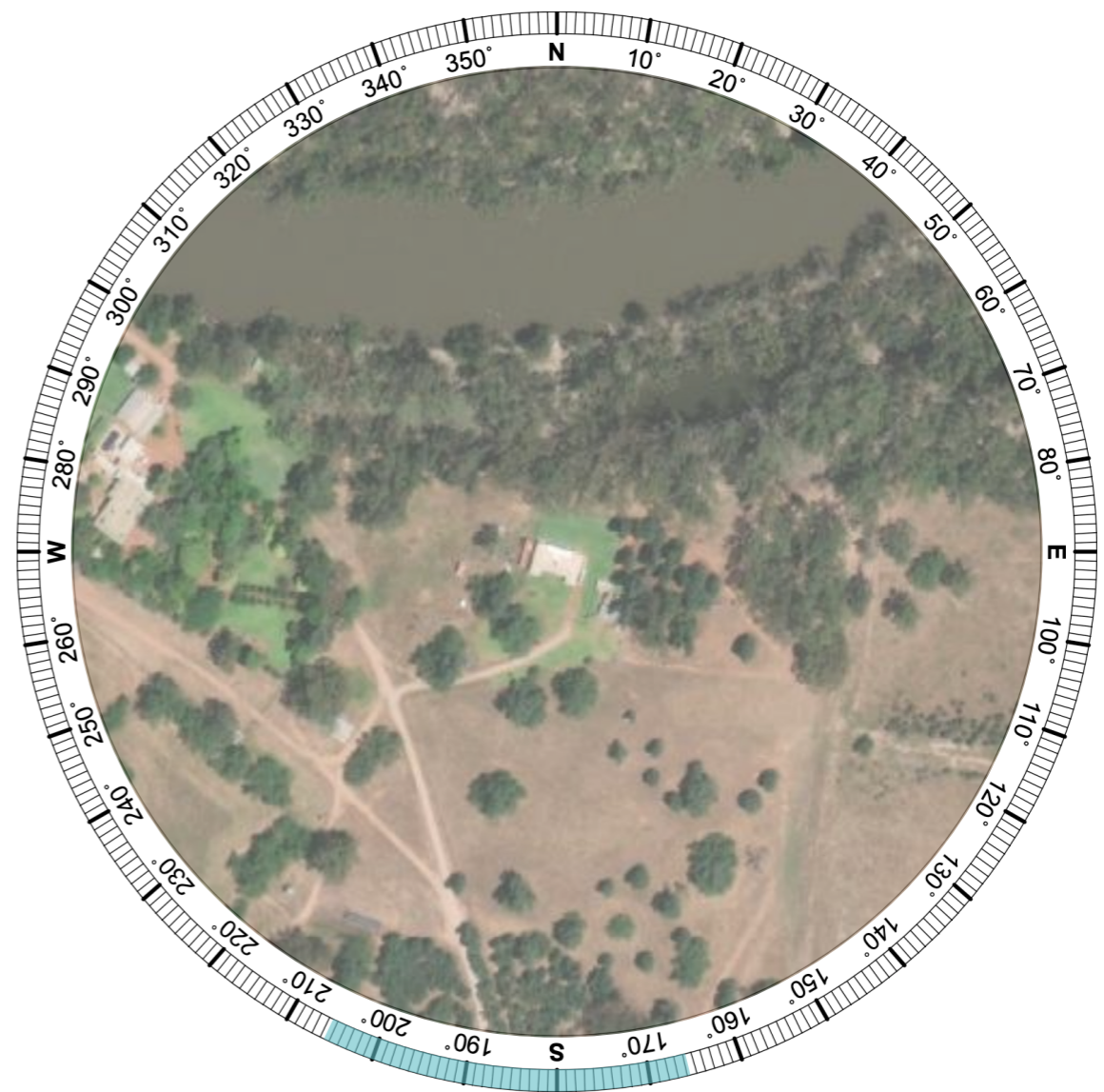
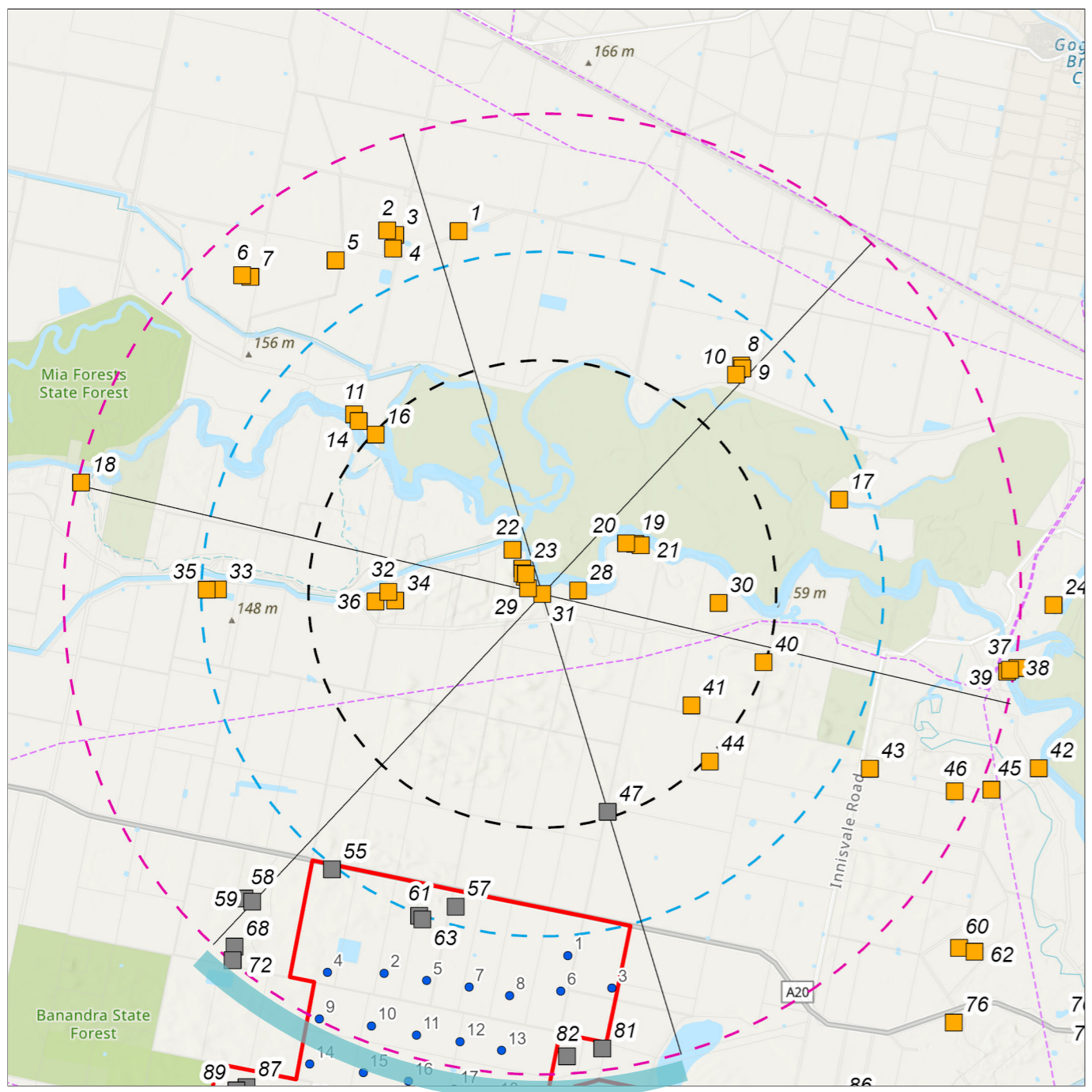
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34	138 m	6,216 m	2	1	0	0	16

Dwelling:
31



LEGEND

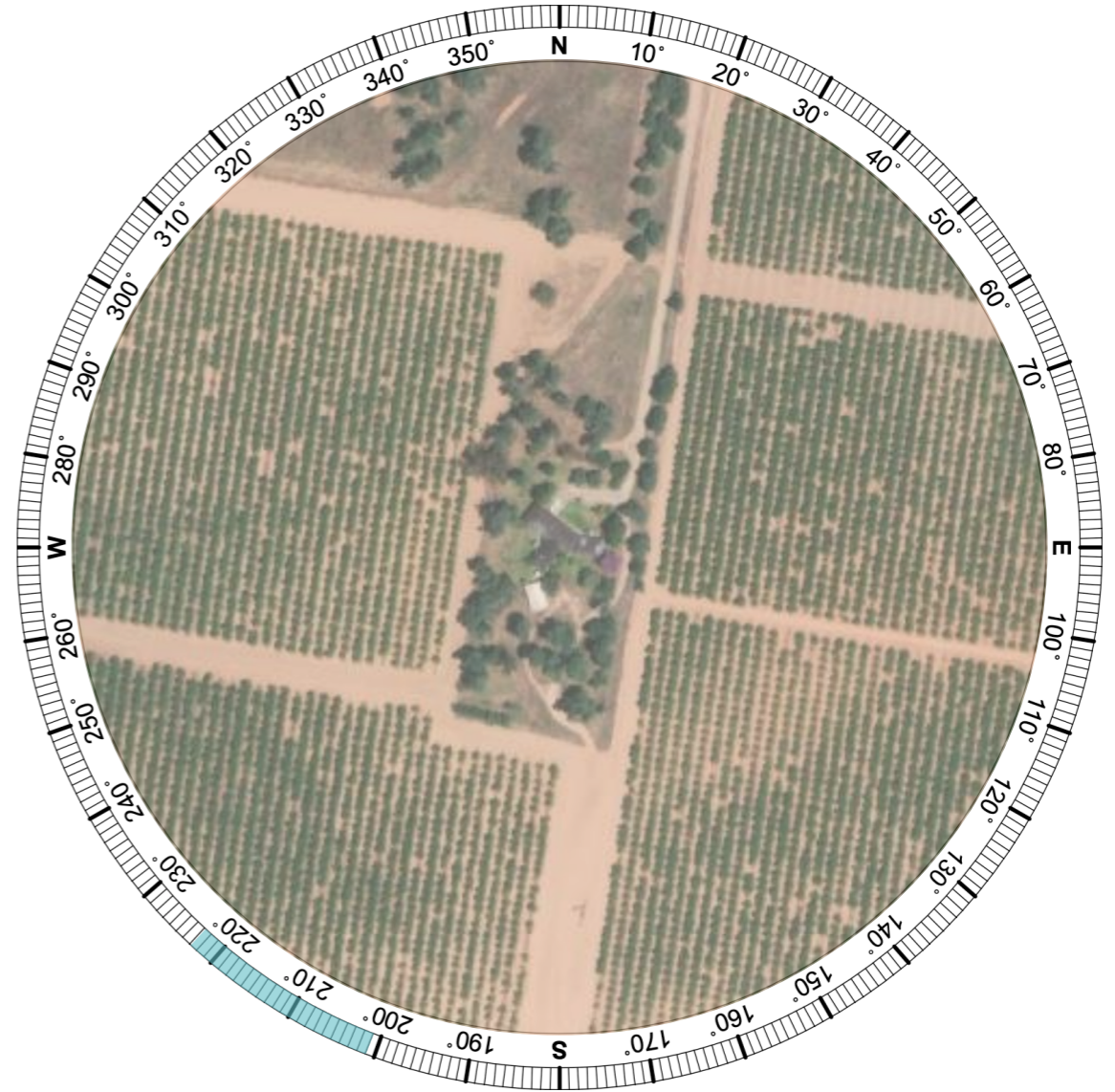
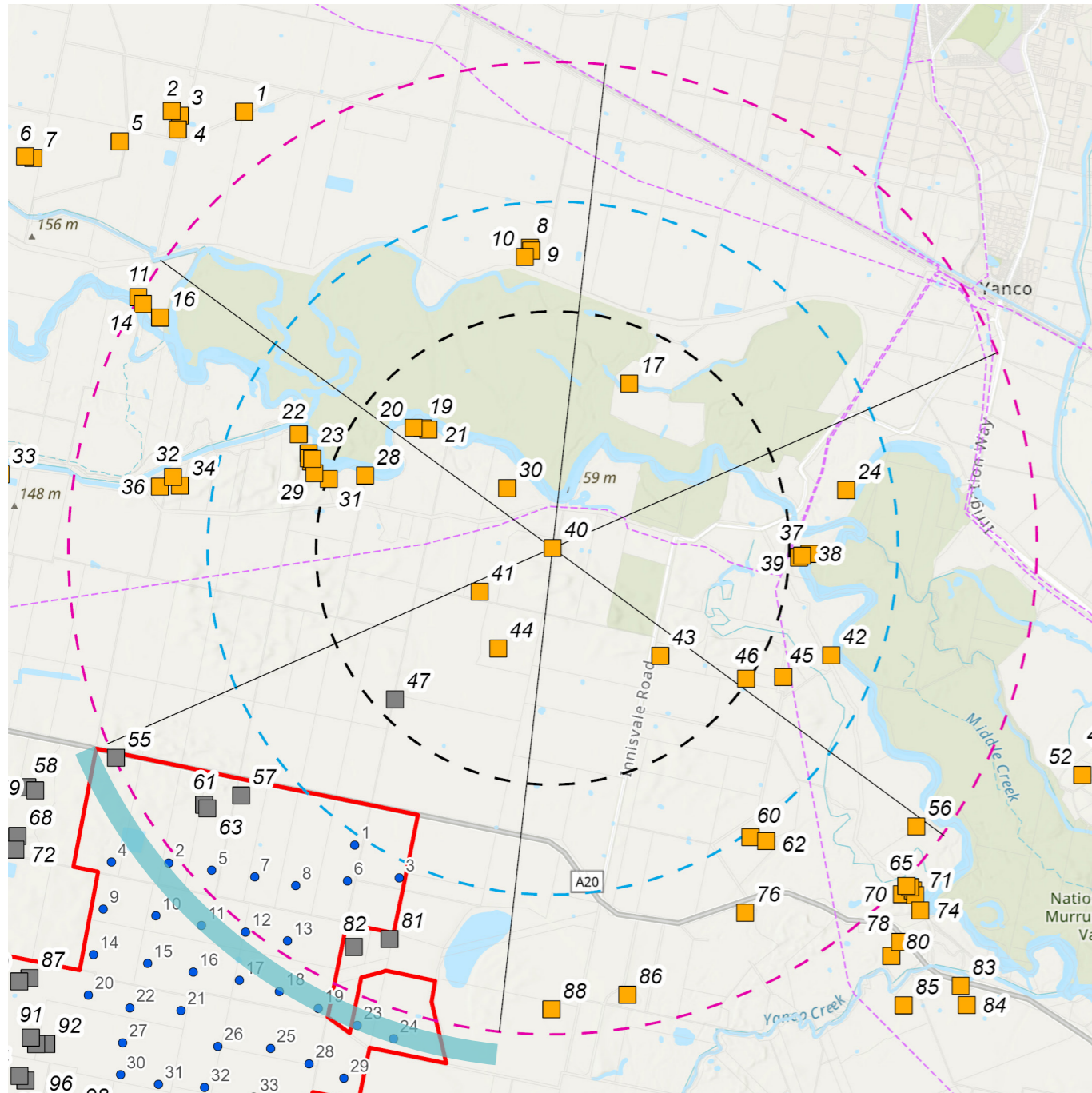
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Aerial Source: Arc GIS, 2024
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31	144 m	6,034 m	1	1	0	0	13

