PLAN 2

PLANNING APPLICATION PLN-18-0319

FAIRBANKS, 105 GREEN RISES ROAD, CRESSY

ATTACHMENTS

A Application & plans, correspondence with applicant

B Responses from referral agencies

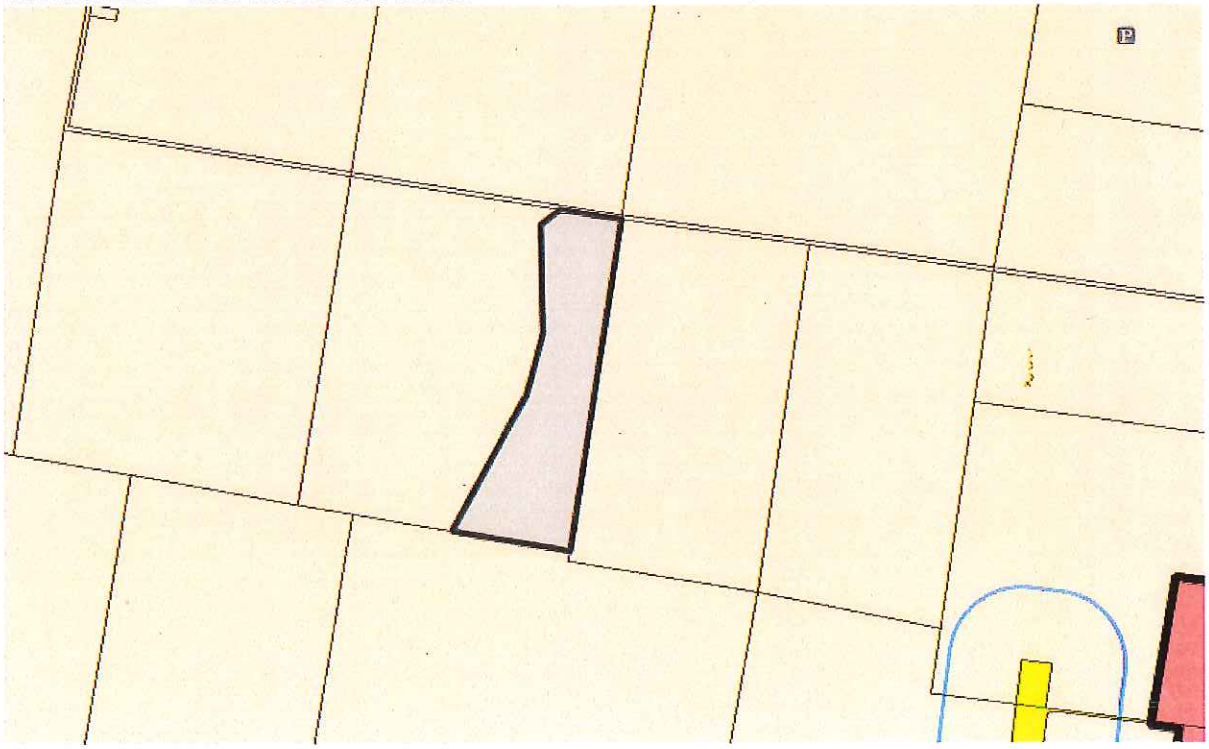
C Representations & applicant's response

ATTACHMENT A

PLN-18-0319

AERIAL PHOTOGRAPH & SERVICES MAP for FAIRBANKS, 105 GREEN RISES ROAD, CRESSY

ZONING MAP - RURAL RESOURCE ZONE



EXHIBITED

PLANNING APPLICATION

Proposal

Description of proposal: TELECOMMUNICATIONS FACILITY AND ASSOCIATED INFRASTRUCTURE.

(attach additional sheets if necessary)

If applying for a subdivision which creates a new road, please supply three proposed names for the road, in order of preference: N/A

1..... 2..... 3.....

Site address: 105 GREEN RISES ROAD, CRESSY TAS 7302

(ON SOUTH SIDE OF GREEN RISES ROAD) LOT 1, SP 112478

CT no: VOL 112478, FOLIO 1

Estimated cost of project $ 180,000 *(include cost of landscaping, car parks etc for commercial/industrial uses)*

Are there any existing buildings on this property? (Yes) / No

If yes – main building is used as .....

If variation to Planning Scheme provisions requested, justification to be provided:

(attach additional sheets if necessary)

