

PLANNING ASSESSMENT REPORT

Development Application for

The installation of a Telecommunications Facility at
29 Corackerup Road, Needilup WA 6336
(Lot 638 on Deposited Plan 224112)

Document prepared by Visionstream Australia Pty Ltd
On behalf of Telstra Corporation Ltd

Project Name: Gnowangerup-Jerramungup
Project No.: WA10366.01

October 2019

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This Development Application is prepared by:

Visionstream Australia Pty Ltd

ABN 85 093 384 680

Postal Address:

35-37 Kewdale Road

Welshpool WA 6106

T (07) 3169 8325

W www.visionstream.com.au

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1.0 Executive Summary

1.1 Site and Proposal Details

Address of Site	29 Corackerup Road, Needilup WA 6336
Legal Property Description	Lot 638 on Deposited Plan 224112
Coordinates	Latitude: -33.95381° Longitude: 118.66483°
Site area	400.94 ha
Local Authority	Shire of Jerramungup
Planning Instrument	Shire of Jerramungup Local Planning Scheme No.2
Zone and Overlay	Rural
Use	Telecommunications Facility
Owner	John Richard Burt Harding & Sally Anne Harding

1.2 Applicant Details

Applicant	Telstra Corporation Limited ABN 051 775 556	
Contact Person	Daniel Park	0437 318 759 Daniel.park@visionstream.com.au
Our Reference	WA10366.01 Gnowangerup-Jerramungup	

2.0 Introduction

This report has been prepared by Visionstream on behalf of Telstra as supporting information to a Planning Permit Application for the installation of a new 60m high lattice tower and associated equipment shelter on 29 Corackerup Road, Needilup WA 6336. The property is more formally known as Lot 638 on Deposited Plan 224112.

Refer to **Appendix 1** for Title details

As part of Telstra's commitment to regional Australia, Telstra is excited to bring high-speed mobile internet to even more communities around the country as part of the Federal Government's Mobile Black Spot program.

The Black Spot Program is one of the largest ever expansions of mobile coverage in regional and remote Australia. Areas which will receive new mobile network coverage have been announced in multiple rounds since 2015, starting with Round 1, and most recently with Round 4 announced in March 2019. This program will deliver mobile coverage to a large number of regional and remote communities who, for the first time, will be able to access fast mobile voice and data services. The improved coverage is increasing access to new technologies for key regional sectors like agriculture, transport, mining and tourism – technologies which rely on a fast, reliable and affordable mobile network.

After the fourth round of the Mobile Black Spot Program is completed, Telstra will have invested over \$280 million and built over 780 new sites to improve coverage for regional areas around the country - a significant proportion of the total 1047 sites co-funded by Government under the Program since 2015.

The Mobile Black Spot Program Round 4 has identified a need to provide mobile service to Needilup and surrounding areas.

All mobile phone network operators are bound by the operational provisions of the federal Telecommunications Act 1997 ("The Act") and the Telecommunications Code of Practice 2018. The Telecommunications (Low-Impact Facilities) Determination 2018 allows for the upgrade of existing mobile phone network infrastructure without the consent of a relevant statutory authority.

In this instance the proposed development does not comply as a "Low Impact facility" under the definitions contained in the Commonwealth legislation. Therefore, it is subject to the provisions of the *WA Planning and Development Act 2005* and the provisions of the *Shire of Jerramungup Local Planning Scheme No.2*

3.0 Proposed Scope of Works

The proposal is inclusive of the following scope of works:

- Installation of one (1) 60.0m high lattice (overall height 64.41 inc antennae);
- Installation of one (1) triangular headframe;
- Installation of four (4) new omni antennas (no greater than 2.8m in length);
- Installation of four (4) remote radio units (RRUs);
- Installation of a Telstra equipment shelter (2.38 (w) x 2.99 (l) x 2.9m (h));
- Installation of associated ancillary cabling and equipment;
- Underground connection of power from point of supply on existing site;

Refer to Plans attached in **Appendix B** for further details.

4.0 Purpose of the Proposal

The purpose of the application is to receive development approval for the installation of a replacement structure and telecommunications facility on 29 Corackerup Road, Needilup WA 6336 on behalf of Telstra.

Mobile Black Spot Program:

This program will deliver mobile coverage to a large number of regional and remote communities who, for the first time, will be able to access fast mobile voice and data services. The improved coverage is increasing access to new technologies for key regional sectors like agriculture, transport, mining and tourism – technologies which rely on a fast, reliable and affordable mobile network.

The Mobile Black Spot Program builds upon significant investments already undertaken by Telstra to expand and upgrade their mobile network.

Telstra's partnership with the Federal Government will involve Telstra investing up to \$280 million of their own funds to build over 780 new sites under all rounds of the Mobile Black Spot Program. This is over and above the billions of dollars Telstra have spent on their mobile network in recent years.

Telstra has worked with State and Local Governments, to attract tens of millions of dollars in additional targeted funding. This means Telstra will be able to deliver a combined investment of over \$540 million for regional telecommunications under the program.

Telstra is committed to providing improved mobile coverage to regional and remote Australia. Over the five years to June 2019 their total mobile network investment has been around \$8 billion, of which almost \$3 billion has been invested in regional areas.

In addition to the Mobile Black Spot Program, Telstra has also delivered over 200 small cells in selected areas where appropriate infrastructure is available, which will bring high speed 4G data services to small country towns.

Telstra continues to invest significantly in maintaining and expanding our mobile network across Australia.

By way of a background:

Mobile phones and mobile broadband devices continue to play an important role in the lives of Australians. This includes providing the fundamental ability to be in contact with family and friends, operating businesses more efficiently and effectively as well as dialling triple 0 during a natural disaster or other emergency.

Because of the ever growing demand for more data and better reception, mobile phone carriers such as Telstra continually have to upgrade and expand mobile phone networks to eliminate coverage blackspots and to keep up with the demands and expectations placed upon them by the community.

As the incumbent telco Telstra knows how important access to modern telecommunications infrastructure is and in order to remedy the lack of mobile phone coverage in the aforementioned areas Telstra wishes to establish a new mobile telecommunications base station facility on 29 Corackerup Road, Needilup WA 6336.

5.0 Mobile Telecommunications Networks

A mobile telecommunications network is made up of multiple base stations covering a geographic area. They work by sending and receiving radio signals from their antennas to mobile phones and other mobile devices such as tablet computers, wireless dongles etc. Base stations are designed to provide service to the area immediately surrounding the base station which can be up to several kilometers in

distance. Depending on the technical objectives of a base station, the physical characteristics of each telecommunications facility; such as its height, number and size of antennas, equipment, cabling etc. will vary.

As a general rule, the higher the antennas of a base station the greater the range of coverage and the ability to relieve capacity issues. If this height is compromised then additional facilities, and thus more infrastructure, will be required for any given locality. The further a facility is located away from its technically optimum position the greater the compromise of the service. This may result in coverage gaps and require additional or taller base stations to provide adequate service.

Each base station transmits and receives signals to and from mobile devices in the area. As the mobile device users move around their devices will communicate with the nearest base station facility to them at all times. If the users cannot pick up a signal, or the nearest base station is congested because it is already handling the maximum number of phone calls or maximum level of data usage, then the users may not be able to place a call, they may experience call “drop outs” or they might experience a slow data rate while attempting to download content.

There are three main factors that can cause the above:

- You may be too far away from a facility to receive a signal, or there may be objects blocking the signal from the nearest facility; such as hills and large trees. To ensure optimum service the radio signals transmitted between the facility’s antennas and mobile devices need to be unimpeded, maintaining a “line-of-sight” between them.
- The facility may be transmitting as much data and calls as it can handle. This can result in call drop-outs and slower data rates when too many users are connected to a facility at once.
- The depth of coverage, which affects the ability to make calls inside buildings, may be insufficient in some local areas.

The current proposal will form part of Telstra’s 4GX network solution to the Needilup locality and will deliver essential mobile services (voice calling, SMS), as well as live video calling, video-based content including; news, finance and sports highlights, and high-speed wireless internet – wireless broadband. With a coverage footprint of more than 2.1 million square kilometers and covering more than 99% of the Australian population. Telstra’s 4GX is Australia’s largest and fastest national mobile broadband network and as such requires more network facilities, located closer together to ensure a high-quality signal strength to achieve reliable service and the fastest possible data transfer rates.

6.0 Site Selection Process

Telstra commences the site selection process with a search of potential sites that meet the network’s technical requirements, with a view to also having the least possible impact on the amenity of the surrounding locality. Telstra applies and evaluates a range of criteria as part of this site selection process.

Telstra assesses the technical viability of potential sites through the use of computer modelling tools that produce predictions of the coverage that may be expected from these sites as well as from the experience and knowledge of the radio engineers.

There are also a number of other important criteria that Telstra uses to assess options and select sites that may be suitable for a proposed new facility. These take into account factors other than the technical performance of the site, and include:

- The potential to co-locate on an existing telecommunications facility.
- The potential to locate on an existing building or structure.
- Visual impact and the potential to obtain relevant town planning approvals.
- Proximity to community sensitive locations and areas of environmental heritage.

- The potential to obtain tenure at the site.
- The cost of developing the site and the provision of utilities (power, access to the facility and transmission links).

In making the proposal for the subject site Telstra has carefully weighed all of the aforementioned criteria. This analysis is detailed in the next section.

7.0 Candidate Sites

Telstra carefully examined a range of possible deployment options in the area before concluding that a new telecommunications facility at the subject site would be the most appropriate solution to provide necessary mobile phone coverage to the Needilup locality.

Accordingly, this section of the report will demonstrate the following:

- Colocation opportunities and existing telecommunications infrastructure within proximity to the proposed installation; and
- An analysis of the locations considered when determining an appropriate location for a new telecommunications installation within the required coverage area.

7.1 Colocation opportunities

The Communications Alliance Ltd. (formerly Australian Communications Industry Forum Ltd. - ACIF) *Industry Code C564:2018 – Mobile Phone Base Station Deployment* promotes the use of existing sites in order to mitigate the effects of the facilities on the landscape. It should also be noted that as a first preference Telstra attempts to utilise, where possible, any existing infrastructure or co-location opportunities.

A map has been prepared that shows the location of existing and proposed telecommunications facilities surrounding the Needilup locality (**Figure 1**).

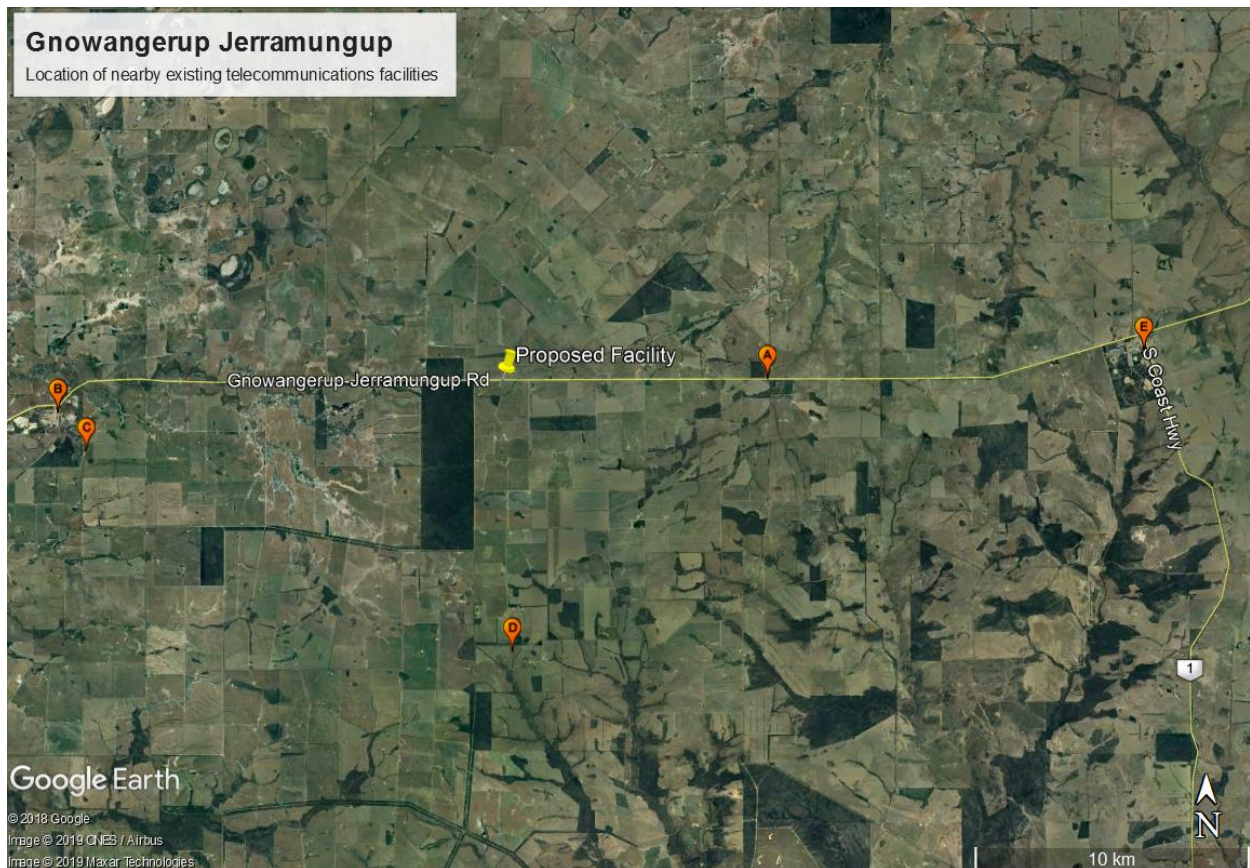


Figure 1: Location of nearby existing telecommunications facilities – Source: *Google Earth*

The map shows that facilities in the area are generally equally spaced throughout the area, with the exception of two facilities near Ongerup. The characteristics of each mobile phone base station identified in **Figure 1** are provided under **Table 1**.

Table 1: Summary of co-location opportunities within Newlands area

Candidate	Site No.	Site Address	Structure type	Is site constructed?	Suitable for co-location?	Comments
A	6336008	Lot 5 Plan 206169 Gnowangerup-Jerramungup Road, Needilup	30m Telstra concrete monopole	Yes	No	Site is approximately 10km from proposed facility and already includes 4 mobile antennae.
B	6390003	12 Gold Mine Road, Boddington WA 6390	45m Telstra lattice tower	Yes	No	Site is approximately 16km from proposed facility and already includes 4

						mobile antennae.
C	63360062	Gold Course Road, Ongerup WA 6336	80m guyed mast	Unknown	No	Site is approximately 15km from proposed facility and if constructed available details show it likely already include mobile antennae.
D	6336001	Lot 1993 Plan 174706 Cardininup Road, Needilup WA 6336	Telstra exchange and 30m tower	Yes	No	Site is approximately 9.5km from the proposed facility
E	6337003	18 Vasey Street, Jerramungup WA 6337	55m Telstra lattice tower	Yes	No	Over 23km from proposed facility and already includes mobile antennae

As evidenced in **Table 1**, existing facilities in the area are tall towers that would be suitable for additional equipment. However, the distances from each of these existing facilities to the subject site makes them unsuitable for co-locating additional equipment to address the identified Mobile Black Spot. This is evidenced by the fact that despite some of these facilities having been operational for several years, the identified Mobile Black Spot continues to persist.

