

Development Application for Planning Consent

Proposed New Telecommunications Facility 275 Edward Road Chirnside Park VIC 3116 Lot 1 PS322790V

Town Planning Report

Project Reference: 340568 Chirnside North RFNSA Reference: 3116009

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Executive Summary

Site Information	Lot description: Lot 1 PS322790V Physical address: 275 Edward Road Chirnside Park VIC 3116 Coordinates: 27.7575 145 31376		
	Coordinates. -57.75555, 145.51576		
Proposal	Axicom are seeking a development permit for Use and Development of a new Telecommunications Facility at 275 Edward Road Chirnside Park VIC 3116 (Lot 1 PS322790V).		
	Optus telecommunications equipment, providing 3G, 4G and 5G services to Chirnside Park.		
	The proposal involves: • One (1) 35m Indara monopole		
	 One (1) new antenna headframe supporting the following equipment: Fifteen (15) new panel antennas; 		
	 One (1) outdoor equipment cabinet at ground level; Out and fill to establish the proposed compound; 		
	 Installation of a new crossover, culvert and access track: 		
	 Ancillary equipment associated with operation and safety of the facility, including remote radio units, elevated cable tray, cabling and antenna mounts, group meter panel, security fencing with 3m wide double access gate etc. 		
	The facility will be located within a fenced compound. The monopole and associated equipment will be finished in a pale grey, while the equipment cabinet will be a pale eucalypt or beige colour.		
Purpose	Axicom Pty Ltd (trading as Indara), with Vodafone and Optus, are proposing a new telecommunications facility at Chirnside Park. The new facility will provide improved mobile and data services to Vodafone and Optus customers in the surrounding area.		
	The facility has been designed as a neutral host facility, capable of supporting co-location by other carriers, government entities and wireless service providers.		
Planning	LGA: Yarra Ranges Council		
Considerations	Zoning: GWZ4 - Green Wedge Zone (Schedule 4) Overlays: Significant Landscape Overlay (Schedule 6 and Schedule 2)		
	Environmental Significance Overlay (Schedule 1)		
	Land Subject to Inundation Overlay		
Applicant	Axicom Ptv Ltd		
Approdite	Level 1, 110 Pacific Highway St Leonards NSW 2065		
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1. Introduction

Axicom Pty Ltd (trading as Indara) are seeking development consent for a new telecommunications facility at 275 Edward Road Chirnside Park VIC 3116 (Lot 1 PS322790V).

The new facility will be comprised of a 35m monopole supporting Vodafone and Optus telecommunications antennas and equipment. The purpose of the project is to significantly improve Vodafone and Optus mobile telecommunications services, including coverage and network capacity, in the Chirnside Park area.

This Town Planning Report provides an assessment of the project against relevant planning controls.

2. Background

2.1 Indara, Vodafone and Optus

This development application has been prepared and submitted by Indara. Indara are Australia's leading independent owner and provider of shared wireless telecommunications infrastructure, with a portfolio of over 4300 telecommunications sites across Australia.

Indara operate as a neutral host. Indara's facilities are specifically designed to accommodate colocation by Australia's mobile carriers, government agencies and other wireless services providers.

Vodafone are currently undertaking a significant expansion of their national mobile network across Australia, both to improve existing 4G services and establish 5G services. Indara are working with Vodafone to deploy new infrastructure across Australia.

This proposed facility is being deployed as part of Vodafone and Optus' Extended Joint Venture program, meaning it will provide both Vodafone and Optus services. The proposed facility is comprised of a new monopole and associated passive infrastructure, which will be owned and managed by Indara, and active infrastructure (antennas and telecommunications equipment) which will be owned and managed by Vodafone and Optus respectively.

Note that Indara were formerly known as Axicom. For legal purposes, the applicant for this development application is Axicom Pty Ltd (Axicom).

2.2 Demand for Network Services

Access to high quality telecommunications services is vitally important to the community. Mobile usage continues to trend upward.

- 99% of Australians use a mobile phone; 76% of Australians do not have a landline phone and rely exclusively on a mobile phone¹.
- Mobile data usage continues to significantly increase as the network is used in different ways. Between 2020 and 2021, the amount of data downloaded by phone increased by over 29%². In the first quarter of 2022, global mobile data usage grew by 40%³. Streaming and video calling are major drivers of this increased demand.
- Covid-19 significantly changed the way that Australians live and work 61% of employed Australians worked online from home in 2021⁴. With many Australians continuing to adopt flexible or hybrid work arrangements, additional demand has been placed on the mobile network.
- Public safety is a significant driver behind improvements to mobile coverage. In 2021, around 78% of emergency calls were made from a mobile handset⁵.

More than ever, mobile telecommunications are an essential service. By extension, mobile base stations are essential infrastructure – it is important that mobile infrastructure keeps pace with this increasing demand.