Is any signage required? NO *(if yes, provide details)*

FOLIO PLAN

RECORDER OF TITLES

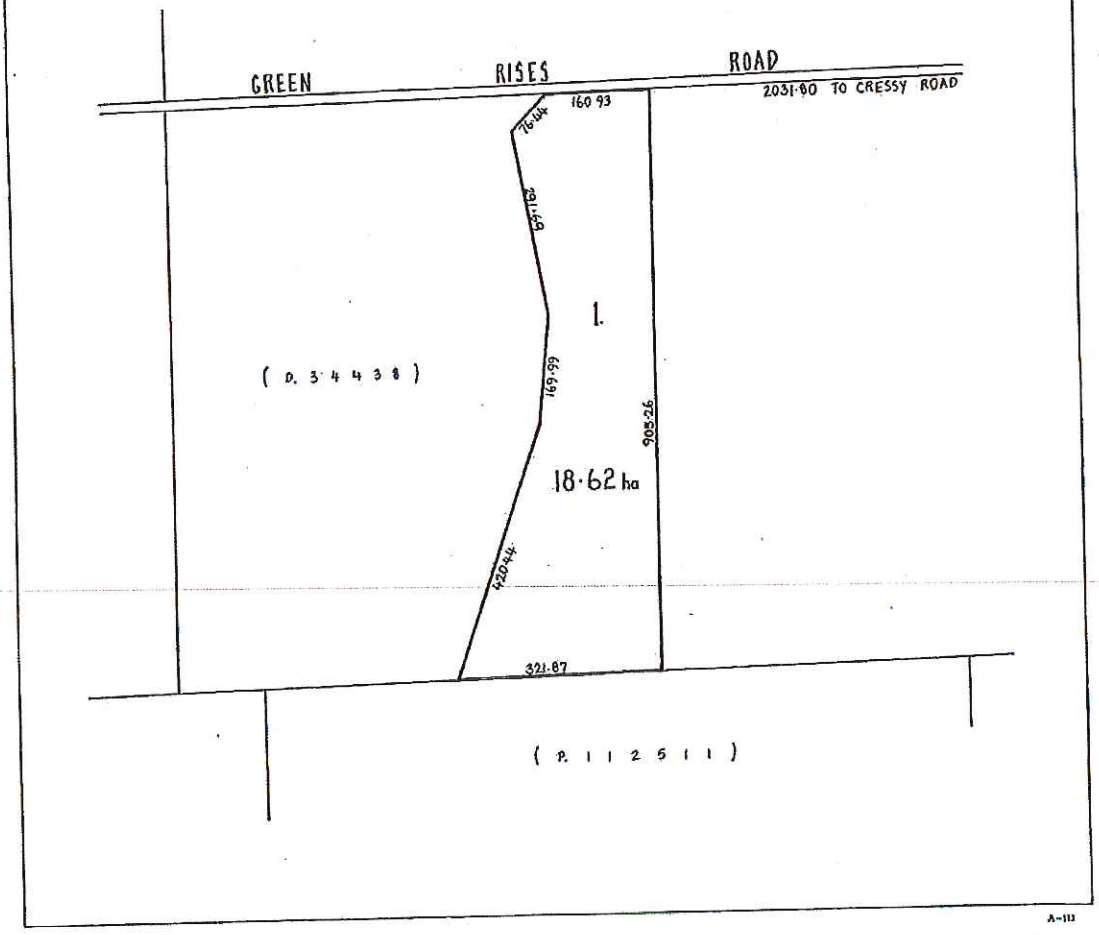
Issued Pursuant to the Land Titles Act 1980

Tasmanian Government

FILE NUMBER A.14197 GRANTEE PART OF 20,000A-0R-0P. GTD. TO ROBERT KEATE, JAMES DRUMMOND, BUTLER ELPHINSTONE & STEWART MARJORIBANKS.	**CONVERSION PLAN** LOCATION WESTMORLAND - CRESSY CONVERTED FROM 42/4046 NOT TO SCALE LENGTHS IN METRES	REGISTERED NUMBER P112478 APPROVED 21 JUL 1994 Recorder of Titles
MAPSHEET MUNICIPAL CODE No. 56	LAST UPI No. 421	ALL EXISTING SURVEY NUMBERS TO BE CROSS REFERENCED ON THIS PLAN — DRAWN HC

SKETCH BY WAY OF ILLUSTRATION ONLY

"EXCEPTED LANDS"



Planning Assessment Report

Development Application for a telecommunications mobile phone base station at;

105 Green Rises Road, Cressy TAS 7302

Prepared on behalf of Optus Mobile Pty Ltd by Metasite Pty Ltd

Project No. H0093

November 2018

metasite

OPTUS

Document Quality Control

This Planning Report is prepared by:

Metasite Pty Ltd
ABN 79 145 899 458

T 03 9804 5324
E david.hodgkinson@metasite.com.au
W www.metasite.com.au
A Level 5, 3 Bowen Crescent, Melbourne Vic 3004

Document Control				
Rev	Date	Status	Prepared by	Reviewed by
1.0	17/11/2017	Final	David Hodgkinson	Adrian Bell

Disclaimer

Metasite Pty Ltd does not accept any risk or responsibility for a third party using this document, unless written authorisation is provided by Metasite Pty Ltd.

Contents

Appendix A	Performance Critera Table
Appendix B	Proposal Plans
Appendix C	Environmental EME Report

Executive Summary

Site Address	105 Green Rises Road, Cressy TAS 7302
Real Property Description	The legal description of the property is Parish of CRESSY Land District of WESTMORLAND, Lot 1 on Plan 112478, Property Number 3211081
Land Title reference	Volume 112478, Folio 1.
Site Area	Telecommunications area of irregular shape approximately 49 square metres within land area 18.62 Hectares on Lot 1 on Plan 112478.
Registered Owner	Fairbanks Pty Ltd
Proposal	Optus proposes to extend the existing telecommunications monopole at 105 Green Rises Road, Cressy TAS 7302. The facility will comprise of; • Installation of a 30 metre high telecommunications monopole with an headframe above (centre-line of antennas 32.6 metres) to install three (3) antennas • Nine (9) Radio Remote Units (RRU's); • 1 x 1200mm diametre radio communication dishes at 26m from ground level; • Two (2) outdoor cabinets/equipment shelters and three (3) future outdoor cabinets/equipment shelters at ground level; and • Ancillary equipment associated with the operation of the facility, including cable trays, cabling, bird proofing, earthing, electrical works and air-conditioning equipment.
Coverage Objectives	A demonstrated need has been identified for a new telecommunications facility in the area to improve voice and data services to the Cressy area.
Site Selection	The site has been identified as the most appropriate location for the new facility following an extensive site selection process.
Council/Planning Scheme	Northern Midlands Interim City Planning Scheme 2013
Use Definition	Telecommunications Facility
Zone	Rural Resource Zone
Overlays	None identified
Applicant	Optus Mobile Pty Ltd c/- Metasite Pty Ltd Contact: David Hodgkinson

	Phone: 03 9804 5324 Email: david.hodgkinson@metasite.com.au
Reference No.	Our Site Reference: H0093 Cressy North RFNSA Reference: 7302008

1.0 Introduction

1.1 What is a mobile base station and how do they work?

A mobile base station is a facility that provides mobile telephone services to a geographical area. A mobile phone network is made up of base stations which operate together to provide service to users moving from place to place within the coverage area. A mobile base station typically consists of the following components: antennas, support structure, base station and transmission equipment. The antennas are connected by cable to radio equipment usually housed in a room, shelter or outdoor unit. Base stations are connected to the core network by microwave or fibre. Mobile phones work by sending and receiving low power radio signals, much like 2 way radio system. The signals are sent and received from antennas that are attached to radio transmitters and receivers, commonly referred to as mobile phone base stations. The base stations are linked to the rest of the mobile and fixed phone network and pass the signal/call on into those other parts of the network.

