

**STATEMENT OF ENVIRONMENTAL EFFECTS TO NSW GOVERNMENT – DEPARTMENT OF PLANNING,
INDUSTRY, AND ENVIRONMENT**



**Accompanying Report to support a
Development Application at
Lot 21/DP 1092147
153 Old Castlereagh Road – Castlereagh NSW – 2749**

November 2020
Project Reference:
S3122 – Penrith Regatta SC1
S3165 – Penrith Regatta SC2



Document prepared by:

**Joanna Ward
Lendlease Services
Level -5, Tower B, Zenith Towers, 821 Pacific Highway,
Chatswood NSW – 2067.**

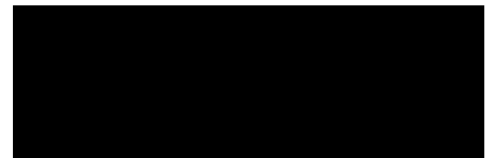




TABLE OF CONTENTS

TABLE OF CONTENTS.....	2
EXECUTIVE SUMMARY	4
1.0 INTRODUCTION.....	5
2.0 BACKGROUND.....	6
2.1 Introduction to Small Cells:.....	6
2.2 Benefits of Mobile Technologies.....	6
3.0 PROPOSED FACILITY	8
3.1 Objective of the Proposed Facility	8
3.2 Process of Site Selection	10
3.3 Co-location Opportunities.....	10
3.4 Consideration of Alternative Sites	12
3.5 Preferred Nominated Candidate.....	14
4.0 SITE CONTEXT.....	15
4.1 Subject Site and Surroundings	15
5.0 THE PROPOSAL.....	17
5.1 Installation details.....	17
5.2 Intent of the proposal	18
5.3 Vegetation and Bushfire Prone Land	18
5.4 Traffic, access and construction management	18
5.5 Utility service details.....	19
5.6 Acoustics	19
5.7 Flooding and Drainage	20
5.8 EME – Health and Safety.....	20
6.0 FEDERAL LEGISLATIVE CONTEXT	22
6.1 Commonwealth Legislation	22
6.1.1 The Telecommunications Act 1997	22
6.1.2 Telecommunications Code of Practice 2018	22
6.1.3 Mobile Phone Base Station Deployment Code	22
6.1.4 The Environment Protection and Biodiversity Conservation (EPBC) Act 1999	23
7.0 FEDERAL LEGISLATIVE CONTEXT	24
7.1 New South Wales State Planning Legislation.....	24
7.2 Environmental Planning and Assessment Act 1979.....	24
7.3 State Environmental Planning Policy (infrastructure)	26
7.4 NSW Telecommunications Facilities Guideline Including Broadband	27
7.5 State Environmental Planning Policy (Penrith Lakes Scheme) 1989	32
8. OTHER ENVIRONMENTAL CONSTRAINTS AND OPPORTUNITIES	36
8.1 Visual Impact.....	36
8.2 Social and Economic Impacts.....	40



8.3 Heritage and Due Diligence Code of Practice for the Protection of Aboriginal Objects in New South Wales	41
9. CONCLUSION.....	44
APPENDIX A – Political Donations Disclosure Statement	45
APPENDIX B – Proposal Plans.....	46
APPENDIX C – Certificate of Title	47
APPENDIX D – ARPANSA EME Report	48
APPENDIX E – Underground Fibre Route	49
APPENDIX F – Assessment of Statement of Environmental Effects against Schedule 2 of the SEPP ..	50
APPENDIX G – AHIMS Search Result	52



EXECUTIVE SUMMARY

Proposal:	<p>Lendlease Services (Lendlease) acts as Project Manager to facilitate the deployment of Mobile Pty Ltd (Optus) wireless network including the provision of town planning, design and site acquisition services.</p> <p>Lendlease on behalf of Optus Mobile Pty Ltd (Optus) proposes to apply for Planning Consent for the installation of a two (2) new Small Cell Radiocommunication Facilities within two (2) new Smart Poles at 153 Old Castlereagh Road – Castlereagh NSW – 2749 (Lot 20 - DP1092147; Lot 21 - DP1092147), commonly known as the Penrith Regatta Centre. The proposal is part of a nationwide rollout to improve mobile coverage and access to enhanced mobile network services in metropolitan, regional and rural areas across Australia.</p> <p>This application seeks planning consent for the installation of a new Smart Pole Solution at Penrith Regatta Centre consisting of:</p> <ul style="list-style-type: none"> • Two (2) new Optus 8.65m Smart Poles; • Two (2) new Optus small cell antennas mounted within each of the proposed new Smart Poles; • Underground electrical and fibre works associated with the proposed smart poles; and • Ancillary equipment associated with the operation of the facility, including but not limited to earthing and electrical works.
Purposes:	The primary objective of the site is to provide significantly improved Optus network coverage and capacity, including improved in-building coverage, to the users of Sydney International Regatta Centre, thereby forming part of the carrier’s network and provide mobile voice and data services to the area.
Property Details:	<p>Lot and Plan: Lot 20/-/DP1092147; Lot 21/-/DP1092147</p> <p>Address: 153 Old Castlereagh Road – Castlereagh NSW – 2749</p> <p>LGA: Penrith City Council</p>
Local Environmental Plan:	<p>State Environmental Planning Policy (Penrith Lakes Scheme) 1989</p> <p>Zone: P - Parkland</p> <p>Use Definition: Telecommunications Facility</p>
Application	Planning Consent for the use and development of the land for the purposes of construction and operation of a Telecommunications Facility.
Applicant	<p>Optus Mobile Pty Ltd, C/- Lendlease Services Pty Ltd Level -5, Tower B, Zenith Towers, 821 Pacific Highway, Chatswood NSW – 2067.</p> <p>Contact: Joanna Ward</p> <div style="background-color: black; width: 100%; height: 20px; margin-bottom: 5px;"></div> <p>Project Ref: S3122 – Penrith Regatta SC1 & S3165 – Penrith Regatta SC2. RFNSA Ref: 2704009 and 2704010</p>

1.0 INTRODUCTION

Optus Mobile Proprietary Limited (Optus) is a licensed carrier under the Telecommunications Act 1997 (Commonwealth) (the Act). Optus is currently expanding and improving their mobile phone networks throughout New South Wales (NSW) to meet growing demand for mobile telecommunications services. As part of this project, Optus are proposing to install two new telecommunications facility smart poles within Penrith Regatta Centre to improve the coverage within the Centre.

Lendlease on behalf of Optus propose to apply for Planning Consent from NSW – Department of Planning for the installation of Two (2) new small cell facilities mounted within two (2) new Optus Smart poles at 153 Old Castlereagh Road – Castlereagh NSW – 2749 (Lot 20/-/DP1092147; Lot 21/-/DP1092147).

Optus has an existing network which continues to require on-going investment to address improved coverage and capacity demands. As part of this deployment process, Optus regularly undertakes detailed assessments of the performance and coverage of their mobile networks to ensure the system is meeting customers' expectations by being reliable and providing adequate network coverage. Currently, there are some mobile network problems at the Regatta Centre. These include some areas where Optus has poor coverage or no coverage due to the location and performance of existing sites, the inability of the radio signal to penetrate inside buildings and the increased demand for mobile phone services. The proposed facility seeks to provide improved voice and data capabilities within the boundary of the Regatta Centre.

A Statement of Environmental Effects (SEE) has been prepared by Lendlease on behalf of Optus to obtain development consent for the construction and installation of two (2) new Smart Pole installations on land at 153 Old Castlereagh Road – Castlereagh NSW – 2749.

This SEE describes the proposed development at the site in the context of relevant planning controls and policies applicable to the proposed development. Furthermore, the statement provides an assessment against the relevant matters for consideration under section 4.15 of the *Environmental Planning and Assessment Act 1979 (EPA Act)* and the *State Environmental Planning Policy (Penrith Lakes Scheme) 1989*.

In accordance with the environmental assessment within this SEE and supplementary documentation, the proposed development is considered appropriate to its context and surrounding and within the planning parameters. It is considered that the installation of two smart poles within the Regatta Centre will provide a modern and stylish solution to the existing coverage problems at the Centre.

2.0 BACKGROUND

2.1 Introduction to Small Cells:

Small cells are wireless transmitters and receivers designated to provide network coverage to smaller areas. Existing macro telecommunications facilities keep the network signal strong across large distances, small cells suit more densely developed environments such as cities and urban residential areas. They typically provide mobile coverage to an area of up to 400 metres as well as reducing strain on existing telecommunication facilities, which in urban environments are often operating at capacity.

The ultimate goal of small cell technology is to improve the cellular experience for the customers. They strengthen coverage and data transfer speeds where there is requirement for better coverage.

Small cell technology is discrete and energy efficient and uses less power and emit very low levels of non-ionising radio frequency electromagnetic energy, also called “RF EME” than traditional macro telecommunication facilities. They have been designed to incorporate into an urban area and with minimal to no impact on existing streetscape.

2.2 Benefits of Mobile Technologies

Mobile telecommunications play a central role in society and is becoming more deeply integrated into our day-to-day lives. Mobile communications networks shape how and when people communicate and how we access information on a daily basis. Today, improved connectivity means that mobile devices are used for everything from commerce and research to location-based services and social media. Individuals, families, businesses and society are all benefiting from the improved connectivity facilitated by mobile technologies.

In addition to its personal and social value, the evolution of mobile technologies has delivered significant benefits to the Australian economy by improving productivity, business management and customer engagement. Since its introduction, mobile technology has played a key role in stimulating labour productivity growth by allowing employees to be more efficient, with more productive use of time. Furthermore, with the latest evolution of mobile technologies into 5G – providing faster speeds, better reliability and greater capacity for both individuals and businesses. The economic benefits of mobile telecommunications services have been acknowledged by Deloitte Access Economics – according to Deloitte’s Mobile Nation: Driving Workforce Participation and Productivity (2019) report (as referenced in the 2019 AMTA Annual Report), the mobile industry contributed \$23 billion in value added in 2017-18 and supports the employment of 116,000 people. Outside of the industry itself, the report finds that by 2023, mobile will be worth \$65 billion to the Australian economy - equivalent to \$2,500 for every Australian and that it would otherwise be due to the long-term productivity of mobile technologies.

Mobile technology’s economic contribution is not limited to improving productivity. It improves connectivity and participation in the workforce. Mobile technology also provides employees with the flexibility to work from home, promoting sustainable commuting and also reducing traffic congestion. According to the Australian Mobile Telecommunications Association (AMTA), two decades ago only 4% of Australians owned a mobile device. According to the Australia Bureau of Statistics, there are now over 27 million subscribers with internet access connections via a mobile handset in Australia, demonstrating a 6 million increase since 2015 (ABS, 2018). Mobile technology’s continual



development has allowed it to become the preferred channel to access the internet for most people in Australia and the rest of the world.

Society’s reliance on mobile technologies cannot be understated – and mobile technology’s continual development has allowed it to become the preferred channel to access the internet for most people in Australia and the rest of the world.

3.0 PROPOSED FACILITY

3.1 Objective of the Proposed Facility

Mobile telecommunications systems work on a cellular principle, whereby a network of base stations provides coverage to an area. Each base station also has a restricted capacity in terms of the number of calls it can receive and transmit and capacity for users to upload and download data or browse the web. Therefore, high demand and usage in the mobile and internet network is directly proportional to the need and requirement for an increased number of base stations to accommodate the high traffic demand.

Optus have undertaken an analysis of their mobile network at Sydney International Regatta Centre and have identified that the coverage and network quality need to be improved. There are currently no existing telecommunications facilities in Regatta Centre and the surrounding outlying facilities cannot provide sufficient coverage to the area; particularly during event periods. The most recent result of RF Modelling Assessment is shown within figure 1 below.