¹ <u>https://www.acma.gov.au/publications/2021-12/report/communications-and-media-australia-how-we-communicate</u>

² <u>https://www.acma.gov.au/publications/2021-12/report/communications-and-media-australia-how-we-use-internet</u>

³ <u>https://www.ericsson.com/en/reports-and-papers/mobility-report/dataforecasts/mobile-traffic-update</u>

⁴ <u>https://www.acma.gov.au/publications/2021-12/report/communications-and-media-australia-trends-and-developments-telecommunications-2020-21</u>

⁵ <u>https://www.triplezero.gov.au/triple-zero/How-to-Call-000/advanced-mobile-location</u>

If new base stations are not deployed, users may have difficulty connecting to the mobile network or experience call dropouts, especially indoors. Users may also experience slow data speeds, longer download times and poor network performance at peak times.

Coverage Objectives

The new facility is proposed specifically to improve mobile services in Chirnside Park.

As with many locations in outer Melbourne, the Yarra Ranges LGA is seeing unprecedented residential growth and development. Chirnside Park, in particular, is expected to see its population grow from 30,140 to 36992 by 2031, an increase of approximately 23%.

The Yarra Ranges Precinct D: Chirnside Park and Mooroolbark Precinct Strategy identifies Chirnside Park as one of the area's best suited to accommodate this future residential growth, primarily from an influx of people leaving Melbourne, as well as the formation of new households from within the existing community.

A particular focus for this new facility is to service the rural residential interface, north of the main township area, by providing improved mobile services to residents and businesses within this area catering for both current demand, and future demand as the area develops further.

While there are existing base stations in area surrounding Chirnside Park, these are generally too far away, poorly positioned or otherwise limited from a technical perspective; they are unable to provide the required network quality and capacity needed to accommodate existing and future residents and businesses in the area. With the population and development density of the Chirnside Park area expanding quickly, there is a significant social, economic and safety impetus to improve mobile coverage and network capacity in this location.

3. Candidate Selection

3.1 Site Selection

Before proposing a new base station, mobile carriers will attempt to resolve service issues by reconfiguring or upgrading existing base stations. If upgrades do not resolve service issues, the carrier will consider any opportunities to co-locate on an existing mobile facility, building or other structure.

If there are no feasible co-location opportunities, the carrier will proceed to deploy a new 'greenfield' base station.

This facility is proposed in partnership with Vodafone and Optus, who have confirmed a new telecommunications facility will be needed in Chirnside Park and are working with Indara to deploy the new facility.

3.2 Upgrade and Co-Location Opportunities

Existing telecommunications facilities in the area have been assessed to confirm if they are feasible for co-location.

Figure 1 shows the location of existing facilities in the area around this proposed site, based on information from the Radio Frequency National Site Archive database (<u>www.rfnsa.com.au</u>). None of the existing sites in the area are suitable for co-location.



Figure 1: Existing Communications Facilities in Chirnside Park (Nearmap).

Existing and Proposed Communications Facilities			
RFNSA Details	Site Address	Comments	
3116006 NBN Co	285 Edward Road Chirnside Park VIC 3116	Closest existing NBN facility to the target coverage area. Facility is a 50m lattice tower hosting NBN equipment, approximately 750m north of the proposed Indara facility. Because of this facility's northerly position, it cannot adequately service the rural residential interface to the south. As such, Vodafone and Optus have identified that an additional base station is needed specifically servicing the Chirnside Park area to the south	
3140011 Telstra	130-132 Victoria Road Lilydale VIC 3140	Existing Telstra facility located to the northeast of the target coverage area. The facility at this location consists of a 35m monopole. Because of this facility's north-easterly position, it cannot adequately service the area of Chirnside Park to the southwest. Vodafone and Optus have identified that an additional base station is needed specifically servicing the Chirnside Park area to the southwest of this location.	

3116001 Telstra	Chirnside Park Country Club Kingswood Drive Chirnside Park VIC 3116	Existing Telstra facility located to the southeast of the target coverage area. The facility at this location consists of a rooftop installation on the Chirnside Park Country Club. Indara is of the understanding that Council is currently assessing a Planning Permit application by Visionstream on behalf of Amplitel for the installation of a new 30m monopole due to a requirement to relocate the existing rooftop facility. Because of this facility's south-easterly position, it cannot adequately service the area of Chirnside Park to the northwest. Vodafone and Optus have
		identified that an additional base station is needed specifically servicing the Chirnside Park area to the northwest of this location.
3116002 Telstra Vodafone Optus	Chirnside Park Shopping Centre 239-241 Maroondah Highway Chirnside Park VIC 3116	Closest existing Vodafone and Optus facility to the target coverage area. The facilities at this location consist of a 18m monopole hosting the Telstra equipment, whilst the Vodafone and Optus equipment are located on the rooftop of the shopping centre.
		Because of this facility's southerly position, it cannot adequately service the area of Chirnside Park to the north. Additionally, this facility is also servicing its own large catchment of users. Vodafone and Optus have identified that an additional base station is needed specifically servicing the Chirnside Park area to the north of this location.

3.3 Alternate Candidates

Per section 3.2, there are no suitable options for co-location. A new base station is required. A robust investigation of potential candidates has been undertaken.

In identifying a candidate, we have sought to maximise separation from residences and sensitive uses where possible, whilst also endeavouring to minimise impacts on the environment and scenic amenity as far as practicable.