7.2 Candidates considered

The site selected is deemed to be the most optimal location to achieve the required coverage for the identified Black Spot and requires a 60.0m high lattice structure and accompanying equipment shelter on 29 Corackerup Road, Needilup WA 6336. This is further outlined in **Table 2** along with the balance of alternative candidates considered as part of the site selection process. **Figure 2** provides a map of the non-colocation candidates considered for the proposed facility.

Table 2: Summary of non-colocation candidates considered

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Candidate A	Lot 1445 Diagonal Road, Needilup, WA 6336 Lat: -33.952080° Long: 118.652625°	Greenfield 60m lattice tower	Rural	In-use agricultural land for which power would need to be extended from the Gnowangerup Jerramungup Road. The landowner did not want a facility at this location due to impacts on agricultural use. An alternative (Candidate D) was also assessed.
Candidate B	29 Corackerup Road, Needilup, WA 6336 Lat: -33.95381°	Greenfield 60m lattice tower	Rural	In-use agricultural land that includes a dwelling close to the western boundary. This is the Nominated Candidate and the subject of this development application.
Candidate C	Lot 1455 Gnowangerup-Jerramungup Road, Needilup, WA 6336 Lat: -33.953133° Long: 118.685521°	Greenfield 60m lattice tower	Rural	In-use agricultural land. Access to the site appears to be 2km east of the identified location. Any new access would require clearing within the road reserve or lot boundary of what appears to be a dedicated environmental corridor. Further, power from Gnowangerup Jerramungup would need to be underbored to prevent clearing of vegetation. Landowner was not responsive to attempts to contact
Candidate D	6729 Gnowangerup-Jerramungup Road, Needilup, WA 6336 Lat: -33.953251°	Greenfield 60m lattice tower	Rural	Property used for agriculture and the storage of plant and equipment associated with surrounding agricultural uses. The landowner did not prefer this location if other candidates were available in the area.
Candidate E	7414 Gnowangerup-Jerramungup Road, Needilup, WA 6336 Lat: -33.956665°	Greenfield 60m lattice tower	Rural	In-use agricultural land that includes a dwelling. The availability and type of power at this location is unclear. Landowner was not responsive to attempts to contact regarding proposal.



Figure 2: Location of Proposed Candidates (Source: Google Earth)

7.3 Nominated Candidate

A preferred nominated candidate was selected for the proposed facility based on the radiofrequency objectives, planning and environmental issues, potential community sensitive uses and engineering criteria as noted above. In this case, **Candidate B** (a new 60m lattice type tower) on 29 Corackerup Road, Needilup WA 6336 was considered the best option. This was based on the following:

- the site is appropriately located and sited to minimise visual and environmental impacts on the immediate and surrounding areas;
- the site is well setback from sensitive uses;
- the site does not require any clearing of trees or vegetation;
- the site will not adversely impact on agricultural land uses on the site;
- the site will not interfere with other land uses in the area;
- the site will achieve the required coverage objectives for the area;
- the site will meet design and construction considerations;
- the proposal operates within the regulatory framework of Commonwealth, State and Local Government; and
- there is a willing land owner.

As stated above, the site selection process carefully considered environmental and visual constraints, existing and future land use characteristics, the orderly planning of the area and the design of the facility. On balance, it is considered that the location and height of the facility ensure optimal service provision to the area whilst minimising any perceived impacts. The proposed Telstra site has been sited and designed to minimise any adverse impact on the amenity of the surrounding locality. The site is located on land that does not currently have an agricultural use and is away from sensitive sites such as Aboriginal heritage sites, schools and child care centres.

As a result of the aforementioned points it is considered that the siting and design effectively responds to the landscape setting in the area.

8. Subject site and surrounds

8.1 Site details

Table 3: Site details

Site Details	
Site address	29 Corackerup Road, Needilup WA 6336
Real property description	Lot 638 on Deposited Plan 224112
Coordinates	Latitude: -33.95381°Longitude: 118.66483°
Site area	400.94 ha
Registered owner	John Richard Burt Harding & Sally Anne Harding A copy of the Certificate of Title has been attached for information purposes (Appendix 1 – Certificate of Title).
Existing land use	The site is currently used for agriculture, noting the specific area where the proposed is not used for agricultural purposes.
Vegetation	The area where the tower is proposed is completely cleared, with vegetation limited to a thin strip bordering Gnowangerup Jerramungup Road.
Access	The site has an existing access from Gnowangerup Jerramungup Road located approximately 70m from the area where the tower is proposed.
Topography	The proposal area is flat, with no relevant changes in topography.
Services	The site is serviced by power and will not require any connected water or sewerage.



Figure 3: Proposed Telstra Site – 29 Corackerup Road, Needilup WA 6336 (Source: Google Earth)

The subject site is considered appropriately setback from identified sensitive sites such as schools, childcare centers and identified Aboriginal heritage areas, none of which are identified within the surrounding area.



Figure 1: Ground view of proposed Telstra site (Source: Visionstream)

In addition, the proposed base station will be positively impacted by mature vegetation on the Gnowangerup Jerramungup Road to the north. This vegetation which will provide visual shielding which in turn will lessen potential impacts upon the visual amenity of the area and help to keep the facility hidden away from public view.

8.2 Surrounding uses, area and views

As a large rural property of over 40 hectares, the subject site has expansive borders. The land-uses adjoining these borders are detailed under Table 3.

Table 3: Adjoining land uses

North	The northern edge of the property border Gnowangerup Jerramungup Road, the main road through the area. The border contains an approximatel 12m wide strip of mature vegetation. Beyond Gnowangerup Jerramungup Road are additional agricultural land uses.
East	The eastern edge of the property borders an access track the separates the subject site from another agricultural property.
South	The southern edge of the property borders a further agricultural property.
West	The western side of the property borders an unnamed land parcel zoned Conservation under the <i>Shire of Gnowangerup Local Planning Scheme No.2</i> .

The proposed facility is located within the rural area of Needilup, located between the townships of Jerramungup and Ongerup, which are 22km and 17km respectively from the subject site. The surrounding properties in the area are predominantly large agricultural properties, with the closest residents located approximately 3km to the north-west and 3.6km to the east.

The area surrounding the subject site is generally cleared, with the exception of some trees to the west and a vegetated strip to the north alongside Gnowangerup Jerramungup Road. Views from the proposed compounds area are shown in **Figure 4-8** below.



Figure 2: Proposal looking North



Figure 3: Proposal looking East



Figure 4: Proposal looking South



Figure 5: Proposal looking West

The proposal views towards the north are inhibited at a ground level by vegetation that is approximately 6-7m tall. Views to the east, south and west are inhibited only by mature trees approximately 10-15m in height and located 420m, 465m and 1km away respectively. There are no vantage points or key focal locations in the area such as mountains or hilltops.

9.0 Federal Regulatory Framework

The following information provides a summary of the Federal legislation relevant to telecommunications development proposals.

9.1 Telecommunications Act 1997

The *Telecommunications Act 1997* (the Act) came into operation on 1st July 1997. The Act provides a system for regulating telecommunications and the activities of carriers and service providers.

Under the Act, telecommunications carriers are no longer exempt from State and Territory planning laws except in three limited instances:

1. There are exemptions for the inspection of land, maintenance of facilities, installation of “low impact facilities”, subscriber connections and temporary defense facilities. These exemptions are detailed in the *Telecommunications (Low-impact Facilities) Determination 2018* and these exemptions are subject to the *Telecommunications Code of Practice 2018*.
2. Limited case-by-case appeals process exists to cover the installation of facilities in situations of national significance.
3. There are some specific powers and immunities from the previous *Telecommunications Act 1991*.

9.2 Telecommunications Code of Practice 2018

The Telecommunications Code of Practice 2018 (The Code) authorizes a carrier to enter land, inspect land and install and maintain a facility. The Code emphasizes “best practice” for the installation of facilities, compliance with industry standards and minimization of adverse impacts, particularly in terms of degradation of the environment and visual impact. The proposal is considered to comply with “best practice” given the proposal will:

- Provide improved telecommunications and wireless internet coverage in the Needilup area
- Be located on a non-residential site within the local area, which maximizes separation to residential and other sensitive uses; and
- Comprises the smallest configuration possible for the site to reduce the visual impact of the proposal, while providing appropriate coverage to the surrounding area.

9.3 Telecommunications (Low-impact Facilities) Determination 2018

The Telecommunications (Low-impact Facilities) Determination 2018 came into effect in March 2018.

The *Determination* contains a list of Telecommunications Facilities that the Commonwealth will continue to regulate. These are facilities that are essential to maintaining telecommunications networks and are unlikely to cause significant community disruption during their installation or operation. These facilities are therefore considered to be 'Low-impact' and do not require planning approval under State or Territory laws.

The proposed facility on 29 Corackerup Road, Needilup WA 6336 does not fall under the *Determination* and, therefore, requires approval under State Planning Legislation.

9.4 Communications Alliance Ltd. Code C564: 2018 Industry Code – Mobile Phone Base Station Deployment

The new Communications Alliance Ltd. C564:2018 *Industry Code – Mobile Phone Base Station Deployment* (referred to as the Deployment Code), replaced a 2011 version of the Deployment Code, which in turn replaced the Australian Communications Industry Forum (ACIF) '*Industry Code - Deployment of Mobile Phone Network Infrastructure*' (more commonly referred to as the ACIF Code) in July 2012.

Similar to the previous ACIF Code, the Deployment Code does not change the existing regulatory regime for telecommunications at Local, State or Federal levels. However, it supplements the existing obligations on Carriers, particularly in relation to community consultation and the consideration of exposure to radio signals, sometimes known as electromagnetic energy (EME or EMR).

The *Code* imposes mandatory levels of notification and community consultation for sites complying with the *Telecommunications (Low-impact Facilities) Determination 2018*. It identifies varying levels of notification and/or consultation depending on the type and location of the proposed infrastructure.

The subject proposal, not being designated a 'Low-impact' Facility, is not subject to the notification or consultation requirements associated with the Deployment Code. These processes are handled within the relevant State and Local consent procedures.

Nevertheless, the intent of the *Code* is to ensure Carriers follow a 'precautionary approach' to the siting of infrastructure away from sensitive land uses and this approach has been followed in the selection of this site, as demonstrated in the *Deployment Code* section 4.1 Precautionary Approach Checklist. This checklist will be uploaded to the RFNSA website, to a site-specific webpage that will shortly be created.

Included in the section 4.1 Checklist is a statement of how the public's exposure to EME from the site has been minimised. All emissions from the site will be well within the requirements of the relevant Australian Standard. Details of this standard are contained in the following section.

This site has been selected and designed to comply with the requirements of the *Deployment Code* in so much as the precautionary approach has been adhered to and, as a result, the best design solution has been achieved.

10.0 State Regulatory Framework

The following information provides a summary of the State legislation/guidelines relevant to telecommunications development proposals.

10.1 Planning and Development Act 2005

The Minister of Planning and Infrastructure has ultimate authority for town planning in Western Australia. Development within Western Australia is controlled by the *Planning and Development Act 2005* through the application of environmental planning instruments. Under the *Planning and Development Act 2005*, the Western Australian Planning Commission (WAPC) is the responsible authority for land use planning and development matters and this report seeks to demonstrate compliance with the WAPC and other items of relevant legislation which pertain to the subject application.

10.2 State Planning Policy No. 5.2 – Telecommunications Infrastructures (WAPC)

State Planning Policy 5.2: Telecommunications Infrastructure Policy aims to balance the need for effective telecommunications services and effective roll-out of networks, with the community interest in protecting the visual character of local areas. The SPP applies for above and below telecommunications infrastructure, other than those exempted under the Commonwealth *Telecommunications Act 1997*.

Under section 5.1.1 of the *State Planning Policy 5.2: Telecommunications Infrastructure Policy* the West Australian Planning Commission provides a set of measures in assessing the visual impact of a proposed telecommunications facility.

An assessment of these guidelines below has found that the proposed Telstra Mobile Phone Base Station is compliant with the intent and requirements of the *State Planning Policy 5.2: Telecommunication Infrastructure Policy*.

Measures	Comments	Complies
Be located where it will not be prominently visible from significant viewing locations such as scenic routes, lookouts and recreation sites;	The proposed 60m lattice structure has been sited to maintain the primary use of the land whilst considering the impact to the surrounding locality. The site carefully considered environmental and visual constraints, existing and future land use characteristics, the orderly planning of the area and the design of the facility. On balance, it is considered that the location and height of the facility ensure optimal service provision to the area whilst minimising any perceived impacts.	✓
Be located to avoid detracting from a significant view of a heritage item or place, a landmark, a streetscape, vista or a panorama, whether viewed from public or private land;	Telstra has selected a site and location that seeks to minimise any perceived negative impacts on the visual amenity of the area, particularly when viewed from residential areas. The lattice tower will remain unpainted (dull grey in colour) which blends in with the sky. Furthermore, the proposed subject site maintains suitable separation distance from surrounding residential areas.	✓
Not be located on sites where environmental, cultural heritage, social and visual landscape values may be compromised;	The proposed facility will involve the construction of a new facility in a cleared area. The site is not identified as containing matters of environmental or cultural heritage importance. The visual impact of the facility is mitigated to an appropriate level by both the significant distance to rural residences in the area, and the existing mature vegetation between it and surrounding residences.	✓

Display design features, including scale, materials, external colours and finishes that are sympathetic to the surrounding landscape;	The proposed 60m r lattice tower structure has been sited to maintain the primary use of the land whilst considering the impact to the surrounding locality. The site carefully considered environmental and visual constraints, existing and future land use characteristics, the orderly planning of the area and the design of the facility. On balance, it is considered that the location and height of the facility ensure optimal service provision to the area whilst minimising any perceived impacts.	✓
Be located where it will facilitate continuous network coverage and/or improved telecommunications services to the community;	<ul style="list-style-type: none"> The Federal Government under the Mobile Black Spot Program has identified a need for wireless services in the Needilup locality. <p>The proposed location on 29 Corackerup Road, Needilup WA 6336 will provide improved and continuous coverage to the locality and will also provide other carriers with the opportunity to co-locate their infrastructure in the future.</p>	✓
<p>Telecommunications infrastructure should be co-located and whenever possible:</p> <p>Cables and lines should be located within an existing underground conduit or duct; and</p> <p>Overhead lines and towers should be co-located with existing infrastructure and/or within an existing infrastructure corridor and/or mounted on existing or proposed buildings.</p>	<p>As per Section 7 of this report, all opportunities for co-location on existing structures without any changes to their design were investigated. All possible locations are too far from the subject area to meet the radio frequency objectives of the proposal.</p> <p>The proposed Telstra lattice tower will also provide other carriers with the opportunity to co-locate their infrastructure in the future.</p> <p>Overhead lines are not applicable to this application.</p>	✓

Overall the proposed development application is consistent with the intent and requirements of the SPP 5.2.