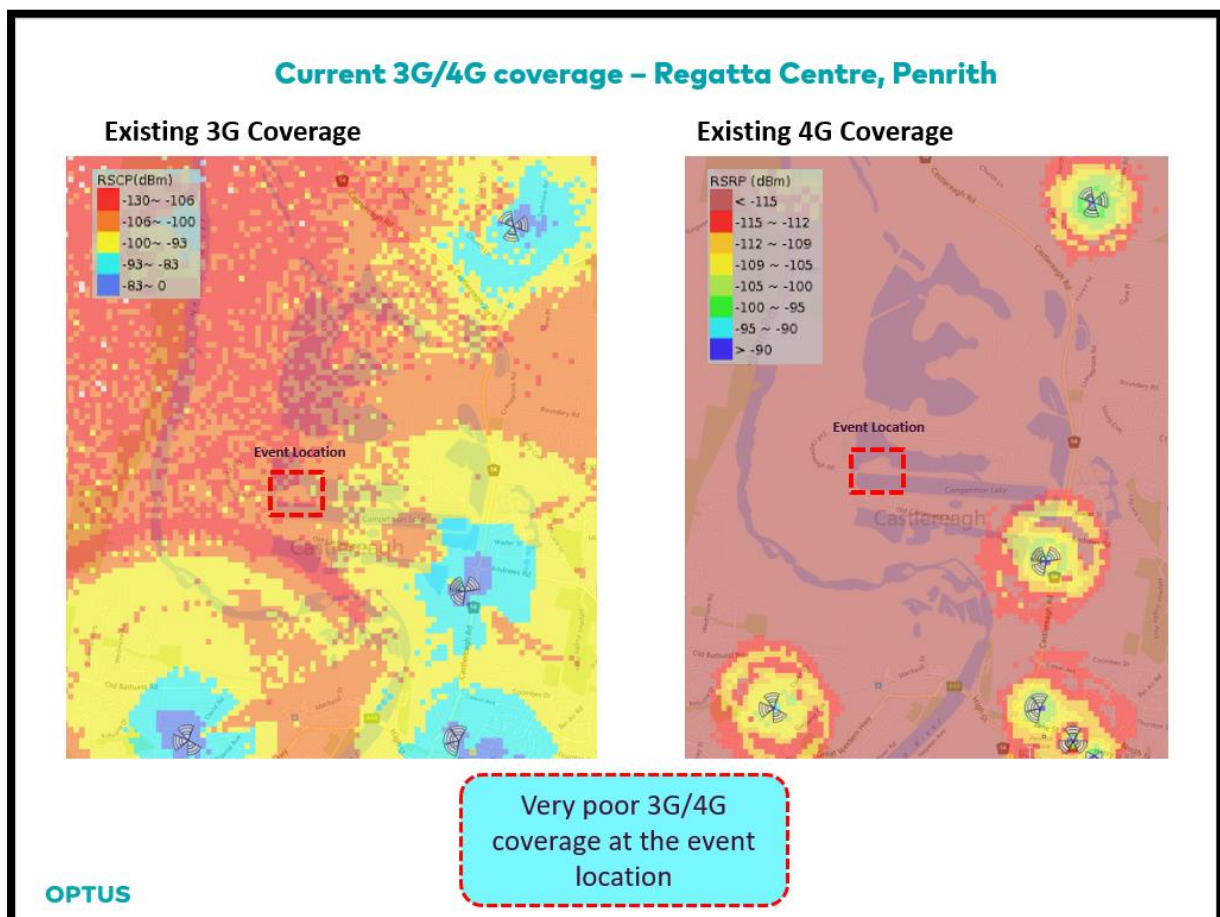


Figure 1: Current RF Modelling of Coverage within Area (Red – Poor -- > Blue – High Quality)

The nearest existing Optus telecommunication facility is approximately 2.5km from the Regatta Centre. The poor mobile voice and data performance is further exacerbated during events held at the centre. Optus hopes to alleviate these call and data download congestion issues at the Regatta Centre through the deployment of two Optus Smart Poles.

Figure 2 provides the primary objective search areas for the proposed smart pole locations.

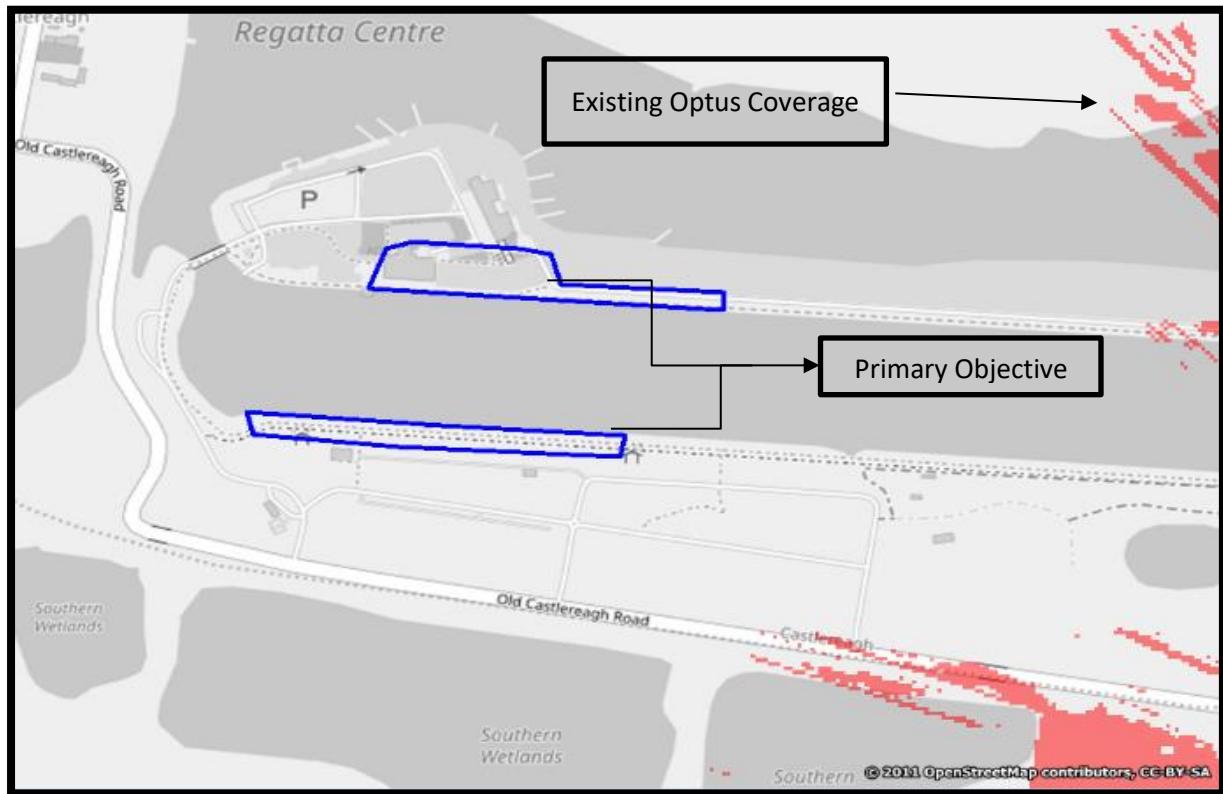


Figure 2: Intended Target Coverage Area

In some areas surrounding the proposed site users will currently see they have coverage via the “bars” on their phone. However, this relates solely to the ability to make/receive a call however, devices are data hungry as users are now demanding more services, from more locations for indoor and outdoor coverage along with indoor video data streaming. Users also demand the ability to travel across the country without interruptions. There is such high demand for these services that the provision of telecommunications infrastructure can struggle to meet these demands. If this issue remains unresolved – the users of International Regatta Centre will continue experiencing slower download and upload speeds/internet browsing and inability to make/receive calls.

The proposed small cell facilities are required to alleviate service issues/relieve congestion from the surrounding base stations which will have a positive knock on effect on the surrounding areas. Additionally, the proposed facilities will provide significantly improved network coverage and data capacity, including improved in-building coverage.

The proposal satisfies all of the relevant planning criteria with regard to preserving the amenity of the surrounding area. At the same time, and of equal importance, it meets the carriers coverage objectives, providing an effective and efficient solution to respond to the events which are organised with a capacity of 30,000 (up to 50,000 subject to approval of application), joggers and cyclists who use the facility for physical activities, which is directly proportional to the growing demand of the mobile telecommunications network services from the community, businesses and travellers.

Furthermore, the site is ideally positioned to satisfy the carriers current and future requirements in terms of providing technology to the area including high speed network access.

3.2 Process of Site Selection

Optus is currently building new mobile network infrastructure across NSW to expand and improve telecommunications services. Optus undertook a detailed process in selecting the site for the facility and several alternative candidates were considered.

This submission provides assessment in respect of the relevant planning guidelines and demonstrates site selection on the basis of the following:

- The site is appropriately located and sited to minimise visual impact on the locality;
- The site will achieve the required coverage objectives for the area;
- The proposal operates within the regulatory framework of Commonwealth, State and Local Government;
- The facility operates within all current and relevant standards and is regulated by the Australian Communications and Media Authority.

As Planning for a new telecommunications facility is a complex process, site selection is also based on a number of key issues including:

- Radiofrequency coverage;
- Low-impact and co-location opportunities;
- Availability of suitable sites;
- Planning, environmental and heritage considerations;
- Engineering considerations and build feasibility.

In this instance, there was a direct requirement to provide targeted coverage to the Regatta Centre, as a result a location within the centre was sought.

3.3 Co-location Opportunities

Where possible, Optus endeavour to co-locate on existing telecommunications facilities if these are available. Where existing telecommunications facilities are not present, Optus explore other potential co-location options such as radio towers, power stanchions, tall buildings or grain silos.

This approach is encouraged by the *Communications Alliance Industry Code – Mobile Phone Base Station Deployment 2018* ('The Deployment Code'), which promotes the use of existing sites for reduced visual impact.

Co-location options may not be available in all circumstances – there may be no existing vertical structures in the area, or no rooftops high enough to provide a feasible co-location option. In these cases, a new 'greenfield' facility is required. The closest mobile facilities in the area are demonstrated within Figure below (for further information on these sites, see www.rfnsa.com.au):



Figure 3: Existing Telecommunication Facilities (Carrier Sites) up to 5km from the proposed site location (from RFNSA Website and Google Earth).

- RFNSA Ref - 2749006: Telstra – Cell on Wheels (COW) Temporary Facility at 153 Old Castlereagh Road – Castlereagh NSW – 2749:**
Existing temporary Telstra site located within the Sydney International Regatta Centre. This site was not pursued any further as it is a temporary site and cannot accommodate the proposed Optus small cell installations.
- RFNSA Ref - 2750014: 30m Telstra Steel pole at 53 Camden Street Penrith NSW 2750:**
Existing site located 2.13km south east of the current proposed site. There is an existing Optus and Vodafone telecommunications facilities installed on the pole which provides coverage to the surrounding area. Colocation opportunities are always the preferred option and considered favourable from a planning perspective due to reduced impact on visual amenity with a straightforward planning pathway as a "Low-Impact facility". The facility was recently upgraded on 16 January 2020, it was concluded that the existing site will not satisfy the coverage requirements of Optus for Sydney International Regatta Centre.
- RFNSA Ref - 2749004: 18m Council Monopole at Greygums Oval, Greygums Road, Cranebrook NSW 2749:**
Existing site with Telstra facility, located 3.00km east of the proposed site. Given the structure is an existing Steel light pole, any additional facilities will exceed the bearing capacity of the structure and was not persuaded further. Also, the site will not meet the coverage objectives of Optus.

The existing telecommunications facilities within a 5km range from the proposal site were reviewed for co-location opportunities, however, as a result of the location, distance, height and coverage, all were rejected as suitable candidates. In instances where carriers were already present, further investigations were undertaken to ascertain if they were suitable to be upgraded to meet the coverage requirements. However, upgrading the existing facilities would still fail to meet the coverage requirements for the area.

Optus also sought the potential for locating the proposed small cell antenna onto existing utility infrastructure within the Regatta Centre, such as an existing Utility pole. However, no viable infrastructure was available. As a result, it was considered that the best visual outcome would be the installation of smart poles.

3.4 Consideration of Alternative Sites

A number of alternative sites were examined within the search area with regard to each site’s ability to meet the coverage objectives and site considerations listed in Section 3.2 of this report. **Error! Reference source not found.** depicts locations considered within the Regatta Centre. The purpose of the proposal is to provide coverage to Penrith International Regatta Centre and as such only locations within the Centre were considered.