1.2 Benefits of mobile technology's

Mobile telecommunications play a central role in society and are 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 labor productivity growth by allowing employees to be more efficient, with more productive use of time. According to Deloitte (2016), the Australian economy is approximately $34 billion larger in 2015 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 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 21 million subscribers with internet access connections via a mobile handset in Australia (ABS, 2015). 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.

1.3 Purpose of the proposal

To cater for the growing demand for mobile services, Optus has embarked on a nationwide rollout to deliver an improved, reliable telecommunications network to the Australian public. The rollout will provide improved mobile coverage and enhanced services in metropolitan, regional and rural areas throughout Australia. This rollout consists of the upgrade of existing telecommunications facilities and where required the installation of new mobile base stations to expand the coverage footprint and offer seamless mobile services.

Additional base stations are required where surrounding facilities cannot provide sufficient coverage to a target area. New facilities are also required when existing base stations are fully utilised and cannot serve additional users in the area. Optus has undertaken analysis of their mobile network in the area to supply the Cressy North area and has identified areas where coverage and network quality needs to be improved. If this investment is not made, the following main issues will arise:

1. Users may have difficulty connecting to the mobile network or the call may drop out. This impacts businesses, residents, visitors to the area and the ability of the user to contact emergency services.
2. User may experience reduced data speeds, longer download times and poor network performance at busy times of the day with data intensive and time sensitive applications (e.g. newscasts, social media, mobile banking, weather forecasts, sports highlights and in this instance mainly conducting business through wireless devices on the farm).

Metasite Pty Ltd has been engaged by Huawei Pty Ltd to provide Site Acquisition, Town Planning, Design & Engineering services for Huawei's national roll-out contract with Optus Mobile Pty Ltd (Optus). This development application has been prepared by Metasite, on behalf of Optus and seeks approval to allow the installation of a new telecommunications facility at 105 Green Rises Road, Cressy TAS 7302 (the site).

Optus is currently undertaking the Long Term Evolution (LTE) upgrade of their existing mobile phone infrastructure across Australia. The overall project will improve customer experience through faster and more reliable voice and data services.

Due to increasing network demands for data, Optus has identified the need to install a telecommunications facility in the area to improve voice and data services to customers in Cressy.

To provide mobile service to the surrounding area, the proposed telecommunication installation requires the installation and works outlined in the "Executive Summary" section on the previous page.

All mobile phone network operators are bound by the operational provisions of the federal *Telecommunications Act 1997* ("The Act"). This application for a planning permit is bound by the core principles and operator requirements outlined within The Act, however consent is required from the Northern Midlands Council in order to undertake the prescribed development. More information regarding the legislative framework pursuant to this proposal is located within **Section 5, 6 & 7** of this report.

2.0 Site Selection

2.1 Potential Candidates

A number of factors have been considered when selecting the appropriate site for the infrastructure. The factors include investigating opportunities to collocate on existing infrastructure, the proposal's proximity to existing sensitive land uses, planning scheme considerations, technical and coverage objectives, cost considerations, lease and land tenure, visual impact and engineering/design criteria.

Furthermore, the site selection process incorporates the mandatory Mobile Phone Base Station Deployment Code (C564:2011) activities which are undertaken in order to justify the proposed location of the subject site (specifically sections 4.1, 4.2 and 8 of the Deployment Code). Such considerations include preparation of a "traffic light model" and assessment against the Deployment Code's precautionary approach provisions.

A number of potential candidate sites are usually considered when selecting the most appropriate site for the infrastructure. In this instance four potential candidates were identified.