10.2 Statement of Planning Policy No. 5.2 – Telecommunications Infrastructures (WAPC)

With the gazettal of State Planning Policy 5.2, the WAPC *Statement of Planning Policy No. 5.2 – Telecommunications Infrastructure* (Statement 5.2) has been repealed. However, it is recognised that the Statement 5.2 provides a more holistic set of criteria than SPP 5.2 which largely focuses on visual impacts. Given this, an assessment of the guiding principles of Statement 5.2 is provided in **Table 5**.

Principles	Comments	Complies
There should be a co-ordinated approach to the planning and development of	Telstra undertakes a carefully co-ordinated and planned approach to the development of their	✓

telecommunications infrastructure, although changes in the location and demand for services require a flexible approach.	network.	
Telecommunications infrastructure should be strategically planned and co-ordinated, similar to planning for other essential infrastructure such as networks and energy supply.	The proposed facility is strategically planned and co-ordinated to ensure that the facility will provide high level coverage to the Needilup locality.	✓
Telecommunications facilities should be located and designed to meet the communication needs of the community.	The proposed facility is strategically planned and co-ordinated to ensure that the facility will provide high level coverage to the Needilup locality.	✓
Telecommunications facilities should be designed and sited to minimise any potential adverse visual impact on the character and amenity of the local environment, in particular, impacts on prominent landscape features, general views in the locality and individual significant views.	The proposed 60m lattice tower structure has been sited to maintain the primary use of the land whilst considering the impact to the surrounding locality. The site carefully considered environmental and visual constraints, existing and future land use characteristics, the orderly planning of the area and the design of the facility. On balance, it is considered that the location and height of the facility ensure optimal service provision to the area whilst minimising any perceived impacts.	✓
Telecommunications facilities should be designed and sited to minimise impacts on areas of natural conservation value and places of heritage significance or where declared rare flora are located.	The area where the telecommunications facility is proposed is entirely cleared and is not located within an identified built heritage or cultural heritage area. As a result, the proposed facility will not have any impact on areas of natural conservation values, places of heritage significance or rare flora.	✓
Telecommunications facilities should be designed and sited with specific consideration of water catchment protection requirements and the need to minimise land degradation.	Prior to the commencement of work Telstra will undertake such measures as deemed necessary by Council to effectively protect water catchments within the immediate area.	✓

Telecommunications facilities should be designed and sited to minimise adverse impacts on the visual character and amenity of residential area.	Telstra has selected a site and location that seeks to minimise any perceived negative impacts on the visual amenity of the area, particularly when viewed from residential areas. The lattice will remain unpainted (dull grey in colour) which blends in with the sky. Furthermore, the proposed subject site maintains suitable separation distance from surrounding residential areas.	✓
Telecommunications cables should be placed underground, unless it is impractical to do so and there would be no significant effect on visual amenity or, in the case of regional areas, it can be demonstrated that there are long-term benefits to the community that outweigh the visual impact.	Overhead cabling is not proposed for this site.	✓
Telecommunications cables that are installed overhead with other infrastructure such as electricity cables should be removed and placed underground when it can be demonstrated and agreed by the carrier that it is technically feasible and practical to do so.	This principle does not apply to the subject of this application.	• N/A
Unless it is impractical to do so telecommunications towers should be located within commercial, business, industrial and rural areas and areas outside identified conservation areas.	The proposed site is located in a rural locality and in an existing cleared area. Given the rural nature of the land and the cleared lease area the proposed facility will be located in the desired zone.	✓
The design and siting of telecommunications towers and ancillary facilities should be integrated with existing buildings and structures, unless it is impractical to do so, in which case they should be sited and designed so as to minimise any adverse impact on the amenity of the surrounding area.	As per Section 7 of this report, all opportunities for co-location on existing structures without any changes to their design were investigated. All possible locations are too far from the subject area to meet the radio frequency objectives of the proposal. The proposed development will minimise amenity impacts due to its location being approximately 3km from the nearest dwelling, and having mature vegetation between it and all surrounding residences.	✓
Co-location of telecommunications facilities	As per Section 7 of this report, all opportunities for co-location on existing structures without any	✓

should generally be sought, unless such an arrangement would detract from local amenities or where operation of the facilities would be significantly compromised as a result.	changes to their design were investigated. All possible locations are too far from the subject area to meet the radio frequency objectives of the proposal.	
Measures such as surface mounting, concealment, colour co-ordination, camouflage and landscaping to screen at least the base of towers and ancillary structures, and to draw attention away from the tower, should be used, where appropriate, to minimise the visual impact of telecommunications facilities.	Telstra has selected a site and location that seeks to minimise any perceived negative impacts on the visual amenity of the area, particularly when viewed from residential areas. The lattice tower will remain unpainted (dull grey in colour) which blends in with the sky. Furthermore, the proposed subject site maintains suitable separation distance from surrounding residential areas.	✓
Design and operation of a telecommunications facility should accord with the licensing requirements of the Australian Communications Authority, with physical isolation and control of public access to emission hazard zones and use of minimum power levels consistent with quality services.	Telecommunications facilities include radio transmitters that radiate electromagnetic energy (EME) into the surrounding area. The levels of these electromagnetic fields must comply with safety limits imposed by the Australian Communications and Media Authority (ACMA, previously ACA). All Telstra installations are designed to operate within these limits.	✓
Construction of a telecommunications facility (including access to a facility) should be undertaken so as to minimise adverse effects on the natural environment and the amenity of users or occupiers of adjacent property and to ensure compliance with relevant health and safety standards.	During construction Telstra contractors will endeavour to minimise the impact of their works on the amenity of nearby residents and on the surrounding environment. As the proposed site is located in a rural area, adverse effects on nearby properties will be minimal. Following construction, maintenance (excluding emergency repair work) activities should not interfere with the amenity of users. All Health and Safety standards will be adhered to.	✓

Overall the proposed development application is consistent with the intent and requirements of the Statement 5.2

11.0 Local Regulatory Framework

The following information provides a summary of the local provisions relevant to telecommunications development proposals.

11.1 The Shire of Jerramungup Local Planning Scheme No.2

The *Shire of Jerramungup Local Planning Scheme No. 2* provides the legal basis for planning in the Shire of Jerramungup local government area.

The proposed site is zoned Rural, and the surrounding area, with the exception of the conservation area to the west, is zoned Rural, as shown in **Figure 9** below.

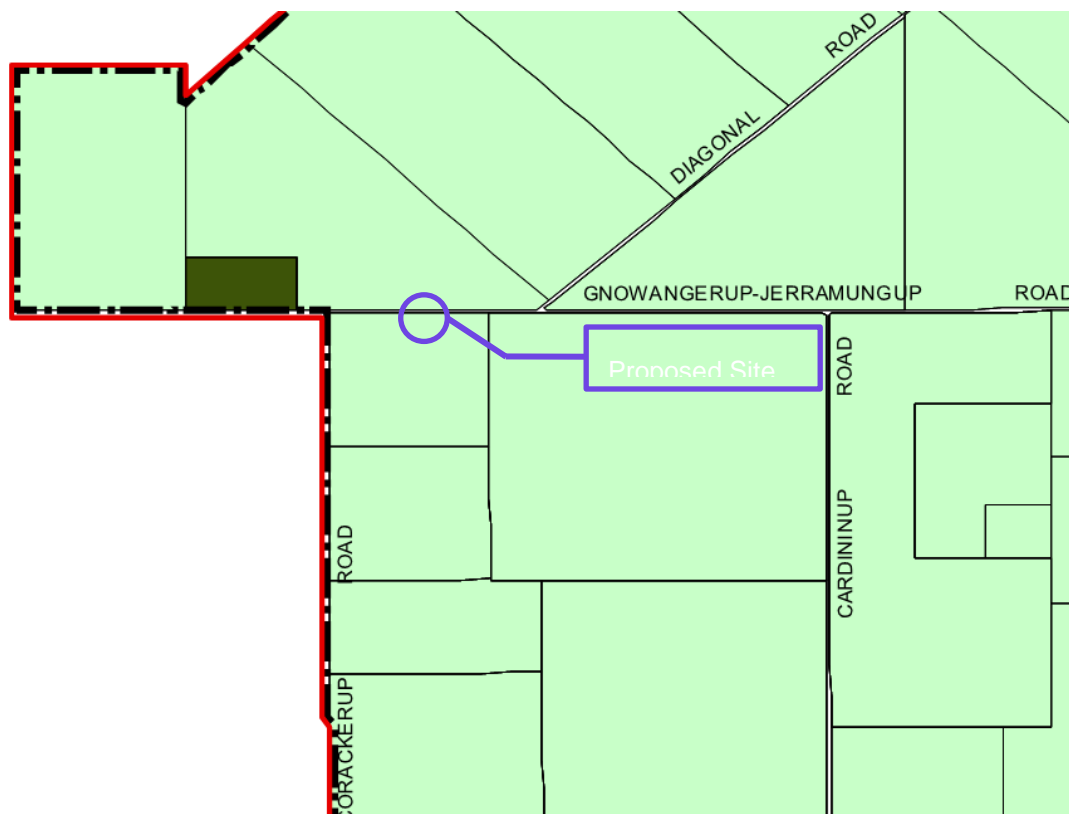


Figure 9: Zoning Map 1 (Shire of Jerramungup Local Planning Scheme No. 2) (Source: Dept. of Planning, Lands and Heritage)

For the purposes of this proposal the Principal Designated Use of the property is 'Rural'.

Telecommunications infrastructure is listed as an activity in the *Shire of Jerramungup Local Planning Scheme No.2* text as a use that will not be permitted unless Council has exercised its discretion by granting development approval after giving special notice in accordance with clause 9.4. Nonetheless, the proposed telecommunications facility on 29 Corackerup Road, Needilup WA 6336 generally complies with the objectives of the Scheme.

In particular, it is noted that the Council's assessment of a Telecommunications Facility at Jacup in 2016 concluded that:

“Council has to eight the benefits of improved mobile telecommunication which will benefit the wider community, whilst also having regard for normal planning considerations such as visual impact of the structure”

Visionstream puts forward that unlike the facility at Jacup, which involved a second tower in close proximity to an existing tower, the proposed facility is in an area that is not serviced by any existing towers or facilities, and which has been identified by the Federal Government as being located in a Mobile Black Spot. Further, Visionstream considers that the proposed facility, buffered from the nearest residence by a distance of 3km and for which visual mitigation is already offered by matures trees between it and all surrounding residences, will have a minimal impact on the amenity of the area as viewed from residences. The location of the facility adjacent to the main road of Gnowangerup Jerramungup Road is also supported by the previous assessment of the Shire of Jerramungup, which stated:

“..they are becoming part of the rural landscape and are expected adjacent to highways and townsites”

The location of the proposed facility adjacent to Gnowangerup Jerramungup Road will allow for the facility to cover residents and businesses in the area, as well as those travelling in the area. Both of these coverage objectives are important for the social wellbeing and safety of residents and travelers.

The proposal has been sited to retain the land for its current use and minimises visual impacts upon the amenity of the area by being placed where it is surrounded by mature vegetation. The detailed siting has been undertaken to ensure the primary use of the land and any potential future use of surrounding land is not negatively impacted upon.

Overall the proposed development application is consistent with the intent and requirements of the *Western Australian Planning Commission SPP 5.2* and the *Shire of Jerramungup Local Planning Scheme No.2*.

12.0 General Provisions

This proposal is for the establishment of a Telstra Mobile Base Station Facility in the Needilup area.

Telstra considers that the proposal is appropriate for the locality given the rural nature of the proposed site and the nature of existing and anticipated uses of the surrounding land.

Environmental considerations such as visual impact, heritage, flora and fauna, traffic, flooding, bushfire, social and economic aspects, health and safety have been discussed within the below sub sections.

12.1 Rural Zone

The proposed development is located on land zoned Rural. It is acknowledged that under the *Shire of Jerramungup Local Planning Scheme No.2*, the intention is for these areas to be retained for their agricultural and biological values, while allowing for non-rural uses where “*they can be shown to be of benefit to the district and not detrimental to the natural resources or the environment*”.

With specific regard to assessment of the proposed development against the requirements of the *Shire of Jerramungup Local Planning Scheme No.2*, the proposed development will not have any impact on existing agricultural land uses, given that the proposed development will be entirely confined to an area that is not used for this purpose, but that is entirely cleared and so does not contain any biodiversity values. Given that Visionstream’ assessment of surrounding land uses shows the majority of land uses are dwellings, agricultural and conservation, the proposed location is considered rare as it does not conflict with any of these uses. Accordingly, Visionstream believe that the proposed Telecommunications Facility does not present a conflict with the intent of the *Shire of Jerramungup Local Planning Scheme No.2* with respect to rural land.

12.1 Visual Impacts

The proposed facility is located with a property zoned Rural and is primarily comprised of a 60m lattice tower.

Telstra has selected a site and location that appropriately minimises any perceived negative impacts on the visual amenity of the area. An assessment of the area has shown that there are few structures and residences within the surrounding area (**Figure 10**), with the nearest residence being over approximately 3km to the north-west and the next nearest being 3.8km to the east. The nearest structure directly faces Gnowangerup Jerramungup Road with its main viewing angles (taken to the approximately 145 degrees from the direction of the residence) not including the proposed facility, while the next nearest residence also faced Gnowangerup Jerramungup Road and excludes the proposed facility from its main viewing angles. Additionally, the existing mature vegetation between the proposed facility and these residences will significantly limit direct views of the facility from residences (**Figure 11**). Given the significant distances involved and the existing and intensive forestry activities occurring between the subject site and these residences, visual amenity impacts are considered low to nil.