Figure 4: All potential site candidates, including the successful candidate shown as ‘Proposed Facility’.

Carriers seek to avoid residential areas and sensitive land uses where possible, although this must be weighed against build implications and coverage feasibility provisions. In this case, the carriers investigated open spaces and sporting reserves. This allows for the best visual and community outcomes for local residents, as it avoids the installation of a new facility in the middle of residential zones.

Table 1 provides a brief assessment on alternate sites considered and why they were discounted.

Table 1 – Site Selection Candidates	
Site	Opportunities and Constraints
<p>Candidate A – Existing Building Façade/ Rooftop. 153 Old Castlereagh Road – Castlereagh NSW – 2749 (Lot 5/DP249113)</p> <p>Zone: P - Parkland PDU: Rural</p>	<p>The proposed location is an existing audience stand structure which is used during events. Any installation of the antennas onto the façade will not satisfy the design requirements of Optus and presents some design and engineering limitations.</p>
<p>Candidate B – Spectator Building 153 Old Castlereagh Road – Castlereagh NSW – 2749 (Lot 5/DP249113)</p> <p>Zone: P - Parkland PDU: Rural</p>	<p>The proposed location is at an existing spectator building. Placing of antennas on the rooftop of the structure will not satisfy the coverage requirements and has structural loading limitations.</p>
<p>Candidate C – Existing Utility poles at Parking lot along Old Castlereagh Rd. 153 Old Castlereagh Road – Castlereagh NSW – 2749 (Lot 5/DP249113)</p> <p>Zone: P - Parkland PDU: Rural</p>	<p>The existing utility poles within the parking lot were considered for the installation but due to the existing trees and the height of the utility poles, the coverage objectives could not be achieved. The utility poles did not meet design requirements required for the installation of small cells antennas.</p>
<p>Candidate D – New 8m Optus Smart Pole. 153 Old Castlereagh Road – Castlereagh NSW – 2749 (Lot 5/DP249113).</p> <p>Zone: P - Parkland PDU: Rural</p>	<p>The proposed candidate is located on a cleared undeveloped part of the property away from spectators seating and viewing area. The proposal will not require any clearing of vegetation and does not impact any existing views within the area. There is enough separation from sensitive uses and there are no heritage items within close proximity of the proposed location.</p>
<p>Candidate E- New 8m Optus Smart Pole 153 Old Castlereagh Road – Castlereagh NSW – 2749 (Lot 5/DP249113).</p> <p>Zone: P - Parkland PDU: Rural</p>	<p>The proposed candidate is located opposite to the spectators seating and viewing area on cleared undeveloped part of the property. The proposal will not require any clearing of vegetation and does not impact any existing views within the area. The proposal will not impact on the existing pathway as the smart pole will be located on the grass bank and will not cause any interruption to the users of the existing pathway.</p>



3.5 Preferred Nominated Candidate

A thorough examination of potential telecommunications facility locations in the surrounding area has been undertaken. There were no suitable options for co-location, and potential greenfield sites were ruled out based on design criteria, coverage requirements or the potential visual impact. It was considered that the proposed dual smart pole design provided the Regatta Centre with a stylish and modern solution to alleviate the coverage short fall.

Lendlease on behalf of Optus has concluded that Candidate D & Candidate E are the ideal locations to install the Two (2) new Optus smart poles at 153 Old Castlereagh Road – Castlereagh NSW – 2749. By pursuing a smart pole solution Optus are able to meet coverage requirements in a way that meets the Regatta Centre’s status as a premier porting and festival event destination. Providing a world class and modern technological solution.

Two smart poles are proposed as part of this application – these are represented as SC1 and SC2 – SC being short form for Small Cell.

A description of the proposal and key considerations that led to this site being selected as the preferred nominated candidate can be found in the following sections of this report.

4.0 SITE CONTEXT

4.1 Subject Site and Surroundings

The Sydney International Regatta Centre was host to the premier 2000 Sydney Olympics and Paralympics. The Regatta Centre has one of the best rowing and sprint kayak courses in the world. Set on 178 hectares of picturesque parklands and bush with views of the low Blue Mountains, the Sydney International Regatta Centre boasts a five-kilometre cycle path, parallel access roadway, competition waterway and warm up lake that make it perfect for triathlons and other aquatic and recreation activities.

The Sydney International Regatta Centre is one of Australia's best sporting and festival event destinations. The Centre's website demonstrates world-class facilities for sporting events, trade shows and community festivals. The Centre has both local uses in the form of public recreation and park runs and National and International scale uses.

The proposed Smart Poles are on land owned by Department of Planning, Industry and Environment at 153 Old Castlereagh Road – Castlereagh NSW – 2749 (refer to Appendix C - Certificate of Title). The land is zoned P – Parkland. The proposed Smart Pole SC1 will be installed near the existing seating arena for spectators and the Smart Pole SC2 will be installed across the lake from the seating area, on the southern side.

Built form in the vicinity of the Regatta Centre is typically comprised of vacant rural lands. The property is surrounded by vacant undeveloped lands in south, west and north. Residential properties are approximately 2km away from the proposed location and are not expected to have any views of the installation. The subject site and surrounding area are demonstrated within Figures 5 and 6.

There are no permanent residents within the property and the proposal will not have any impact on the ongoing uses at the Centre. The proposed Smart poles are not expected to have a detrimental visual impact on the facility and are designed to be visually pleasing and sit well within the landscape of the Centre.

Small cells are designed to be incorporated within any streetscape and do not impact the visual character of the area.

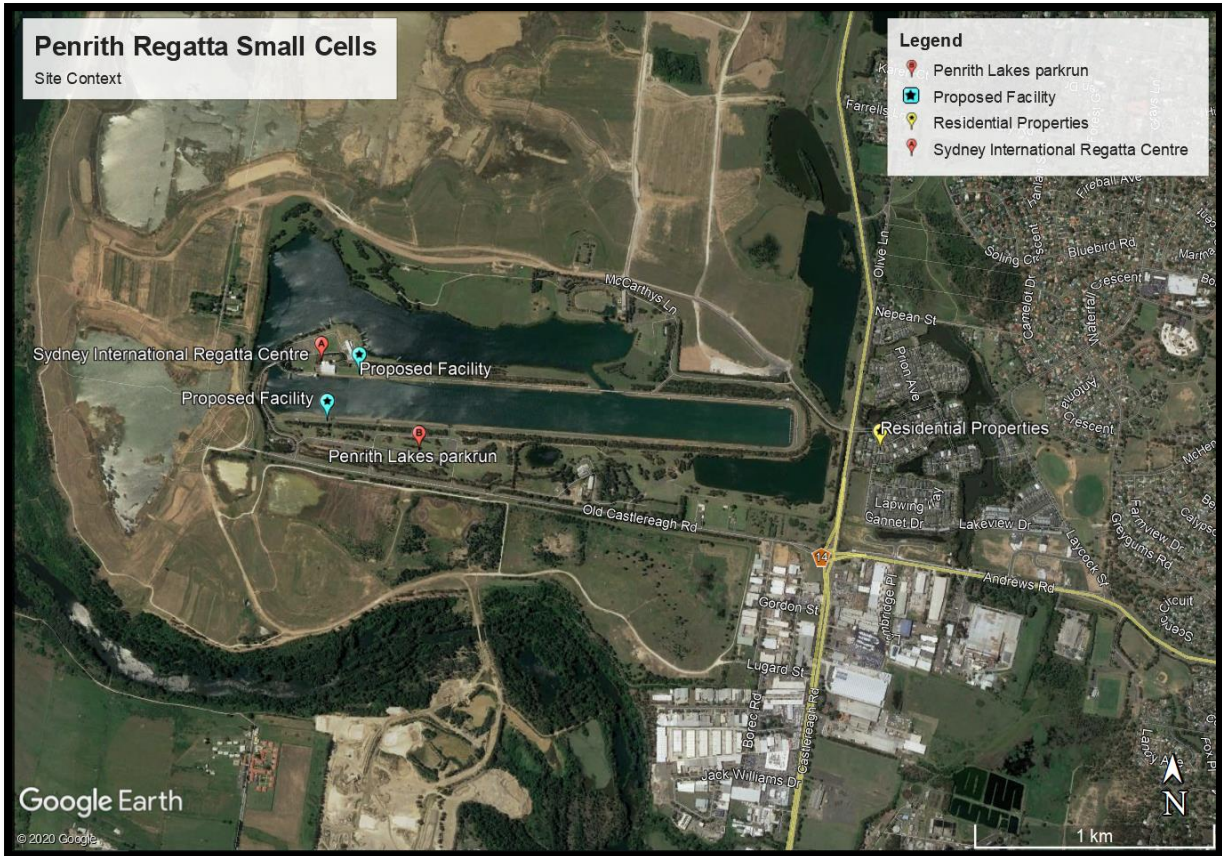


Figure 5: Site Context (from Google Earth/NSW Globe)

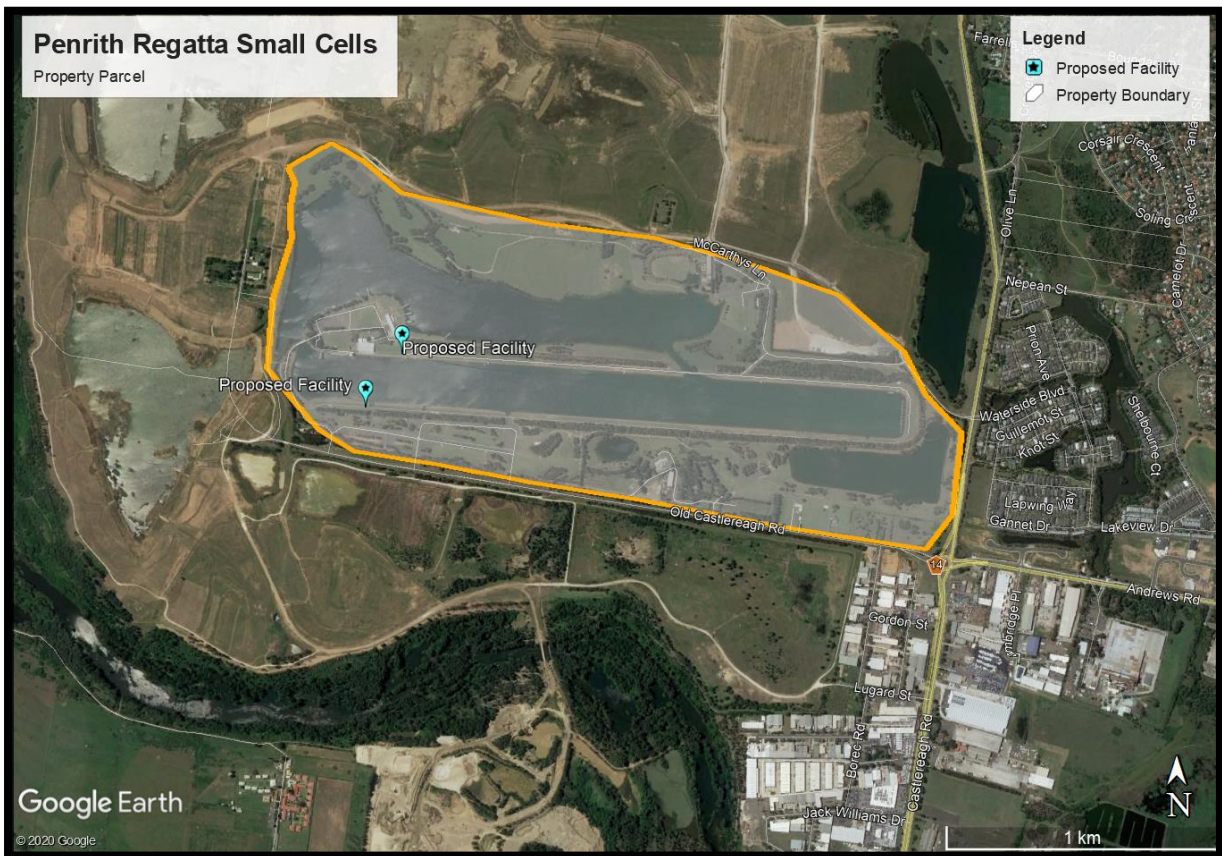


Figure 6: Aerial view of the indicate proposed site location in context of Property Boundary (from NSW Globe)

5.0 THE PROPOSAL

5.1 Installation details

The proposed facility installation consists of the following elements:

- Two (2) new Optus 8.65m Smart Poles;
- Two (2) new Optus small cell antennas mounted within each of the proposed new Smart Poles;
- Underground electrical and fibre works associated with the proposed smart poles; and
- Ancillary equipment associated with the operation of the facility, including but not limited to earthing and electrical works.