A precautionary approach has been taken to site selection in accordance with sections 4.1 and 4.2 of the *C564:2020 Mobile Base Station Deployment Code*.



Figure 2: Potential candidates (Nearmap).

Prospective Candidates		
Candidate	Site Address	Comments
A	New Monopole 13 Paynes Road Chirnside Park VIC 3116	Contact with the landowner was not able to be established in order to enter into a lease agreement for the proposed facility, as such, this candidate was not progressed further.

В	New Monopole 235 Edward Road Chirnside Park VIC 3116	Contact with the landowner was not able to be established in order to enter into a lease agreement for the proposed facility, as such, this candidate was not progressed further.
С	New Monopole 165 Edward Road Chirnside Park VIC 3116	Contact with the landowner was not able to be established in order to enter into a lease agreement for the proposed facility, as such, this candidate was not progressed further.
D	New Monopole 95 Stanley Street Chirnside Park VIC 3116	Contact with the landowner was not able to be established in order to enter into a lease agreement for the proposed facility, as such, this candidate was not progressed further.
E	New Monopole 17 Paynes Road Chirnside Park VIC 3116	Contact with the landowner was not able to be established in order to enter into a lease agreement for the proposed facility, as such, this candidate was not progressed further.
F	New Monopole Chirnside Park CFA Fire Station 79 Edward Road Chirnside Park VIC 3116	New monopole on the boundary of the rural-residential interface, retaining Green Wedge zoning. Given the availability of options in the rural area to the north, that had a similar service outcome but a much greater setback to residential land uses, this option was not pursued.
G	New Monopole 19 Stanley Street Chirnside Park VIC 3116	New monopole near the boundary of the rural-residential interface, retaining Green Wedge zoning. Given the availability of options in the rural area to the north, that had a similar service outcome but a much greater setback to residential land uses, this option was not pursued.
н	New Monopole 9 Paynes Road Chirnside Park VIC 3116	Contact with the landowner was not able to be established in order to enter into a lease agreement for the proposed facility, as such, this candidate was not progressed further.
I	New Monopole 110 Anthony Drive Chirnside Park VIC 3116	Contact with the landowner was not able to be established in order to enter into a lease agreement for the proposed facility, as such, this candidate was not

		progressed further.
J	New Monopole 20 Sunset Drive Chirnside Park VIC 3116	Contact with the landowner was not able to be established in order to enter into a lease agreement for the proposed facility, as such, this candidate was not progressed further.
К	New Monopole 45 Stanley Street Chirnside Park VIC 3116	New monopole near the boundary of the rural-residential interface, retaining Green Wedge zoning. Given the availability of options in the rural area to the north, that had a similar service outcome but a much greater setback to residential land uses, this option was not pursued.
L	New monopole 80 Anthony Drive Chirnside Park VIC 3116	New monopole closer to the more developed residential areas of Chirnside Park, retaining Green Wedge zoning. Given the availability of options in the rural area to the north, that had a similar service outcome but a much greater setback to residential land uses, this option was not pursued.
Μ	New Monopole 275 Edward Road Chirnside Park VIC 3116	New monopole on rural paddock located north of Chirnside Park, retaining a Green Wedge zoning. The candidate was considered favourable from a service perspective, as well as having good separation from surrounding land uses. Additionally, the proposal is considered to have a minor environmental impact, as the proposal does not involve the removal of any vegetation, except for some of the grass in the paddock to establish the proposed compound and access track. Accordingly, this candidate was chosen as Indara's prime candidate and is the subject of this application.

4. Site Context

The proposal involves establishment of a new telecommunications facility at 275 Edward Road Chirnside Park VIC 3116.

The proposed facility will host both Vodafone and Optus equipment and will provide telecommunications services to residential and commercial customers located in the rural-residential interface of Chirnside Park, north of the main township area, for both carriers.

The site is located on a large lot retaining GWZ4 Green Wedge Zone - Schedule 4 under the Yarra Ranges Planning Scheme. The property is a rural paddock, that has been historically cleared of native vegetation, except for a few scattered trees across the property.

The proposed facility is located near the southern boundary of the subject property, approximately 580m west of Edward Road and setback approximately 10m from Paynes Road.

The surrounding locality consists predominantly of large lot rural properties in all directions around the proposed site location. The closest residences are located approximately 380m to the northeast and southwest, at 275 Edward Rd and 5 Paynes Rd respectively.

Figures 3 to 5 show the proposed site.



Figure 3: Site context. The proposed facility is located within a rural paddock, as outlined in red, within a wider rural area. The facility has been deliberately sited in this area in preference to sites closer to the established housing further to the south (Nearmap).



Figure 4: Site context. The proposed facility is located, as outlined in red, near the southern boundary of the subject property, approximately 580m west of Edward Road and setback approximately 10m from Paynes Road, as shown in red (Nearmap).



Figure 5: View of the approximate compound location, as shown in red, when viewed from Paynes Road (Field Investigation, 20 August 2022).