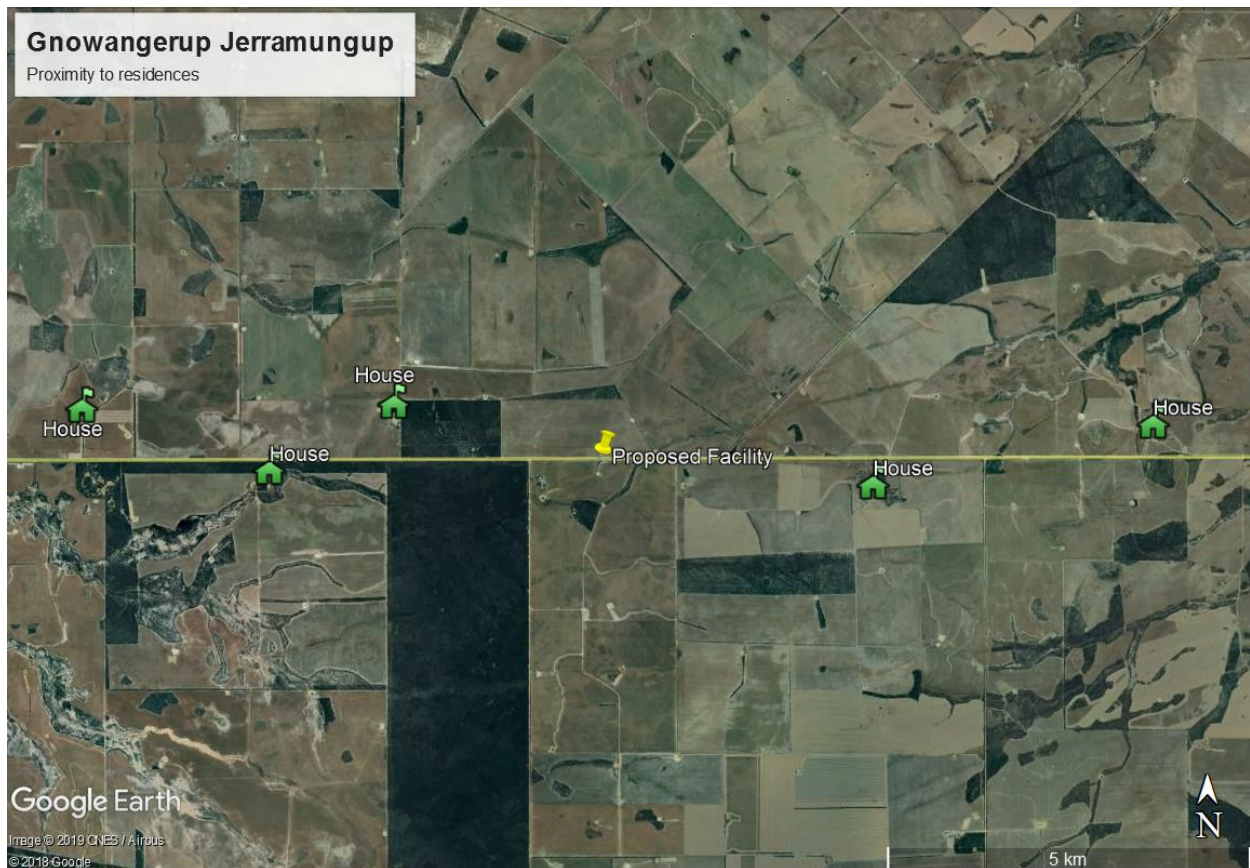


Figure 10: Aerial photo of subject site and closest residences (Source: Google Earth)

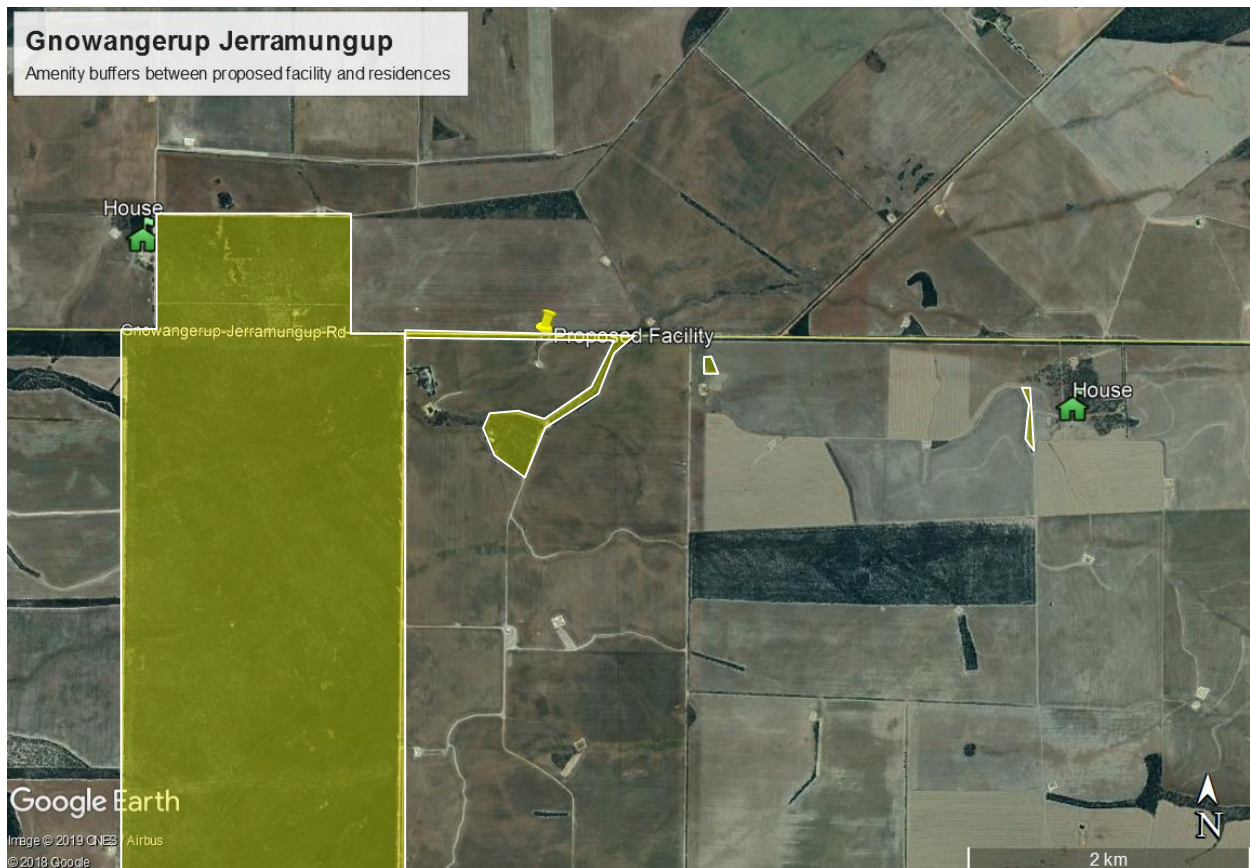


Figure 11: Aerial photo showing mature vegetation providing amenity buffers between proposed facility and nearest residences (Source: Google Earth)

The site selection has carefully considered environmental and visual constraints, existing and future land use characteristics, the orderly planning of the area and the design of the facility. On balance, it is considered that the location and height of the facility ensure optimal service provision to the area whilst minimising any perceived visual impact. Moreover, as previously mentioned the site will also provide other carriers with the opportunity to co-locate their infrastructure in the future.

12.2 Heritage

In order to determine any possible natural or cultural values of state or national significance associated with the site a search was conducted through the relevant Heritage Registers.

No heritage sites, including Aboriginal heritage sites, of significance were identified within the subject land holding or within close proximity.

The site is located within a located within Cultural Heritage Search area 200247(1), under the *Prehistoric Lithic Resource Utilisation: a Case Study from the Southwest of Western Australia: 1985*, a thesis. The thesis provides that an examination of study area was best undertaken by examining the historical narratives and sources of the Hassell family, with some supplementation from other fragmentary sources. The thesis used these narratives to inform specific areas of study, which focused on previous casual reports of artefacts, coastal areas, water areas, firebreak and track areas. Accordingly, proposed facility site was not included as an area that was systematically surveyed under the survey (**Figure 12**).

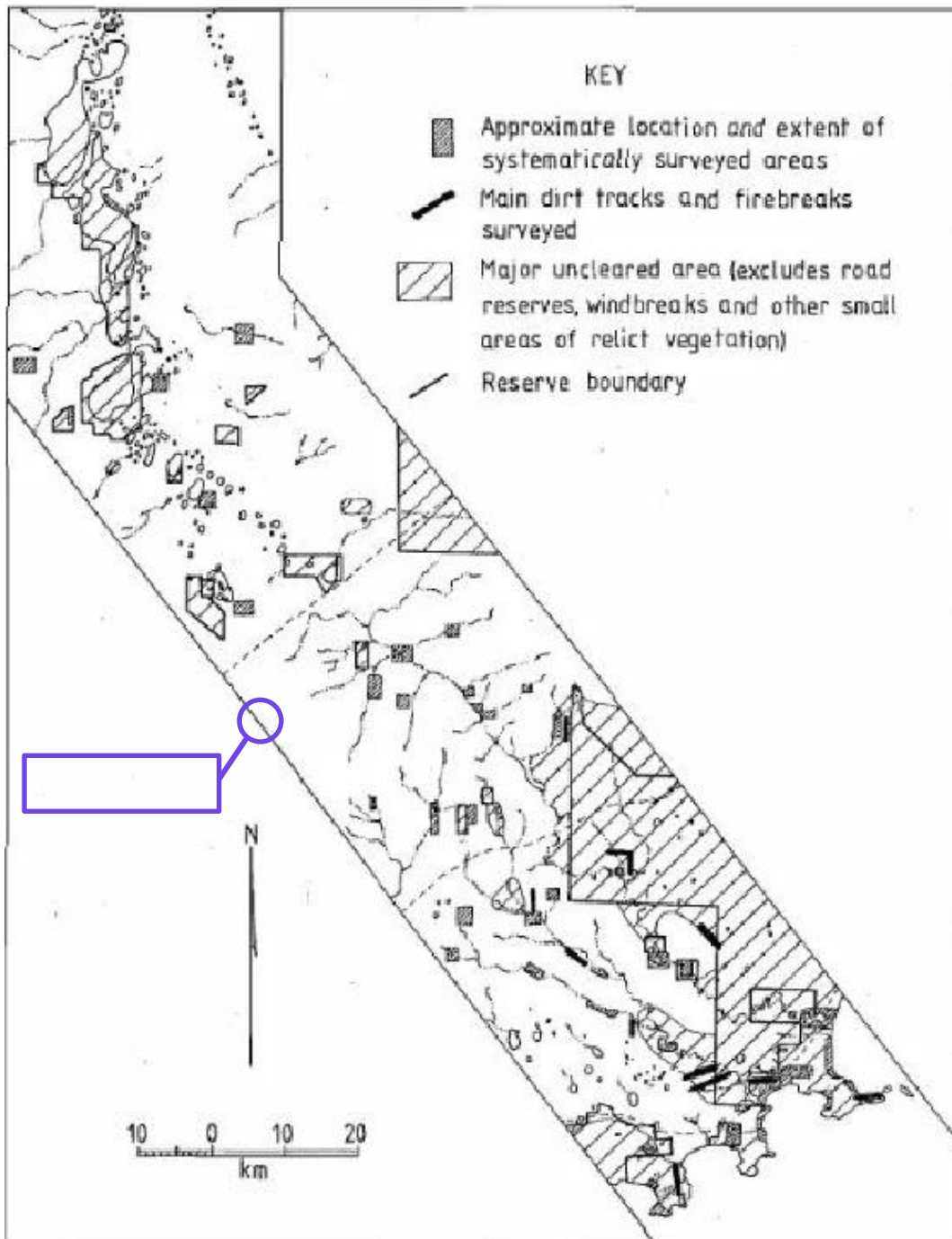


Figure 12: Extract from Prehistoric Lithic Resource Utilisation: a Case Study from the Southwest of Western Australia: 1985, showing the site of the proposed facility against specifically surveyed areas (Source: *Prehistoric Lithic Resource Utilisation: a Case Study from the Southwest of Western Australia: 1985*, Bird, 1985)

Separate discussions with the South West Aboriginal Land and Sea Council are currently being undertaken to confirm if any further requirements are required with regards to the potential for cultural heritage on the subject site.

12.3 Flora and Fauna

In order to determine any possible natural Flora and Fauna significance associated with the site, a search was conducted through the relevant environmental searches (**Figure 13**).

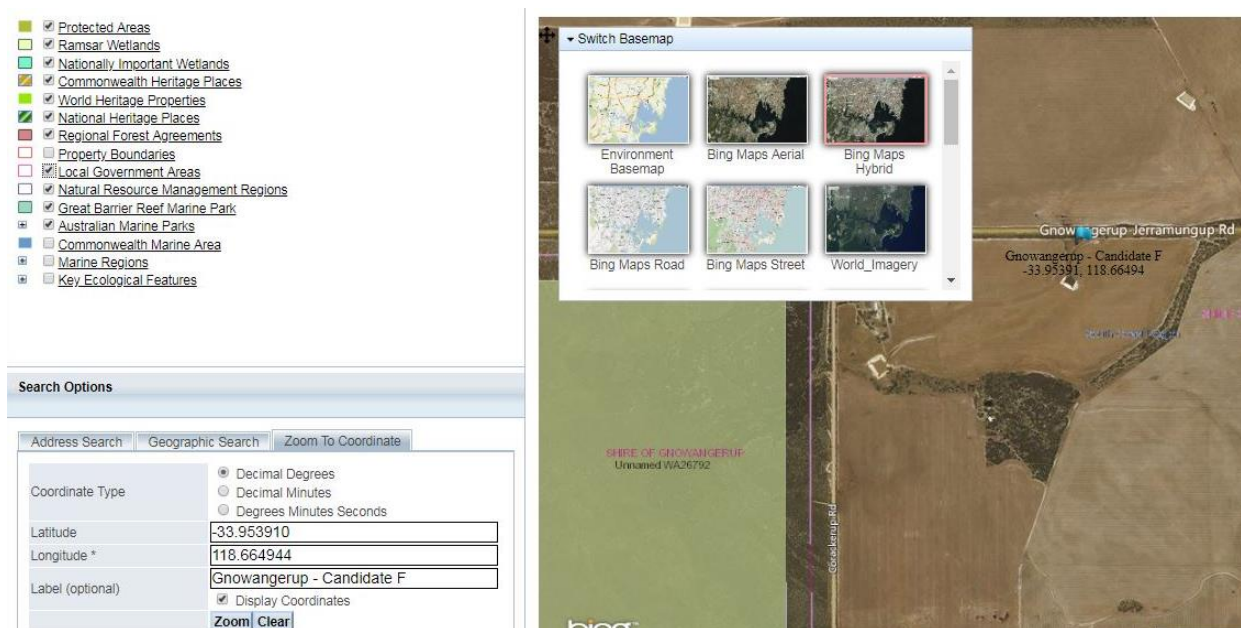


Figure 13: Excerpt from Protected Matters Search Tool showing no protected matters on subject site (Source: Department of the Environment and Energy)

Searches identified the potential for 1 threatened ecological community, 17 threatened species and 8 migratory species of Flora and Fauna significance to be located within 1km of the subject site. See **Appendix C – Environment Analysis Report** for further information. As the subject site is currently used is entirely cleared, the proposed works are considered unlikely to have any impact on any valueable flora or fauna.