The proposed smart poles are designed to enclose the two small cell antenna, feeder cables, and ancillary equipment within the pole to reduce visual clutter. The smart poles will be painted with ‘non – reflective colours’ to blend with the existing landscape. Please refer to Figure 77, an expert of the Proposal Plans within Appendix B, for equipment layout and pole dimensions.

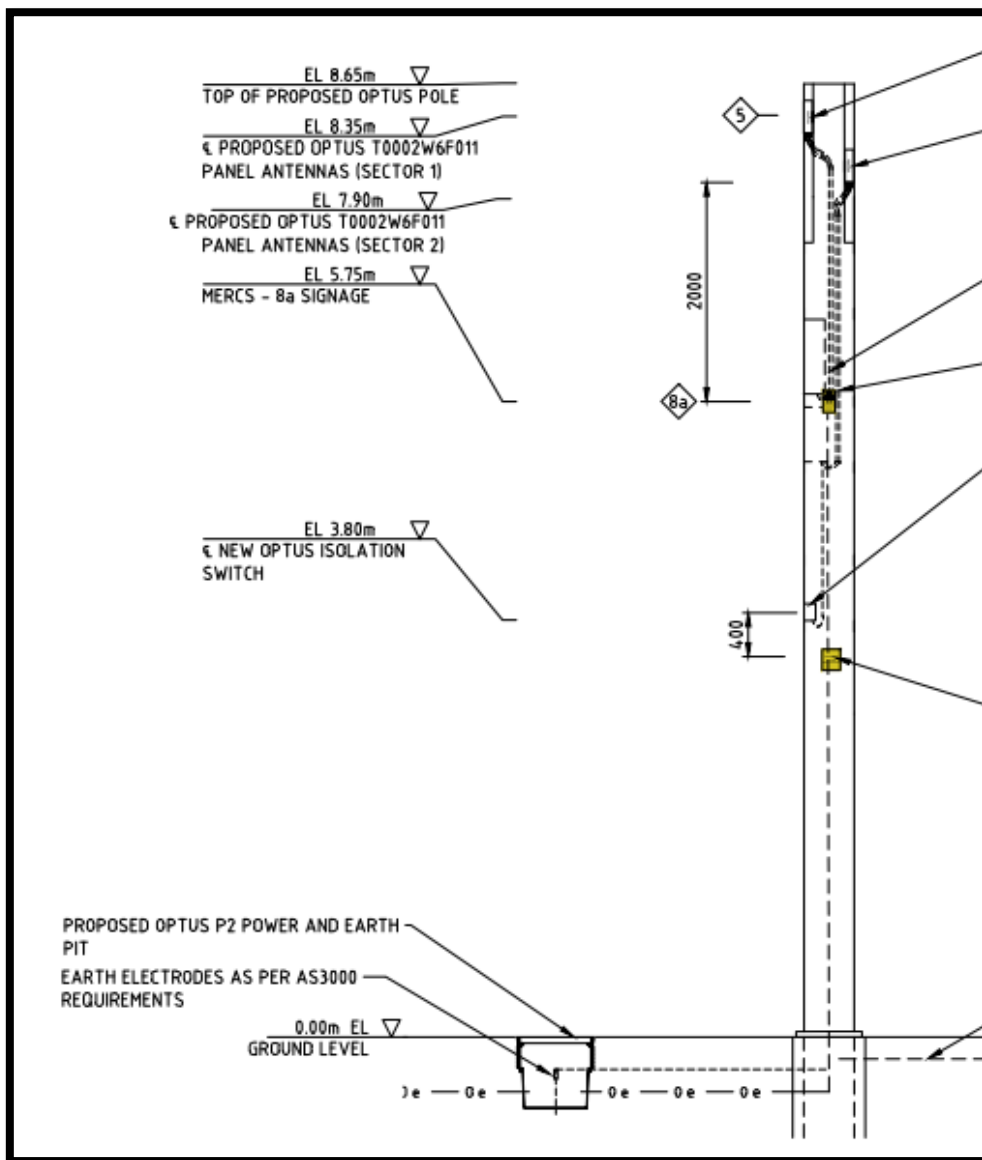


Figure 7: Smart Pole Equipment Layout.

The proposal will not require any clearing of vegetation as the installation will be located on an already cleared portion of the property. The smart poles are designed to have a positive visual impact on the area. They are not expected to impinge on viewing corridors or sight lines however will provide a modern, technologically advanced solution to the coverage issues within the Regatta Centre. The design incorporates all equipment within the facility, so when viewed, it is a slim line and as visually pleasing as possible.

5.2 Intent of the proposal

The intent of the proposal is to provide Optus call and data services to Sydney International Regatta Centre and the surrounding area. Further detail about why this is required is within Section 3 of the Statement of Environmental Effects.

5.3 Vegetation and Bushfire Prone Land

The subject site is affected by the Bushfire Prone Land overlay. The proposed smart pole localities are within the Vegetation 2 category of the bush fire prone land overlay. This vegetation category has lower combustibility and/or limited potential fire size due to the vegetation area shape and size, land geography and management practices. The proposed site is constructed of non-combustible materials. It is considered that based on the non-habitable nature of the proposal that a bushfire report is not required to accompany this development application.

5.4 Traffic, access and construction management

Access to the facility will be obtained from the Old Castlereagh Road for both construction and future maintenance visits, without any disruption to road use and traffic flow.

During the construction phase, a truck will be used to deliver the equipment and a crane will be utilised to lift the equipment into place. Any traffic impacts associated with construction will be of a short-term duration. Accordingly, the proposed facility will not be a significant generator of vehicular or pedestrian traffic and will not adversely impact local traffic flow. In the unlikely event that road closure will be required Lendlease will apply to the relevant authorities for permission.

Once operational, the facility will require infrequent maintenance visits. As such, access to and from the telecommunications infrastructure will be retained for maintenance purposes. Given the facility generates minimal trips per year, it is considered that traffic interference will be negligible.

This access is considered to be appropriate and compliant with the Transport, Access and Parking objectives of Penrith Development Control Plan 2014 given the existing access point has been designed with the use of the existing site and is considered to be adequate. As demonstrated on the proposal plans, there is adequate space at the compound location for vehicles to manoeuvre. All vehicles can enter and exit the site in a forward direction – refer to 8 below for the proposal plans and further information.



Figure 8: Red line is an illustration of the access route from Old Castlereagh Road terminating at the proposed site locations.

5.5 Utility service details

The proposed facility will be connected to electricity however due to its unmanned nature, will not be connected to potable water or sewerage. Electricity supply is available from nearby poles, and the power authority will determine the most suitable method to obtain and provide electricity to the communications facility. This will likely be via an underground supply that is consistent with existing power lines. The communications facility does not use or generate water nor create significant impermeable area for the generate of excessive stormwater runoff. Apart from electricity, no other utilities are required for the proposed facility.

The power supply with be privately metred. The AC power demand for each respective smart pole will be 5A Single Phase 240 Volts.

5.6 Acoustics

The facility is not considered a significant noise generator. The only noise produced by the facility, while operating, is low level noise from the Fan which is enclosed within the smart poles. Noise emanating from the fan unit is at a comparable level to a domestic air conditioning installation and will comply with the background noise levels prescribed by Australian Standard AS1055.

Noise and vibration emissions associated with the proposed 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 *Protection of the Environment Operations Act 1997* (POEO Act). Construction works will only occur as per Council’s daily timeframe direction.

5.7 Flooding and Drainage

The land parcel is not flood prone and the proposed works will not increase the flood hazard risk at the subject site or neighbouring properties. The proposed smart poles have minimal surface area and as such the proposal will not be a significant generator in storm water runoff.

5.8 EME – Health and Safety

Lendlease and Optus acknowledge that 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.

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).

Telecommunications carriers including Optus must operate within the operational standards set by the Australian Radiation Protection and Nuclear Safety Agency (ARPANSA) and Australian Communication and Media Authority (ACMA). ARPANSA is a Federal Government agency incorporated under the Health and Ageing portfolio and is charged with the responsibility for protecting the health and safety of both people and the environment from the harmful effects of radiation (ionising and non-ionising). The operational standards known as the *Radiocommunications (Electromagnetic Radiation – Human Exposure) Standard 2014*, prepared by ARPANSA are based on international standards set by the International Commission for Non-Ionizing Radiation protection (ICNRP) – an agency associated with the World Health Organisation (WHO).

The Standard operates by placing a limit on the strength of the signal (or RF EME) that Carriers 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, 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’s handling the maximum number of users 24-hours a day.

In this way, 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, Optus have undertaken a compliance report that predicts the maximum levels of radiofrequency EME from the proposed facility. The maximum environmental EME level for each smart pole will comply with the ACMA mandated exposure limit (See Appendix D). Optus complies with the public health and safety standard by a significant margin. The calculated maximum level within the EME Report for each Smart Pole is:

- S3122 Penrith Regatta SC1: 1.66% out of a possible 100% of the Australian Safety Standard
- S3165 Penrith Regatta SC2: 1.49% out of a possible 100% of the Australian Safety Standard

Carriers rely on the expert advice of national and international health authorities such as 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.

Optus 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 the Optus' responsible approach to EME and mobile phone technology.

6.0 FEDERAL LEGISLATIVE CONTEXT

6.1 Commonwealth Legislation

6.1.1 *The Telecommunications Act 1997*

The Telecommunications Act 1997 has been operative since 1 July 1997. This legislation establishes the criteria for ‘low impact’ telecommunication facilities. If a proposed facility satisfies the requirements of a ‘low-impact’ facility, the development is exempt from the planning approval process. Further clarification of the term ‘low-impact’ is provided in the *Telecommunications Act 1997* and the *Telecommunications (Low-Impact Facilities) Determination 2018*, which was gazetted subsequent to the Act. The *Telecommunications (Low-Impact Facilities) Determination 2018* establishes certain facilities, which cannot be considered low-impact facilities.

The proposed facility is not considered to be low impact under the definitions contained in the Commonwealth legislation and therefore Planning consent is required from the Planning Minister – NSW.

6.1.2 *Telecommunications Code of Practice 2018*

The *Telecommunications Code of Practice 2018* (the Code) emphasises “best practice” for the installation of facilities, compliance with industry standards and minimisation 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:

- Be separated from sensitive land uses such as schools and childcares and be moderately separated from residential areas;
- Provide improved telecommunications and wireless internet coverage in the locality;
- Comprise the smallest configuration possible for the site, in order to reduce visual impact of the proposal, while providing a high quality of service to the locality;

6.1.3 *Mobile Phone Base Station Deployment Code*

The Communications Alliance Limited – Mobile Phone Base Station Deployment C564:2018 (the Deployment Code) is an industry code of practice registered by the Australian Communications and Media Authority. All licensed telecommunications carriers must abide by Deployment Code provisions.

The Code supplements local, State and Federal regulations that apply to telecommunications carriers, by setting guidelines for site selection, community consultation, design, installation and operation of telecommunications facilities.

Sections 4.1, 4.2 and 4.3 of the Deployment Code are specifically relevant for the new installation. These sections require completion of precautionary approach checklists for site selection, infrastructure design and site operation. Furthermore, it is a requirement for an Electromagnetic Energy (EME) Report to be prepared for all new sites.

In accordance with the Deployment Code requirements, the precautionary approach checklists have been duly completed and an EME report has been prepared for the site and uploaded to the Radio

Frequency National Site Archive (RFNSA) database (www.rfnsa.com.au). The ARPANSA EME report is attached in Appendix D, and further information on EME is within Section 5.8 of this report.