Dwelling:
40



LEGEND

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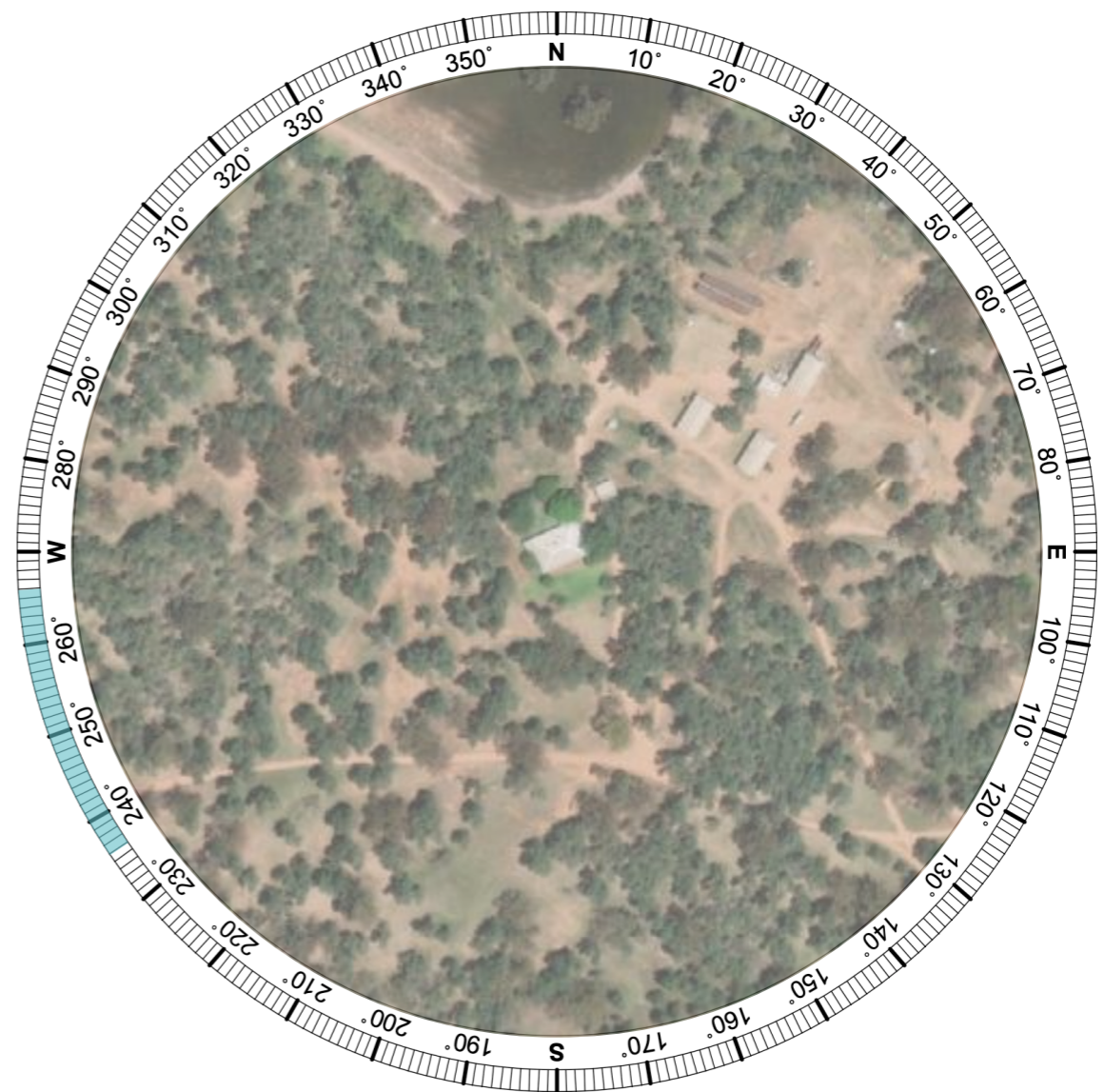
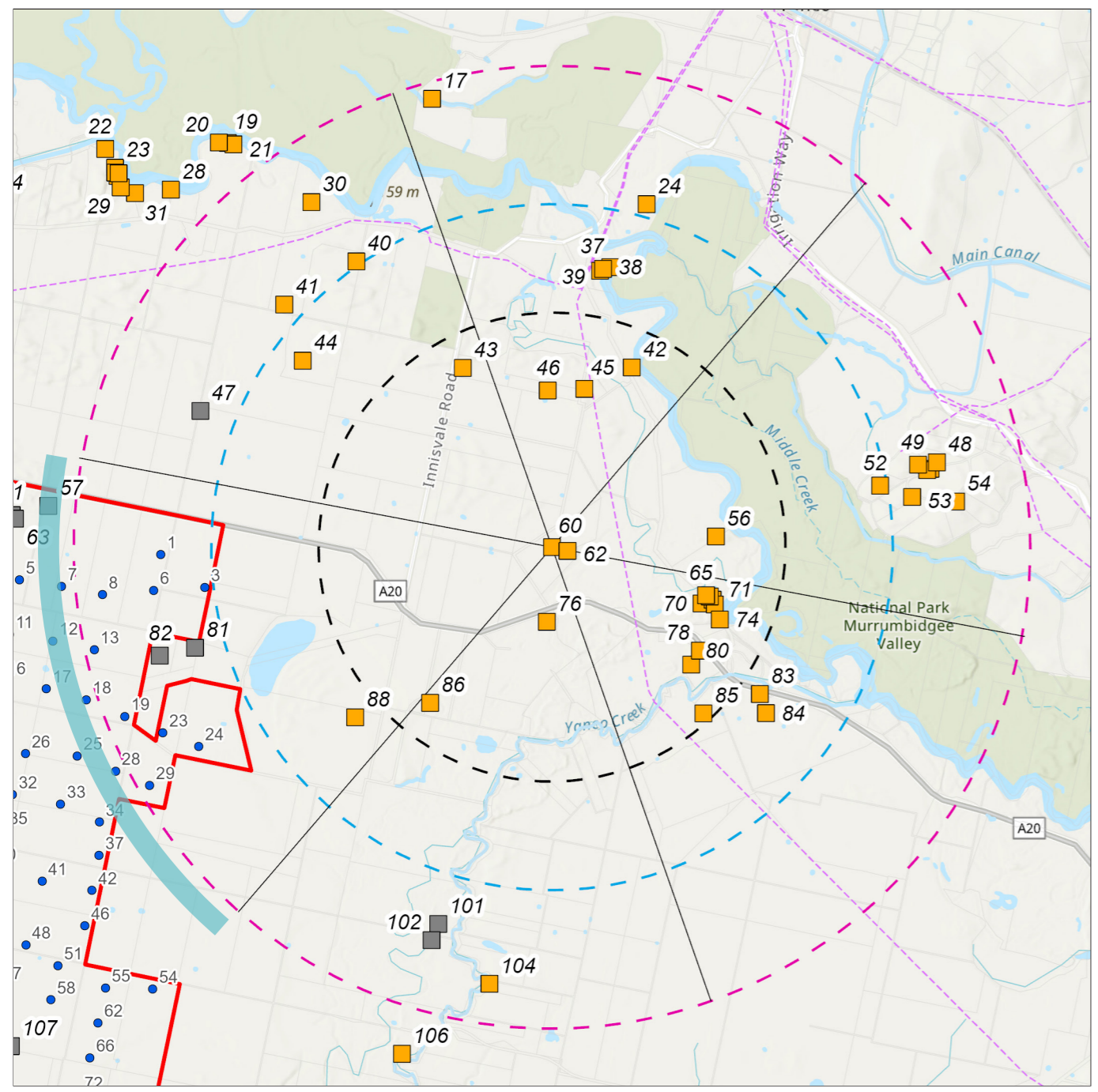
Aerial Source: Arc GIS, 2024

— Extent of Potential Visibility (within 8,000 m)

Number of Sectors (The Project)

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Dwelling ID:	Elevation of Receiver: (m)	Distance to Nearest WTG: (m) approx.	Nearest WTG:	Number of 60° Sectors:	Number of WTGs within 3,900m:	Number of WTGs between 3,900m - 5,700m:	Number of WTGs between 5,700m & 8,000m:
40	145 m	5,875m	1	1	0	0	7

Dwelling:
60



LEGEND

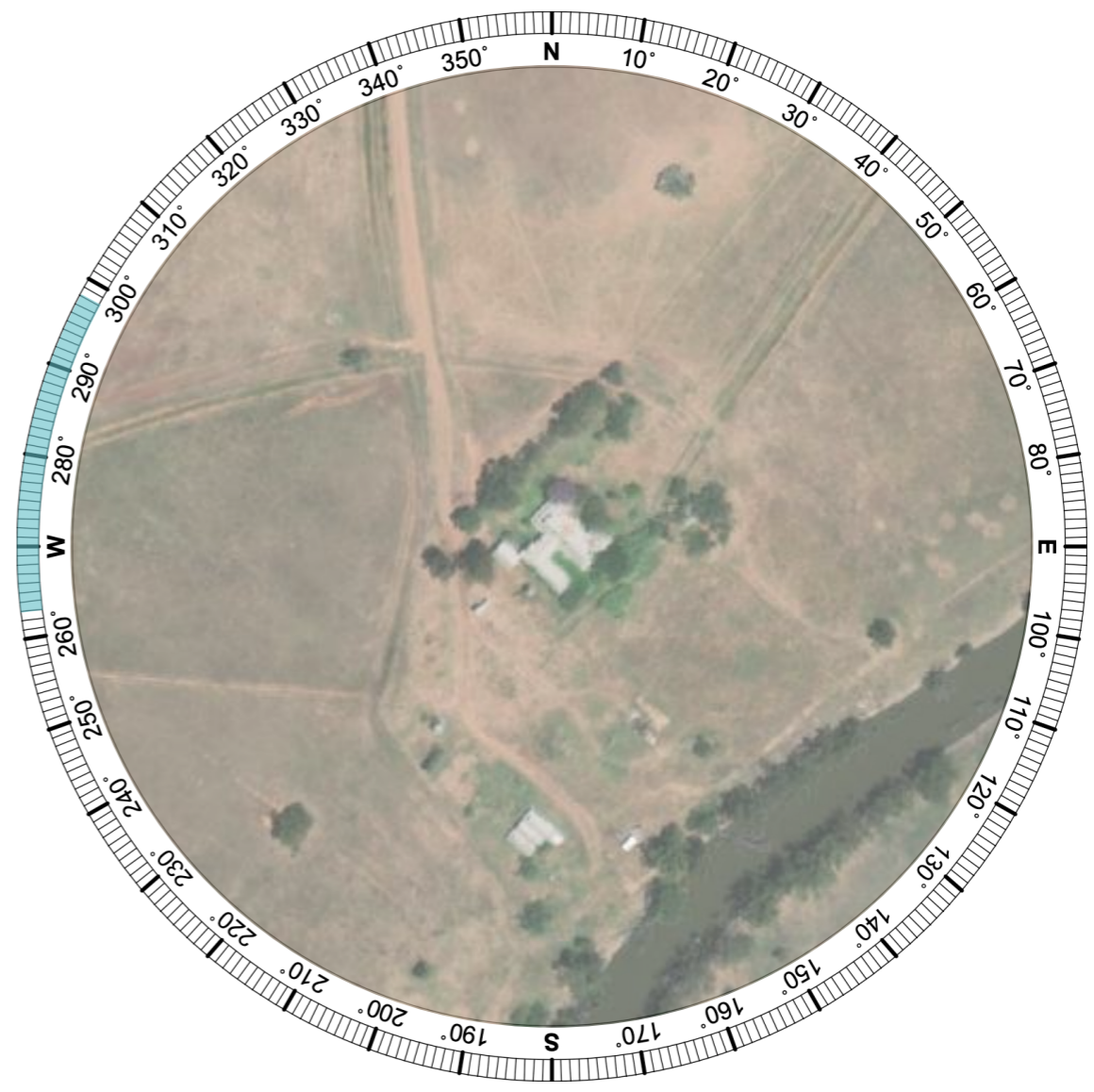
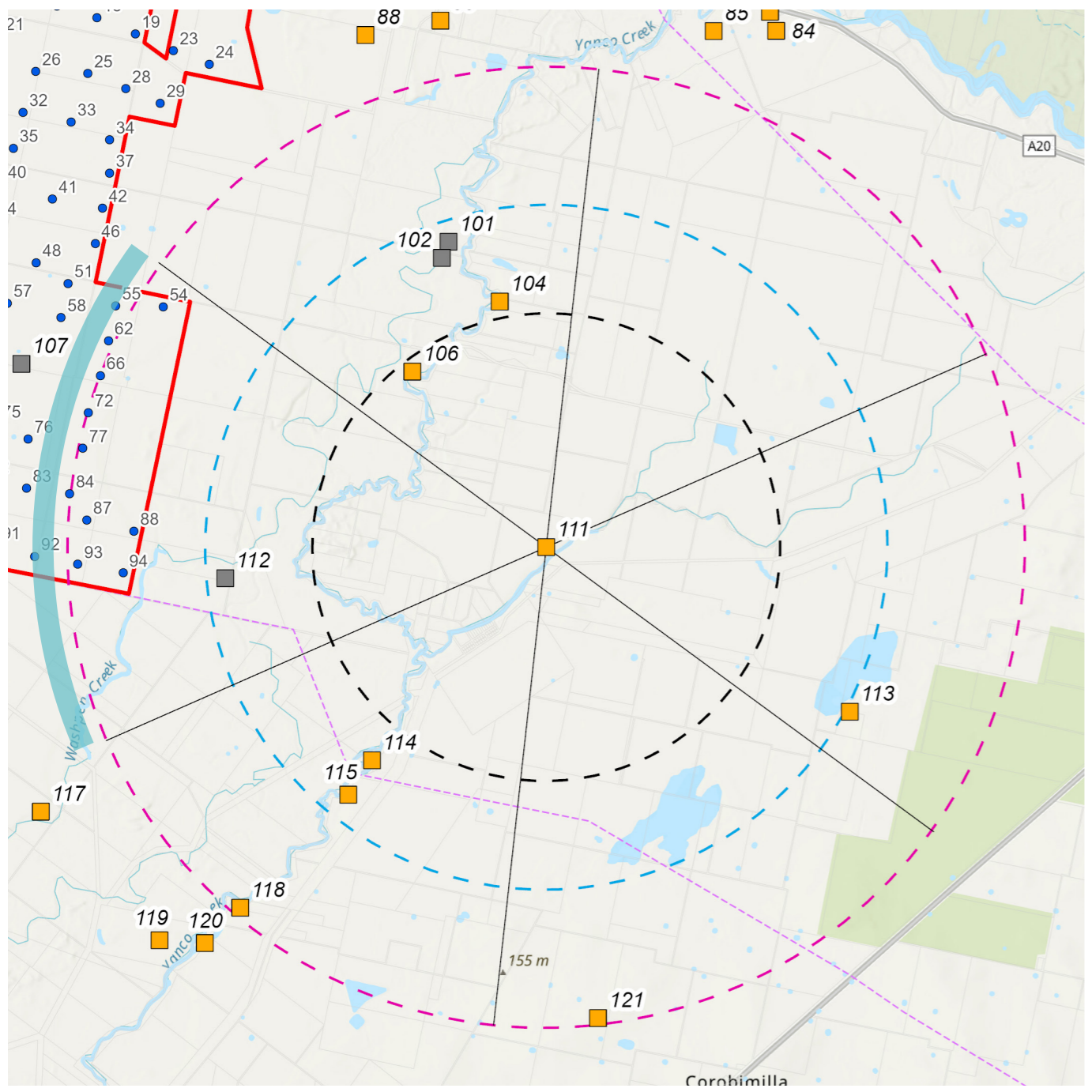
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60	144 m	5,832 m	3	1	0	0	9