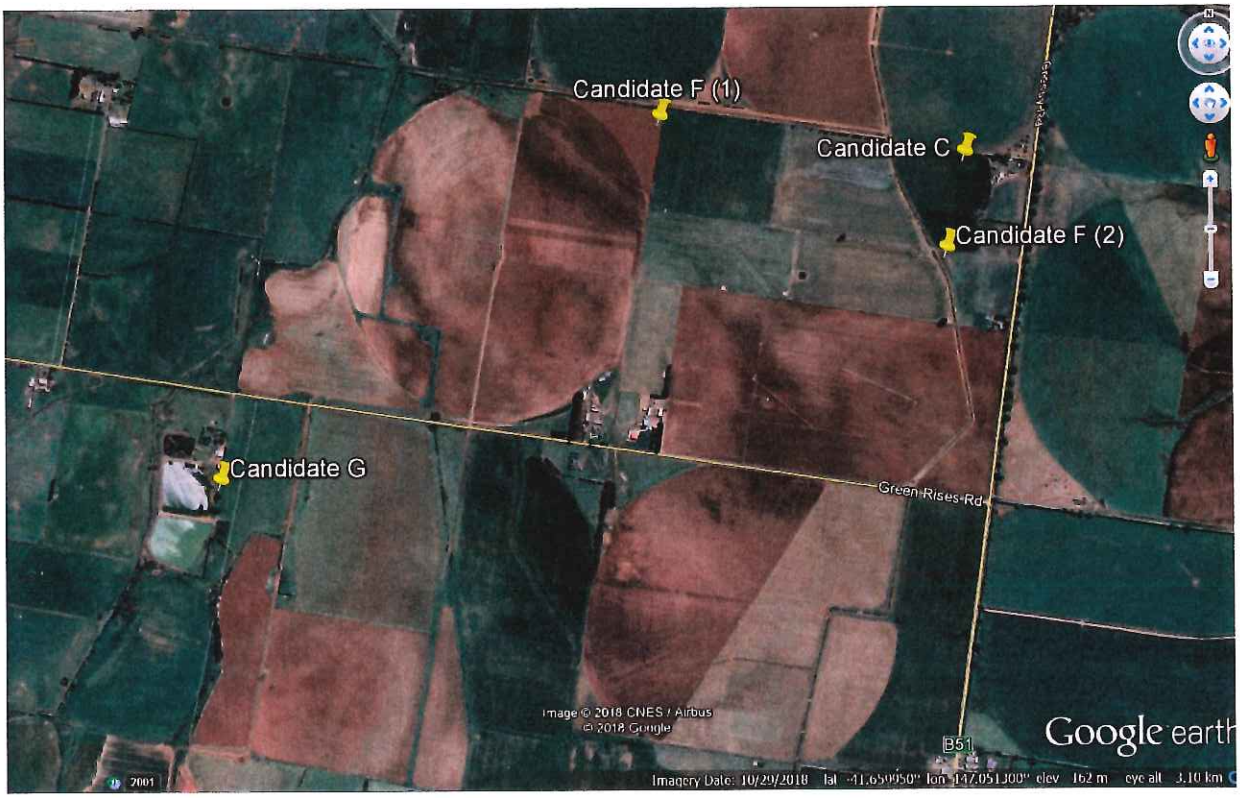


Figure 1: Potential Candidate Locations (source: Google Earth 2018)

A detailed analysis of each candidate has been undertaken in the below table to determine the most appropriate site location for the telecommunications facility. It is also worth noting there are no opportunities to co-locate Optus' equipment on an existing facility.

Candidate	Address	Opportunities / Constraints
C New monopole	974 Cressy Road Cressy TAS 7302 (Lot 1 on Sealed Plan 164931)	The proposed location was originally chosen however agreement could not be reached with the land owner.
F (1) New monopole	110 Green Rises Road, Cressy TAS 7302 (Lot 3 on Sealed Plan 164931)	The proposed location is an open field area however was situated on land used for cropping. The site was not selected due to more superior coverage available from the other locations.
F (2) New monopole	105 Green Rises Road, Cressy TAS 7302 (Lot 3 on Sealed Plan 164931)	Within the same ownership as 110 Green Rises Road, a location was chosen as it was more superior in coverage however the position was not supported by council.
G New monopole	105 Green Rises Road, Cressy TAS 7302 (Lot 1 on Sealed Plan 112478)	Within the same ownership as 110 Green Rises Road, Lot 1 on Plan 112478, Property Number 3211081 a location on a property on the southern side of Green Rises Road

Two (2) further properties were selected in the target area for consideration however were not further progressed in the investigation.

2.2 Preferred Nominated Candidates

The preferred site (Candidate G) at 105 Green Rises Road, Cressy TAS 7302 was chosen as the preferred site candidate for the following reasons:

- The site is technically feasible, and can achieve Optus' coverage and capacity objectives for the area. It will provide a high quality 2G, 3G & 4G mobile and wireless broadband service, which will greatly improve access to mobile telecommunications services for the staff and customers and the business as whole at the and also improve voice coverage;
- The site is within a Rural Resource Zone land use which is considered a suitable location for the proposed telecommunications facility;
- The character of the area will not be detrimentally affected by the proposal;
- The position of the monopole mitigates visual impacts;

- The facility will not create any traffic congestion;
- The landowner is supportive of the Optus proposal and its associated benefits for increased telecommunications services in the local area;
- The site will not require the clearing of any trees;
- The site has readily available access to the electricity supply network;
- The proposed facility will not prejudice the existing or anticipated future use of the site;
- The costs associated with delivering the site and constructing the facility are considered by Optus to be reasonable;

3.0 Site and surrounds

3.1 Site details

The subject site is located in on a rural property at 105 Green Rises Road, Cressy TAS 7302. The legal description of the property is Parish of CRESSY Land District of WESTMORLAND, Lot 1 on Sealed Plan 112478. Volume 112478, Folio 1. An aerial plan demonstrating the site location and the context of the property is located within **Figure 2 & 3 below:**