6.1.4 The Environment Protection and Biodiversity Conservation (EPBC) Act 1999

The EPBC Act 1999 obliges telecommunications carriers to consider “matters of national environmental significance”. Under this legislation, an action will require approval from the Minister of Environment if the action has or is likely to have an impact on a matter of “national environmental significance”. According to the EPBC Act 1999, there are seven matters of national significance, which must be considered. The site is not within close proximity to any protected matters. – Please refer to Figure 9 below.

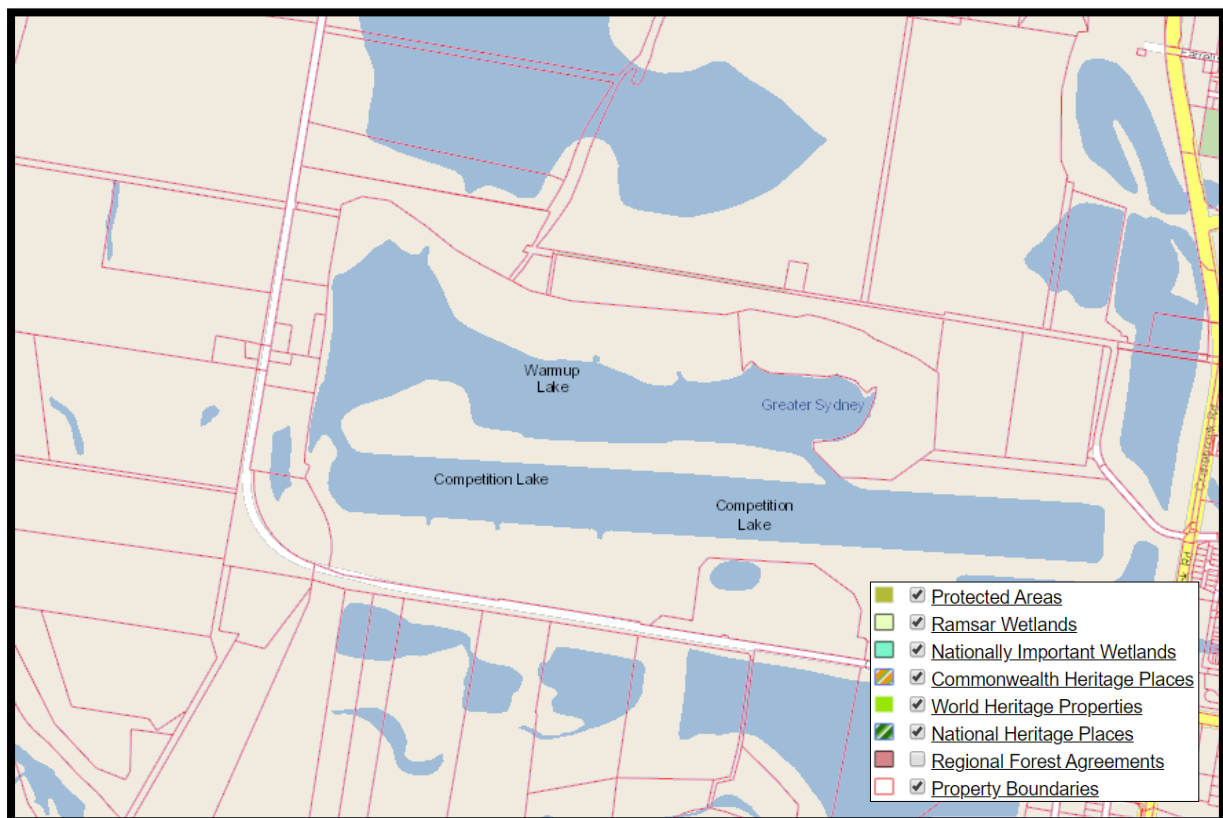


Figure 2: EPBC Protected Matters Mapping (From Department of the Environment)

7.0 FEDERAL LEGISLATIVE CONTEXT

7.1 New South Wales State Planning Legislation

The proposed development is subject to State Planning Instruments and regulations in addition to the Commonwealth regulatory framework. There are a number of State Government provisions which apply to the proposed facility. These include;

- Environmental Planning and Assessment Act 1979
- State Environmental Planning Policy (infrastructure)
- NSW Telecommunications Facilities Guideline Including Broadband
- State Environmental Planning Policy (Penrith Lakes Scheme) 1989

7.2 Environmental Planning and Assessment Act 1979

The proposal is subject to the provisions of the *Environment Planning and Assessment Act 1979* (EP&A Act). This Act controls development within New South Wales through the application of State Environmental Planning Policies. It is those policies that document whether or not development is permissible, either with or without development consent, or prohibited.

Section 79C of the EP&A Act outlines specific assessment criteria which must be addressed within the submissions of a development application and the likely impacts of the development on the surrounding built and natural environs. A consent authority is required to consider the full range of matters listed under Section 79C of the *Environment Planning and Assessment Act 1979* in its assessment of a development application. Each of the relevant matters is addressed below:

Section 79C (1) (a) – Statutory Planning Considerations

Section 79C (1) (a) requires the consent authority to take into consideration:

- (a) *the provisions of:*
- (i) *any environmental planning instrument, and*
 - (ii) *any proposed instrument that is or has been the subject of public consultation under this Act and that has been notified to the consent authority (unless the Director-General has notified the consent authority that the making of the proposed instrument has been deferred indefinitely or has not been approved), and*
 - (iii) *any development control plan, and*
 - (iiia) *any planning agreement that has been entered into under section 93F, or any draft planning agreement that a developer has offered to enter into under section 93F, and*
 - (iv) *the regulations (to the extent that they prescribe matters for the purposes of this paragraph), and*
 - (v) *any coastal zone management plan (within the meaning of the Coastal Protection Act 1979), that apply to the land to which the development application relates.*

This report seeks to demonstrate compliance with relevant legislation, in particular the State Environmental Planning Policy (Penrith Lakes Scheme) 1989, which pertains to the subject application and matters of consideration within the planning process to minimise adverse negative impacts of the development.

Section 79C (1) (b) – Environmental, Social and Economic Impacts

Section 79C (1) (b) requires the consent authority to consider:

- (b) the likely impacts of that development, including environmental impacts on both the natural and built environments, and social and economic impacts in the locality'*

The relevant matters mentioned in the above clause are addressed below:

- *Impacts on the Natural Environment:*

The proposal is located partially within an already developed subject site and requires no vegetation removal.

The proposed smart poles will not require any clearing of the vegetation and the surrounding area will experience no detrimental impacts on the existing natural environment. Additionally, it should be noted that the subject land parcel has no environmental protection overlays. Based on the outcomes of the survey, it is considered the proposal to have no significant adverse environmental impact.

- *Impacts on the Built Environment:*

The proposed base station will be located on the portion of land zoned P - Parkland. The proposed works will not impact on the existing use of the subject site or any intended future uses at the subject site or surrounding land parcels. It is considered that the proposal will enhance the use of the property for its purposes by providing improved mobile voice and data coverage during events.

The smart poles will have a beneficial impact on the existing streetscape and minimal impact on the existing views from spectators at the subject site. While the facility will be visible from certain perspectives within the Centre, by nature of its height, it should also be noted that the proposed facility is a well-designed structure, no different to any other utility pole in the area. It is considered that the proposed facility is commensurate and fits with the surrounding settings of the locality. Overall, the facility's profile fits in with the surrounding build form and nearby spectator stands and is not expected to adversely impact the local amenity and will provide improved mobile coverage services in the area.

- *Social and Economic Impacts:*

As discussed in Section 2.2 of this report, mobile technologies have a strong social and economic benefit in Australia. It is expected that the deployment of two smart poles within Penrith regatta Centre will enhance the useability of the Centre as a world class conference centre. Negative impacts of the proposal have been limited, based on the site's separation from community sensitive areas and positive modern design.

Section 79C (1) (c) - The Suitability of the Site

Section 79c (1) (c) requires the consent authority to consider:

- (c) the suitability of the site for the development'*

The suitability of the site for the proposed development is addressed in Sections 3 and 4 of this SEE. Alternative candidates were considered in the site selection process. However, the subject site is considered highly suitable for the location of a smart pole facility.

Section 79C (1) (d) – Submissions

Section 79C (1) (d) requires the consent authority to consider:

'(d) any submissions made in accordance with this Act or the regulations'

Any submissions received in relation to the proposed telecommunications facility will need to be considered by the relevant authority in the determination of the development application.

Section 79C (1) (e) – Public Interest

Section 79C (1) (e) requires the consent authority to consider:

'(e) the public interest'

The public interest is best served by the orderly and economic use of land for purposes permissible under the relevant planning regime and predominantly in accordance with the prevailing planning controls. The proposed telecommunications facilities are a permissible form of development and are therefore considered to be in the public interest.

7.3 State Environmental Planning Policy (infrastructure)

The proposed telecommunications facility is subject to the allowances of the *SEPP (Infrastructure) 2007*.

The *SEPP (Infrastructure) 2007*, as amended by the *SEPP (Infrastructure) Amendment (Telecommunications Facilities) 2010* is of specific relevance to this proposal. The provisions of clauses 113 and 115 are being relied upon for the permissibility of the proposed development at the subject location and are the basis for seeking Council consent for this development.

The proposal is located within P- Parkland which does not meet the criteria for Exempt and Complying Development under *SEPP (Infrastructure) – 2007*.

Clause 113 of the *SEPP* defines a 'Telecommunications Facility' as:

- a) any part of the infrastructure of a telecommunications network, or
- b) any line, cable, optical fibre, equipment, apparatus, tower, mast, antenna, dish, tunnel, duct, hole, pit, pole or other structure in connection with a telecommunications network.

Clause 115(1) provides that:

Development for the purposes of telecommunications facilities, other than development in clause 114 or development that is exempt development under clause 20 or 116, may be carried out by any person with consent on any land.

Under Clause 115, telecommunications facilities are permissible in all zones within the Penrith City Council LGA with development consent.

Clause 115(3) of the *SEPP* provides that:

Before determining a development application for development to which this clause applies, the consent authority must take into consideration any guidelines concerning site selection, design, construction or operating principles for telecommunications facilities that are issued by the Director General for the purposes of this clause and published in the Gazette.

In this respect, the *NSW Telecommunications Facilities Guideline including Broadband (July 2010)* has been issued by the Director General. The principles that must be taken into consideration are outlined in Section 2.2 of the *NSW Telecommunications Facilities Guideline including Broadband (July 2010)*.

7.4 NSW Telecommunications Facilities Guideline Including Broadband

Further regulation for the development, upgrade and/or maintenance of telecommunication facilities is provided within *NSW Telecommunications Facilities Guideline including Broadband (July 2010)*. The role of the “Guideline” is located within clause 115 of the ISEPP as outlined below:

“Before determining a development application for development to which this clause applies, the consent authority must take into consideration any guidelines concerning site selection, design, construction or operating principles for telecommunications facilities that are issued by the Director-General for the purposes of this clause and published in the Gazette.”