As per the plans of development, no trees will be removed as part of this proposal.

12.4 Traffic

Mobile phone base stations are not a significant generator of pedestrian or vehicular traffic.

The site will be visited on a quarterly basis throughout the year for maintenance purposes.

During the construction phase various vehicles will be used to deliver equipment and construct the Telstra Mobile Base Station Facility. Any traffic impacts associated with construction and establishment will be of a short-term duration (i.e. approximately five weeks over non-consecutive periods) and are not anticipated to adversely impact on the surrounding road network.

Adequate parking will be available on site for these vehicles and these movements would not impact the local traffic.

Traffic from this construction would only occur from the hours of 7am to 6pm. If a road closure is required for the erection and installation of equipment, the appropriate approvals will be obtained from the Department of Transport (DOT).

The mobile base station facility is unmanned would require maintenance checks approximately 3-4 times per year as required. Routine maintenance would involve one vehicle per visit and parking would be available close to the proposed site for this purpose.

12.5 Access

Access to the proposed site will be through the existing crossover off the Gnowangerup Jerramungup Road. In this regard, there is no requirement for special access to the site. (Refer to **Appendix B – Proposal Plans (S1)** for more information)

The proposed site access is considered to be appropriate given the Telstra facility will not be a significant generator of traffic. Once operational, the facility will require maintenance visits approximately 3-4 times per year as required but will remain unattended at all other times. As the facility generates minimal visits per year it is considered that traffic interference will be negligible.

During the construction phase various vehicles will be used to deliver equipment and construct the Telstra Mobile Base Station Facility. Any traffic impacts associated with construction and establishment will be of a short-term duration (i.e. approximately five weeks over non-consecutive periods) and are not anticipated to adversely impact on the surrounding road network. Adequate parking would be available in the vicinity for vehicles used during construction and these movements would not impact local traffic. In the unlikely event that road closure is required Telstra will apply to the relevant authorities for permission.

12.6 Utilities

There is existing access to power at the site that will be connected to the proposed facility through an underground run to prevent the removal of vegetation. The proposed site does not require any additional permits for the connection of a sewer/roadway.

12.7 Construction

The construction of the mobile base station will take approximately five weeks over non-consecutive periods, subject to weather.

Noise and vibration emissions associated with the Telstra Mobile Base Station Facility will be limited to the construction phase. Noise generated during the construction phase will be of short duration and will be in accordance with the standards outlined in the Environmental Protection (Noise) Regulations 1997. Construction works will only occur between the hours of 7am and 6pm.

There will be some low-level noise from the ongoing operation of air conditioning equipment associated with the equipment shelter once it is installed. Noise emanating from the air conditioning equipment is at a comparable level to a domestic air conditioning installation and will generally accord with the background noise levels prescribed by Australian Standard AS1055.

The proposed site is appropriately setback from residential properties so that the noise related impacts will be negligible.

12.8 Bushfire

The specific site location is identified as being in a Bush Fire Prone Area by the Fire and Emergency Services Commissioner (**Figure 14**).

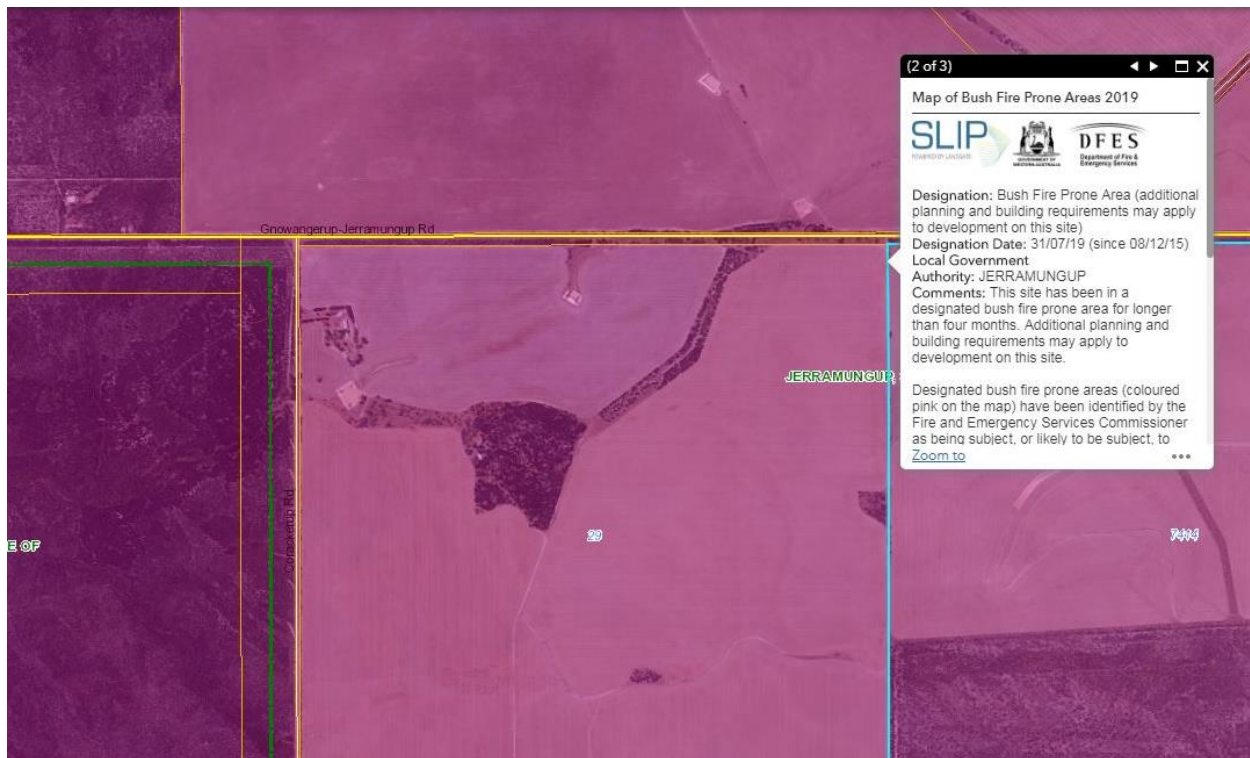


Figure 14 – Bushfire Prone Areas Mapping (Source DFES Slip Mapping)

Natural disasters, including the continuing threat of bushfires, have served to highlight the critical importance of effective telecommunications. Previous bushfire incident reviews have demonstrated effective telecommunications networks are essential for disaster response management, allowing emergency services providers to be alerted to medical or fire emergencies.

In its *Communications Report 2014-2015* the Australian Communications and Media Authority reported that in 2014 -15, 66.9% of calls to the 000 emergency number were made from mobile phones. Therefore, in addition to day-to-day personal and business applications, effective telecommunications networks can be the difference between life and death in disaster situations.

The entirety of the facility will be earthed in accordance with the Australian Standard. Earthing draws any lightning strike underground away from combustible material. It is submitted that contrary to being a risk factor for fires, the site in this case could reduce the risk of lightning strike causing fires, by attracting the strike and earthing it underground.

The *State Planning Policy 3.7* provides the foundation for land use planning to address bushfire risk management in Western Australia. Notwithstanding the Department of Planning updated [Planning Bulletin 111/2016](#) to clarify that for telecommunications infrastructure, *SPP 3.7* should be applied pragmatically.

The Planning Bulletin states:

“Exemptions from the requirements of SPP 3.7 and the deemed provisions should be applied pragmatically by the decision maker. If the proposal does not result in the intensification of development (or land use), does not result in an increase of residents or employees; or does not involve the occupation of employees on site for any considerable amount of time, then there may not be any practicable reason to require a BAL Assessment. Exemptions may apply to infrastructure including roads, telecommunications and dams; and to rural activities, including piggeries and chicken farms which do not involve employees on site for a considerable amount of time.”

With respect to the above, Visionstream on behalf of Telstra believes that all necessary design measures have been undertaken to ensure the facility does not increase or affect the bushfire risk to the area. In particular, it is noted the facility has been sited to allow for a minimum 10 metres buffer from the compound to any vegetation in the area and that vegetation is sparse and narrow in width and so is not considered to represent a high bushfire threat to the proposed facility.

12.9 Health and Safety

Telstra acknowledges some people are genuinely concerned about the possible health effects of electromagnetic energy (EME) from mobile phone base stations and is committed to addressing these concerns responsibly.

Telstra, along with the other mobile phone carriers, must strictly adhere to Commonwealth Legislation and regulations regarding mobile phone facilities and equipment administered by the Australian Communications and Media Authority (ACMA).

In 2003 the ACMA adopted a technical standard for continuous exposure of the general public to RF EME from mobile base stations. The standard, known as the *Radiocommunications (Electromagnetic Radiation – Human Exposure) Standard 2003*, was prepared by the Australian Radiation Protection and Nuclear Safety Agency (ARPANSA) and is the same as that recommended by ICNIRP (International Commission for Non- Ionising Radiation Protection), an agency associated with the World Health Organisation (WHO). Mobile carriers must comply with the Australian Standard on exposure to EME set by the ACMA.

The Standard operates by placing a limit on the strength of the signal (or RF EME) that Telstra can transmit to and from any network base station. The general public health standard is not based on distance limitations or the creation of “buffer zones”. The environmental standard restricts the signal strength to a level low enough to protect everyone at all times. It has a significant safety margin, or precautionary approach, built into it.

In order to demonstrate compliance with the standard, the ARPANSA created a prediction report using a standard methodology to analyse the maximum potential impact of any new telecommunications facility. Carriers are obliged to undertake this analysis for each new facility and make it publicly available.

Importantly, the ARPANSA-created compliance report demonstrates the maximum signal strength of a proposed facility, assuming that it is handling the maximum number of users 24-hours a day.

In this way, the ARPANSA requires network carriers to demonstrate the greatest possible impact that a new telecommunications facility could have on the environment to give the community greater peace of mind. In reality, base stations are designed to operate at the lowest possible power level to accommodate only the number of customers using the facility at any one time. This design function is called “adaptive power control” and ensures that the base station operates at minimum, not maximum, power levels at all times.

Using the ARPANSA standard methodology, Telstra is required to complete and make available an EME report which predicts the maximum environmental EME level the facility will emit. Telstra will shortly provide an EME report that predicts the maximum levels of radiofrequency EME from the proposed installation at the subject site. This EME report will demonstrate that the proposed facility, using the maximum EME output possible, is substantially within the allowable limit under the ARPANSA standard.

Telstra relies on the expert advice of national and international health authorities such as the Australian Radiation Protection and Nuclear Safety Agency (ARPANSA) and the World Health Organisation (WHO) for overall assessments of health and safety impacts.

The WHO advises that all expert reviews on the health effects of exposure to radiofrequency fields have concluded that no adverse health effects have been established from exposure to radiofrequency fields at levels below the international safety guidelines that have been adopted in Australia.

Telstra has strict procedures in place to ensure its mobile phones and base stations comply with these guidelines. Compliance with all applicable EME standards is part of Telstra's responsible approach to EME and mobile phone technology.

12.10 Erosion, Sediment Control and Waste Management

All erosion and sediment control mitigation measures will be detailed in construction plans and will comply with the *Building Code of Australia* and Local Council Standards. On completion of the installation, the site will be restored and reinstated to an appropriate standard. No waste which requires collection or disposal will be generated by the operation of the facility.

12.11 Social and Economic Impact

Reliable mobile phone coverage is important to ensure the economic growth of communities. It is not expected to have any adverse social or economic impacts as a result of the development. Indeed, it is anticipated that there would be positive impacts because of the mobile telephone coverage, and the proposed facility could also be utilised in the event of an emergency with reference to mobile phone and internet use.

The proposed development is essential to enable Carriers to remain competitive and increase the choice of mobile telephone services to consumers. Additional competition in the market will have economic benefits for individual consumers and the community as a whole. The development is consistent, with the objectives of the *Telecommunications Act 1997*, namely:

- To promote “the efficiency and international competitiveness of the Australian telecommunications industry” (s.3 (1)); and
- To ensure that telecommunications services “are supplied as efficiently and economically as practicable” (s.3 (2) (a) (ii).

12.12 Impacts to Airports

The closest airport/airfield to the proposed facility is the Gnowangerup Airport, located 60km to the west. As a result of this distance, the proposed facility is not required to be assessed by the Civil Aviation and Safety Authority (CASA).

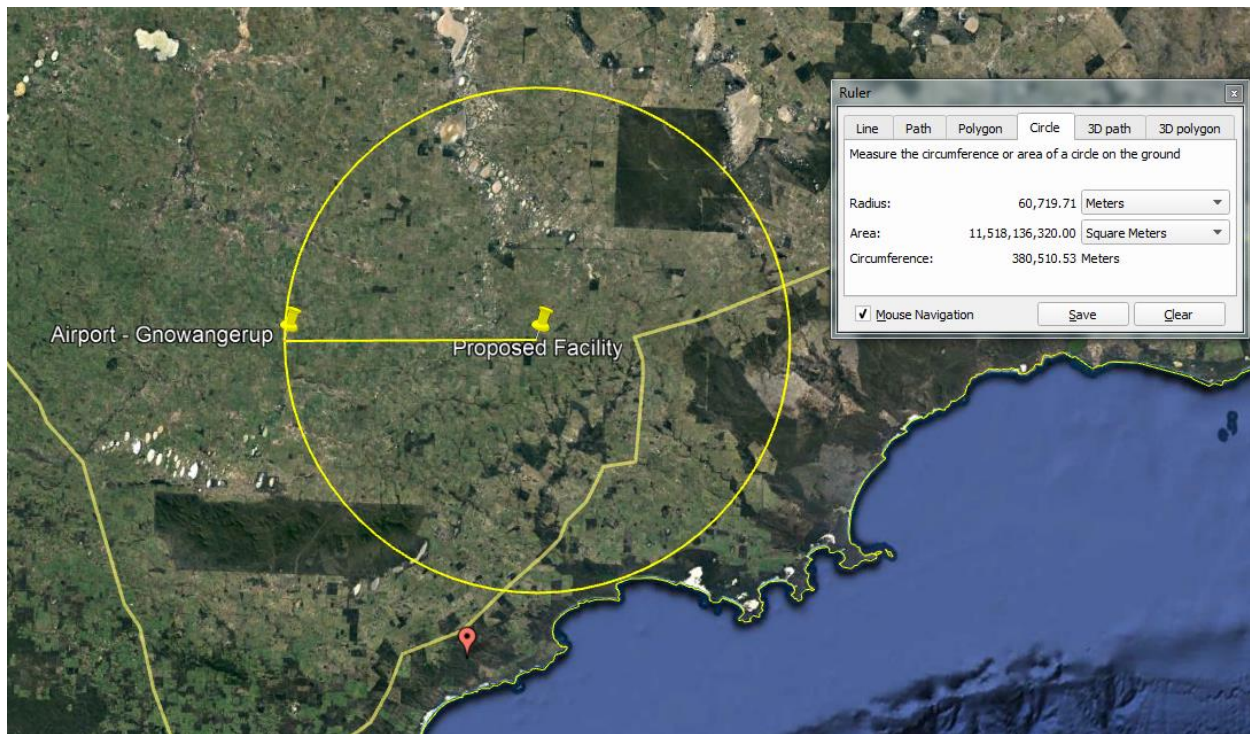


Figure 15 – Aerial image showing subject site proximity to airports (Source Google Earth)

In accordance with the CASA Advisory Circular *AC139-08 Reporting of tall structures and hazardous plume sources*, a Tall Structure Notification will be provided to Airservices Australia upon the commencement or completion of any construction of the proposed tower.