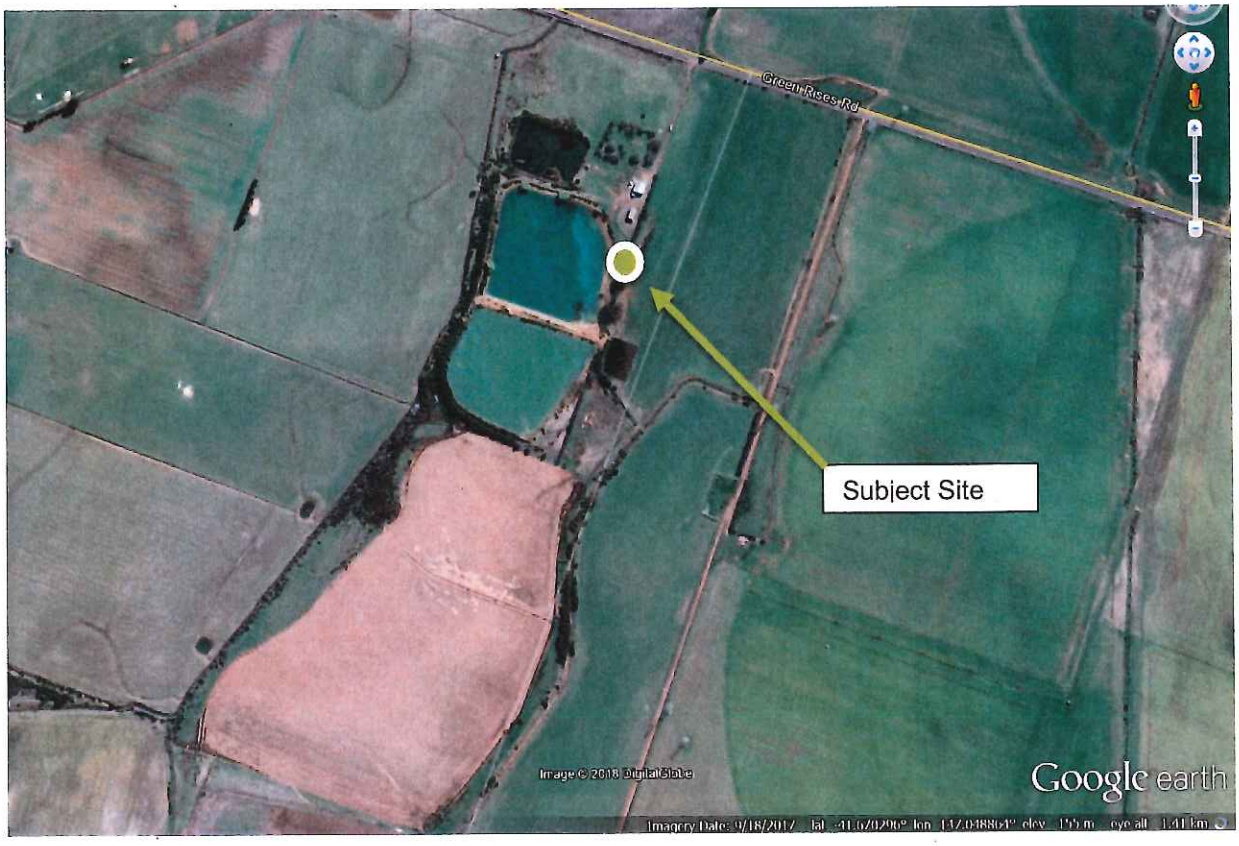


Figure 2: Subject Site (Google Earth)

View to site from south to north along eastern fence-line

View to site from north to south along eastern fence-line

Existing access driveway to site from Green Rises Road

The subject site is within a Rural Resource Zone land use and is irregular in shape and is currently used for the rural purposes. The site is to be located within a paddock adjacent to the northern boundary fence and near the irrigation channel area. The topography of the land is generally flat with an irrigation channel to the west and cropping paddocks further to the west. To the east is the access way to Cressy Road.

3.2 Surrounding area

To the south and north are similar rural properties that contain animal grazing or rural agricultural pursuits. Further west are similar cropping paddocks with and irrigation pivot machines and associated irrigation channels. The land surrounding is generally with open fields and few areas of large vegetation.

4.0 Proposal

Mobile networks are like roads when traffic increases, upgrades are needed to relieve congestion and remove roadblocks. Congestion is relieved by making changes to existing base stations or adding additional base stations in areas where we may already have existing coverage. The following proposal is necessary to alleviate congestion and service issues within the Cressy locality.

4.1 Overview

The proposed telecommunication installation requires installing the equipment outlined in the "Executive Summary" section on page 4 of this report.

As previously highlighted, Optus Mobile Pty Ltd has an obligation under the Industry Code to ensure that all suitable alternatives have been explored as part of the justification behind this development application. It is believed that proposed works as outlined above will not result in any adverse visual or environmental impact to the surrounding environs within the Cressy locality.

The proposal is demonstrated through the proposal plans, attached to this submission in **Appendix A**.

4.2 Transport, access and parking

Access to the facility will be obtained via an existing access from Cressy Road to the property. An access track is available to the irrigational channel. No formal parking is proposed, given the facility will function on a continuously unmanned basis, and will typically only require infrequent maintenance. There is sufficient space onsite for a vehicle to park during these times. The location of Cressy Road shown on the proposal plans attached in **Appendix A**.

Mobile phone base stations require only infrequent maintenance visits (i.e. only two (2) to four (4) times per year). Furthermore, the site will operate on a continually unmanned basis. As such, the proposal will not be a significant generator of vehicular and/or pedestrian traffic. Therefore, the proposed informal access will provide appropriate access for the infrequent maintenance inspections.

4.3 Utilities

The final power design for the site is yet to be confirmed. The indicative power design/route for the proposed facility has been outlined within the drawing package, located within **Appendix A** of this document.

The unmanned nature of the proposed mobile base station removes the need for connection to water or sewer services. Furthermore, the proposal incorporates very minimal hard surfaces and therefore will

generate insignificant stormwater runoff from the site. As such, the proposal does not require connection to the stormwater network.

4.4 Construction schedule

The construction of the proposed mobile phone base station primarily consists of the following processes:

- Remediation – ensuring that the land is suitable for construction. This is inclusive of confirming existing structural assessments and the provisioning of cabling (if required).
- Installation of new equipment – reflective of the scope of works outlined within this Development Application; and
- Network Integration – Ensuring that the mobile phone base station can connect with both end users and other sites within the Optus network.

During the construction of the facility, a truck will be required to deliver necessary equipment to the site and a crane will be used to establish the extension of the facility. Traffic associated with the construction phase will be temporary in nature and will not affect existing traffic flows of the surrounding area. Should a road closure be required for the erection and installation of equipment, the appropriate approvals will be obtained from Council.

4.5 Acoustic

Air conditioners will be installed for each of the outdoor cabinets located within the base station, which enable the equipment to stay within normal operating temperatures. The air conditioning units will emit a small amount of noise commensurate to that of domestic air conditioning units. The operation of air conditioning units from the site will not result in any adverse impact to neighboring properties, given the low noise levels generated by the air conditioners, the remote location of the proposed facility and the separation of the facility to surrounding land uses.

4.6 Environmental

As it is an existing facility there will only be minor earth works to establish the facility. No Vegetation is proposed to be removed as part of the works other than field grass cover to establish the compound area.

4.7 Retaining structures

The topography of the site ensures that retaining structures will not be necessary for the proposed telecommunications facility.

4.8 Visual Impact

This assessment has identified the proposed telecommunications facility as having a medium level of visual impact. The visual impact of the proposed development will vary depending on the viewing distance, number of viewers, period of view and vantage point within the surrounding areas.

Attention has been given to the design of the various elements of the telecommunications facility. Careful consideration of these elements will ensure the best possible outcome to minimise the impact on views within the visual catchment of the site.

Overall it is anticipated that the proposed development will not have a significant visual impact on the surrounding area. The proposed facility will be visible from some distance, given its location and required height to gain optimal network performance for Cressy and surrounding areas.