The proposal’s consistency with the *NSW Telecommunications Facilities Guideline including Broadband (July 2010)* has been outlined within **Table 2** below:

Principle 1 – A telecommunications facility should be sited in order to minimise visual impact:	
Principle, as outlined:	Response:
(a) As far as practical, a telecommunications facility that is to be mounted on an existing building or structure should be integrated with the design and appearance of the building or structure.	These principles relate to facilities that are located on an existing buildings or structures and are not directly applicable to the new, freestanding smart poles proposed in this instance.
(b) The visual impact of telecommunications facilities should be minimised, visual clutter is to be reduced particularly on tops of buildings, and their physical dimensions (including support mounts) should be sympathetic to the scale and height of the building to which it is to be attached, and sympathetic to adjacent buildings.	
(c) Where telecommunications facilities protrude from a building or structure and are predominantly backgrounded against the sky, the facility and their support mounts should be either the same as the prevailing colour of the host building or structure, or a neutral colour such as grey.	
(d) Ancillary facilities associated with the telecommunications facility should be screened or housed, using the same colour as the	Ancillary equipment will be completely enclosed within the smart poles, and underground where necessary, to reduce the visual clutter associated

prevailing background to reduce its visibility, including the use of existing vegetation where available, or new landscaping where possible and practical.	with the installation. The smart poles will be painted in non – reflective colour to blend with the surrounding landscape.
(e) A telecommunications facility should be located and designed to respond appropriately to its rural landscape setting.	The facilities have been designed and sited with due concern for the surrounding landscape context. The strategic placement of the facility allows it to be well screened from the community sensitive uses, without impinging on the visual amenity value of the local area. This is discussed in detail in Section 8.1 – Visual Impacts.
(f) A telecommunications facility located on, or adjacent to, a State or local heritage item or within a heritage conservation area, should be sited and designed with external colours, finishes and scale sympathetic to those of the heritage item or conservation area.	Not applicable – the proposed site is not located on land subject to heritage significance or near a heritage area or item.
(g) A telecommunications facility should be located so as to minimise or avoid the obstruction of a significant view of a heritage item or place, a landmark, a streetscape, vista or a panorama, whether viewed from public or private land.	Effort has been made in the site selection process to locate the proposed facility to minimise its impact on significant viewing corridors, streetscapes and landmarks. The proposed facility does not occupy a position that will obstruct views or sightline to any heritage item or place, landmark or streetscape.
(h) The relevant local government authority must be consulted where the pruning, lopping, or removal of any tree or other vegetation would contravene a Tree Preservation Order applying to the land or where a permit or development consent is required.	The proposed location is located on the cleared part of the property and there is no requirement for the removal, pruning or lopping of any existing vegetation.
(i) A telecommunications facility that is no longer required is to be removed and the site restored, to a condition that is similar to its condition before the facility was constructed.	Optus is satisfied with this condition and can comply. The proposed facility will be removed once no longer required and the site restored, to a condition that is similar to its condition before the facility was constructed.
(j) The siting and design of telecommunications facilities should be in accordance with any relevant Industry Design Guides.	The siting and design of the proposed telecommunications facility is compliant with the New South Wales Telecommunications Facility Guideline, as released by the NSW Department of Planning and Infrastructure.
Principle 2: Telecommunications facilities should be co-located wherever practical.	
Principle, as outlined:	Response:
(a) Telecommunications lines are to be located, as far as practical, underground or within an existing underground conduit or duct.	The proposal will not require above ground communications lines, as it will utilise fibre to connect to the wider network. An underground power supply is also proposed.

<p>(b) Overhead lines, antennas and ancillary telecommunications facilities should, where practical, be co-located or attached to existing structures such as buildings, public utility structures, poles, towers or other radiocommunications equipment to minimise the proliferation of telecommunication facilities and unnecessary clutter.</p>	<p>No existing co-location opportunities where practical as they did not satisfy the coverage objectives of the area.</p> <p>The current proposal was only selected after co-location opportunities on existing telecommunications facilities had been exhausted. The proposal has been designed to retain the smallest, slimmest and neatest visual profile possible to minimise any visual amenity impacts on the surrounding area.</p>
<p>(c) Towers may be extended for the purposes of co-location.</p>	<p>Not applicable.</p>
<p>(d) The extension of an existing tower must be considered as a practical co-location solution prior to building new towers.</p>	<p>Not applicable.</p>
<p>(e) If a facility is proposed not to be co-located the proponent must demonstrate that co-location is not practicable.</p>	<p>An exhaustive assessment of prospective co-location options was undertaken, as identified in 3.3 Co-location Opportunities section of this report.</p>
<p>(f) If the development is for a co-location purpose, then any new telecommunications facility must be designed, installed and operated so that the resultant cumulative levels of radio frequency emissions of the co-located telecommunications facilities are within the maximum human exposure levels set out in the Radiation Protection Standard.</p>	<p>Not applicable to this proposal, as it does not involve co-location on an existing facility.</p> <p>An ARPANSA EME report for each proposed small cell has been prepared to accompany this development application. This EME report demonstrates the cumulative EME levels of Optus at the subject site and demonstrates the site's compliance with Australian Standards. This report is provided in Appendix D.</p>
<p>Principle 3: Health standards for exposure to radio emissions will be met.</p>	
<p>Principle, as outlined:</p>	<p>Response:</p>
<p>(a) A telecommunications facility must be designed, installed and operated so that the maximum human exposure levels to radiofrequency emissions comply with Radiation Protection Standard. Refer also to Appendix D.</p>	<p>It is the legal obligation for any carrier to ensure that any telecommunications equipment is operated within the human exposure limits within the Radio Protection Standard.</p> <p>The proposed installation will comply with the Australian Communications and Media Authority (ACMA) regulatory arrangements with respect to electromagnetic radiation exposure levels.</p>
<p>(b) An EME Environmental Report shall be produced by the proponent of the development to which the Mobile Phone Network Code applies in terms of design, siting of facilities and notifications. The Report is to be in the format required by the Australian Radiation Protection Nuclear Safety</p>	<p>An EME Environmental Report has been included within Appendix D of this document.</p> <p>EME Exposure Levels from this site have been calculated in accordance with the ARPANSA prediction methodology and report format. This</p>

<p>Agency. It is to show the predicted levels of electromagnetic energy surrounding the development comply with the safety limits imposed by the Australian Communications and Media Authority and the Electromagnetic Radiation Standard and demonstrate compliance with the Mobile Phone Networks Code.</p>	<p>report is provided in Appendix D. EME issues are also discussed in Section 5.8: EME – Health and Safety.</p>
<p>Principle 4: Minimise disturbance and risk, and maximise compliance</p>	
<p>Principle, as outlined:</p>	<p>Response:</p>
<p>(a) The siting and height of any telecommunications facility must comply with any relevant site and height requirements specified by the Civil Aviation Regulations 1988 and the Airports (Protection of Airspace) Regulations 1996 of the Commonwealth. It must not penetrate any obstacle limitation surface shown on any relevant Obstacle Limitation Surface Plan that has been prepared by the operator of an aerodrome or airport operating within 30 kilometres of the proposed development and reported to the Civil Aviation Safety Authority Australia.</p>	<p>The provisions of the Civil Aviation Regulations 1988 and the Airports (Protection of Airspace) Regulations 1996 were considered during the design and sitting process. The proposal is not expected to penetrate any identified Obstacle Limitation Surfaces.</p> <p>The nearby Airports and airfields around the propose telecommunication facilities are:</p> <ol style="list-style-type: none"> 1. Proposed Western Sydney International Airport. (within 18Kms).
<p>(b) The telecommunications facility is not to cause adverse radio frequency interference with any airport, port or Commonwealth Defence navigational or communications equipment, including the Morundah Communication Facility, Riverina.</p>	<p>The proposed equipment at the subject site is licensed as per ACMA regulations. As a result, there is to be no interference with other civil and military communications facilities.</p>
<p>(c) The telecommunications facility and ancillary facilities are to be carried out in accordance with the applicable specifications (if any) of the manufacturers for the installation of such equipment.</p>	<p>The proposed equipment is to be installed as per the manufacturer’s specifications. The proposal will comply with the requirements of all relevant Australian Standards.</p>
<p>(d) The telecommunications facility is not to affect the structural integrity of any building on which it is erected.</p>	<p>Not applicable – the proposed facility is a standalone structure and is not being erected on any existing building.</p>
<p>(e) The telecommunications facility is to be erected wholly within the boundaries of a property where the landowner has agreed to the facility being located on the land.</p>	<p>Complies – the proposed facility will be erected wholly within the boundaries of 153 Old Castlereagh Road – Castlereagh NSW – 2749 at the agreed location.</p>
<p>(f) The carrying out of construction of the telecommunications facilities must be in accordance with all relevant regulations of the Blue Book – ‘Managing Urban Stormwater: Soils and Construction’ (Landcom 2004), or its replacement.</p>	<p>The proposed telecommunications facility is designed and is to be installed in accordance with relevant manufacturer specifications and requirements of all relevant Australian Standards. Additionally, these matters can be appropriately addressed through the imposition of conditions of development consent where relevant.</p>

<p>(g) Obstruction or risks to pedestrians or vehicles caused by the location of the facility, construction activity or materials used in construction are to be mitigated.</p> <p>(h) Where practical, work is to be carried out during times that cause minimum disruption to adjoining properties and public access. Hours of work are to be restricted to between 7.00am and 5.00pm, Mondays to Saturdays, with no work on Sundays and public holidays.</p> <p>(i) Traffic control measures are to be taken during construction in accordance with Australian Standard AS1742.3-2002 Manual of uniform traffic control devices – Traffic control devices on roads.</p> <p>(j) Open trenching should be guarded in accordance with Australian Standard Section 93.080 – Road Engineering AS1165 – 1982 – Traffic hazard warning lamps.</p>	
<p>(k) Disturbance to flora and fauna should be minimised and the land is to be restored to a condition that is similar to its condition before the work was carried out.</p>	<p>The proposal is located on a piece of the property which was previously disturbed for development. The facility will have no impact on the surrounding flora and fauna.</p>
<p>(l) The likelihood of impacting on threatened species and communities should be identified in consultation with relevant state or local government authorities and disturbance to identified species and communities avoided wherever possible.</p>	<p>Desktop research was conducted for the installation of the proposed small cells within the property for its impact on the nearby flora and fauna.</p> <p>An EPBC search was also ordered to identify nearby threatened and protected species.</p> <p>There are no threatened or protected species identified within the property and the installation will not have any impact on the existing flora and fauna.</p>
<p>(m) The likelihood of harming an Aboriginal Place and / or Aboriginal object should be identified. Approvals from the Department of Environment, Climate Change and Water (DECCW) must be obtained where impact is likely, or Aboriginal objects are found.</p>	<p>A search of the AHIMS data base has been completed and it indicates the proposed installations are approximately 300m and 500m away from identified Indigenous Camp Sites.</p> <p>The small poles will be installed on parcel of land which have been previously disturbed and taking into consideration the amount of floor space ratio required for the installation, they will not have any impact on the aboriginal places.</p> <p>This is further detailed in Section 8.3 of this report.</p>



<p>(n) Street furniture, paving or other existing facilities removed or damaged during construction should be reinstated (at the telecommunications carrier's expense) to at least the same condition as that which existed prior to the telecommunications facility being installed.</p>	<p>Not applicable. The proposal will not impede on any street furniture, paving or other existing facilities. However, if disturbed, all street furniture, paving and walkways will be reinstated at the end of construction to at least the same condition they were in before work began</p>
---	--

It is considered that the proposal is compliant with all relevant principles of the *NSW Telecommunications Facilities Guideline including Broadband (July 2010)*.

7.5 State Environmental Planning Policy (Penrith Lakes Scheme) 1989

The State Environmental Planning Policy (Penrith Lakes Scheme) 1989 (the SEPP) is the applicable planning legislation for the subject site. The SEPP provides relevant controls which are applicable to the subject development.

The subject site is marked as P- Parkland as per the SEPP (Penrith Lakes Scheme) – 1989. Please see Figure 3 below for the nearby zoning.