Dwelling:
111



LEGEND

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Dwelling ID:	Elevation of Receiver: (m)	Distance to Nearest WTG: (m) approx.	Nearest WTG:	Number of 60° Sectors:	Number of WTGs within 3,900m:	Number of WTGs between 3,900m - 5,700m:	Number of WTGs between 5,700m & 8,000m:
111	141 m	6,883 m	88	1	0	0	7

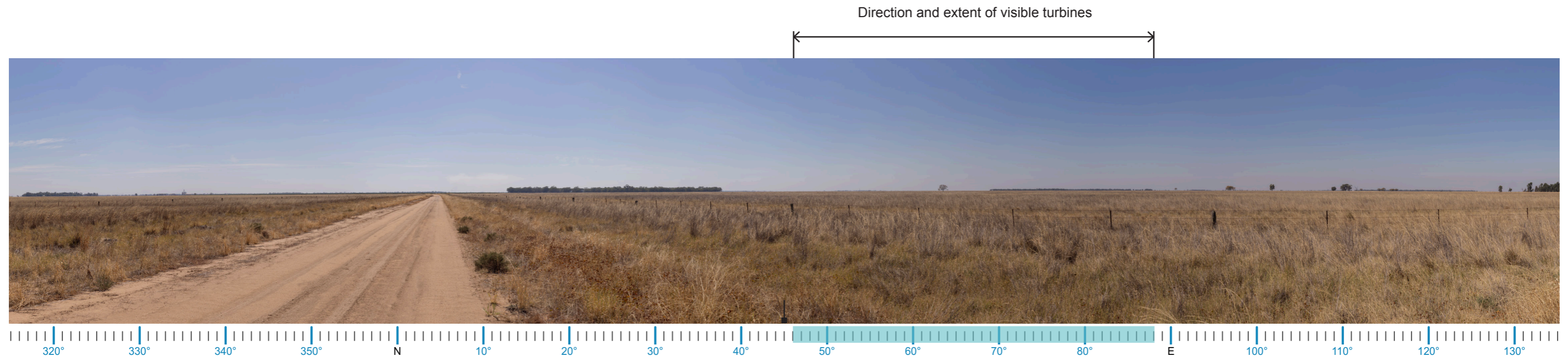


Appendix B

Public Viewpoint Analysis

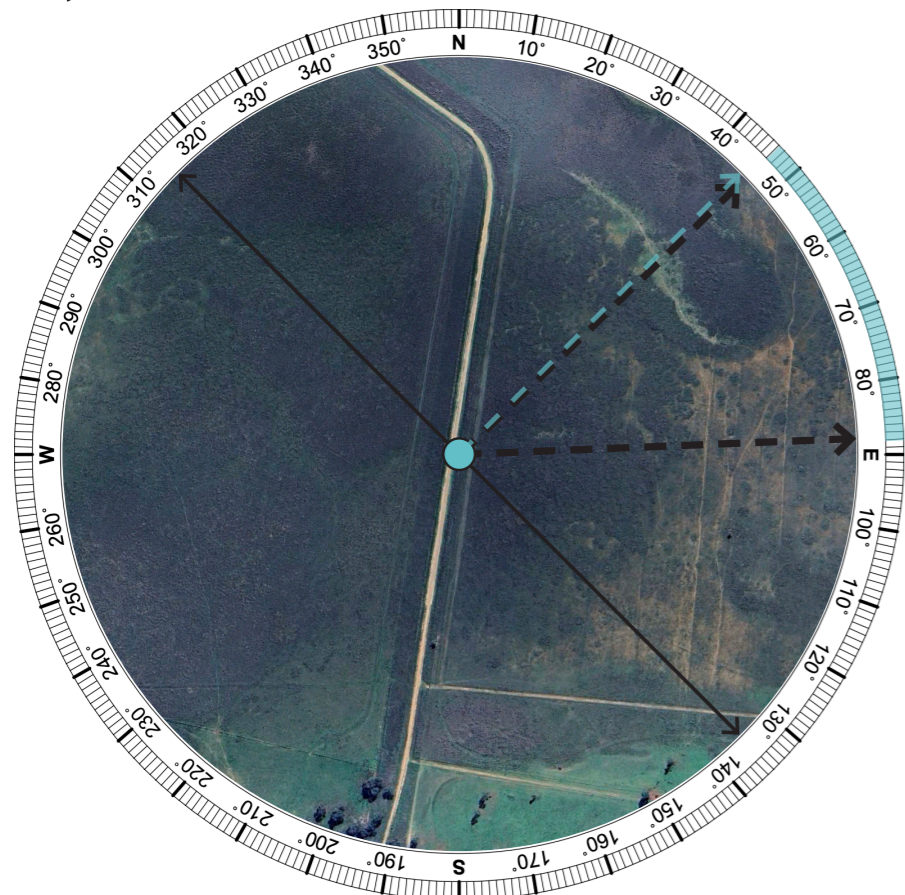
Rev C
16.05.24

VP01 Old Morundah Road



LEGEND

- Viewing direction and centre of panorama
- Extent of panorama
- Direction of potentially visible turbines
- Extent of visible turbines (Based on topography alone)



VIEWPOINT VP01

Viewpoint Summary:

Location:	Elevation:
Old Morundah Road	128 m
Coordinates:	Viewing Direction:
34°48'2.97"S 146° 7'20.81"E	Northeast
Distance to nearest WTG:	Visibility Distance Zone:
10.60 km (WTG 65)	Near Background (NB)
Land Use:	Viewer Sensitivity Level:
Low Use Row	Level 3 Sensitivity (Low)
LCU:	Scenic Quality Rating:
LCU02 Flat Pastures & Grassy Plains	Low

Multiple Wind Turbine Tool:

Nil (In excess of 8 km)

Aerial Image Source: Google Earth, 2024

Existing Landscape Character Description:

This viewpoint was taken on Old Morundah Road, approximately 4.17 km southeast of the intersection with Main Canal Road.

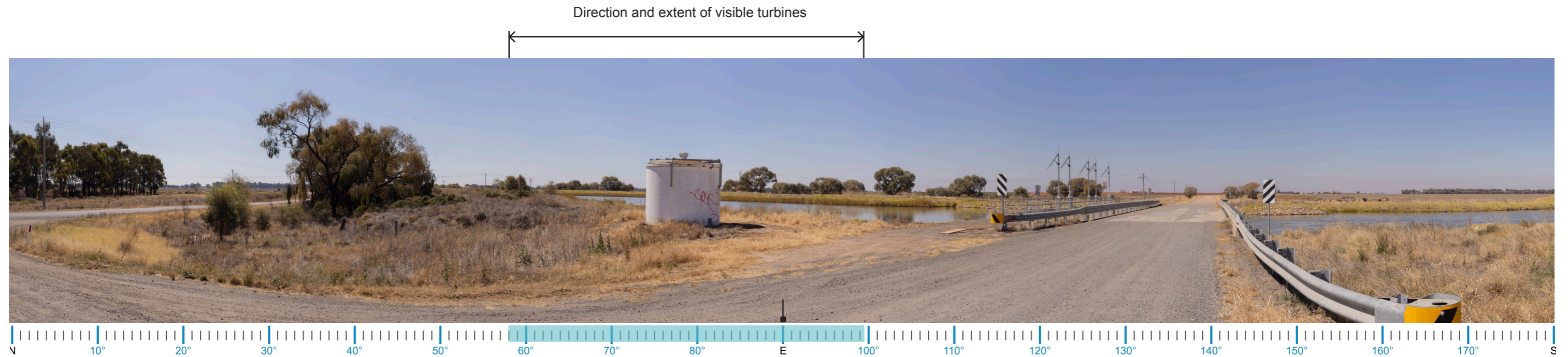
The surrounding lands are open pastoral farmland generally used for native vegetation grazing. The terrain is flat with minimal vegetation, allowing open views to the horizon.

Prominent vegetation throughout these expansive plains include grasses such as Speargrass, Windmill Grass and Whitetop Wallaby Grass. Also present are perennial herbs, daisies and legumes, low shrubs and scattered trees.

Potential Visual Impact:

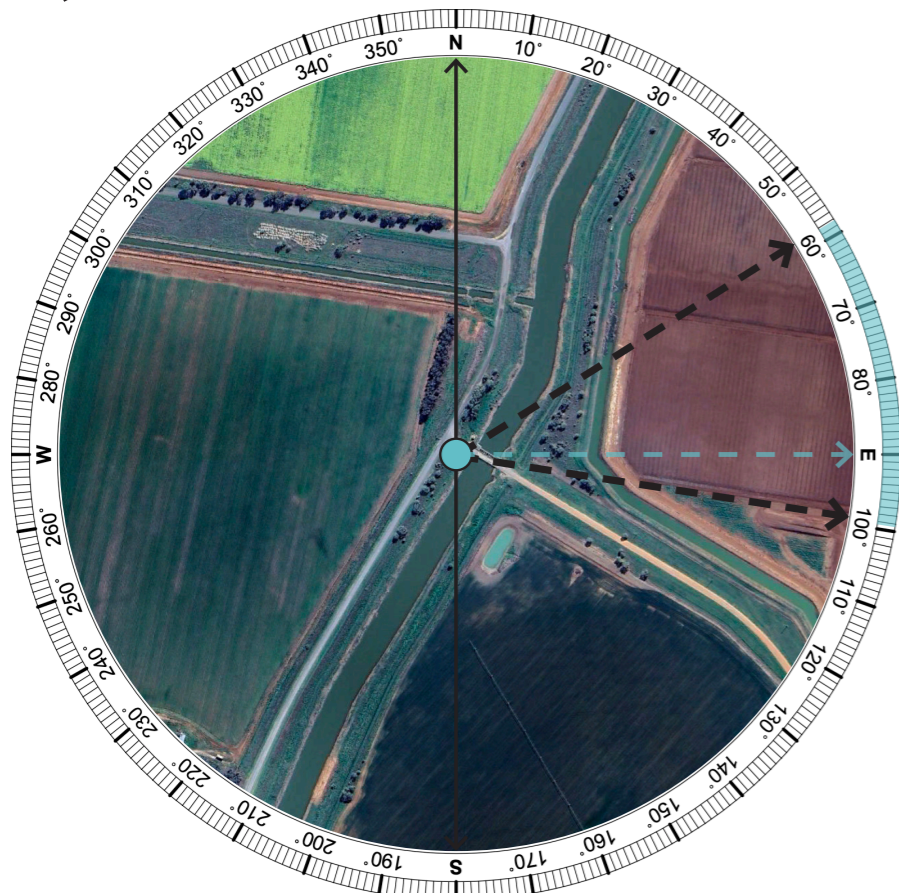
There are no intervening elements in the foreground of this viewpoint allowing for open views towards the Project. The Project is 11 km from the viewpoint.

VP02 Intersection of Old Morundah Road and Main Canal Road



LEGEND

- Viewing direction and centre of panorama
- Extent of panorama
- Direction of potentially visible turbines
- Extent of visible turbines (Based on topography alone)



VIEWPOINT VP02

Viewpoint Summary:

Location:	Elevation:
Intersection of Old Morundah Road and Main Canal Road	128 m
Coordinates:	Viewing Direction:
34°46'16.26"S 146° 5'55.58"E	East
Distance to nearest WTG:	Visibility Distance Zone:
12.00 km (WTG 65)	Mid Background (MB)
Land Use:	Viewer Sensitivity Level:
Low Use road	Level 3 Sensitivity (Low)
LCU:	Scenic Quality Rating:
LCU05 Grassy Woodland	Low

Multiple Wind Turbine Tool:

Nil (In excess of 8 km)

Aerial Image Source: Esri, 2024

Existing Landscape Character Description:

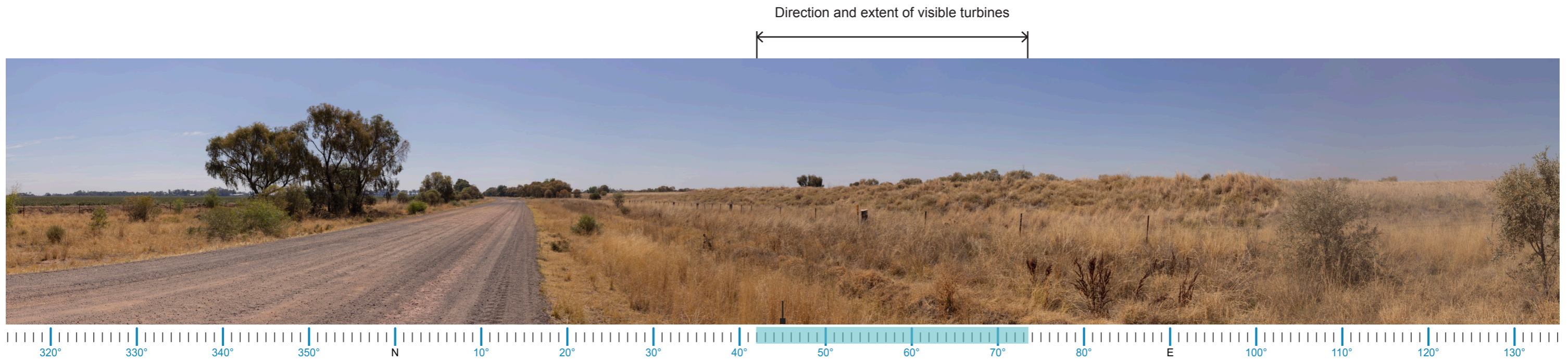
This viewpoint was taken at the intersection of Old Morundah Road and Main Canal Road.