13.0 Conclusion

This application is a direct result of the community's requests for reliable telecommunications to be provided to the Needilup area. There is strong State policy support for telecommunications facilities if, when balancing improved telecommunications services with environmental impacts; including for example, visual impact and flood or fire hazard, a particular proposal provides a net community benefit.

The proposed works provide the community with reliable 4G access which in turn supports the various rural, residential and tourist industries in the region and form part of a wider plan to ensure reliable and accessible coverage during emergency situations such as in the event of bush fires.

The proposed telecommunications facility will form an integral component in Telstra's national 4GX network. This 4G service brings higher speeds and extra 4G coverage to a range of communities across the nation. 4GX will include services provided over Telstra's new 700MHz spectrum and deliver higher typical mobile speeds on compatible devices, allowing more Australians to experience more reliable connections and ultra-fast mobile internet.

Telstra has undertaken an assessment of the relevant matters as required by the *Telecommunications Act 1997*, State Legislation and the *Shire of Jerramungup Local Planning Scheme No. 2*. The proposal is considered appropriate in light of the relevant legislative, environmental, technical, radio coverage and public safety requirements.

The proposed facility is considered appropriate for the subject site for the following reasons:

- The facility is located as part of the Mobile Blackspot Program to provide reliable mobile phone service to the Needilup locality. It will deliver mobile coverage to regional and remote communities who, for the first time, will be able to access fast mobile voice and data services.

The improved coverage is increasing access to new technologies for key regional sectors and communities, which rely on a fast, reliable and affordable mobile network.

- Public views to the facility are adequately contained due to the distance from residents and the presence of mature vegetation between them.
- The proposed location of the facility and height will ensure that it will not impact on the vistas from these public viewpoints or the valued landscape qualities in the region.
- The proposal is consistent with the relevant provisions of the *Shire of Jerramungup Local Planning Scheme No.2*.
- The proposal will improve Telstra 4GX communications services to the area, including voice calls, video calling and Wireless Broadband – a high speed wireless internet service via the 3G/4G phone network.
- The proposed facility is appropriately located in a rural area, providing good separation from residential properties and roads.
- The proposed facility will not require the clearing of any vegetation.
- A reasonable balance has been struck between the technical requirements for a new facility in this area, the need to deliver an optimum level of service based on the level of coverage delivered by a facility of this height and the need to minimise visual and other environmental impacts.
- The proposed installation will provide possible opportunities for future co-location on the lattice tower by other carriers.
- Emissions from the proposed facility will be significantly below the Australian Radiation Protection and Nuclear Safety Agency standards adopted by the Australian Communications and Media Authority.

The assessment of the proposal demonstrates that the proposal represents sound and proper town planning and it is respectfully requested that consent is granted for this development application.

Should Council have any further queries regarding the subject application, please do not hesitate to contact the nominated representative outlined within this document.

Appendix A – Certificate of Title

WESTERN



AUSTRALIA

REGISTER NUMBER N/A	
DUPLICATE EDITION N/A	DATE DUPLICATE ISSUED N/A

RECORD OF CERTIFICATE OF TITLE

UNDER THE TRANSFER OF LAND ACT 1893

VOLUME
1795FOLIO
10

The person described in the first schedule is the registered proprietor of an estate in fee simple in the land described below subject to the reservations, conditions and depth limit contained in the original grant (if a grant issued) and to the limitations, interests, encumbrances and notifications shown in the second schedule.

REGISTRAR OF TITLES



THIS IS A MULTI-LOT TITLE

LAND DESCRIPTION:

LOTS 638 & 640 ON DEPOSITED PLAN 224112

REGISTERED PROPRIETOR: (FIRST SCHEDULE)

JOHN RICHARD BURT HARDING
SALLY ANNE HARDING
BOTH OF POST OFFICE BOX 52, ONGERUP
AS JOINT TENANTS

(T K855710) REGISTERED 17/2/2009

LIMITATIONS, INTERESTS, ENCUMBRANCES AND NOTIFICATIONS: (SECOND SCHEDULE)

1. *K855711 MORTGAGE TO RABOBANK AUSTRALIA LTD REGISTERED 17/2/2009.

Warning: A current search of the sketch of the land should be obtained where detail of position, dimensions or area of the lot is required.
* Any entries preceded by an asterisk may not appear on the current edition of the duplicate certificate of title.
Lot as described in the land description may be a lot or location.

-----END OF CERTIFICATE OF TITLE-----

STATEMENTS:

The statements set out below are not intended to be nor should they be relied on as substitutes for inspection of the land and the relevant documents or for local government, legal, surveying or other professional advice.

SKETCH OF LAND: 1795-10 (638/DP224112), 1795-10 (640/DP224112)
PREVIOUS TITLE: 390-27A
PROPERTY STREET ADDRESS: 29 CORACKERUP RD, NEEDILUP (638/DP224112).
LOCAL GOVERNMENT AUTHORITY: SHIRE OF JERRAMUNGUP

NOTE 1: K882396 LAND PARCEL IDENTIFIER OF KENT LOCATION 638 CHANGED TO LOT 638 ON DEPOSITED PLAN 224112, KENT LOCATION 640 CHANGED TO LOT 640 ON DEPOSITED PLAN 224112 ON 16.3.2009 TO ENABLE ISSUE OF A DIGITAL CERTIFICATE OF TITLE.

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RECORD OF CERTIFICATE OF TITLE

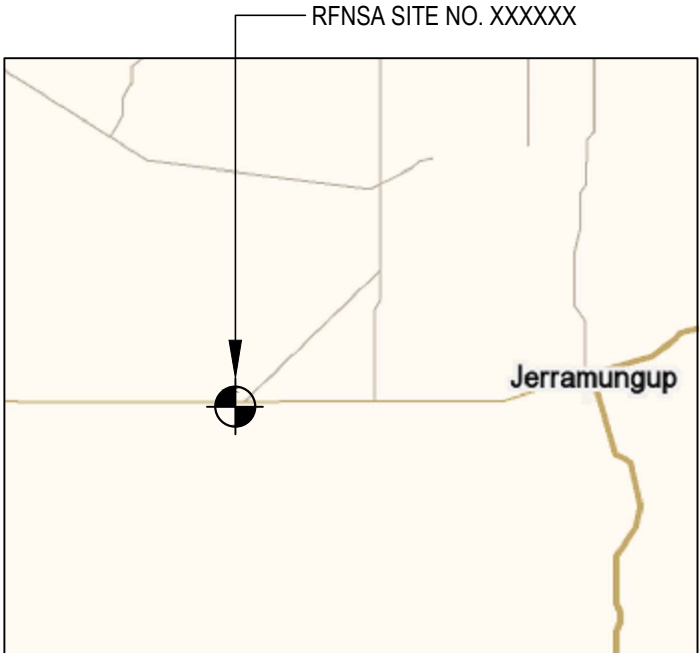
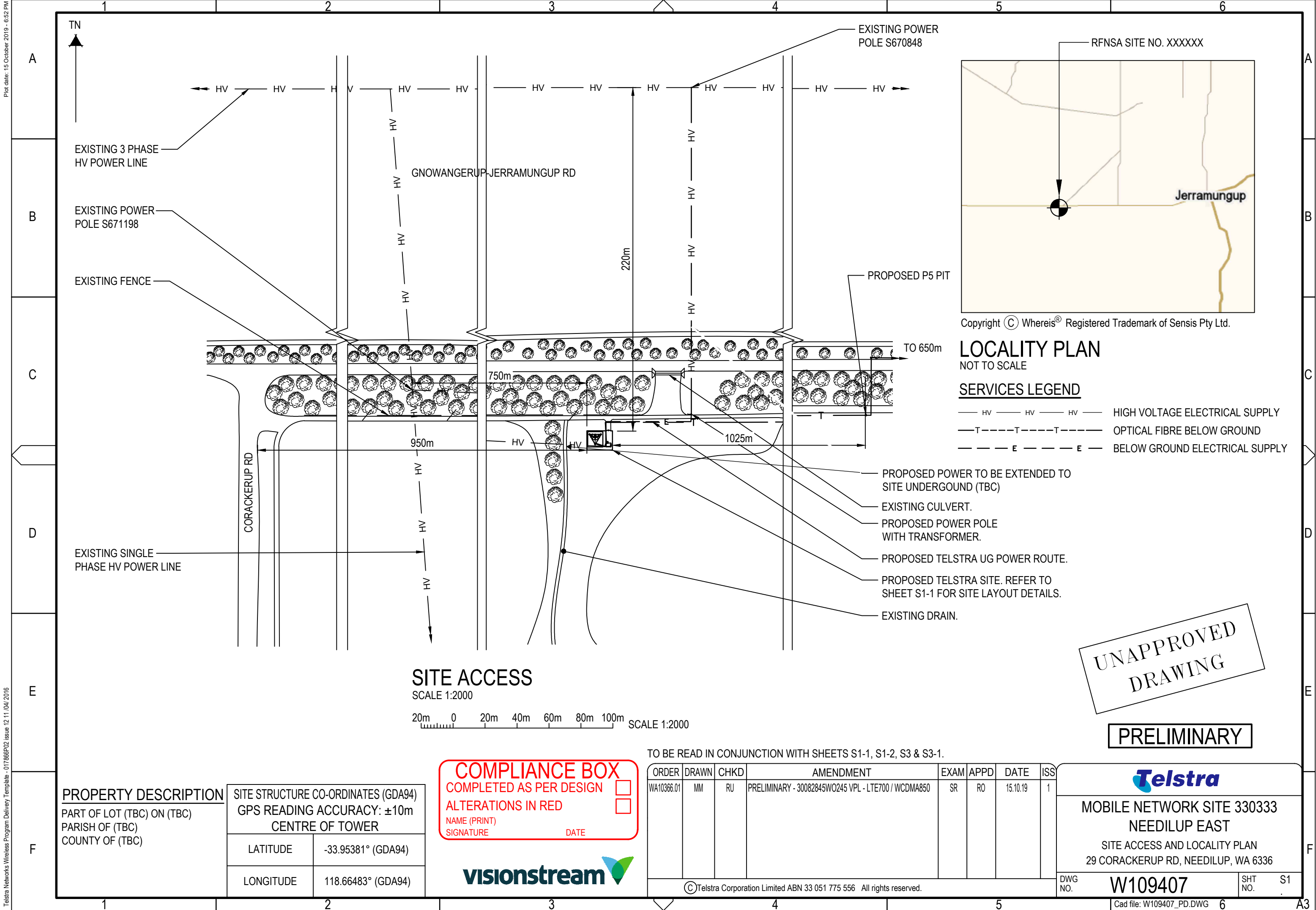
REGISTER NUMBER: N/A

VOLUME/FOLIO: 1795-10

PAGE 2

NOTE 2: DUPLICATE CERTIFICATE OF TITLE NOT ISSUED AS REQUESTED BY DEALING
K855711

Appendix B – Plans of the Proposal



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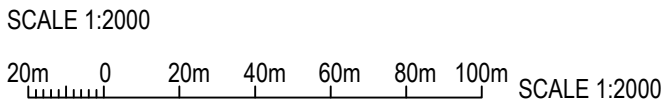
LOCALITY PLAN

NOT TO SCALE

SERVICES LEGEND

- HV — HV — HV — HIGH VOLTAGE ELECTRICAL SUPPLY
- T — T — T — OPTICAL FIBRE BELOW GROUND
- E — E — E — BELOW GROUND ELECTRICAL SUPPLY

SITE ACCESS



UNAPPROVED
DRAWING

PRELIMINARY

PROPERTY DESCRIPTION

PART OF LOT (TBC) ON (TBC)
PARISH OF (TBC)
COUNTY OF (TBC)

SITE STRUCTURE CO-ORDINATES (GDA94)
GPS READING ACCURACY: ±10m
CENTRE OF TOWER

LATITUDE	-33.95381° (GDA94)
LONGITUDE	118.66483° (GDA94)

COMPLIANCE BOX

COMPLETED AS PER DESIGN ☐

ALTERATIONS IN RED ☐

NAME (PRINT) _____

SIGNATURE _____ DATE _____



TO BE READ IN CONJUNCTION WITH SHEETS S1-1, S1-2, S3 & S3-1.