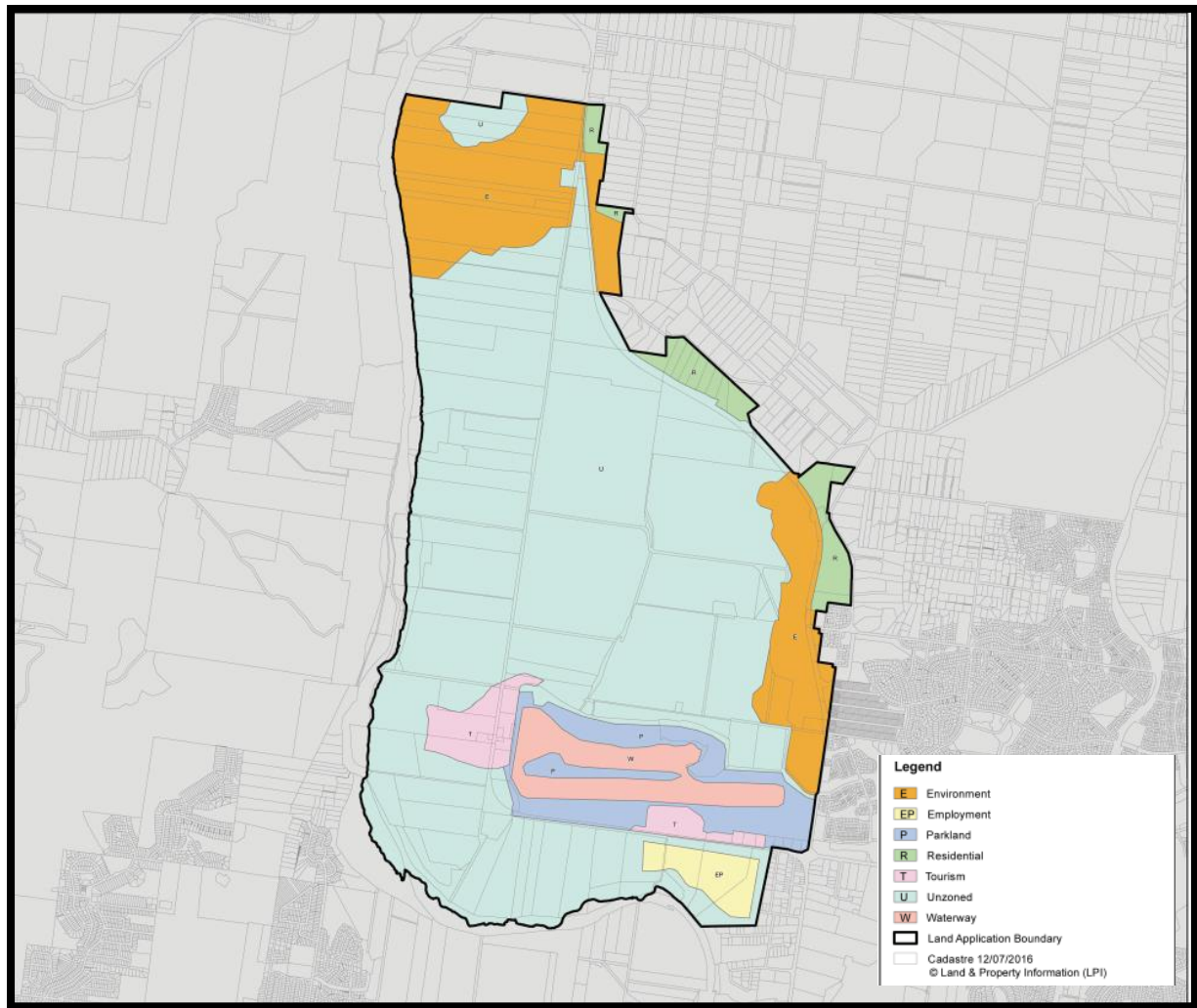


Figure 3: Site Zoning

An assessment of the proposal against the objectives of the Park Land Zone, as per Part 3 of the State Environmental Planning Policy (Penrith Lakes Scheme) 1989 (the SEPP), is provided in Table 3.

Additional provisions relating to the Parkland Zone are provided within Part 5 of the SEPP – an assessment of the proposal against these provisions is provided within Tables 3 and 4.

Table 3 – Assessment of the Proposal against Parkland Zone Objectives	
Parkland Zone Objective	Comment
To enable land to be used for open space or recreational purposes.	<p>The smart poles and the associated small cell antennas will enhance the use of the subject site for open space and recreational purposes. Mobile connectivity has become commonplace in today's society and is expected to be provided in open space areas for both community use and safety purposes.</p> <p>Secondly, the proposal will not detract from spaces provided for open space – occupying minimal land area.</p>
To provide a range of recreational settings and activities and compatible land uses.	The installation provides an effective and efficient solution to respond to both the events which are organised with a capacity of 30,000 (up to 50,000 subject to approval of application) as well as recreational joggers and cyclists who use the subject site, which is directly proportional to the growing demand for the mobile telecommunications network services from the community, businesses and travellers.
To protect and enhance the natural environment for recreational purposes.	The installation will have no impact on the existing natural environment within the property. The availability of uninterrupted telecommunication services will allow people to use the facilities more often and contact emergency services in case of an emergency.

Table 4 – Assessment of Proposal against Additional Provisions for Parkland Zone Land	
Development on land zoned Parkland	Comment
<p>Development consent must not be granted for development on land zoned Parkland unless the consent authority has considered the following—</p> <p>(a) Whether the development is consistent with a plan of management for the Penrith Lakes Scheme that is endorsed by the Planning Secretary as being appropriate for the Scheme;</p>	<p>It is considered that the proposal is consistent with the plan of management for the Regatta Centre. The Sydney International Regatta Centre currently attracts 500,000 visitors a year and the proposed facilities will provide significantly improved mobile services to users of the facility.</p>
<p>(b) Whether the development interferes with the operation or use of the Sydney International Regatta Centre or the Penrith Whitewater Stadium;</p>	<p>The installations will not impact the ongoing function of the Sydney International Regatta Centre. The proposed smart poles will be installed in a location that has been agreed by management of the Centre to ensure uninterrupted use of the facility.</p>



<p>(c) A traffic and transportation plan that includes proposals about the management of traffic impacts caused by the development;</p>	<p>The proposed smart poles will not be a significant generator of vehicular or pedestrian traffic and will not adversely impact local traffic flow.</p> <p>Once operational, the smart poles will require infrequent maintenance visits. Given the facility generates minimal trips per year, it is considered that traffic interference will be negligible.</p>
<p>(d) An Aboriginal cultural heritage assessment for the land (being a written report detailing the results of the assessment and recommendations for actions to be taken before, during and after an activity to manage and protect Aboriginal objects and declared Aboriginal places identified by the investigation and assessment) that has been prepared by a suitably qualified person.</p>	<p>The proposed installations are approximately 300m and 500m away from identified Indigenous Camp Sites.</p> <p>The small poles will be installed on parcel of land which have been previously disturbed and taking into consideration the amount of floor space ratio required for the installation, they will not have any impact on the aboriginal places. The AHIMS Report is provided within Appendix G of the SEE.</p> <p>This is further detailed in Section 8.3 of this report.</p>

Appendix F provides an assessment of this Statement of Environmental Effects against Schedule 2 of the SEPP.

8. OTHER ENVIRONMENTAL CONSTRAINTS AND OPPORTUNITIES

8.1 Visual Impact

The proposed smart poles are an exceptional inclusion in the landscape of the subject site. Smart poles are technologically advanced and provide a service to meet the expectations of users of an International Regatta Centre. The smart poles will be visible from nearby footpaths however it is considered that this is a beneficial utility to be seen. The proposed Smart Poles are designed to not infringe on any viewing corridors or sightlines within the Regatta Centre.

The proposed smart pole locations have been selected at the subject site to best provide coverage to the key event spaces without detracting from the existing use of the Regatta Centre. The smart pole locations are demonstrated in Figure 3 below.

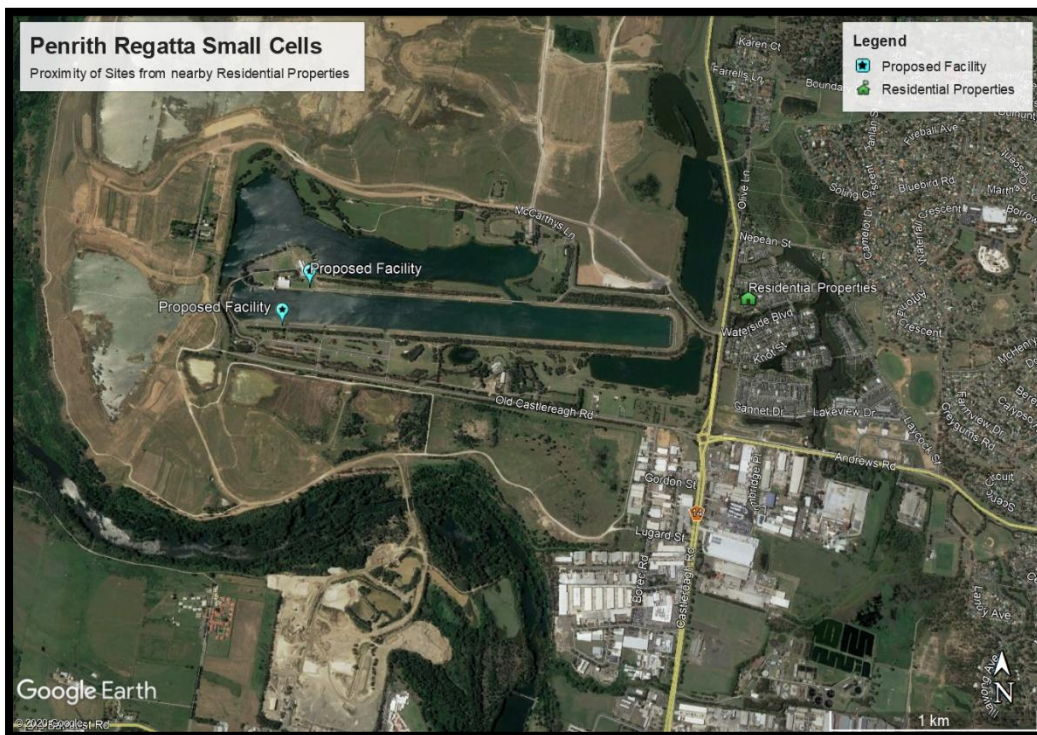


Figure 4: Site Locations with Regatta Centre

The smart pole will have all the ancillary equipment enclosed within the structure which will reduce visual clutter and keep the visual impact to a minimum. Please refer to **Error! Reference source not found.** for an indicative photo montage, supplied by the smart pole manufacturer, of a similar smart pole design. The lighting arm is considered ‘modular’ and has not been included as part of this proposal. However, this can be included at the Minister’s discretion.



Figure 12: Pole Manufacturer Photomontage of Smart Pole

The proposed smart pole **SC1** is located adjacent to the existing running track and 100m east of the spectators seating area. The pole will be painted in ‘neutral non reflective’ colour to blend with the

surrounding stands, flag posts and vegetation at the background. Figures 13 and 14 are taken at the proposed site location looking in an eastern and western direction.



Figure 13: Pole Smart Pole SC1 Location – Looking West Toward Spectator Seating Area



Figure 14: Pole Smart Pole SC1 Location – Looking East

The proposed smart pole **SC2** is located on the southern side of the lake, across from the spectator seating area. The pole will be painted in ‘neutral non reflective’ colour to blend with the surroundings. **Error! Reference source not found.** looks toward the site location and beyond to the spectator seating area.



Figure 15: Pole Smart Pole SC2Location – Looking North

It is considered that the proposed smart pole solution is a modern and effective way of alleviating coverage and capacity problems at the Sydney International Regatta Centre. Any visual impact of the proposal has been minimised through the effective slim line design of the proposed smart poles and underground transmission fibre and power supply.

Smart Poles have been deployed in a number of locations by Optus including within the Royal Botanic Gardens. Smart poles are an effective, stylish and modern coverage solution for areas of Local and State significance. In areas of high tourism use, high quality coverage is expected. The Carrier’s must find a solution to these coverage objectives without compromising the visual amenity of the subject property. Smart Poles have proven to be an effective solution to this challenge. Figure 16 is an example of Optus’ Smart Poles deployed in the Royal Botanic Gardens.



Figure 16: Existing Smart Poles within Royal Botanic Garden

The subject property is developed and host to a number of minor and major events yearly. On an informal basis the property is regularly used by the local community for exercise and recreational events. The proposed facilities will not detract from these events now will the smart poles impact on the amenity of the subject site.

Any ground works associated with underground fibre and power installations will be short term in nature and the land will be rehabilitated to the full satisfaction of the landowner and centre managers. Landscape design has not been included as part of this proposal due to the limited footprint and visual impact of the proposed smart poles.

The proposed smart poles will have a positive visual outcome on the Penrith International Regatta Centre and are considered to be a positive solution to the existing coverage deficits at the property.

8.2 Social and Economic Impacts

The provision of maintaining communications services to the area will have many beneficial impacts on the people who work, visit and travel through the area. As Sydney International Regatta Centre is poised to evolve into the largest water based recreational urban parklands in Australia, the need for high quality mobile coverage is a necessity.