The surrounding lands are farmland with scattered trees generally used for modified pasture grazing and irrigated cropping. Within view is the Coleambally Canal, bridge infrastructure and a small tank.

Potential Visual Impact:

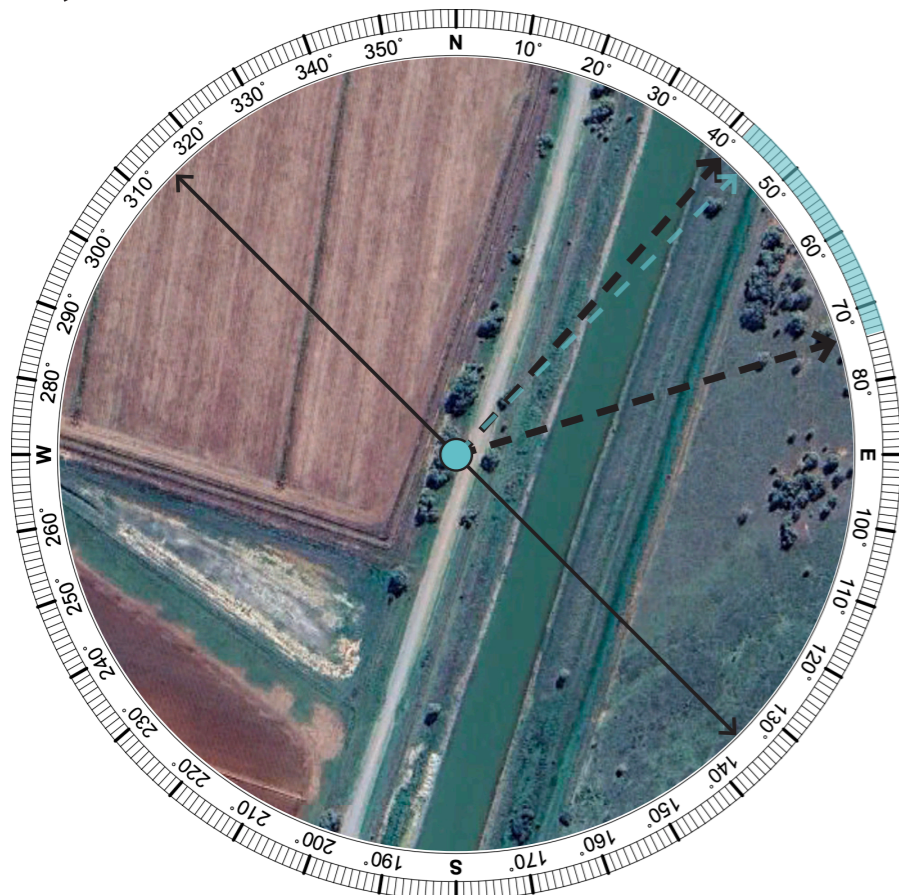
Despite the flat terrain, moderate vegetation fills the middleground of this viewpoint in the direction of the Project. The viewpoint is 12.07 km from the Project.

VP03 Main Canal Road



LEGEND

- Viewing direction and centre of panorama
- Extent of panorama
- Direction of potentially visible turbines
- Extent of visible turbines (Based on topography alone)



VIEWPOINT VP03

Viewpoint Summary:

Location:	Elevation:
Main Canal Road	128 m
Coordinates:	Viewing Direction:
34°50'55.47"S 146° 4'52.33"E	Northeast
Distance to nearest WTG:	Visibility Distance Zone:
16.44 km (WTG 65)	Mid Background (MB)
Land Use:	Viewer Sensitivity Level:
Low Use Road	Level 3 Sensitivity (Low)
LCU:	Scenic Quality Rating:
LCU02 Flat Pastures & Grassy plains	Low

Multiple Wind Turbine Tool:

Nil (In excess of 8 km)

Aerial Image Source: Google Earth, 2024

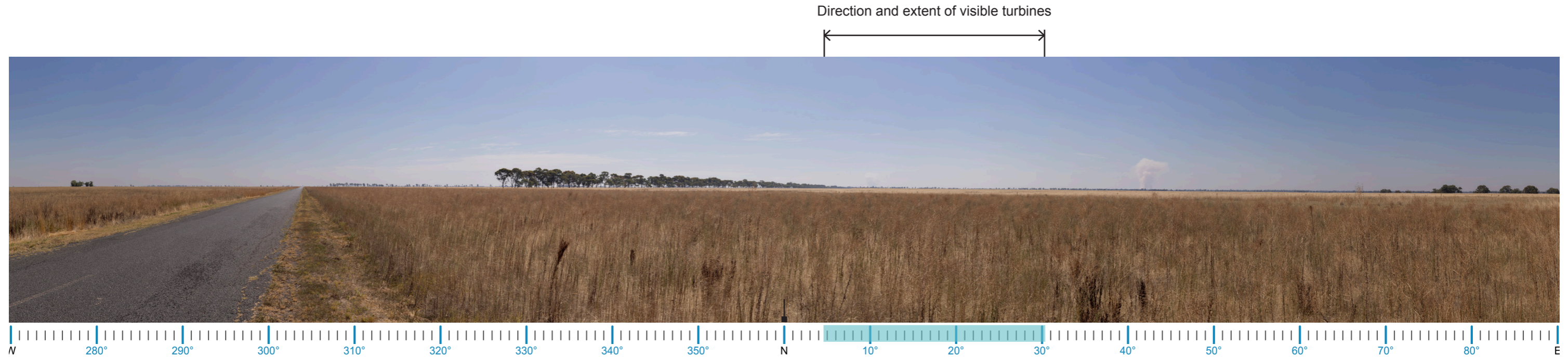
Existing Landscape Character Description:

This viewpoint was taken along Main Canal Road, 640 m north of the intersection with Gaston Road. The surrounding lands are farmland used for native vegetation grazing and irrigated cropping. The terrain is generally flat with a notable bund along the bank of the Coleambally Canal causing filtered views. Vegetation consists of mainly grasses, shrubs and scattered trees.

Potential Visual Impact:

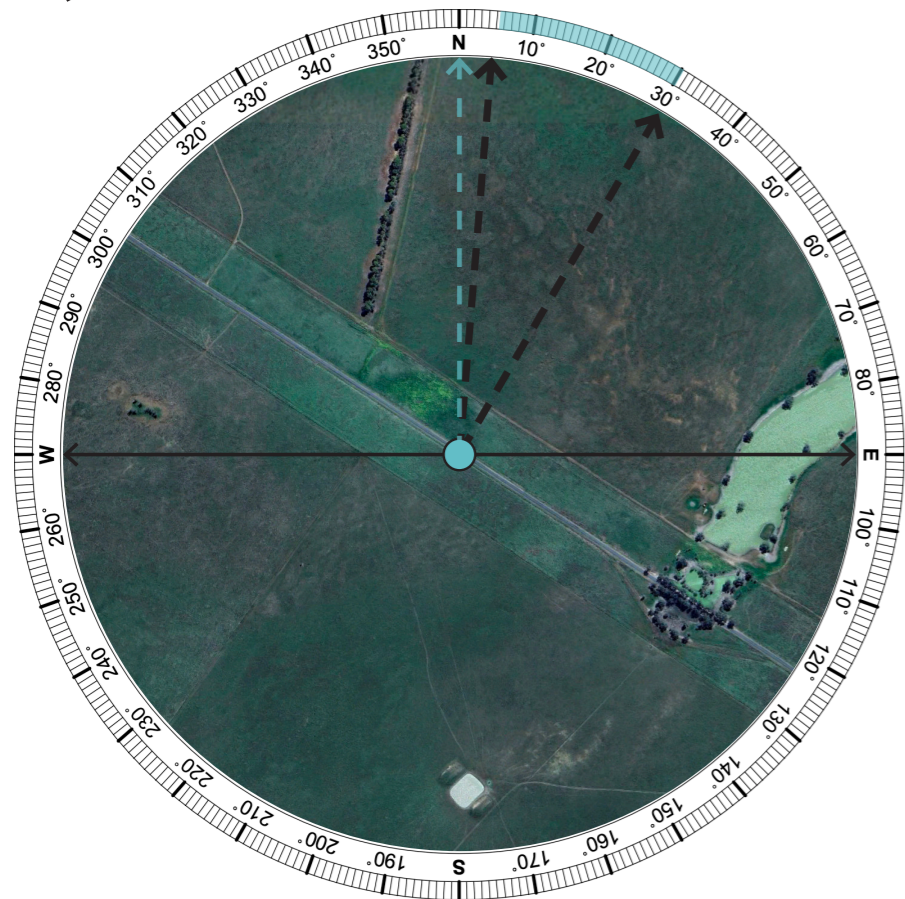
Despite the flat terrain, the bund of Coleambally Canal fills the middleground of this viewpoint in the direction of the Project. The viewpoint is 16.44 km from the Project.

VP04 Yamma Road



LEGEND

- Viewing direction and centre of panorama
- Extent of panorama
- Direction of potentially visible turbines
- Extent of visible turbines (Based on topography alone)



VIEWPOINT VP04

Viewpoint Summary:

Location:	Elevation:
Yamma Road	126 m
Coordinates:	Viewing Direction:
34°55'3.53"S 146°12'41.01"E	North
Distance to nearest WTG:	Visibility Distance Zone:
16.50 km (WTG 86)	Mid Background (MB)
Land Use:	Viewer Sensitivity Level:
Low Use Road	Level 3 Sensitivity (Low)
LCU:	Scenic Quality Rating:
LCU02 Flat Pastures & Grassy plains	Low

Multiple Wind Turbine Tool:

Nil (In excess of 8 km)

Aerial Image Source: Esri, 2024

Existing Landscape Character Description:

This viewpoint was taken midway on Yamma Road 6.7 km north east of the intersection with Yamma Road South.

The terrain is flat with open views across open pastoral farmland generally used for modified pasture grazing, and native vegetation grazing.

Vegetation consists mainly of grasses, with a double line of trees protruding from the middle ground to the horizon, following a paddock boundary.

Potential Visual Impact:

The flat terrain allows for open views across low level vegetation. The viewpoint is 14.50 km from the Project.

VP05 Back Morundah Road

Direction and extent of visible turbines



LEGEND

- Viewing direction and centre of panorama
- Extent of panorama
- Direction of potentially visible turbines
- Extent of visible turbines (Based on topography alone)

VIEWPOINT VP05

Viewpoint Summary:

Location:	Elevation:
Back Morundah Road	135 m
Coordinates:	Viewing Direction:
34°53'30.20"S 146°17'23.99"E	North
Distance to nearest WTG:	Visibility Distance Zone:
10.47 km (WTG 94)	Near Background (NB)
Land Use:	Viewer Sensitivity Level:
Low Use Road	Level 3 Sensitivity (Low)
LCU:	Scenic Quality Rating:
LCU04 Grassy Woodlands	Moderate

Multiple Wind Turbine Tool:

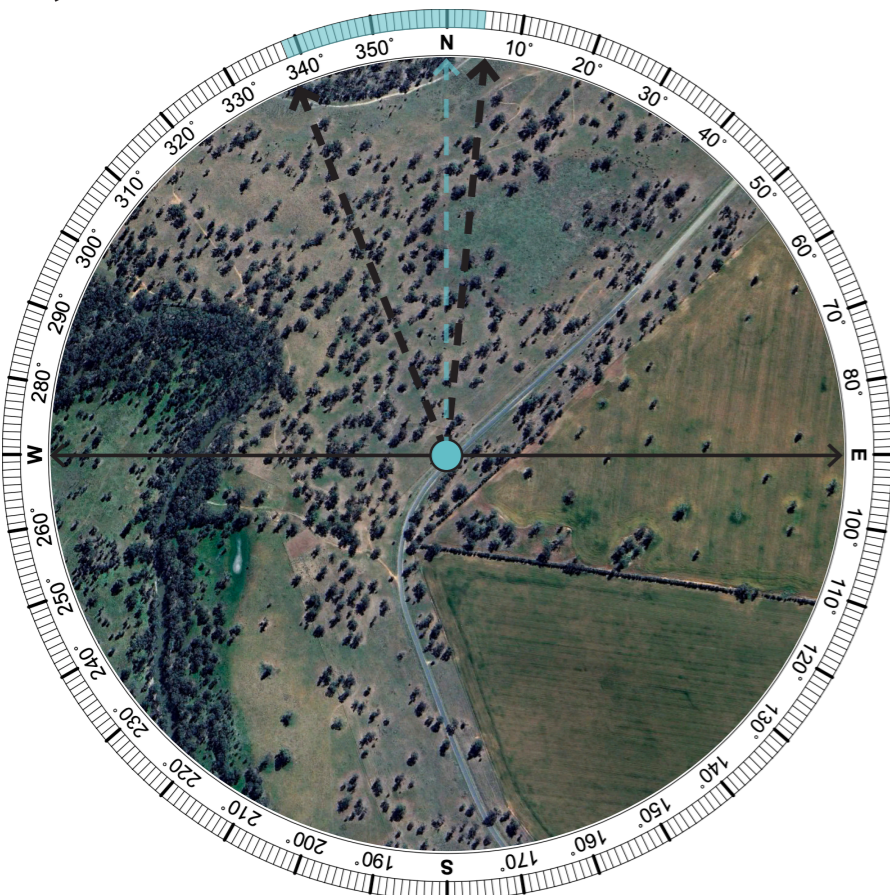
Nil (In excess of 8 km)

Existing Landscape Character Description:

The viewpoint was taken on Back Morundah Road 1.3 km southeast of Tarabah Weir. Surrounding terrain is flat with filtered views, and generally used for cropping, and grazing of native and modified pastures. The vegetation is tall grassy Riverine Woodlands consisting of mainly Yellow Box and River Red Gum trees, with an understorey of Speargrass, Windmill Grass and Whitetop Wallaby Grass. Denser riparian vegetation lining Yanco Creek can be seen in the distance.