ORDER	DRAWN	CHKD	AMENDMENT	EXAM	APPD	DATE	ISS
WA10366.01	MM	RU	PRELIMINARY - 30082845WO245 VPL - LTE700 / WCDMA850	SR	RO	15.10.19	1

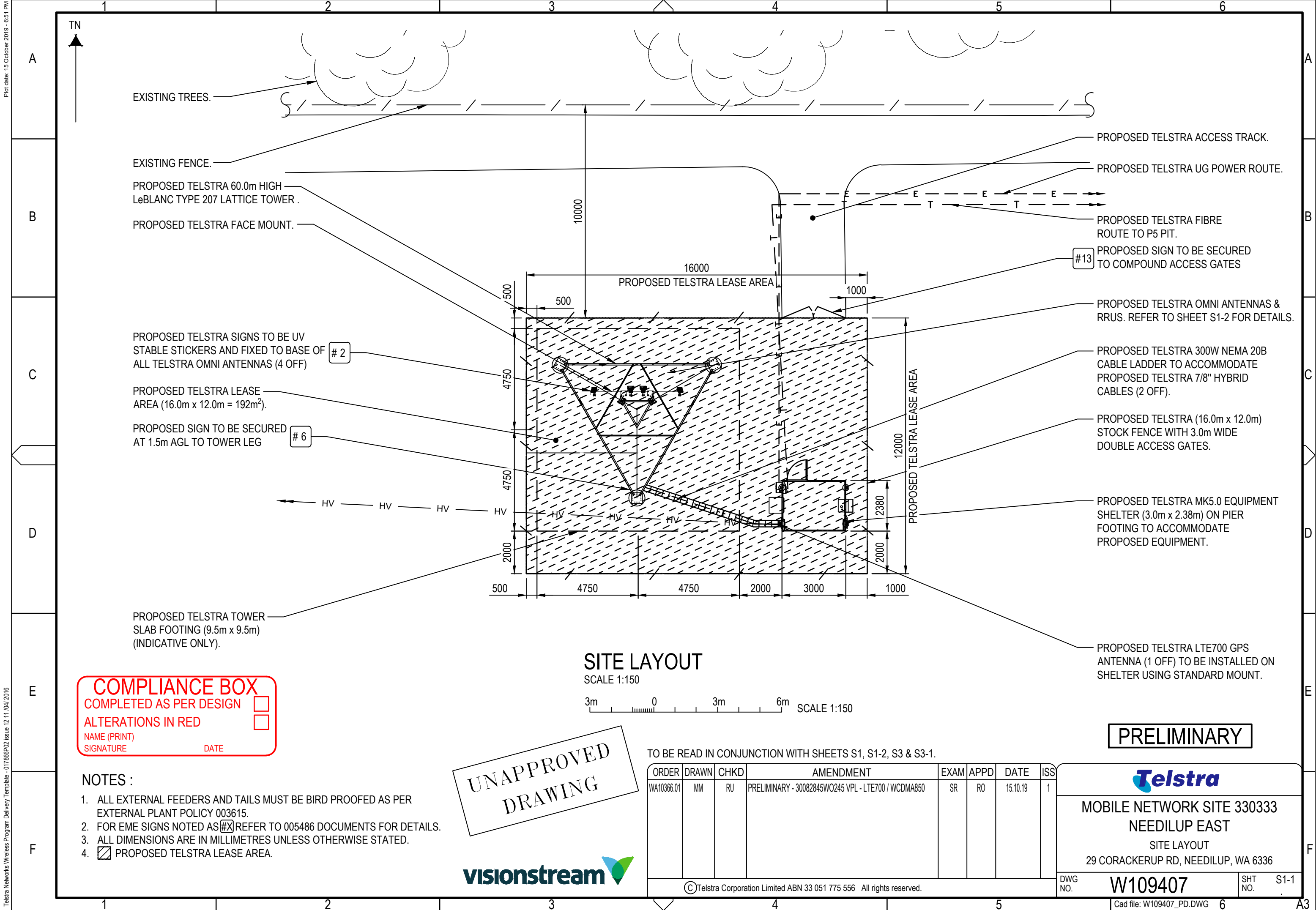
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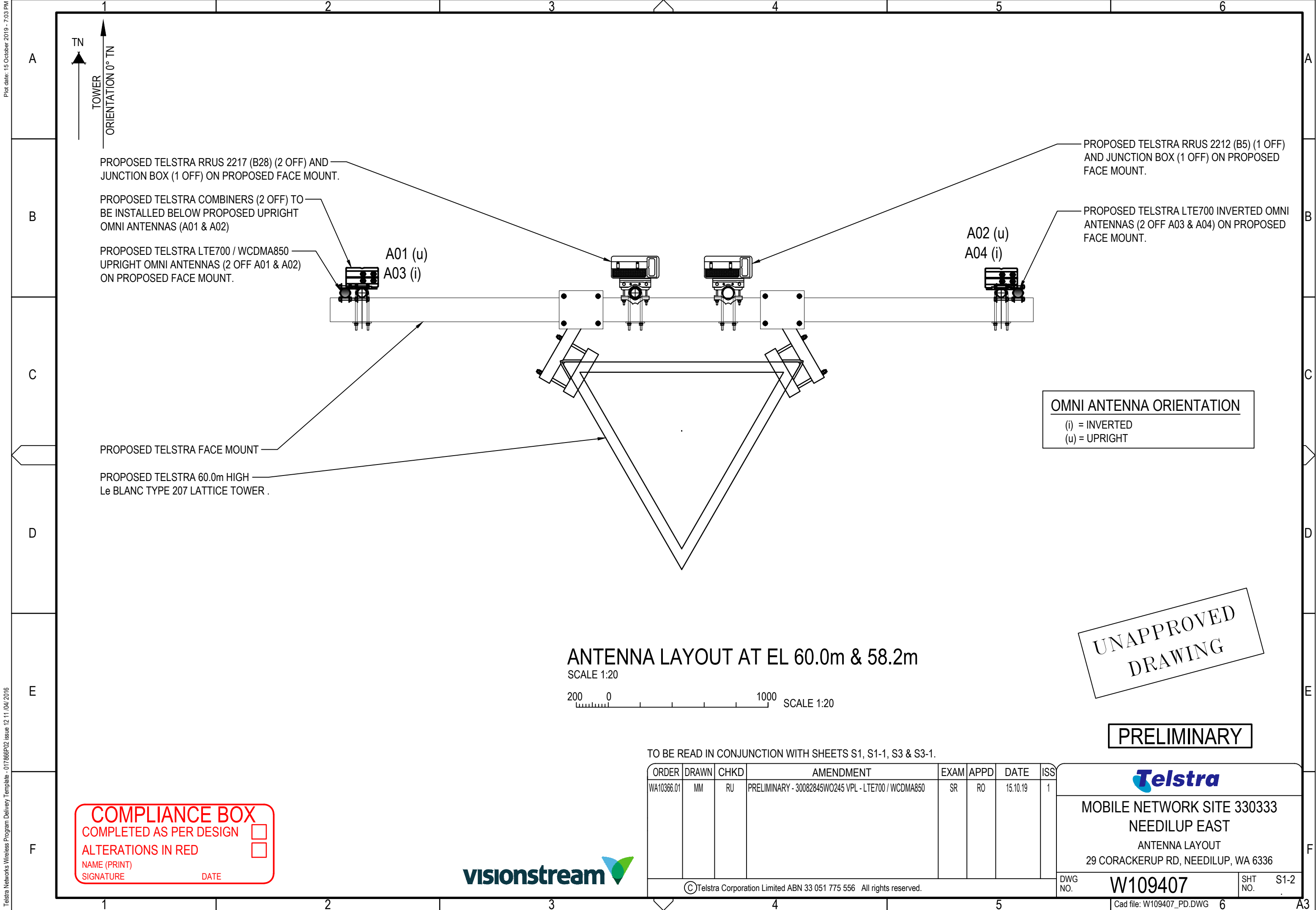


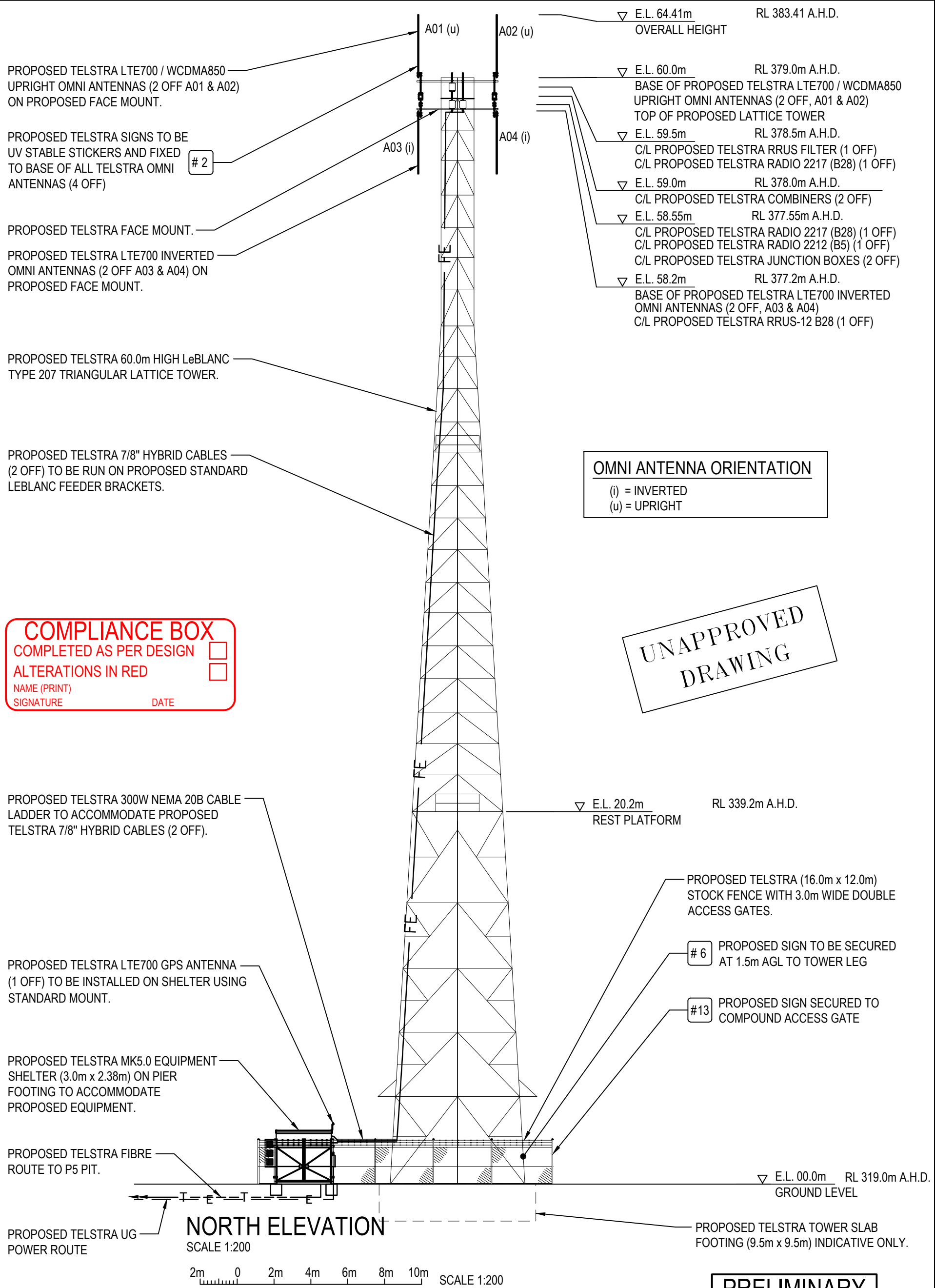
MOBILE NETWORK SITE 330333
NEEDILUP EAST

SITE ACCESS AND LOCALITY PLAN
29 CORACKERUP RD, NEEDILUP, WA 6336

DWG NO.	W109407	SHT NO.	S1
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OMNI ANTENNA ORIENTATION
(i) = INVERTED
(u) = UPRIGHT

UNAPPROVED
DRAWING

COMPLIANCE BOX	
COMPLETED AS PER DESIGN	<input type="checkbox"/>
ALTERATIONS IN RED	<input type="checkbox"/>
NAME (PRINT)	
SIGNATURE	DATE

PRELIMINARY

TO BE READ IN CONJUNCTION WITH SHEETS S1, S1-1, S1-2 & S3-1.

ORDER	DRAWN	CHKD	AMENDMENT	EXAM	APPD	DATE	ISS
WA10366.01	MM	RU	PRELIMINARY - 30082845W0245 VPL - LTE700 / WCDMA850	SR	RO	15.10.19	1



MOBILE NETWORK SITE 330333
NEEDILUP EAST
NORTH ELEVATION
29 CORACKERUP RD, NEEDILUP, WA 6336

DWG
NO.

W109407

SHT NO.	S3
---------	----

Cad file: W109407 | PD.DWG

A3V

TELSTRA ANTENNA CONFIGURATION TABLE					
ANTENNA No	ANTENNA TYPE & SIZE H x W x D	ANTENNA ACTION REQUIRED	ANTENNA HEIGHT C/L A.G.L.	ANTENNA BEARING (x°T)	SECTOR NO. & TECHNOLOGY
A01	ARGUS UNA010F-0-V2 OMNI Ø56 x 3414mm	INSTALL	60.0m	0°	S0: LTE700 / WCDMA850
A02	ARGUS UNA010F-0-V2 OMNI Ø56 x 3414mm	INSTALL	60.0m	0°	S0: LTE700 / WCDMA850
A03	ARGUS UNA010F-0-V2 OMNI Ø56 x 3414mm	INSTALL	58.2m	0°	S0: LTE700
A04	ARGUS UNA010F-0-V2 OMNI Ø56 x 3414mm	INSTALL	58.2m	0°	S0: LTE700
A200	GPS ANTENNA KRE 101 2082/1 Ø68 x 96	INSTALL	BASE OF GPS 1.8m	0°	-


COMPLIANCE BOX	
COMPLETED AS PER DESIGN	<input type="checkbox"/>
ALTERATIONS IN RED	<input type="checkbox"/>
NAME (PRINT)	
SIGNATURE	DATE

UNAPPROVED
DRAWING

PRELIMINARY

ORDER	DRAWN	CHKD	AMENDMENT	EXAM	APPD	DATE	ISS
WA10366.01	MM	RU	PRELIMINARY - 30082845WO245 VPL - LTE700 / WCDMA850	SR	RO	15.10.19	1

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<p>MOBILE NETWORK SITE ID</p> <p>NEEDILUP EAST</p> <p>ANTENNA CONFIGURATION TABLE</p> <p>29 CORACKERUP RD, NEEDILUP, WA 6336</p>		
<p>DWG NO.</p>	<p>W109407</p>	<p>SHT NO.</p>
		<p>S3-1</p>

Appendix C – Environment Analysis Report (EPBC)



EPBC Act Protected Matters Report

This report provides general guidance on matters of national environmental significance and other matters protected by the EPBC Act in the area you have selected.

Information on the coverage of this report and qualifications on data supporting this report are contained in the caveat at the end of the report.

Information is available about [Environment Assessments](#) and the EPBC Act including significance guidelines, forms and application process details.