It is anticipated that the proposed telecommunications facilities at Sydney International Regatta Centre at 153 Old Castlereagh Road, Castlereagh NSW – 2749 will provide localised uninterrupted Optus coverage to the Centre.

The use of small cells within the Centre keeps the visual impact to a minimum and the installation does not require any clearing of vegetation. The smart poles used for the installation of small cell antennas have a very small floor space ratio which will not impact the wider use of the area.



The need for the proposed facilities is demonstrated within **Section 3.1** Objective of the Proposed Facility of this report.

8.3 Heritage and Due Diligence Code of Practice for the Protection of Aboriginal Objects in New South Wales

As part of the site identification and site selection process, and in accordance with the legislative requirements, Optus ensures that physical, cultural, natural and Indigenous heritage significance is taken into consideration prior to proceeding with the subject site.

Heritage searches are undertaken in the initial feasibility stage of the project, including through the following registers:

- The *Environmental Protection and Biodiversity Conservation (EPBC) Act 1979* Protected Matters Search Tool;
- The Australian Heritage Places Inventory (AHPI)
- The Aboriginal Heritage Information Management System (AHIMS)
- Due Diligence Code of Practice for the Protection of Aboriginal Objects in New South Wales
- The NSW Heritage Database;
- State and Local Heritage Schedules
- Other State Agency heritage listings (if relevant) such as the RMS Heritage and
- Conservation Register etc.

The site is not heritage listed or located in close proximity to any existing heritage items. The proposal will not result in the degradation of any local historic character.

From an indigenous heritage perspective, all relevant environmental searches were conducted to determine any possible Aboriginal heritage significance associated with the site. The proposed site has been recognised via an AHIMS search containing two (2) items of Aboriginal cultural significance or being an area of Aboriginal Significance (please see Appendix G).

As per the desktop research, there are two aboriginal camp sites located within the proposed property. Please refer Figure 5 below to see the exact locations of these camp sites. The smart poles are within 300m and 500m away from the aboriginal sites. The smart poles have very small floor space ratio and are located within an area which was previously disturbed for landscaping and installing other utility services. Due to this, the installation is not expected to impact the existing aboriginal sites within the property.

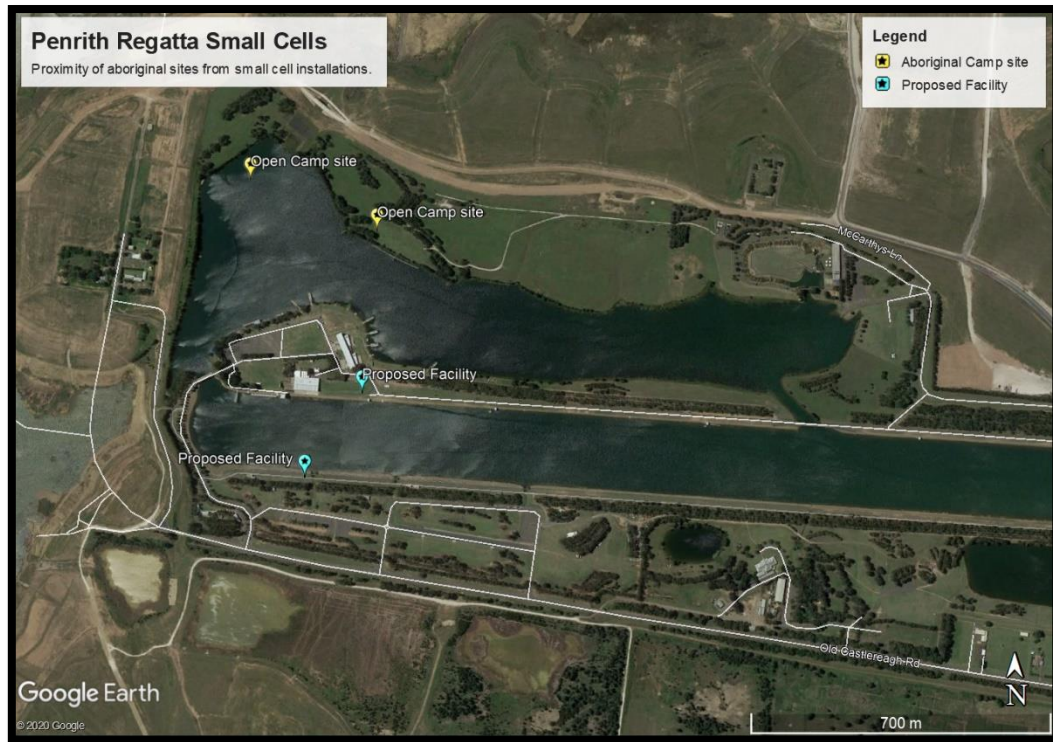


Figure 5: Proximity of Aboriginal sites within Sydney International Regatta Centre.

Lendlease and Optus recognise the importance and protection of Aboriginal objects not only in the state of New South Wales but at a National level. The purpose is to identify any activities that may potentially harm Aboriginal objects, and the site assessment was conducted in accordance with the due diligence process to ensure activities do not harm Aboriginal objects as per Figure .

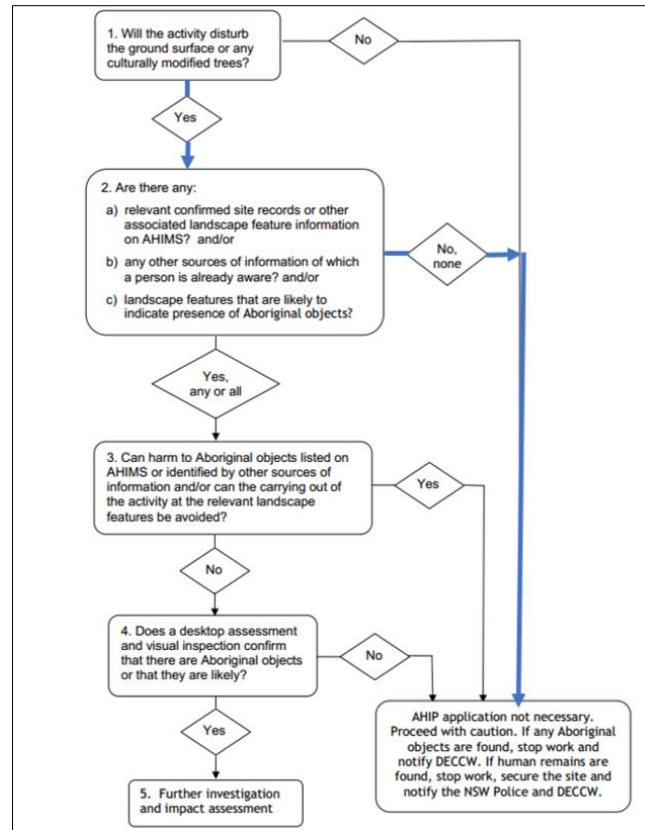


Figure 18: Due diligence process to ensure activities do not harm Aboriginal objects

9. CONCLUSION

The Sydney International Regatta Centre is one of Australia's best sporting and festival event destinations. The Centre consists of world-class facilities for sporting events, trade shows and community festivals. The Centre has both local uses in the form of public recreation and park runs and National and International scale uses. Set on 178 hectares of picturesque parklands and bush with views of the low Blue Mountains, the Sydney International Regatta Centre boasts a five-kilometre cycle path, parallel access roadway, competition waterway and warm up lake that make it perfect for triathlons and other aquatic and recreation activities.

There is a significant Optus Mobile Coverage deficit within the Regatta Centre which the proposed smart poles are expected to alleviate. Smart Poles are a modern and effective way of improving the Regatta Centre's Mobile Voice and Data coverage, without compromising the visual character of the area.

The proposed Optus smart poles, featuring small cell antennas, have been placed in the most appropriate location to provide adequate Optus mobile voice and data coverage for both events held at the Centre as well as every day uses. The proposed works comprise the installation of two (2) new Smart Poles, each hosting two (2) small cell antennas and ancillary equipment within.

The proposed site is located within P- Parkland zone and is separated from residential areas. It is anticipated that the proposal will not have a negative visual impact on the surrounding area, nor will it affect the existing character of the Sydney International Regatta Centre. It is considered that the proposed smart poles will provide an effective and modern solution for the Centre.

The proposal is considered to be consistent with the existing State Environmental Planning Policy (Penrith Lakes Scheme) 1989 as discussed in previous sections of the report. There is no vegetation removal anticipated and the proposed development will not have a significant impact on the amenity of the area.

We respectfully request that the Planning Minister looks favourably at this application and grant development approval.



APPENDIX A – Political Donations Disclosure Statement



APPENDIX B – Proposal Plans



APPENDIX C – Certificate of Title



APPENDIX D – ARPANSA EME Report



APPENDIX E – Underground Fibre Route

APPENDIX F – Assessment of Statement of Environmental Effects against Schedule 2 of the SEPP

Schedule 2 Matters to be included in the statement of environmental effects	Included
The following matters—	☑
(a) justification of the proposed development in the context of State Environmental Planning Policy (Penrith Lakes Scheme) 1989,	☑
(b) a full description of the proposed development,	☑
(c) a statement of the objectives of the proposed development,	☑
(d) a full description of the existing environment likely to be affected by the proposed development if carried out,	☑
(e) identification and analysis of the likely environmental interactions between the proposed development and the environment,	☑
(f) analysis of the likely environmental impacts or consequences of carrying out the proposed development (including implications for use and conservation of energy),	☑
(g) justification of the proposed development in terms of environmental, economic and social considerations,	☑
(h) measures to be taken in conjunction with the proposed development to protect the environment and an assessment of the likely effectiveness of those measures,	☑
(i) energy requirements of the proposed development,	☑
(j) any feasible alternatives to the carrying out of the proposed development and the reasons for choosing the latter, and	☑
(k) the consequences of not carrying out the proposed development.	☑
In addition to the matters listed in clause 1, particular regard must be given to the following matters—	☑.
(a) relationship and extent of the proposed development to the completed scheme,	☑
(b) where appropriate, the integration of the proposed development with development previously carried out,	☑
(c) the sequence of extraction and rehabilitation where the proposed development is for or includes an extractive industry,	Not Applicable.
(d) unless the land is to be dedicated to the Crown, the proposed control and management of the land,	☑
(e) the management and control of water resources including— (i) the source of water in order to fill any lake (including the quality and quantity of water from that source), (ii) water reticulation systems from the Nepean River to any lake, from lake to lake and from any lake to the Nepean River, (iii) the water quality of any lake (including the aquatic ecosystem), (iv) water treatment facilities,	The proposed smart poles occupy minimal surface area and will not generate stormwater, nor do they require connection to existing water systems. It is considered that these provisions are not applicable .

<p>(v) water depth of any lake, (vi) flood control, (vii) storm water control, (viii) the effect that development would have upon the quantity and quality of the existing groundwater as well as the level of the existing groundwater table, (ix) lake usage, (x) staged development of the lakes and their usage during staged development, (xi) the need to monitor the water quality of the lakes having regard to their intended use, and (xii) the effect upon the Hawkesbury/Nepean River system,</p>	
<p>(f) the rehabilitation and reconstruction of the land including— (i) landscape design, (ii) the structural stability and soil compaction of landforms (including, where appropriate, the land shown on the structure plan as future urban), (iii) the stability and impermeability of the Nepean River embankment, (iv) soil conservation, and (v) revegetation,</p>	<input checked="" type="checkbox"/>
<p>(g) any effect upon a locality, place or building not listed in Schedule 3 having aesthetic, anthropological, archaeological, architectural, cultural, historical, scientific or social significance or other special value for present or future generations,</p>	<input checked="" type="checkbox"/>
<p>(h) measures to be taken to conserve and preserve items of environmental heritage listed in Schedule 3 including, where appropriate, a conservation plan, and</p>	<input checked="" type="checkbox"/>
<p>(i) access to, the supply of water from any existing service to, and the supply of and access to municipal and utility services to, land to which this Policy applies other than that part of that land the subject of the application.</p>	<p>Not applicable.</p>



APPENDIX G – AHIMS Search Result