Potential Visual Impact:

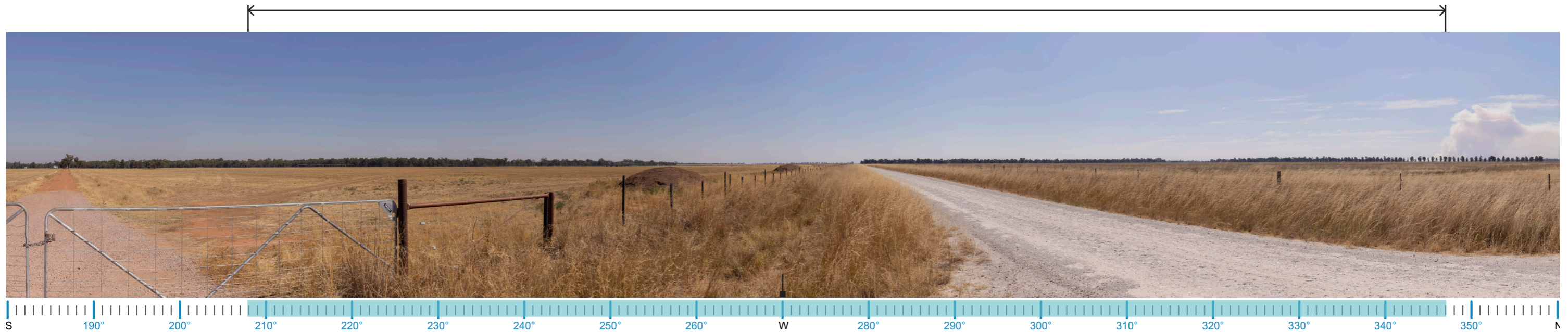
The view has scattered woodland and riparian forest in the foreground and middleground creating filtered to the Project. The viewpoint is 10.47 km, from the Project.



Aerial Image Source: Google Earth, 2024

VP06 Devlins Bridge Road

Direction and extent of visible turbines



LEGEND

- Viewing direction and centre of panorama
- Extent of panorama
- Direction of potentially visible turbines
- Extent of visible turbines (Based on topography alone)



VIEWPOINT VP06

Viewpoint Summary:

Location:	Elevation:
Devlins Bridge Road	135 m
Coordinates:	Viewing Direction:
34°45'27.84"S 146°19'20.59"E	West
Distance to nearest WTG:	Visibility Distance Zone:
2.00 km to WTG 54	Near Middleground (MB)
Land Use:	Viewer Sensitivity Level:
Low Use Road	Level 3 Sensitivity (Low)
LCU:	Scenic Quality Rating:
LCU02 Flat Pastures & Grassy Plains	Low

Multiple Wind Turbine Tool:

3

Aerial Image Source: Esri, 2024

Existing Landscape Character Description:

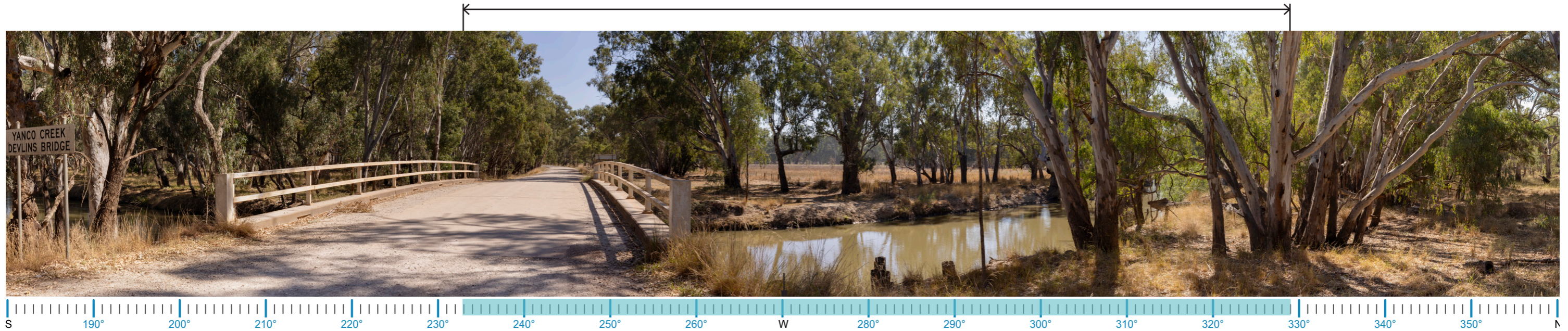
This viewpoint was taken on Devlins Bridge Road 2.93 km west of Back Creek and Devlins Bridge. The terrain is flat with minimal vegetation in the foreground allowing for open views. The surrounding land is open pastoral farmland generally used for cropping. Vegetation in the foreground is made up of mainly grasses, with a distant shelterbelt of trees lining the horizon.

Potential Visual Impact:

There are no intervening elements in the foreground of this viewpoint. The project is 2.3 km from the Project.

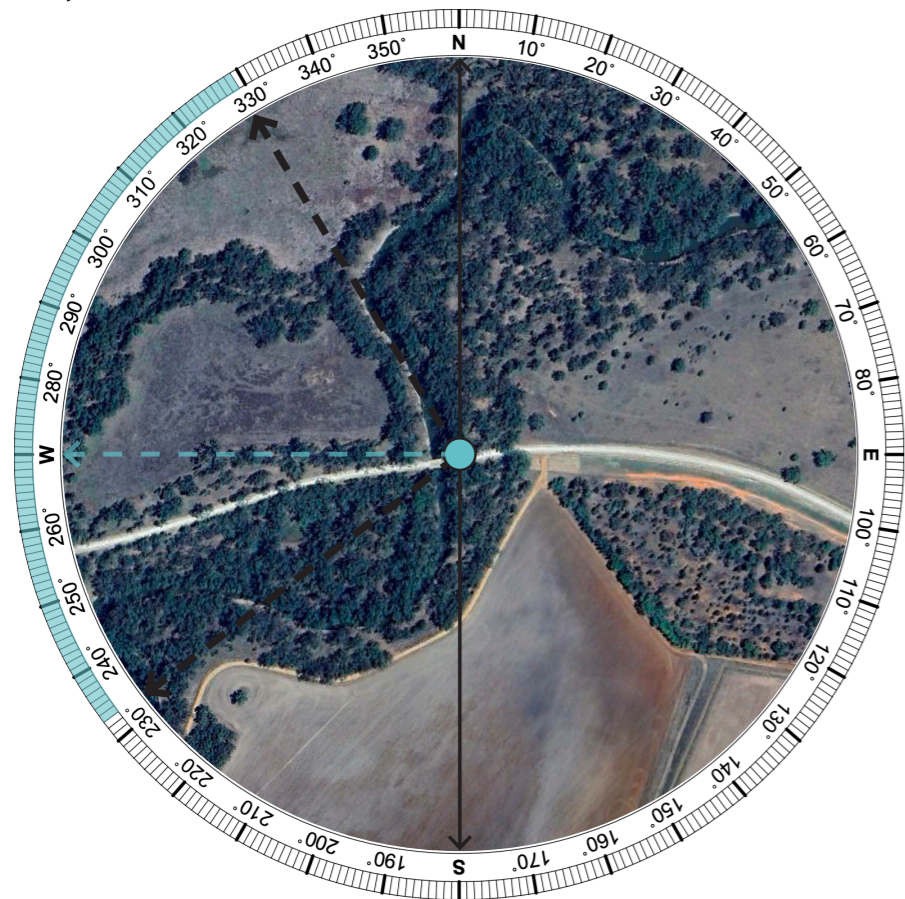
VP07 Devlins Bridge

Direction and extent of visible turbines



LEGEND

- Viewing direction and centre of panorama
- Extent of panorama
- Direction of potentially visible turbines
- Extent of visible turbines (Based on topography alone)



VIEWPOINT VP07

Viewpoint Summary:

Location:	Elevation:
Devlins Bridge	143 m
Coordinates:	Viewing Direction:
34°45'36.16"S 146°21'15.66"E	West
Distance to nearest WTG:	Visibility Distance Zone:
4.90 km (WTG 54)	Far Middleground (FM)
Land Use:	Viewer Sensitivity Level:
Low Use Road	Level 3 Sensitivity (Low)
LCU:	Scenic Quality Rating:
LCU01 River Red Gum Forest	Moderate

Multiple Wind Turbine Tool:

2

Aerial Image Source: Google Earth, 2024

Existing Landscape Character Description:

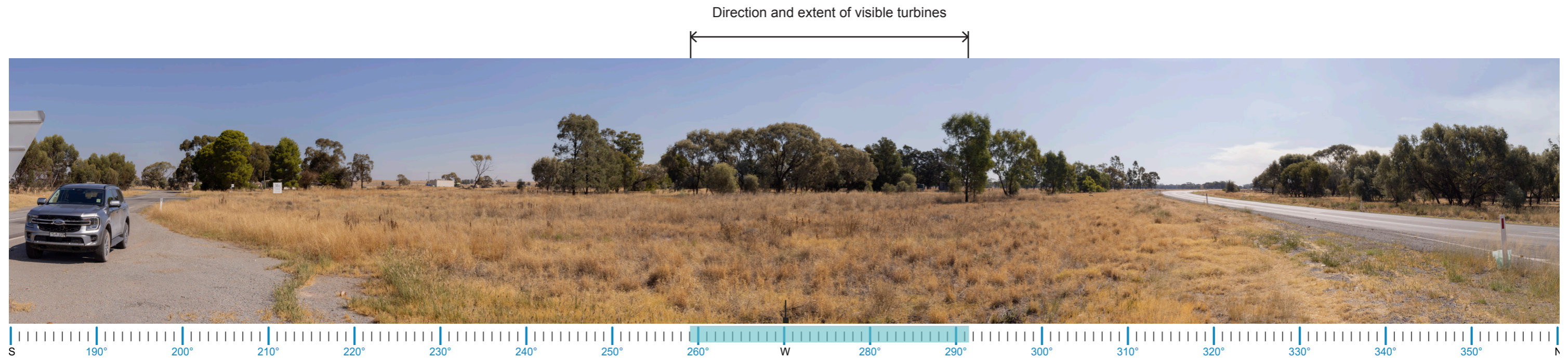
This viewpoint was taken on the bank of Back Creek, adjacent to Devlins Bridge.

The terrain is flat with slight undulation along the creek, generally used for native vegetation grazing. A thin belt of riparian River Red Gum forest filters distant views of grassland, riparian forest and woodland.

Potential Visual Impact:

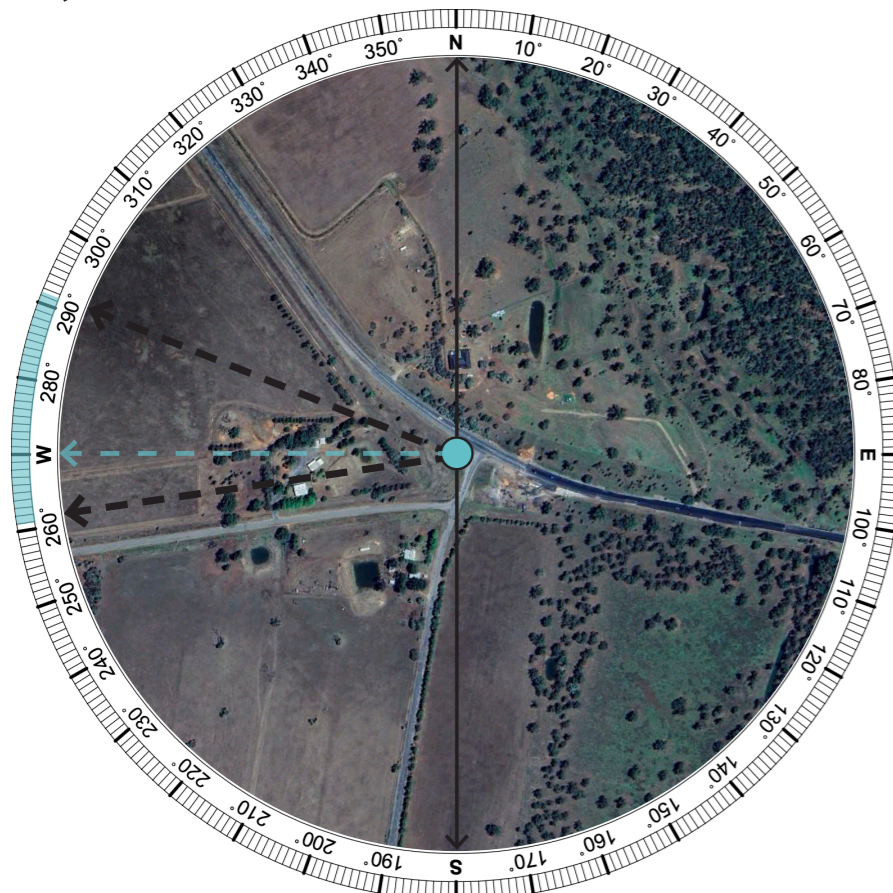
Due to intervening vegetation in the foreground and middleground of this view, the majority of the Project will not be visible. Blade tips may be visible over vegetation to the west.

VP08 Intersection of Reas Lane and Sturt Highway



LEGEND

- Viewing direction and centre of panorama
- Extent of panorama
- Direction of potentially visible turbines
- Extent of visible turbines (Based on topography alone)



VIEWPOINT VP08

Viewpoint Summary:

Location:	Elevation:
Intersection of Reas Lane and Sturt Highway	146 m
Coordinates:	Viewing Direction:
34°45'40.34"S 146°31'3.84"E	West
Distance to nearest WTG:	Visibility Distance Zone:
19.80 km to WTG 24	Far Background (FB)
Land Use:	Viewer Sensitivity Level:
Major Road	Level 3 Sensitivity (Low)
LCU:	Scenic Quality Rating:
LCU03 Grassy Woodland	Low

Multiple Wind Turbine Tool:

Nil (In excess of 8 km)

Aerial Image Source: Esri, 2024

Existing Landscape Character Description:

This viewpoint was taken at the intersection of Reas Lane and the Sturt Highway, 3.5 km southwest of the township of Narrandera.

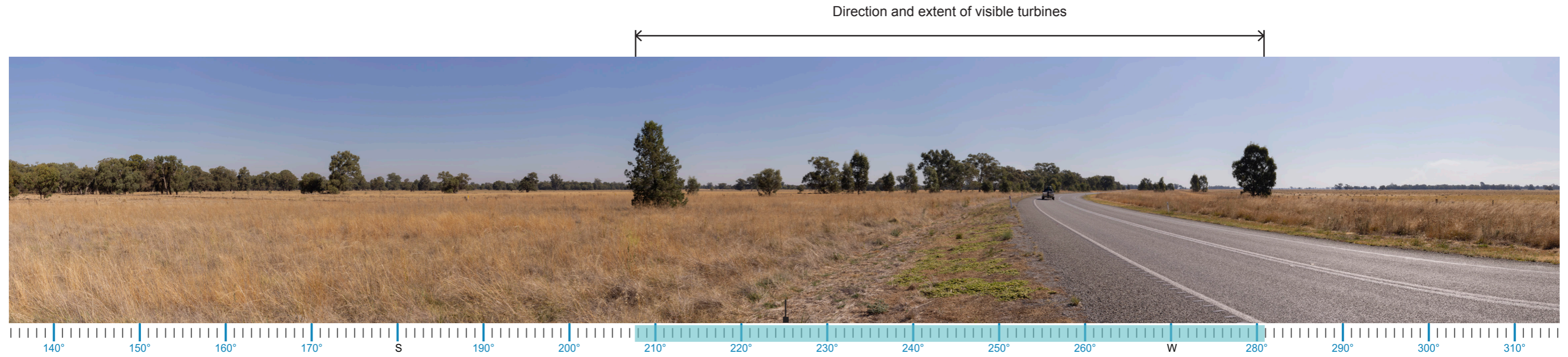
The surrounding land is pastoral farmland used for native vegetation grazing and residential farm infrastructure. The terrain is flat with filtered views.