5. Proposed Works

5.1 Equipment to be Installed

The proposed works involve installation of:

- One (1) new 35m Indara monopole, finished in unpainted grey colour.
- Installation of a triangular headframe at the top of the new monopole.
- Vodafone and Optus telecommunications equipment on the pole and within the compound, including:
 - Three (3) 4G panel antennas, each up to 2.8m in length, mounted on a new headframe.
 - Twelve (12) 5G panel antennas, each up to 1m in length, mounted on the new headframe.
 - One (1) outdoor equipment cabinet, finished in either beige or pale eucalypt green, mounted at ground level at the base of the pole.
 - Ancillary equipment associated with operation and safety of the facility, including remote radio units, cabling and safety equipment etc.
 - Installation of a new gravel 3m wide access track and gate, 7m wide crossover and 5m wide culvert and end walls to access the facility from Paynes Road.
 - \circ Cut and fill will be required to level the site and establish the proposed compound.

The overall height of the facility, including antennas and equipment, will not exceed 38.8m above ground level. The facility will be located within a fenced 10m x 10m compound, enclosed by a 2.4m tall chain-link security fence.

Refer Appendix 2 for proposal plans.

5.2 Site Access and Parking

The property can be accessed via a new crossover and gate off Paynes Road. The new crossover and culvert are proposed to be installed in accordance with local Council design guidelines. A new gravel access track of approximately 10m is required to the proposed compound.

Once constructed, the facility will operate on an unmanned basis aside from periodic routine maintenance visits (generally 2-4 times annually). The facility will not generate significant vehicle traffic through its ongoing operation.

5.3 Noise

The facility will not be a significant generator of noise. The only part of the facility that generates noise is the cooling fans on the equipment cabinet.

Cooling equipment will only operate when required and will not operate continuously. Cooling equipment will operate at levels generally comparable to those of a domestic air conditioner. The project is not expected to represent a noise nuisance, noting the site is located approximately 380m from the nearest residences.

5.4 **Power and Utilities**

The proposal will include installation of underground power and fibre infrastructure, via trench. No works associated with stormwater drainage, or connections to reticulated water and sewerage, are proposed or required.

5.5 Emissions

Operation of the facility will not result in emission of dust, heat, smoke, gaseous plumes or particulates, nor result in the generation of any waste once the facility is operational.

To provide mobile coverage, the facility will produce electromagnetic EME emissions. These will be within the levels prescribed by ARPANSA and regulated by ACMA. An ARPANSA EME Report, demonstrating compliance with Australian safety standards, is attached. Refer Section 8 of this report.

5.6 Environmental Considerations

The subject site is located inside an established rural paddock, which has been historically cleared of native vegetation, except for a few scattered trees across the property. The proposed site has been positioned to the southeast, in a cleared area of the lot, as shown in **Figures 4 and 5**.

The proposed works are located outside the drip line of all the surrounding trees and does not require the pruning of removal of any vegetation remaining on the site, except for the exotic grasses to establish the proposed compound. As such, the proposal is considered to have a minor environmental impact.

5.7 Heritage

The subject lot is not heritage listed and searches indicate no record of European nor aboriginal artefacts or sensitivity. Should any artefacts be identified during build, works will cease, and the appropriate investigations undertaken.

5.8 Aviation

The proposed facility is not expected to have any impact on aviation safety. The facility is not within 30km of an airport or aerodrome and does not penetrate any Obstacle Limitation Surfaces. No specific aviation safety measures, such as lighting or obstacle paintwork, are proposed.

6. Legislative Context

6.1 Commonwealth Legislation

6.1.1 Telecommunications Act 1997 and Telecommunications (Low-Impact Facilities) Determination 2018

The *Telecommunications Act 1997* allows mobile carriers to perform certain maintenance and installation works without needing development consent. The *Telecommunications (Low-Impact Facilities) Determination 2018* also allows for certain kinds of 'Low Impact' equipment to be installed without development consent.

New towers do not fall within these federal planning exemptions. Accordingly, this proposal will require Council approval.

6.1.2 Telecommunications Code of Practice 2018

The *Telecommunications Code of Practice 2018* emphasizes "best practice" for the installation of facilities, compliance with industry standards and minimisation of adverse impacts on the environment.

This proposal has been designed with consideration for the Code of Practice. All steps will be taken to do as little damage as practicable; the facility will be constructed and operated in accordance with industry standards and good engineering practice; and the design of the facility will be in accordance with industry best practice.

6.1.3 C564:2020 Mobile Phone Base Station Deployment Code

The Communications Alliance Limited *C564:2020 Mobile Phone Base Station Deployment Code* (the Deployment Code) is an industry code of practice registered by the Australian Communications and Media Authority.

The Code applies to all licenced telecommunications carriers, and sets guidelines for site selection, community consultation, design, installation and operation of telecommunications facilities.

Sections 4.1 and 4.2 of the Code are relevant to this proposal, and require a precautionary approach to site selection, infrastructure design and site operation. The proposed facility has been sited and designed in accordance with Sections 4.1 and 4.2. Checklists demonstrating compliance can be provided on request.

The Code also requires an ARPANSA EME report be prepared for all new mobile base stations, to demonstrate compliance with relevant safety standards. The report is enclosed in **Appendix 3**.