Although the proposal will have a localised impact, the site is situated within a rural land use, and is therefore largely separated from urban and residential areas, minimising the level of visual impact. This is also lessened by the neutral colour of the facility and use of vegetation for visual screening purposes to minimise visual disturbance and improve assimilation into its immediate and wider surroundings.

Given the advantages to be gained by the public by receiving improved telecommunications services, it is considered that the facility provides an acceptable level of impact which outweighs any general loss of visual amenity.

4.9 EME & Health

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

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

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

The Standard operates by placing a limit on the strength of the signal (or RF EME) that Optus 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 has undertaken a compliance report that predicts the maximum levels of radiofrequency EME from the proposed installation. The maximum environmental EME level from the site, once it is operational, this will comply with the ACMA mandated exposure limit **(See Appendix C)**. Optus complies with the public health and safety standard by a significant margin.

Optus relies on the expert advice of national and international health authorities such as the Australian Radiation Protection and Nuclear Safety Agency (ARPANSA) and the World Health Organisation (WHO) for overall assessments of health and safety impacts. The WHO advises that all expert reviews on the health effects of exposure to radiofrequency fields have concluded that no adverse health effects have been established from exposure to radiofrequency fields at levels below the international safety guidelines that have been adopted in Australia.

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

5.0 Federal Regulatory Framework

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

5.1 Telecommunications Act 1997

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

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 1997*, which was gazetted subsequent to the Act. The Telecommunications (Low Impact Facilities) Determination 1997 establishes certain facilities, which cannot be considered low impact facilities.

This subject proposal is for a freestanding monopole, associated antennas and equipment. Pursuant to the *Telecommunications (Low-impact Facilities) Determination 1997* **the proposed facility cannot be considered as "low- impact."** Accordingly, the proposal is not exempt from State and Local Planning laws and therefore the provisions of the *Land Use Planning and Approvals Act 1993* and the *Northern Midlands Interim City Planning Scheme 2013* are applicable.

5.2 Telecommunications Code of Practice 1997

The Telecommunications Code of Practice 1997 (The Code) authorises a carrier to enter land, inspect land and install and maintain a facility. The Code emphasises "best practice" design, planning and installation of facilities, compliance with industry standards and minimisation of adverse impacts as much as practicable, particularly in terms of degradation of the environment and visual impact. The subject proposal is considered to comply with "best practice" given the proposal will:

- Provide improved telecommunications and wireless internet coverage to the Cressy areas;
- Be located on with a rural area and that does not hinder the available agricultural activities;
- Comprise the smallest scale configuration possible for the site to reduce the visual impact of the proposal.

6.0 State Regulatory Framework

6.1 Land Use Planning and Approvals Act 1993

The proposed telecommunications facility is not considered a low-impact facility and is therefore subject to the *Land Use Planning and Approvals Act 1993*.

The purpose of LUPA Act is to establish a framework for planning the use, development and protection of land in Tasmania in the present and long-term interests of all Tasmanians.

The proposed telecommunications facility is consistent with the key objectives of the LUPA Act and will result in the orderly and sustainable development and use of land that will have minimal impact on natural resources and ecological processes.

6.2 State Planning Policy

Tasmanian state policies address land use, land management, environmental management and environmental protection for the state. State policies include coastal protection, water quality management & protection of agricultural land.

In addition, the relevant regional land use strategy guides the state development, for this particular application the *Regional Land Use Strategy of Northern Tasmania* is applicable.

Purpose of the *Regional Land Use Strategy of Northern Tasmania* is to provide strategic foundation for land use planning which provides a perspective on planning issues of regional significance.

- The purpose of the RLUS is to create the regional strategic planning land use policy intent for the future planning directives of the development of Northern Tasmania derived from the vision for the State as outlined by **Tasmania Together**; objectives of the **Tasmanian Resource Management and Planning System (RMPS)**

The Regional Land Use Strategy refers to the growth in telecommunications in general;

'Most of the Region is covered by Next G network for voice, picture, video and wireless broadband. It is planned that by 2014, Tasmania will have the best fixed consumer broadband in the world through the current roll out of optic fibre. There is a need for greater investment in mobile and wireless infrastructure, in applications, in smart grids and other system-wide digital technologies. Five Northern regional localities will benefit in the three stage National Broadband Network rollout plan that will add value to innovation and competitive capacity in the region. The rollout includes Launceston in stage 3 following on from St Helens, George Town, Scottsdale and Deloraine.'

In addition, the *State Policy of Protection of Agricultural Land 2009* is relevant to the application as the site is within the Rural Resource Zone.

The purpose of the policy is

- *To conserve and protect agricultural land so that it remains available for the sustainable development of agriculture, recognising the particular importance of prime agricultural land.*

To enable the sustainable development of agriculture by minimising:

- *conflict with or interference from other land uses; and*
- *non-agricultural use or development on agricultural land that precludes the return of that land to agricultural use.*

The following Principles will be implemented through planning schemes and other relevant planning instruments. No one Principle should be read in isolation from the others to imply a particular action or consequence.

- *Agricultural land is a valuable resource and its use for the sustainable development of agriculture should not be unreasonably confined or restrained by non-agricultural use or development.*

- *Use or development of prime agricultural land should not result in unnecessary conversion to non-agricultural use or agricultural use not dependent on the soil as the growth medium.*

- *Use or development, other than residential, of prime agricultural land that is directly associated with, and a subservient part of, an agricultural use of that land is consistent with this Policy.*

- *The development of utilities, extractive industries and controlled environment agriculture on prime agricultural land may be allowed, having regard to criteria, including the following:*
  - *(a) minimising the amount of land alienated;*
  - *(b) minimising negative impacts on the surrounding environment; and*
  - *(c) ensuring the particular location is reasonably required for operational efficiency.*

- *Residential use of agricultural land is consistent with this Policy where it is required as part of an agricultural use or where it does not unreasonably convert agricultural land and does not confine or restrain agricultural use on or in the vicinity of that land.*

- *Proposals of significant benefit to a region that may cause prime agricultural land to be converted to non-agricultural use or agricultural use not dependent on the soil as a growth medium, and*

which are not covered by Principles 3, 4 or 5, will need to demonstrate significant benefits to the region based on an assessment of the social, environmental and economic costs and benefits.