Vegetation is mainly grasses with a strand of trees filling the middle ground of this view.

Potential Visual Impact:

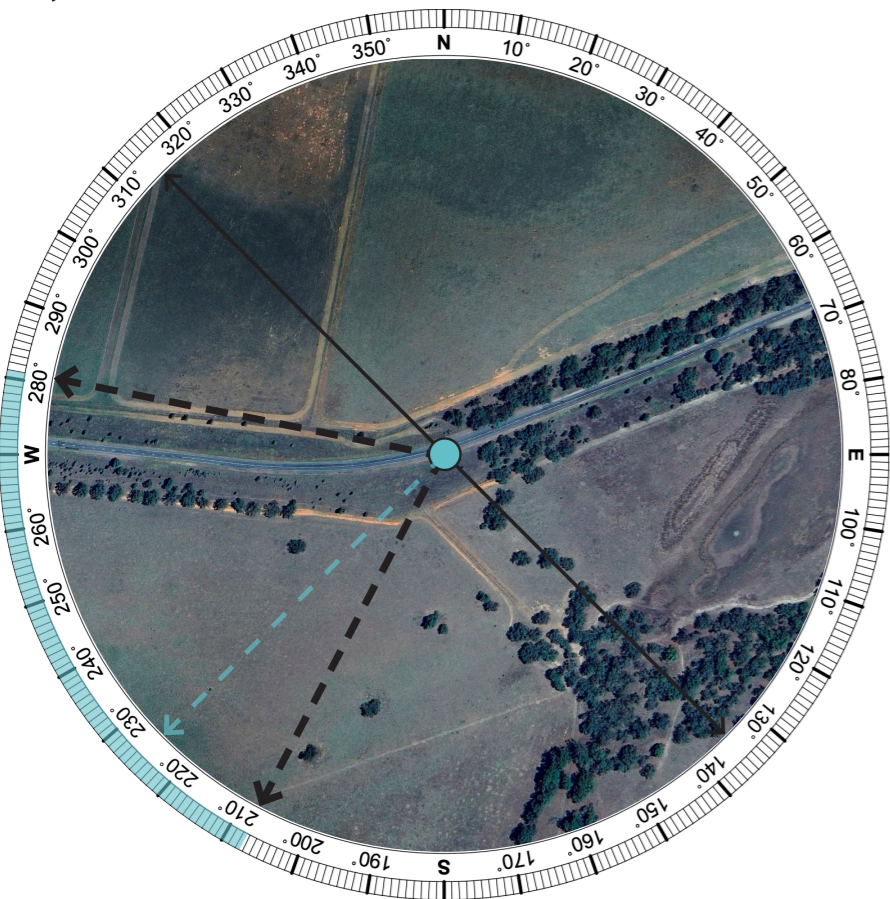
The viewpoint is 20.20 km from the Project. Views will be filtered by intervening vegetation.

VP09 Sturt Highway



LEGEND

- Viewing direction and centre of panorama
- Extent of panorama
- Direction of potentially visible turbines
- Extent of visible turbines (Based on topography alone)



VIEWPOINT VP09

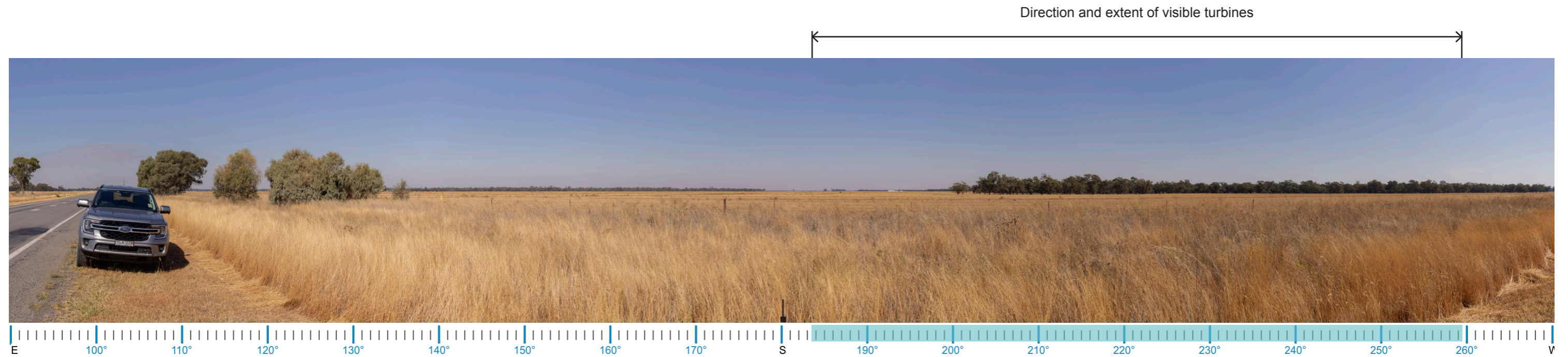
Viewpoint Summary:	
Location:	Elevation:
Devlins Bridge	143 m
Coordinates:	Viewing Direction:
34°42'12.3"S 146°21'27.38"E	West
Distance to nearest WTG:	Visibility Distance Zone:
4.74 km (WTG 3)	Far Middleground (MB)
Land Use:	Viewer Sensitivity Level:
Major Road	Level 3 Sensitivity (Low)
LCU:	Scenic Quality Rating:
LCU03 Open Riverina Woodland Wetland	Low

Multiple Wind Turbine Tool:
2

Existing Landscape Character Description:	Potential Visual Impact:
This viewpoint was taken on the Sturt Highway, 3.9 km west of the intersection with Yanco Weir Road.	Views of the Project will be filtered by intervening vegetation. Blade tips could be visible over middleground vegetation.
The surrounding land is open pastoral farmland generally used for cropping. The terrain is flat with filtered views towards the Project.	
Vegetation consists mainly of grasses, with scattered Yellow Box and River Red Gum trees. Distant vegetation is associated with the forested wetland and sedgeland growing around Dry Lake.	

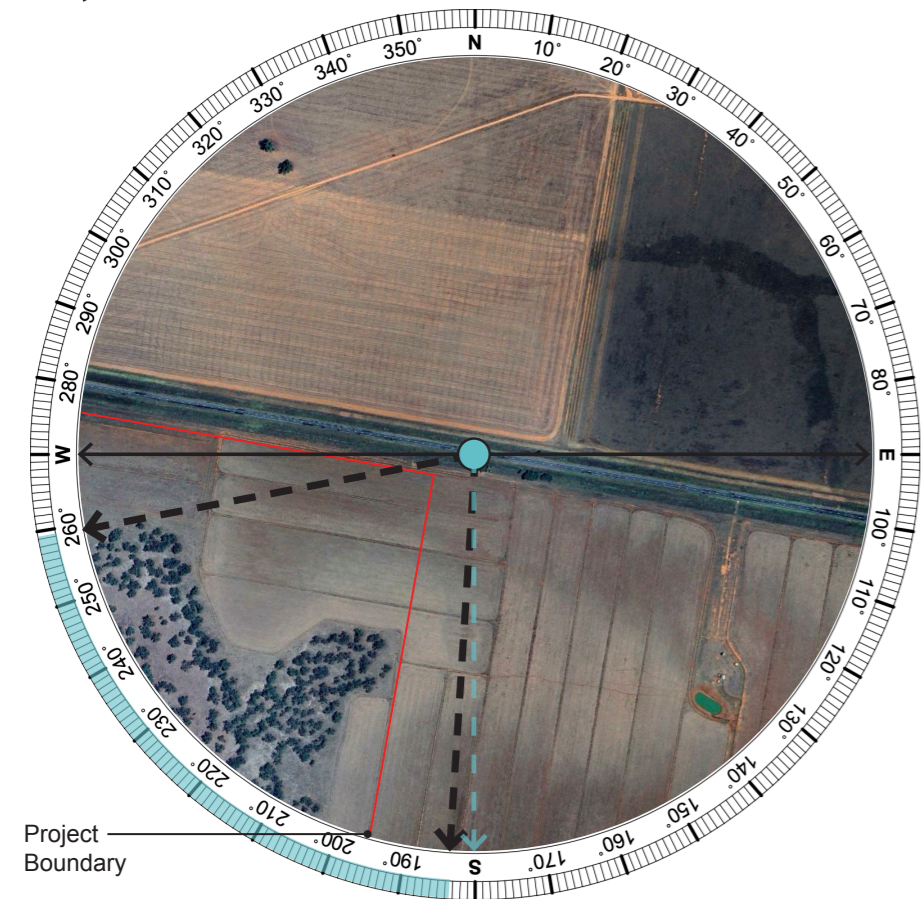
Aerial Image Source: Google Earth, 2024

VP10 Sturt Highway



LEGEND

- Viewing direction and centre of panorama
- Extent of panorama
- Direction of potentially visible turbines
- Extent of visible turbines (Based on topography alone)



VIEWPOINT VP10

Viewpoint Summary:

Location:	Elevation:
Sturt Highway	138 m
Coordinates:	Viewing Direction:
34°41'10.86"S 146°18'34.28"E	South
Distance to nearest WTG:	Visibility Distance Zone:
1.09 km (WTG 3)	Far Foreground (FF)
Land Use:	Viewer Sensitivity Level:
Major Road	Level 3 Sensitivity (Low)
LCU:	Scenic Quality Rating:
LCU02 Flat Pastures & Grassy Plains	Low

Multiple Wind Turbine Tool:

2

Aerial Image Source: Google Earth, 2024

Existing Landscape Character Description:

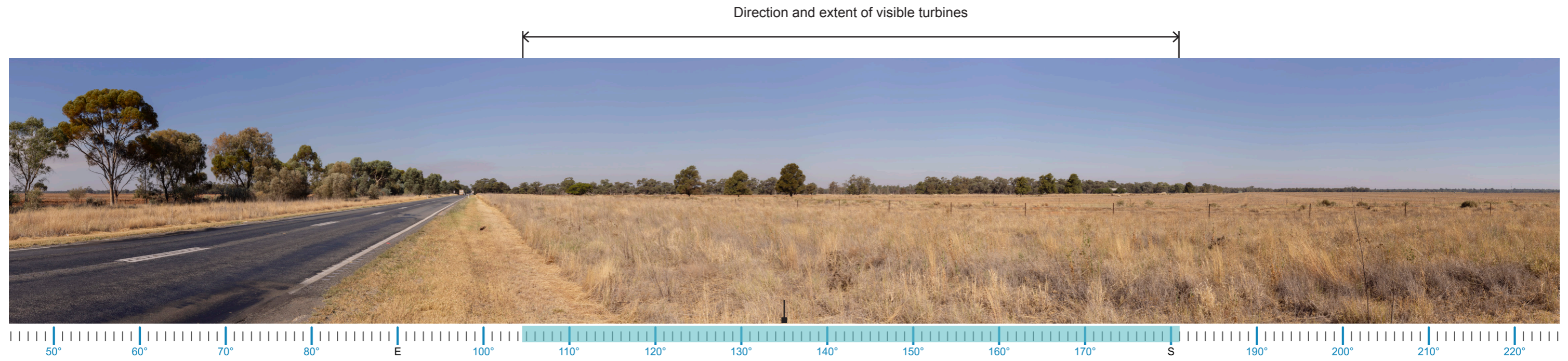
This viewpoint was taken on the Sturt Highway, 22 km from Narrandera. It is the closest viewpoint in proximity to the Project.

The surrounding land is open pastoral farmland generally used for cropping and irrigated cropping. The terrain is flat with open views over grasses, with views of distant Black Box, Weeping Myall and Yellow Box woodlands along the middle ground and horizon.

Potential Visual Impact:

Due to the flat terrain and the viewpoint's close proximity to the Project, open views of the project will be available, with proposed turbines visible over the middle ground vegetation.

VP11 Sturt Highway



LEGEND

- Viewing direction and centre of panorama
- Extent of panorama
- Direction of potentially visible turbines
- Extent of visible turbines (Based on topography alone)

VIEWPOINT VP11

Viewpoint Summary:

Location: Sturt Highway	Elevation: 133 m
Coordinates: 34°40'36.93"S 146°13'57.28"E	Viewing Direction: Southeast
Distance to nearest WTG: 2.90 km to WTG 4	Visibility Distance Zone: Near Middleground (NM)
Land Use: Major Road	Viewer Sensitivity Level: Level 3 Sensitivity (Low)
LCU: LCU02 Flat Pastures & Grassy Plains	Scenic Quality Rating: Low

Multiple Wind Turbine Tool:

2

Aerial Image Source: Esri, 2024

Existing Landscape Character Description:

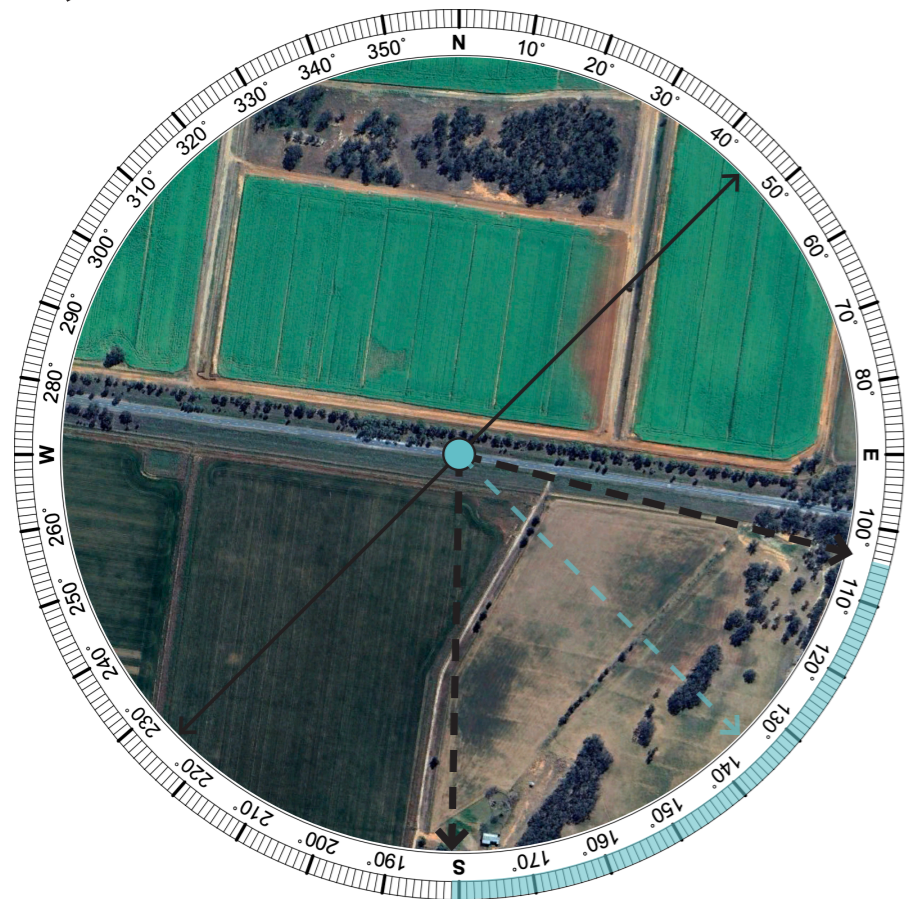
This viewpoint is taken from the Sturt Highway 30 km west of the township of Narrandera.