Report created: 30/08/19 12:49:04

[Summary](#)

[Details](#)

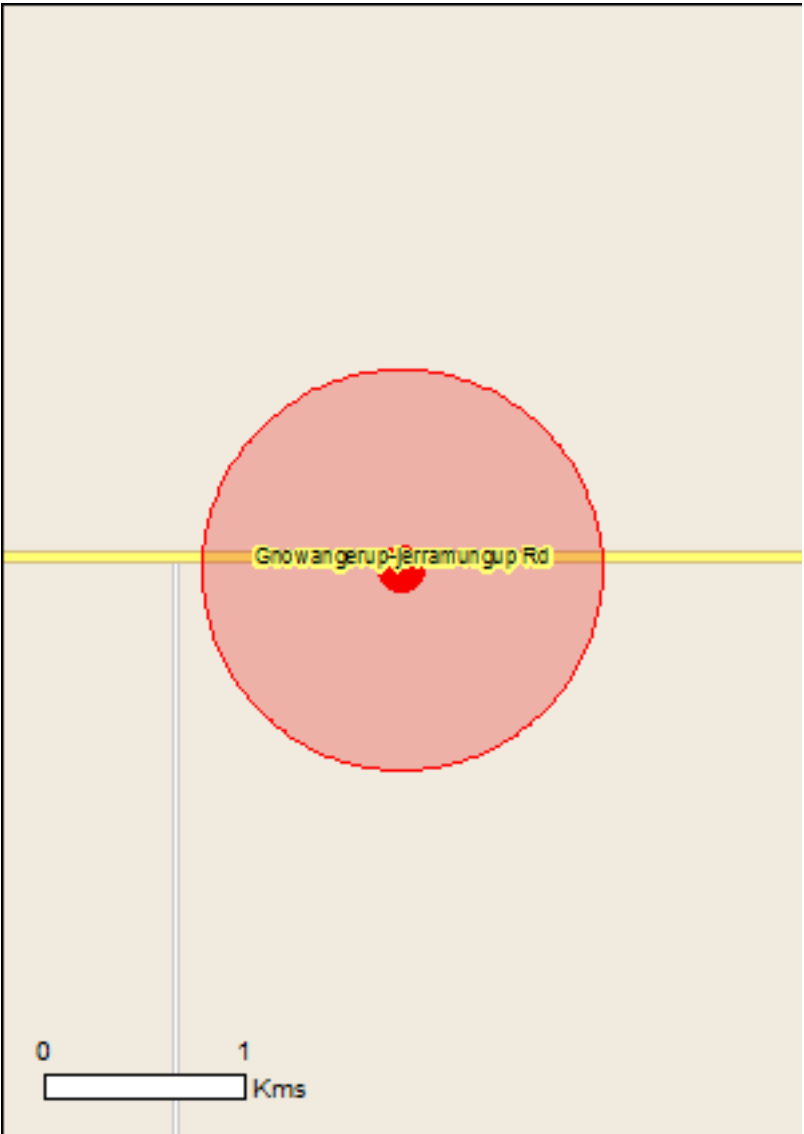
[Matters of NES](#)

[Other Matters Protected by the EPBC Act](#)

[Extra Information](#)

[Caveat](#)

[Acknowledgements](#)



This map may contain data which are
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[Coordinates](#)

Buffer: 1.0Km



Summary

Matters of National Environmental Significance

This part of the report summarises the matters of national environmental significance that may occur in, or may relate to, the area you nominated. Further information is available in the detail part of the report, which can be accessed by scrolling or following the links below. If you are proposing to undertake an activity that may have a significant impact on one or more matters of national environmental significance then you should consider the [Administrative Guidelines on Significance](#).

World Heritage Properties:	None
National Heritage Places:	None
Wetlands of International Importance:	None
Great Barrier Reef Marine Park:	None
Commonwealth Marine Area:	None
Listed Threatened Ecological Communities:	1
Listed Threatened Species:	17
Listed Migratory Species:	8

Other Matters Protected by the EPBC Act

This part of the report summarises other matters protected under the Act that may relate to the area you nominated. Approval may be required for a proposed activity that significantly affects the environment on Commonwealth land, when the action is outside the Commonwealth land, or the environment anywhere when the action is taken on Commonwealth land. Approval may also be required for the Commonwealth or Commonwealth agencies proposing to take an action that is likely to have a significant impact on the environment anywhere.

The EPBC Act protects the environment on Commonwealth land, the environment from the actions taken on Commonwealth land, and the environment from actions taken by Commonwealth agencies. As heritage values of a place are part of the 'environment', these aspects of the EPBC Act protect the Commonwealth Heritage values of a Commonwealth Heritage place. Information on the new heritage laws can be found at <http://www.environment.gov.au/heritage>

A [permit](#) may be required for activities in or on a Commonwealth area that may affect a member of a listed threatened species or ecological community, a member of a listed migratory species, whales and other cetaceans, or a member of a listed marine species.

Commonwealth Land:	None
Commonwealth Heritage Places:	None
Listed Marine Species:	13
Whales and Other Cetaceans:	None
Critical Habitats:	None
Commonwealth Reserves Terrestrial:	None
Australian Marine Parks:	None

Extra Information

This part of the report provides information that may also be relevant to the area you have nominated.

State and Territory Reserves:	None
Regional Forest Agreements:	None
Invasive Species:	10
Nationally Important Wetlands:	None
Key Ecological Features (Marine)	None

Details

Matters of National Environmental Significance

Listed Threatened Ecological Communities

[Resource Information]

For threatened ecological communities where the distribution is well known, maps are derived from recovery plans, State vegetation maps, remote sensing imagery and other sources. Where threatened ecological community distributions are less well known, existing vegetation maps and point location data are used to produce indicative distribution maps.

Name	Status	Type of Presence
Eucalypt Woodlands of the Western Australian Wheatbelt	Critically Endangered	Community may occur within area

Listed Threatened Species

[Resource Information]

Name	Status	Type of Presence
Birds		

Botaurus poiciloptilus Australasian Bittern [1001]	Endangered	Species or species habitat may occur within area
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Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat may occur within area
---	-----------------------	--

Calyptorhynchus latirostris Carnaby's Cockatoo, Short-billed Black-Cockatoo [59523]	Endangered	Breeding likely to occur within area
--	------------	--------------------------------------

Leipoa ocellata Malleefowl [934]	Vulnerable	Species or species habitat may occur within area
---	------------	--

Numenius madagascariensis Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat may occur within area
---	-----------------------	--

Pezoporus occidentalis Night Parrot [59350]	Endangered	Species or species habitat may occur within area
--	------------	--

Mammals

Dasyurus geoffroii Chuditch, Western Quoll [330]	Vulnerable	Species or species habitat may occur within area
---	------------	--

Parantechinus apicalis Dibbler [313]	Endangered	Species or species habitat likely to occur within area
---	------------	--

Phascogale calura Red-tailed Phascogale, Red-tailed Wambenger, Kenngoor [316]	Vulnerable	Species or species habitat likely to occur within area
--	------------	--

Plants

Adenanthos pungens subsp. pungens Spiky Adenanthos [19429]	Vulnerable	Species or species habitat may occur within area
---	------------	--

Name	Status	Type of Presence
Banksia pseudoplumosa False Plumed-Banksia [82760]	Endangered	Species or species habitat likely to occur within area
Darwinia oxylepis Gillam's Bell [13188]	Endangered	Species or species habitat may occur within area
Darwinia wittwerorum Wittwer's Mountain Bell [15626]	Endangered	Species or species habitat may occur within area
Eremophila subteretifolia Lake King Eremophila [56702]	Endangered	Species or species habitat may occur within area
Eremophila verticillata Whorled Eremophila [7032]	Endangered	Species or species habitat may occur within area
Myoporum cordifolium Jerramungup Myoporum [24223]	Vulnerable	Species or species habitat likely to occur within area
Ricinocarpos trichophorus Barrens Wedding Bush [19931]	Endangered	Species or species habitat likely to occur within area

Listed Migratory Species

[Resource Information]

* Species is listed under a different scientific name on the EPBC Act - Threatened Species list.

Name	Threatened	Type of Presence
Migratory Marine Birds		
Apus pacificus Fork-tailed Swift [678]		Species or species habitat likely to occur within area
Migratory Terrestrial Species		
Motacilla cinerea Grey Wagtail [642]		Species or species habitat may occur within area
Migratory Wetlands Species		
Actitis hypoleucos Common Sandpiper [59309]		Species or species habitat may occur within area
Calidris acuminata Sharp-tailed Sandpiper [874]		Species or species habitat may occur within area
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat may occur within area
Calidris melanotos Pectoral Sandpiper [858]		Species or species habitat may occur within area
Numenius madagascariensis Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat may occur within area
Pandion haliaetus Osprey [952]		Species or species habitat may occur within area

Other Matters Protected by the EPBC Act

Listed Marine Species		[Resource Information]
* Species is listed under a different scientific name on the EPBC Act - Threatened Species list.		
Name	Threatened	Type of Presence
Birds		
Actitis hypoleucos Common Sandpiper [59309]		Species or species habitat may occur within area
Apus pacificus Fork-tailed Swift [678]		Species or species habitat likely to occur within area
Ardea alba Great Egret, White Egret [59541]		Species or species habitat likely to occur within area
Ardea ibis Cattle Egret [59542]		Species or species habitat may occur within area
Calidris acuminata Sharp-tailed Sandpiper [874]		Species or species habitat may occur within area
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat may occur within area
Calidris melanotos Pectoral Sandpiper [858]		Species or species habitat may occur within area
Chrysococcyx osculans Black-eared Cuckoo [705]		Species or species habitat likely to occur within area
Haliaeetus leucogaster White-bellied Sea-Eagle [943]		Species or species habitat may occur within area
Merops ornatus Rainbow Bee-eater [670]		Species or species habitat may occur within area
Motacilla cinerea Grey Wagtail [642]		Species or species habitat may occur within area
Numenius madagascariensis Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat may occur within area
Pandion haliaetus Osprey [952]		Species or species habitat may occur within area

Extra Information

Invasive Species		[Resource Information]
Weeds reported here are the 20 species of national significance (WoNS), along with other introduced plants that are considered by the States and Territories to pose a particularly significant threat to biodiversity. The following feral animals are reported: Goat, Red Fox, Cat, Rabbit, Pig, Water Buffalo and Cane Toad. Maps from Landscape Health Project, National Land and Water Resouces Audit, 2001.		
Name	Status	Type of Presence

Name	Status	Type of Presence
Birds		
Columba livia Rock Pigeon, Rock Dove, Domestic Pigeon [803]		Species or species habitat likely to occur within area
Streptopelia senegalensis Laughing Turtle-dove, Laughing Dove [781]		Species or species habitat likely to occur within area
Mammals		
Canis lupus familiaris Domestic Dog [82654]		Species or species habitat likely to occur within area
Capra hircus Goat [2]		Species or species habitat likely to occur within area
Felis catus Cat, House Cat, Domestic Cat [19]		Species or species habitat likely to occur within area
Mus musculus House Mouse [120]		Species or species habitat likely to occur within area
Oryctolagus cuniculus Rabbit, European Rabbit [128]		Species or species habitat likely to occur within area
Vulpes vulpes Red Fox, Fox [18]		Species or species habitat likely to occur within area
Plants		
Asparagus asparagoides Bridal Creeper, Bridal Veil Creeper, Smilax, Florist's Smilax, Smilax Asparagus [22473]		Species or species habitat likely to occur within area
Tamarix aphylla Athel Pine, Athel Tree, Tamarisk, Athel Tamarisk, Athel Tamarix, Desert Tamarisk, Flowering Cypress, Salt Cedar [16018]		Species or species habitat likely to occur within area

Caveat

The information presented in this report has been provided by a range of data sources as acknowledged at the end of the report.

This report is designed to assist in identifying the locations of places which may be relevant in determining obligations under the Environment Protection and Biodiversity Conservation Act 1999. It holds mapped locations of World and National Heritage properties, Wetlands of International and National Importance, Commonwealth and State/Territory reserves, listed threatened, migratory and marine species and listed threatened ecological communities. Mapping of Commonwealth land is not complete at this stage. Maps have been collated from a range of sources at various resolutions.

Not all species listed under the EPBC Act have been mapped (see below) and therefore a report is a general guide only. Where available data supports mapping, the type of presence that can be determined from the data is indicated in general terms. People using this information in making a referral may need to consider the qualifications below and may need to seek and consider other information sources.

For threatened ecological communities where the distribution is well known, maps are derived from recovery plans, State vegetation maps, remote sensing imagery and other sources. Where threatened ecological community distributions are less well known, existing vegetation maps and point location data are used to produce indicative distribution maps.

Threatened, migratory and marine species distributions have been derived through a variety of methods. Where distributions are well known and if time permits, maps are derived using either thematic spatial data (i.e. vegetation, soils, geology, elevation, aspect, terrain, etc) together with point locations and described habitat; or environmental modelling (MAXENT or BIOCLIM habitat modelling) using point locations and environmental data layers.

Where very little information is available for species or large number of maps are required in a short time-frame, maps are derived either from 0.04 or 0.02 decimal degree cells; by an automated process using polygon capture techniques (static two kilometre grid cells, alpha-hull and convex hull); or captured manually or by using topographic features (national park boundaries, islands, etc). In the early stages of the distribution mapping process (1999-early 2000s) distributions were defined by degree blocks, 100K or 250K map sheets to rapidly create distribution maps. More reliable distribution mapping methods are used to update these distributions as time permits.

Only selected species covered by the following provisions of the EPBC Act have been mapped:

- migratory and
- marine

The following species and ecological communities have not been mapped and do not appear in reports produced from this database:

- threatened species listed as extinct or considered as vagrants
- some species and ecological communities that have only recently been listed
- some terrestrial species that overfly the Commonwealth marine area
- migratory species that are very widespread, vagrant, or only occur in small numbers

The following groups have been mapped, but may not cover the complete distribution of the species:

- non-threatened seabirds which have only been mapped for recorded breeding sites
- seals which have only been mapped for breeding sites near the Australian continent

Such breeding sites may be important for the protection of the Commonwealth Marine environment.

Coordinates

-33.95388 118.66466

Acknowledgements

This database has been compiled from a range of data sources. The department acknowledges the following custodians who have contributed valuable data and advice:

- [Office of Environment and Heritage, New South Wales](#)
- [Department of Environment and Primary Industries, Victoria](#)
- [Department of Primary Industries, Parks, Water and Environment, Tasmania](#)
- [Department of Environment, Water and Natural Resources, South Australia](#)
- [Department of Land and Resource Management, Northern Territory](#)
- [Department of Environmental and Heritage Protection, Queensland](#)
- [Department of Parks and Wildlife, Western Australia](#)
- [Environment and Planning Directorate, ACT](#)
- [Birdlife Australia](#)
- [Australian Bird and Bat Banding Scheme](#)
- [Australian National Wildlife Collection](#)
- Natural history museums of Australia
- [Museum Victoria](#)
- [Australian Museum](#)
- [South Australian Museum](#)
- [Queensland Museum](#)
- [Online Zoological Collections of Australian Museums](#)
- [Queensland Herbarium](#)
- [National Herbarium of NSW](#)
- [Royal Botanic Gardens and National Herbarium of Victoria](#)
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- [University of New England](#)
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- [eBird Australia](#)
- [Australian Government – Australian Antarctic Data Centre](#)
- [Museum and Art Gallery of the Northern Territory](#)
- [Australian Government National Environmental Science Program](#)
- [Australian Institute of Marine Science](#)
- [Reef Life Survey Australia](#)
- [American Museum of Natural History](#)
- [Queen Victoria Museum and Art Gallery, Inveresk, Tasmania](#)
- [Tasmanian Museum and Art Gallery, Hobart, Tasmania](#)
- Other groups and individuals

The Department is extremely grateful to the many organisations and individuals who provided expert advice and information on numerous draft distributions.

Please feel free to provide feedback via the [Contact Us](#) page.