6.2 Yarra Ranges Planning Scheme

6.2.1 Clause 19.03 Development Infrastructure

The Victoria Planning Provisions (VPPs) are a comprehensive set of planning provisions that apply across the state of Victoria and are incorporated into all planning schemes. The VPPs recognise the importance of telecommunications networks to Victoria, while also identifying that deployment of telecommunications infrastructure must be balanced against adverse environmental impacts.

Clause 19.03-4S provides guidelines for Councils to consider in relation to deployment of telecommunications facilities. The proposal is generally compliant.

Compliance with 19.03-4S Telecommunications	s
Objective	Comments
To facilitate the orderly development, extension and maintenance of telecommunications infrastructure.	Complies. This proposal is for the orderly development of a new telecommunications facility and will provide additional capacity for Vodafone and Optus mobile and data services to residential and commercial customers in Chirnside Park.
Strategies	Comments
Facilitate the upgrading and maintenance of telecommunications facilities.	Not applicable. The proposal is for a new telecommunications facility.
Ensure that modern telecommunications facilities are widely accessible and that the telecommunications needs of business, domestic, entertainment and community services are met.	Complies. The proposal will provide improved Vodafone and Optus 4G and establish 5G mobile and data services to residential and commercial customers in Chirnside Park.

6.2.2 Zone Provisions

The site is zoned GWZ4 Green Wedge Zone - Schedule 4 and is generally compliant with the purposes of the zone.

Compliance with 35.04 Green Wedge Zone		
Purpose	Comments	
To implement the Municipal Planning Strategy and the Planning Policy Framework.	Not applicable. This purpose relates more to Council decision making, rather than the proposal.	
To provide for the use of land for agriculture.	Complies. Given the small scale of the proposed development, it is not anticipated to adversely impact the use of land for agricultural purposes, however, it will provide essential supporting mobile and data services for agribusinesses that are operating in the surrounding area.	

To recognise, protect and conserve green wedge land for its agricultural, environmental, historic, landscape, recreational and tourism opportunities, and mineral and stone resources.	Complies. Indara have sought to minimise environmental impacts as far as practical, by locating the proposed facility within a cleared area of the subject lot, which does not require the removal of any vegetation.
	Given the small scale of the proposed development, it is not anticipated that the proposal will adversely impact the zone's objectives to protect and conserve green wedge land for agricultural, tourism or recreational opportunities. However, it will provide essential supporting mobile and data services to these businesses operating in the surrounding area.
	As noted in Section 5.7, the subject lot is not identified as holding any Aboriginal or European historical or heritage significance. Neither will the proposal impact on any mineral or stone resources.
	Regarding landscape opportunities, the facility has been located to minimise amenity impacts as far as practical. The facility is located approximately 380m from the nearest residences. As such, the facility is not considered to be a visual focal point.
	The top of the monopole and headframe will protrude above the landscape and will be visible from vantage points within the locality. We note this is a technical requirement, as telecommunications facilities, by their nature, must be tall enough in order to function - however, the amenity impact of the proposal is considered to be appropriate in context.
To encourage use and development that is consistent with sustainable land management practices.	Not applicable to this proposal.
To encourage sustainable farming activities and provide opportunity for a variety of productive agricultural uses.	Not applicable to this proposal.
To protect, conserve and enhance the cultural heritage significance and the character of open rural and scenic non-urban landscapes.	Complies as far as practical. As noted in Section 5.7, the subject lot is not identified as holding any Aboriginal or European historical or heritage significance.
	Regarding the character of open rural and scenic non- urban landscapes, the proposal is not considered to adversely impact the character of these landscapes, given the small scale of the proposed development.

	The proposed facility has been positioned to provide as much separation from the surrounding residential land uses as practical, whilst still being able to meet the target coverage objectives of Vodafone and Optus
	The skylines of rural landscapes across Australia are often interspersed with tall vertical elements, such as high voltage towers, light poles and telecommunications facilities. As shown in Figure 6 , there are existing high voltage towers, which are already an established feature within the landscape. As such, it is not anticipated that the proposed monopole will be out of scale, context or character for the area.
	As noted previously, the facility is located approximately 380m from the nearest residences and is not considered to be a visual focal point. While the top of the monopole and headframe will protrude above the landscape and will be visible from vantage points within the locality, we note this is a technical requirement, as telecommunications facilities, by their nature, must be tall enough in order to function - however, the amenity impact of the proposal is considered to be appropriate in context.
To protect and enhance the biodiversity of the area.	Complies. The proposal is considered to have a minor impact on biodiversity, noting the land has been historically cleared of native vegetation. The proposal does not involve the removal of any vegetation, except for some of the grass in the paddock to establish the proposed compound and access track.
Schedule 4	Comments
Earthworks which change the rate of flow or the discharge point of water across a property boundary.	Complies. Given the small scale of the development, the proposal is not considered to have an adverse impact on the rate of flow or the discharge point of water across a property boundary, nor increase the discharge of saline groundwater.
Earthworks which increase the discharge of saline groundwater.	