The surrounding land is open pastoral farmland generally used for cropping, irrigated cropping and modified pasture grazing. The terrain is flat with filtered views.

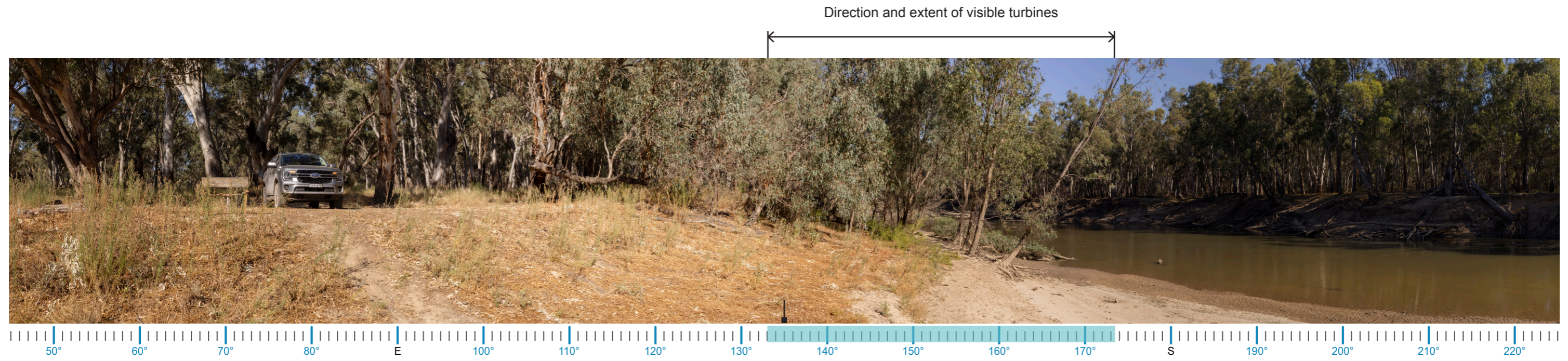
Woodlands of White Cypress Pine and Black Box, and grasslands of Forb-rich Speargrass, Windmill Grass and White Top Wallaby Grass are present along the middleground and horizon.

Potential Visual Impact:

Due to the flat terrain and the viewpoint's close proximity to the Project, it is likely proposed turbines will be visible over the middleground vegetation.

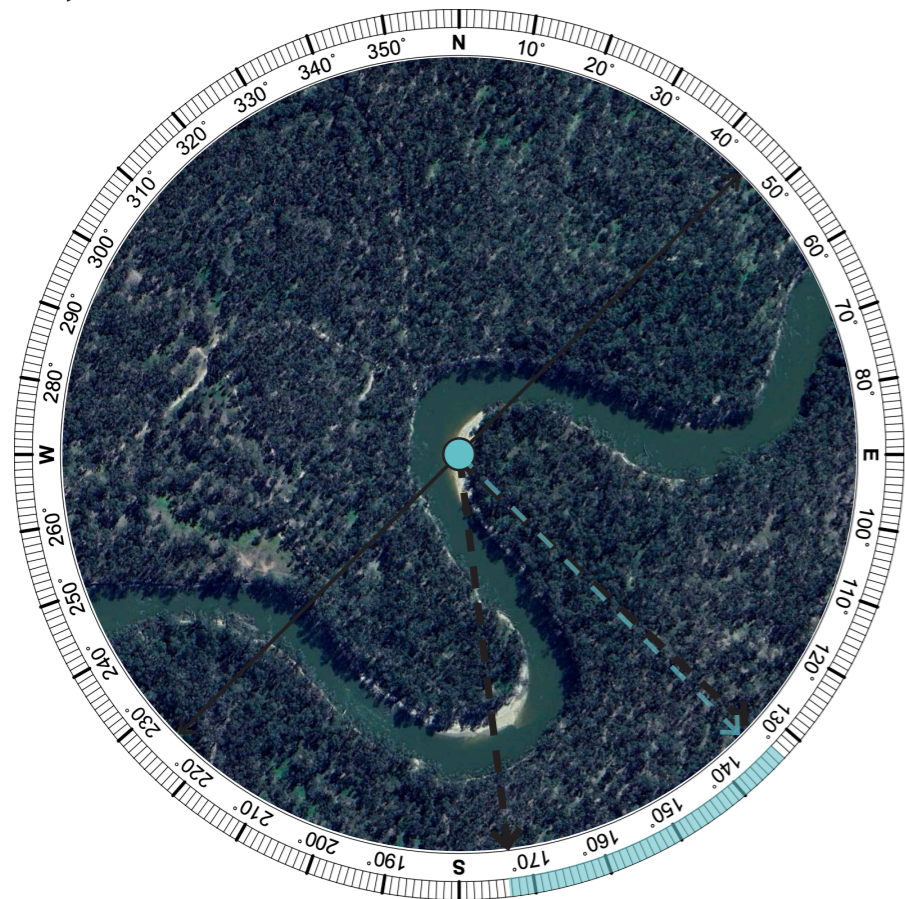


VP12 Jurambula Beach Campground



LEGEND

- Viewing direction and centre of panorama
- Extent of panorama
- Direction of potentially visible turbines
- Extent of visible turbines (Based on topography alone)



VIEWPOINT VP12

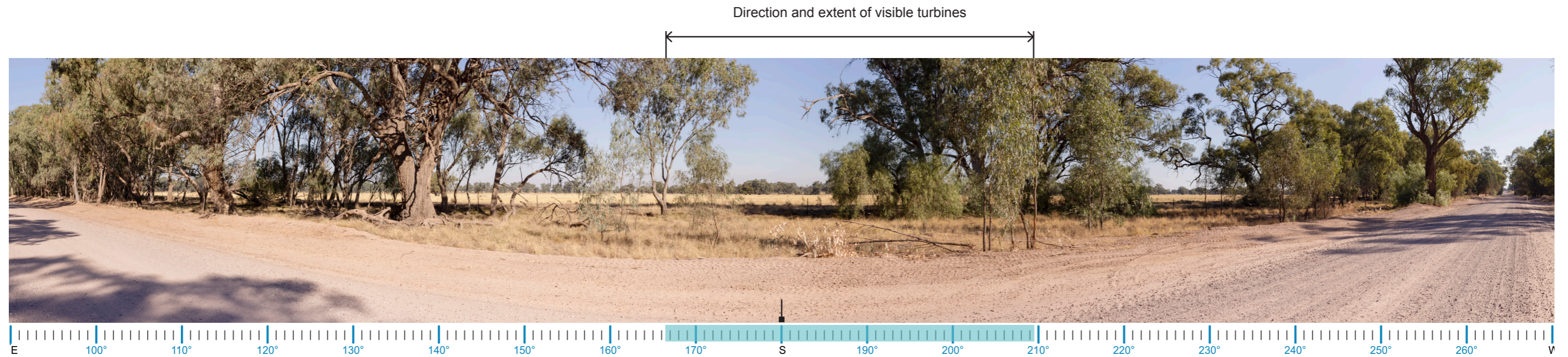
Viewpoint Summary:	
Location:	Elevation:
Jurambula Beach Campground	140 m
Coordinates:	Viewing Direction:
34°37'13.97"S 146°12'37.32"E	Southeast
Distance to nearest WTG:	Visibility Distance Zone:
9.24 km to WTG 4	Near Background (NB)
Land Use:	Viewer Sensitivity Level:
Nature Conservation	Level 2 Sensitivity (Moderate)
LCU:	Scenic Quality Rating:
LCU01 Riverina Red Gum Forest	Moderate

Multiple Wind Turbine Tool:
Nil (In excess of 8 km)

Aerial Image Source: Google Earth, 2024

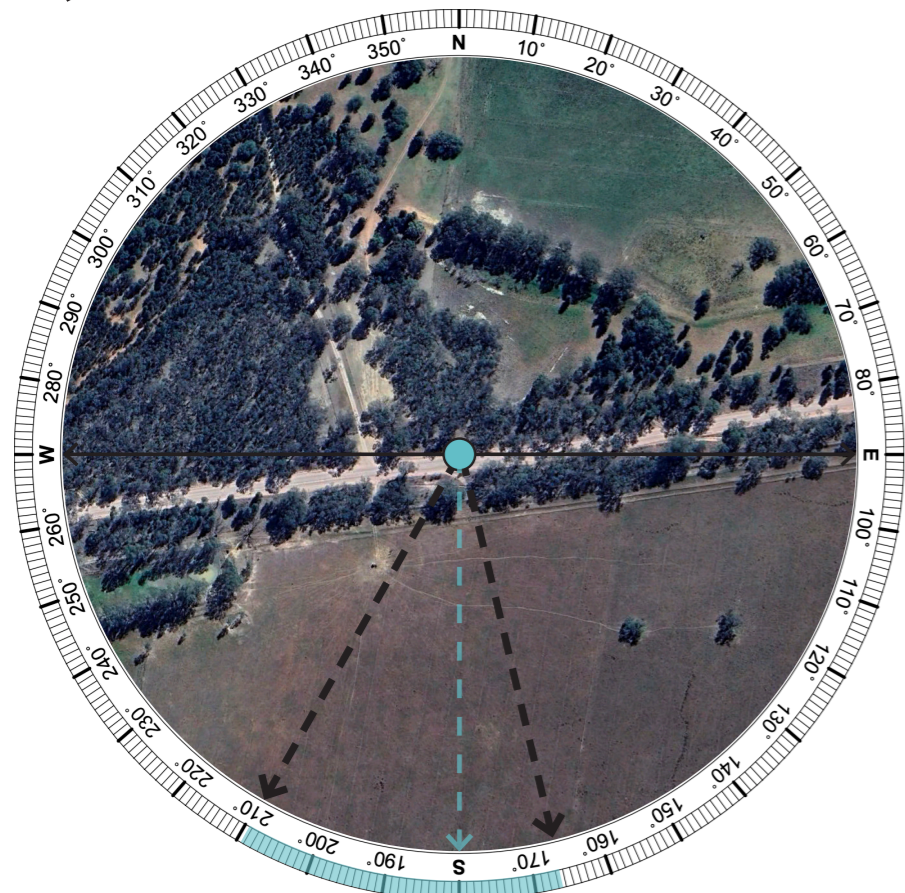
Existing Landscape Character Description:	Potential Visual Impact:
This viewpoint was taken at Jurambula Beach Campground (Maccas Beach), in the Murumbidgee Valley National Park, on the Murumbidgee River.	Due to dense vegetation in the foreground and middleground of this viewpoint, and the viewpoint's distance of 9.24 km from the Project it is likely the proposed turbines will not be visible.
The land is frequently flooded riparian forest consisting mainly of River Red Gum, grasses and sedges. It is used for nature conservation, and recreationally for hiking, camping and fishing.	
Views across the river are contained by dense vegetation.	

VP13 Euroley Road



LEGEND

- Viewing direction and centre of panorama
- Extent of panorama
- Direction of potentially visible turbines
- Extent of visible turbines (Based on topography alone)



VIEWPOINT VP13

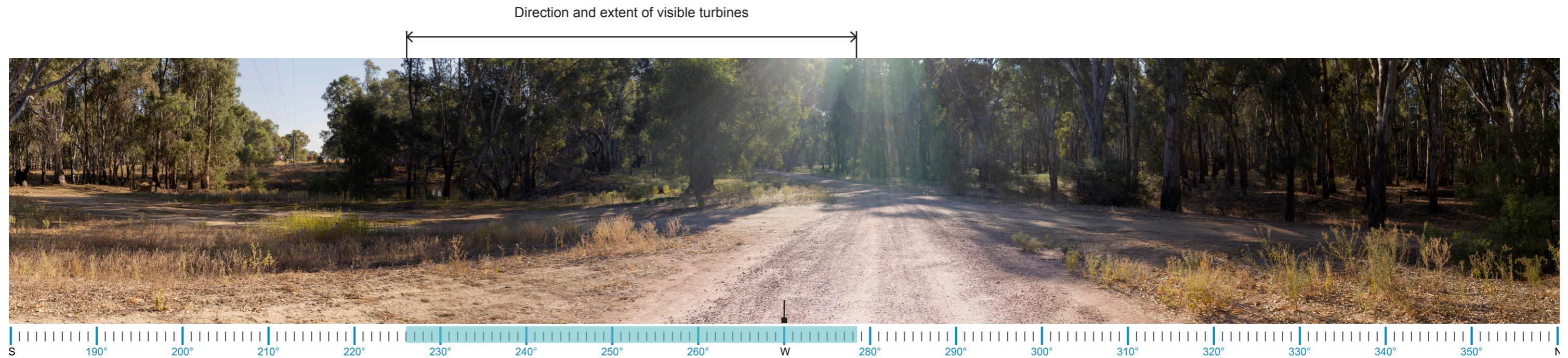
Viewpoint Summary:	
Location:	Elevation:
Euroley Road	140 m
Coordinates:	Viewing Direction:
34°38'28.54"S 146°17'28.43"E	South
Distance to nearest WTG:	Visibility Distance Zone:
5.57 km to WTG 1	Far Middleground (FM)
Land Use:	Viewer Sensitivity Level:
Low Use Road	Level 3 Sensitivity (Low)
LCU:	Scenic Quality Rating:
LCU05 Grassy Woodland	Moderate

Multiple Wind Turbine Tool:
1

Aerial Image Source: Esri, 2024

Existing Landscape Character Description:	Potential Visual Impact:
This viewpoint is located on Euroley Road 500m south of the Murumbidgee River.	Views of the Project will be filtered by intervening vegetation. Blade tips could be visible over middleground vegetation.
The viewpoint is situated on the edge of woodlands over looking open pastral farmland generally used for Grazing Native Vegetation and Irrigated Cropping.	
The terrain is flat with filtered views and the vegetation is predominately Black Box and grasses.	