- *The protection of non-prime agricultural land from conversion to non-agricultural use will be determined through consideration of the local and regional significance of that land for agricultural use.*
- *Provision must be made for the appropriate protection of agricultural land within irrigation districts proclaimed under Part 9 of the Water Management Act 1999 and may be made for the protection of other areas that may benefit from broad-scale irrigation development.*

- *Planning schemes must not prohibit or require a discretionary permit for an agricultural use on land zoned for rural purposes where that use depends on the soil as the growth medium, except as prescribed in the below.*

- *New plantation forestry must not be established on prime agricultural land unless a planning scheme reviewed in accordance with this Policy provides otherwise. Planning scheme provisions must take into account the operational practicalities of plantation management, the size of the areas of prime agricultural land, their location in relation to areas of non-prime agricultural land and existing plantation forestry, and any comprehensive management plans for the land.*

- *Planning schemes may require a discretionary permit for plantation forestry where it is necessary to protect, maintain and develop existing agricultural uses that are the recognised fundamental and critical components of the economy of the entire municipal area, and are essential to maintaining the sustainability of that economy.*

The land use strategy refers to recognising the need for telecommunications infrastructure to enhance technology. The proposal to development of telecommunications provides the vehicle to make available access to technologies and competitive providers to residents, visitors and business. In relation to the agricultural policy the land area of approximately 49 square metres does not interfere with any existing agricultural or rural uses and located in an area on the property that is not used for cropping purposes.

7.0 Local Government Regulatory Framework

7.1 Council Planning Scheme

As highlighted earlier in this report, the planning scheme applicable to the proposed development is the *Northern Midlands Interim City Planning Scheme 2013* (the Planning Scheme).

7.2 Northern Midlands Planning Scheme Objectives

Under the Northern Midlands Planning Scheme, the scheme identifies regional and local policies objectives. The purpose of the scheme is;

(a) To further the Objectives of the Resource Management and Planning System and of the Planning Process as set out in Parts 1 and 2 of Schedule 1 of the Act; and

(b) To achieve the planning scheme objectives set out in clause 3.0 by regulating or prohibiting the use or development of land in the planning scheme area.

Regional Land Use Strategy

Under the Northern Midlands Planning Scheme, the relevant land use strategy objectives are:

a) Primary Industries:

- Resources for primary industries make a significant contribution to the rural economy and primary industry uses are to be protected for long-term sustainability.
- The prime and non-prime agricultural land resource provides for variable and diverse agricultural and primary industry production which will be protected through individual consideration of the local context.
- Processing and services can augment the productivity of primary industries in a locality and are supported where they are related to primary industry uses and the long-term sustainability of the resource is not unduly compromised.

b) Tourism

- Tourism is an important contributor to the rural economy and can make a significant contribution to the value adding of primary industries through visitor facilities and the downstream processing of produce.

- The continued enhancement of tourism facilities with a relationship to primary production is supported where the long-term sustainability of the resource is not unduly compromised.

- The rural zone provides for important regional and local tourist routes and destinations such as through the promotion of environmental features and values, cultural heritage and landscape.

- The continued enhancement of tourism facilities that capitalise on these attributes is supported where the long-term sustainability of primary industry

c) Rural Communities

- Services to the rural locality through provision for home-based business can enhance the sustainability of rural communities. Professional and other business services that meet the needs of rural populations are supported where they accompany a residential or other established use and are located appropriately in relation to settlement activity centres and surrounding primary industries such that the integrity of the activity centre is not undermined and primary industries are not unreasonably confined or restrained.

7.3 Zoning

The site is zoned Rural Resource Zone pursuant to the Northern Midlands Planning Scheme. The purpose of the zone is

- To provide for the sustainable use or development of resources for agriculture, aquaculture, forestry, mining and other primary industries, including opportunities for resource processing.
- To provide for other use or development that does not constrain or conflict with resource development uses.
- To provide for economic development that is compatible with primary industry, environmental and landscape values.
- To provide for tourism-related use and development where the sustainable development of rural resources will not be compromised

The application for a telecommunications facility will a rural resource zone provides the appropriate location and area and not change the use or hinder the expansion of rural resource activities of the zone. The proposal meets the purpose of the zone where the zone allow uses that are not appropriate in other areas. The facility will enhance the land use strategy by improving cover to the local area for access to technology and services thereby promoting business and tourism to the Cressy area.

9.0 Conclusion

The proposed telecommunications facility at 105 Green Rises Road, Cressy TAS 7302, Lot 1 on Plan 112478, Property Number 3211081, Parish of CRESSY Land District of WESTMORLAND will form a vital component of the Optus network. As previously highlighted, the proposed Optus mobile phone base station will both voice and data services to the Cressy area. Optus has identified that coverage within the specified area requires improvement to ensure ongoing service provisions to personal users and businesses who take advantage of the Optus network. The proposal will allow for the enhanced coverage and increased data speeds for end users. The proposed facility is considered appropriate on the site given:

- The site is located within a Rural Resource Zone land use which is considered a suitable location. The application demonstrates compliance with all applicable planning scheme requirements and therefore supports the intent of the planning scheme. As such, the proposal is an appropriate use on the site;
- The site is setback from Cressy Road frontage;
- The proposal will not require the clearing of any trees;
- The site is not located within an environmentally or culturally significant area;
- The site is appropriately serviced and has a readily available access to the electricity supply and existing transport network;
- The proposed facility will not prejudice the existing or anticipated future use of the site;

Based on the above, the proposed application, to install a telecommunications facility at 105 Green Rises Road, Cressy TAS 7302, Lot 1 on Plan 112478, Property Number 3211081, Parish of CRESSY Land District of WESTMORLAND is considered appropriate for the site and warrants favorable consideration by Council subject to reasonable and relevant conditions. Should Council have any further queries regarding the subject application, please do not hesitate to contact the nominated representative outlined within this document.