6.2.3 Clause 52.19 Telecommunications Facility

This application seeks approval for the Use and Development of a Telecommunications Facility. Clause 52.19 provides specific requirements for new telecommunications facilities and provides that certain kinds of telecommunications infrastructure do not require development consent.

Clause 52.19 Telecommunications Facility	
Objective	Comments
To ensure that telecommunications infrastructure is provided in an efficient and cost-effective manner to meet community needs.	Complies. The proposal will provide improved Vodafone and Optus 4G and establish 5G mobile and data services to residential and commercial customers in Chirnside Park.
To facilitate an effective statewide telecommunications network consistent with orderly and proper planning.	
To support the provision of telecommunications facilities with minimal impact on the amenity of the area.	Complies as far as practical. The proposed facility has been positioned to provide as much separation from the surrounding residential land uses as practical, whilst still being able to meet the target coverage objectives of Vodafone and Optus.
	The proposed facility has been positioned to provide as much separation from the surrounding residential land uses as practical, whilst still being able to meet the target coverage objectives of Vodafone and Optus
	The skylines of rural landscapes across Australia are often interspersed with tall vertical elements, such as high voltage towers, light poles and telecommunications facilities. As shown in Figure 6 , there are existing high voltage towers, which are already an established feature within the landscape. As such, it is not anticipated that the proposed monopole will be out of scale, context or character for the area.
	As noted previously, the facility is located approximately 380m from the nearest residences and is not considered to be a visual focal point. While the top of the monopole and headframe will protrude above the landscape and will be visible from vantage points within the locality, we note this is a technical requirement, as telecommunications facilities, by their nature, must be tall enough in order to function - however, the amenity impact of the proposal is considered to be appropriate in context.
	Notwithstanding, certain measures have been taken to ensure that visual impact is mitigated as much as practicable. Refer to Section 7 for further information on visual impact.

6.2.4 Overlays

Significant Landscape Overlay

42.03 Significant Landscape Overlay	
Purpose	Comments
To implement the Municipal Planning Strategy and the Planning Policy Framework.	Not applicable. This purpose relates more to Council decision making, rather than the proposal.
To identify significant landscapes.	Not applicable. This purpose relates more to Council decision making, rather than the proposal.
To conserve and enhance the character of significant landscapes.	Complies as far as practical. The proposed facility has been positioned to provide as much separation from the surrounding residential land uses as practical, whilst still being able to meet the target coverage objectives of Vodafone and Optus
	The skylines of rural landscapes across Australia are often interspersed with tall vertical elements, such as high voltage towers, light poles and telecommunications facilities. As shown in Figure 6 , there are existing high voltage towers, which are already an established feature within the landscape. As such, it is not anticipated that the proposed monopole will be out of scale, context or character for the area.
	As noted previously, the facility is located approximately 380m from the nearest residences and is not considered to be a visual focal point. While the top of the monopole and headframe will protrude above the landscape and will be visible from vantage points within the locality, we note this is a technical requirement, as telecommunications facilities, by their nature, must be tall enough in order to function - however, the amenity impact of the proposal is considered to be appropriate in its context.
	We note that all the potential candidates identified in Section 3.3 of this Town Planning Report are located within land subject to the Significant Landscape Overlay. As such, regardless of which location was chosen, it would not have been possible to completely avoid impacting on areas that Council considers to be

	significant landscapes.
	Of the 13 potential candidates, a facility at 275 Edward Road Chirnside Park, was best positioned to satisfy Vodafone and Optus' coverage objectives for residential and commercial customers in Chirnside Park, whilst any amenity impacts of the proposal were considered appropriate in context. This location represents a considerably superior option to siting the facility closer to the residential areas to the south.
	Notwithstanding, certain measures have been taken to ensure that visual impact is mitigated as much as practicable. Refer to Section 7 for further information on visual impact.
Schedule 2	Comments
To maintain a broad open rural landscape in which buildings are inconspicuous elements.	Not applicable. The proposal is not a building.
To allow middle and long distance views from the valley to the surrounding ranges.	Complies. Due to the small scale of the development, the proposal is not considered to have an adverse impact on middle and long distance views from the valley to the surrounding ranges.
	The skylines of rural landscapes across Australia are often interspersed with tall vertical elements, such as high voltage towers, light poles and telecommunications facilities. As shown in Figure 6 , there are existing high voltage towers, which are already an established feature within the landscape. As such, it is not anticipated that the proposed monopole will be out of scale, context or character for the local area.
To ensure that the siting and design of new buildings complements their setting and reinforces the open rural landscape character of the area.	Not applicable. The proposal is not a building.
To retain the pattern of development with occasional clusters of building and infrastructure located well away from roads.	Complies as far as practical. The facility has been positioned near the southern boundary of the lot, in a location that does not impact the landowner's future objectives for the property. Additionally, this is also an area that was easily accessible for ongoing maintenance.