VP14 Road to Yanco Weir



LEGEND

- Viewing direction and centre of panorama
- Extent of panorama
- Direction of potentially visible turbines
- Extent of visible turbines (Based on topography alone)

VIEWPOINT VP14

Viewpoint Summary:

Location:	Elevation:
Road to Yanco Weir	149 m
Coordinates:	Viewing Direction:
34°42'19.01"S 146°24'52.73"E	West
Distance to nearest WTG:	Visibility Distance Zone:
10.00 km (WTG 3)	Near Background (NB)
Land Use:	Viewer Sensitivity Level:
Low Use Road	Level 1 Sensitivity (High)
LCU:	Scenic Quality Rating:
LCU01 Riverina Red Gum Forest	Moderate

Multiple Wind Turbine Tool:

Nil (In excess of 8 km)

Aerial Image Source: Google Earth, 2024

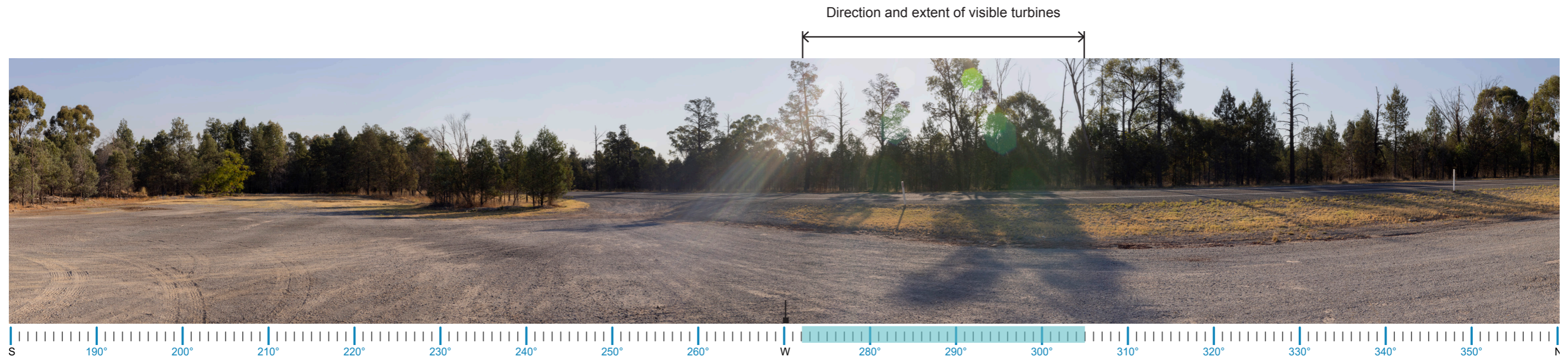
Existing Landscape Character Description:

This viewpoint is taken from a low use road 150m from the Murumbidgee River and heritage-listed Yanco Weir. The surrounding land is riparian forest and woodland consisting mainly of River Red Gum, Yellow Box, low shrubs and grasses. The terrain is flat with contained views, generally used for native vegetation grazing and recreational practices such as camping, fishing and swimming.

Potential Visual Impact:

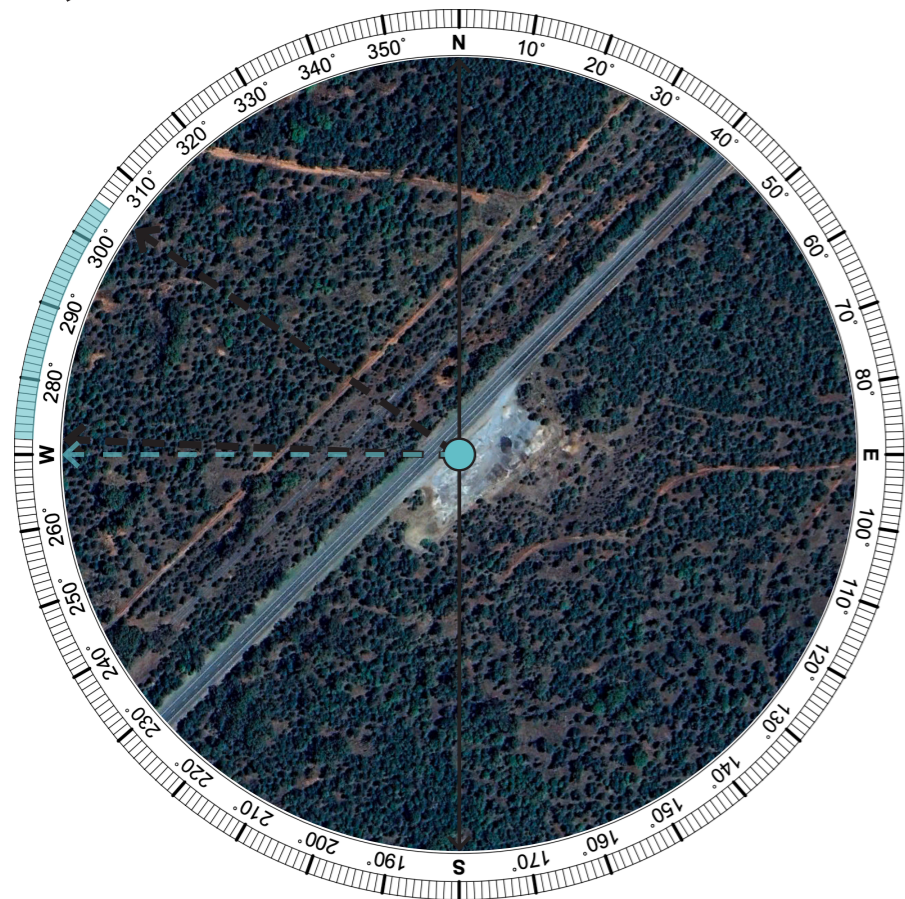
Potential views are unlikely due to intervening vegetation and the viewpoint's distance of 10 km from the Project.

VP15 Moon Siding Rest Area



LEGEND

- Viewing direction and centre of panorama
- Extent of panorama
- Direction of potentially visible turbines
- Extent of visible turbines (Based on topography alone)



VIEWPOINT VP15

Viewpoint Summary:

Location:	Elevation:
Moon Siding Rest Area, Newell Highway	171 m
Coordinates:	Viewing Direction:
34°48'13.27"S 146°29'31.71"E	West
Distance to nearest WTG:	Visibility Distance Zone:
17.90 km to WTG 88	Mid Background (MB)
Land Use:	Viewer Sensitivity Level:
Highway Rest Area	Level 1 Sensitivity (Low)
LCU:	Scenic Quality Rating:
LCU04 Gillenbah State Forest	Low

Multiple Wind Turbine Tool:

Nil (In excess of 8 km)

Aerial Image Source: Esri, 2024

Existing Landscape Character Description:

This viewpoint was taken from Moon Siding Rest Area, 8 km southwest of the township of Narrandera, on the Newell Highway.

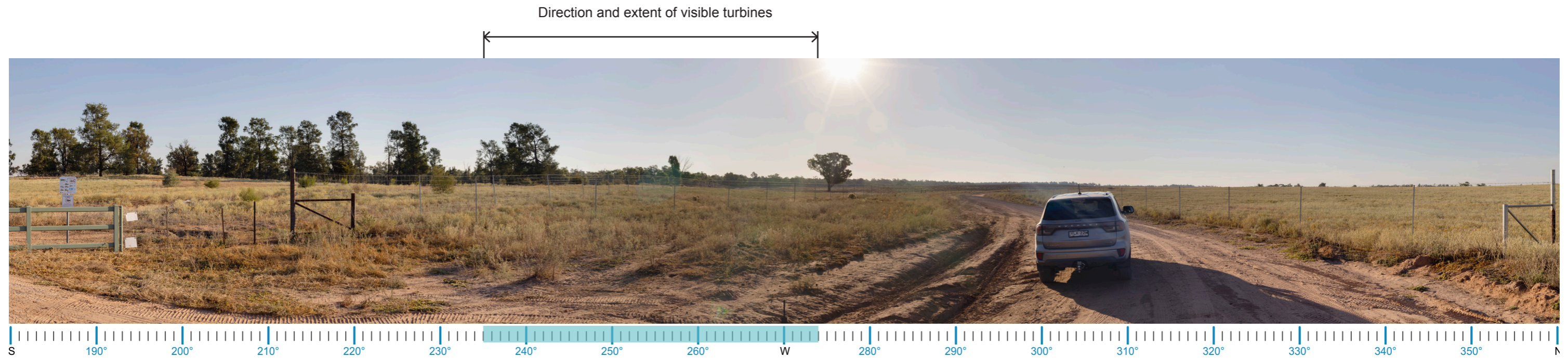
The terrain is flat with contained views of the surrounding Gillenbah State Forest, used for native timber production.

Vegetation is grassy woodland made up of White Cypress Pine, Yellow Box, Western Grey Box, and Poplar Box.

Potential Visual Impact:

Potential views are unlikely due to intervening vegetation and the viewpoint's distance of 17.9 km from the Project.

VP16 Intersection of Graham Grave Road, Pine Road, Forest Drive and Rook Trail



LEGEND

- Viewing direction and centre of panorama
- Extent of panorama
- Direction of potentially visible turbines
- Extent of visible turbines (Based on topography alone)

VIEWPOINT VP16

Viewpoint Summary:

Location:	Elevation:
Intersection of Graham Grave Road, Pine Road, Forest Drive and Rook Trail	146 m
Coordinates:	Viewing Direction:
34°42'7.92"S 146°27'52.31"E	West
Distance to nearest WTG:	Visibility Distance Zone:
14.57 km (WTG 3)	Mid Background (MB)
Land Use:	Viewer Sensitivity Level:
Low Use Road	Level 1 Sensitivity (Low)
LCU:	Scenic Quality Rating:
LCU02 Open Pastures & Grassy Plains	Low

Multiple Wind Turbine Tool:

Nil (In excess of 8 km)

Aerial Image Source: Google Earth, 2024

Existing Landscape Character Description:

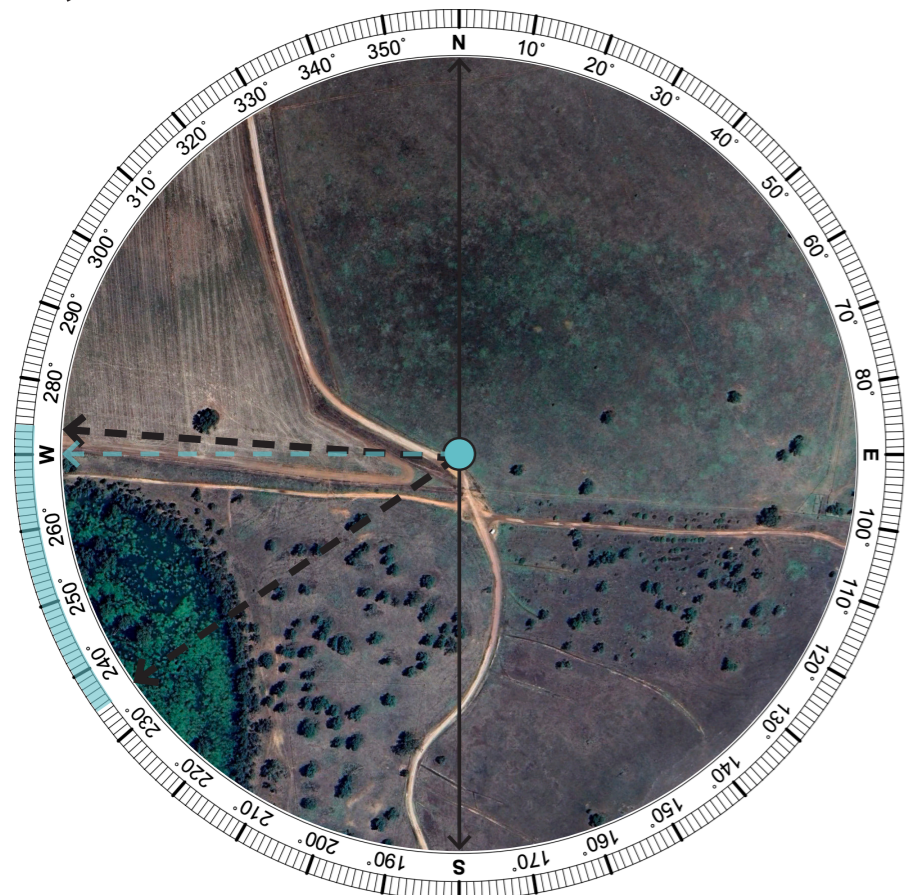
This viewpoint was taken on the intersection of Graham Grave Road, Pine Road, Forest Drive and Rook Trail, 2 km north of the Murrumbidgee River.

The surrounding land is open pastoral farmland generally used for nature conservation, modified pasture grazing, and irrigated cropping. The terrain is flat with filtered views.

Vegetation is made up of mainly grasses with few scattered trees. Distant vegetation on the horizon is woodland and riparian forest associated with Murrumbidgee Valley National Park.

Potential Visual Impact:

Despite the flat terrain, views of the Project are unlikely due to intervening vegetation and the viewpoint's distance of 14.57 km from the Project.



VP17 Forest Drive

Direction and extent of visible turbines



LEGEND

- Viewing direction and centre of panorama
- Extent of panorama
- Direction of potentially visible turbines
- Extent of visible turbines (Based on topography alone)

VIEWPOINT VP17

Viewpoint Summary:

Location:	Elevation:
Forest Drive	146 m
Coordinates:	Viewing Direction:
34°40'25.89"S 146°23'53.40"E	Southwest
Distance to nearest WTG:	Visibility Distance Zone:
8.80 km (WTG 3)	Near Background (NB)
Land Use:	Viewer Sensitivity Level:
Nature Conservation	Level 2 Sensitivity (Moderate)
LCU:	Scenic Quality Rating:
LCU01 Riverina Red Gum	Moderate

Multiple Wind Turbine Tool:

Nil (In excess of 8 km)

Aerial Image Source: Esri, 2024

Existing Landscape Character Description:

This viewpoint was taken along Forest Drive, on the northern bank of the Murrumbidgee River, 3.7 km northwest of Yanco Weir in the Murrumbidgee Valley National Park.

The land is frequently flooded riparian forest consisting mainly of River Red Gum, grasses and sedges. It is used for nature conservation, and recreationally for hiking, camping and fishing.

Views across the river are contained by dense vegetation.

Potential Visual Impact:

Views of the Project are unlikely due to intervening vegetation and the viewpoint's distance of 8.80 km from the Project.