Complies. The proposal does not involve the removal of any vegetation, except for some of the grass in the paddock to establish the proposed compound and access track.
Comments
Complies. Due to the small scale of the development, the proposal is not considered to result in the intensification of development within the landscape.
As noted previously, the skylines of rural landscapes across Australia are often interspersed with tall vertical elements, such as high voltage towers, light poles and telecommunications facilities. As shown in Figure 6 , there are existing high voltage towers, which are already an established feature within the landscape. As such, it is not anticipated that the proposed monopole will be out of scale, context or character for the local area.
Not applicable. The proposal is not a building.
Complies. The proposal does not involve the removal of any vegetation, except for some of the grass in the paddock to establish the proposed compound and access track.
Complies. Due to the small scale of the development, the proposal is not considered to have an adverse impact on middle and long distance views from the valley to the surrounding ranges.
Complies. The proposal will not interrupt the forested backdrop to views. As noted previously, the skylines of rural landscapes across Australia are often interspersed with tall vertical elements, such as high voltage towers, light poles and telecommunications facilities. As shown in Figure 6 , there are existing high voltage towers, which are already an established feature within the landscape.

	monopole will be out of scale, context or character for the local area.
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Environmental Significance Overlay

While parts of the lot are identified as having an Environmental Significance Overlay, the subject site location does not, as such, the provisions of this overlay have not been covered in this report.

Land Subject to Inundation Overlay

While parts of the lot are identified as having a Land Subject to Inundation Overlay, the subject site location does not, as such, the provisions of this overlay have not been covered in this report.

Erosion Management Overlay

While parts of the lot are identified as having an Erosion Management Overlay, the subject site location does not, as such, the provisions of this overlay have not been covered in this report.

7. Visual Impact

Telecommunications facilities, by their nature, must be tall enough to protrude above the surrounding environment to function. Indara acknowledge the proposed facility will be visible from a number of perspectives within the area – however, the visual impact of this proposal is considered appropriate in this context.

The skylines of rural landscapes across Australia are often interspersed with tall vertical elements, such as high voltage towers, light poles and telecommunications facilities. As shown in **Figure 6**, there are existing high voltage towers, which are already an established feature within the landscape. As such, it is not anticipated that the proposed monopole will be out of scale, context or character for the area.

Additionally, certain measures have been taken to ensure that visual impact is mitigated as much as practicable, these include:

- Use of a monopole is proposed. Monopoles are considered to be a sympathetic inclusion to the environment when compared to other structure types, such as lattice towers, because of their slimmer profile.
- To minimize visual bulk, Vodafone and Optus antennas will be mounted on a single headframe, reducing visual impact compared with separate headframes at different heights.
- Indara has sought to minimise amenity impacts as far as possible by locating the proposed facility on large rural lot, north of the main township area, which will minimise amenity impacts from surrounding perspectives as far as practical - the nearest residences are located approximately 380m from the proposed facility location. At this distance, the proposed facility is not considered to be a focal point and will be of a similar scale to other utility infrastructure within the landscape.
- The facility will be finished in a pale grey, which is considered to be the most sympathetic finish with regards to blending into the natural landscape in all weathers. It will also match other existing vertical elements in the area, such as the existing high voltage towers, light and utility poles, as shown in **Figure 6**, which are present across many rural landscapes. However, Indara will consider an alternate colour scheme if requested by Council.

At this location, a 35m monopole is required, we note this is a technical requirement to meet the targeted coverage objectives for both Vodafone and Optus. Indara note that this proposal

represents a suitable planning outcome because it avoids proliferation of telecommunications infrastructure in this area. Indara, as a neutral host, design and construct telecommunications facilities with the ability to facilitate co-location. The proposed facility will support two carriers initially and has been designed to accommodate additional mobile carriers, government agencies and other wireless services providers, as required, at a future time.

Overall, the proposed facility is not considered to have an adverse visual impact.



Figure 6: Existing high voltage towers in surrounding landscape (Field Investigation, 20 August 2022).

Views from the North

The land to the north of the proposed site location consists predominantly of agricultural land, with rural properties interspersed throughout the landscape.

Due to the undulating terrain and geographic separation from these properties, the proposed facility is not considered to be a focal point in the landscape from this aspect, nor is the facility expected to impact the use and enjoyment of resident's backyards or recreation areas.

Furthermore, the high voltage towers traversing across the landscape are an established feature of the landscape in this area. As such, it is not anticipated that the proposed monopole will be out of scale, context or character for the locality. Refer **Figures 7 and 8**.



Figure 7: View towards the proposed facility location from near the corner of Edward Road and the driveway to 345 Edward Road (Google Earth).



Figure 8: View towards the proposed facility location from near the corner of Edward Road and the adjacent high voltage tower adjacent to the road (Google Earth).

Views from the East

As with views from the north, the proposal is not anticipated to have an adverse impact on amenity from the east, due to the undulating terrain and geographic separation from these properties, the proposed facility is not considered to be a focal point in the landscape from this aspect, nor is the facility expected to impact the use and enjoyment of resident's backyards or recreation areas.

The existing street plantings, as well as the existing utility infrastructure such as light poles will aid in blending the facility into the landscape.

Refer Figure 9.



Figure 9: View towards the proposed facility location from near the corner of Edward Road and Paynes Road (Google Earth).

Views from the South

Views from the south look directly across the valley towards the surrounding ranges, which consist of the Kangaroo Ground South Bushland Reserve, Warrandyte – Kinglake Nature Reserve and Yering Gorge Bushland Reserve. Views from this aspect are considered to be indicative of those

viewed by the majority of residents of the acreage properties. As noted in **Figure 10**, the high voltage towers are a prominent feature in the skyline from this aspect.

Given the significant geographic separation from these residents, distant views of the proposed facility from this aspect are not considered to be intrusive.



Figure 10: View towards the proposed facility location from the end of Stanley Street (Google Earth).

Views from the West

Views from the west along Paynes Road are representative of those experienced by some of the closest neighbouring properties to the proposed facility. As noted in **Figure 11**, the roadside plantings as well as the hedging along the property boundary will aid in breaking up the profile of the tower from these views.

As such, the proposal is not considered to have an adverse amenity impact from this aspect, nor is it expected to impact the use and enjoyment of resident's backyards or recreation areas.



Figure 11: View towards the proposed facility from the West along Paynes Road (Google Earth).

8. Radiofrequency Emissions and Safety

It is the position of the Australian government, and peak health bodies like the World Health Organization (WHO), that mobile base stations are safe.

Statement from Australia's Chief Medical Officer

I'd like to reassure the community that 5G technology is safe. There is no evidence that telecommunication technologies, such as 5G, cause adverse health impacts. This position is supported by health authorities in Australia – such as the Australian Radiation Protection and Nuclear Safety Agency (ARPANSA) – and around the world, such as the World Health Organization.

Mobile phone networks and other wireless telecommunications emit low-powered radio waves also known as radiofrequency (RF) electromagnetic energy (EME). This is different to ionising radiation associated with nuclear energy or use in medicine. <u>The radio waves to which the general public is exposed from telecommunications are not hazardous to human health</u>.

https://www.health.gov.au/news/safety-of-5g-technology

Australian Government Advice

What do we know about EME? Answer: extensive scientific research confirms that mobile technology has no long or short term health effects; and the Australian Government is focused on capturing the benefits of advanced telecommunications while ensuring strict protections and safety standards are met.

The EME standard set by the Australian Radiation Protection and Nuclear Safety Agency (ARPANSA) defines the maximum exposure limit for all wireless equipment and is strictly enforced by the Australian Communications and Media Authority (ACMA). Measurements undertaken by carriers and ACMA show that mobile telecommunication sites emit a tiny fraction of maximum EME exposure limits. The exposure limits are themselves very conservative. As such, sites which operate at 100% of the limit are still considered safe.

This standard is informed by decades of quality studies undertaken by expert Australian and international scientists which show the low levels of EME produced by telecommunications equipment have no adverse effects. This includes previous generations of mobile technology, like 3G and 4G, and the higher, more efficient, radio waves used for 5G.

https://www.infrastructure.gov.au/media-centre/5g-and-electromagnetic-energy

EME is one of the most heavily studied types of energy in the world. Decades of research shows there is no verifiable evidence that EME from telecommunications facilities pose a negative health risk, especially when emission levels are below the maximum exposure limits set out in the Standard for Limiting Exposure to Radiofrequency Fields – 100 kHz to 300 GHz (the Standard).

https://www.infrastructure.gov.au/media-technology-communications/spectrum/5g-eme

All mobile base stations in Australia must comply with a strict safety standard called the *Standard for Limiting Exposure to Radiofrequency Fields* – *100 KHz to 300 GHz (RPS S-1)*. The standard has been prepared by the Australian Radiation Protection and Nuclear Safety Agency (ARPANSA), based on the recommendations of ICNIRP (International Commission for Non-Ionising Radiation Protection).

The Australian Communications and Media Authority (ACMA) regulates compliance with the standard. The safety standard applies to all mobile frequencies currently used in Australia, including 3G, 4G and 5G.

The Standard operates by placing a limit on the strength of the signal (or RF EME) that mobile carriers can transmit to and from any network base station. The environmental standard restricts the signal strength to a level low enough to protect all people at all times. It has a significant safety margin, or precautionary approach, built into it.

An ARPANSA EME report has been prepared to demonstrate compliance with the Australian standard. This report demonstrates the maximum signal strength that a proposed telecommunications facility is capable of producing, assuming it is operating at maximum capacity.

This facility will operate at maximum EME levels representing **1.98%** of the Australian standard. Refer **Appendix 3**.

Note that mobile base stations are designed to operate at minimum, not maximum, power levels at all times. The facility will only operate at a level necessary to accommodate the number of customers using the facility at any one time. Actual EME levels emitted by the facility will generally be much lower than those shown in the ARPANSA EME Report.

9. Conclusion

Indara (Australia Tower Network Pty Ltd), is seeking development consent to install a new telecommunications facility at 275 Edward Road Chirnside Park VIC 3116. The new facility is proposed to improve mobile services in the Chirnside Park area.

The facility has been sited to minimise impact on surrounding land uses as far as practicable, generally accords with planning requirements for the site, and has as small as possible a visual impact.

Given the significant public benefit afforded by the proposal, it is requested that consent be granted to undertake the project.

Appendix 1: Certificate of Title

Appendix 2: Proposal Plans

Appendix 3: ARPANSA EME Report