APPENDIX A

26.0 Rural Resource Zone

26.3 Use Standard

26.3.1 Discretionary Uses if Not a Single Dwelling

Objectives

a) To provide for an appropriate mix of uses that support the Local Area Objectives and the location of discretionary uses in the rural resources zone does not unnecessarily compromise the consolidation of commercial and industrial uses to identified nodes of settlement or purpose built precincts
b) To protect the long term productive capability of prime agricultural land by minimizing conversion of the land to non-agricultural uses or uses not dependent on the soil as a growth medium, unless an overriding benefit to the region can be demonstrated
c) To minimize the conversion of non-prime land to a non-primary industry uses except where that land cannot be practically utilized for primary industry purposes.
d) Uses are located such that they do not unreasonably confine or restrain the operation of primary industry uses.
e) Uses are suitable within the context of the locality and do not create an unreasonable adverse impact on existing sensitive uses or local infrastructure
f) The visual impacts of uses are appropriately managed to integrate with the surrounding rural landscape

Acceptable Solutions	Performance Criteria	Response
A1 If for permitted or no permit required uses	P.1.1 It must be demonstrated that the use is consistent with local area objectives for the provision of non-primary industry uses in the zone, if applicable; and P1.2 Business and professional services and general retail and hire must not exceed a combined gross floor area of 250m2 over the site.	Telecommunications facility is proposed to be approximately 49m2 in area and will not change the use of the rural land nor impede the current and future capability of the rural agricultural land.

A2 If for permitted or no permit required uses	P2.1 Utilities, extractive industries and controlled environment agriculture located on prime agricultural land must demonstrate that the: 1. Amount of land alienated/converted is minimsied; and 2. Location is reasonably required for operational efficiency; and P2.2 Use other than utilities, extractive industries and controlled environment agriculture located on prime agricultural land, must demonstrate that the conversion of prime agricultural land to that use will result in a significant benefit to the region having regard to the economic, social and environmental costs and benefits.	Telecommunications facility is proposed to be approximately 49m2 in area and will not change the use of the rural land nor impede the current and future capability of the rural agricultural land. The location is upon the northern boundary of the property and will not impede the use of the existing paddock used for animal stock.
A3 If for permitted or no permit required uses	P3 The conversion of non-prime agricultural to non-agricultural use must demonstrate that: (a) The amount of land converted is minimized having regard to:	Telecommunications facility is proposed to be approximately 49m2 in area and will not change the use of the rural land nor impede the current and future capability of the rural agricultural land. The location is upon the eastern boundary of the property and will

	1) Existing use and development on the land; and 2) Surrounding use and development and; 3) Topographical constraints or (b) The site is practically incapable of supporting an agricultural use or being included with other land for agricultural or other primary industry use due to factors such as: 1) Limitations created by an existing use and/or development surrounding the site; and 2) Topographical features; and 3) Poor capability of the land for primary industry; or (c) The site is practically incapable of supporting an agricultural use or being included with other land for agricultural or other primary industry use due to factors such as	not impede the use of the existing paddock
A4 If for permitted or no permit	P4 It must be demonstrated	There are no emissions from the telecommunications facility that

	a) Emissions are not likely to cause an environmental nuisance; and b) Primary industry uses will not be unreasonably confined or restrained from conducting normal operations; and c) The capacity of the local road network can accommodate the traffic generated by the use.	will cause environmental nuisance. The facility will not impact primary production and the only traffic generated is through construction and then only approx. 2 visits a year for maintenance.
A5 The use must: a) Be permitted or no permit required; or b) Be located in an existing building.	P5 It must be demonstrated that the visual appearance of the use is consistent with the local area having regard to: a) The impacts on skylines and ridgelines; and b) Visibility from public roads; and c) The visual impacts of storage of materials or equipment; and d) The visual impacts of vegetation clearance or retention; and e) The desired future character statements.	The telecommunication facility is of a monopole design that has less visual impact that a design of a 4 sided lattice tower. The monopole is setback from the main Cressy Highway into the property and existing vegetation and buildings will provide screening from frontage vantage points. No vegetation is proposed to be removed and no storage of materials is required.

26.3.3 Irrigation Districts

Objectives

To ensure that land within irrigation districts proclaimed under Part 9 of the Water Management Act 1999 is not converted to uses that will comprise the utilization of water resources.

Acceptable Solutions	Performance Criteria	Response
A1 Non-agricultural uses are not located within an irrigation district proclaimed under Part 9 of the Water Management Act 1999.	P.1.1 Non-agricultural uses within an irrigation district proclaimed under Part 9 of the Water Management Act 1999 must demonstrate that the current and future irrigation potential of the land is not unreasonably reduced having regard to: a) The location and amount of land to be used; and b) The operational practicalities of irrigation systems as they relate to land ; and c) Any management or conservation plan for land.	Telecommunications facility is proposed to be approximately 49m2 in area and will not impede current and future irrigation capability of the rural agricultural land. The facility will be clear of any pivot irrigation.

26.4.1 Building Location and Appearance

Objectives

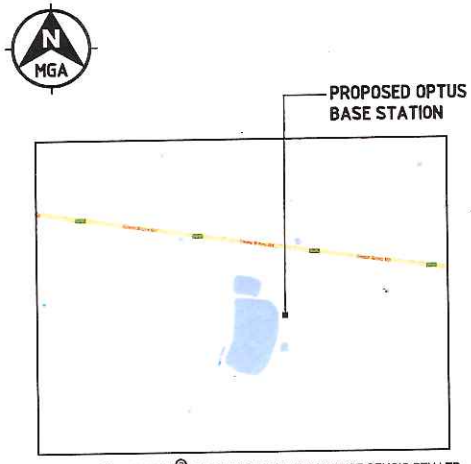
To ensure that the

a) Ability to conduct extractive industries and resources development will not be constrained by conflict with sensitive uses; and
b) Development of buildings is unobtrusive and complements the character of the landscape.

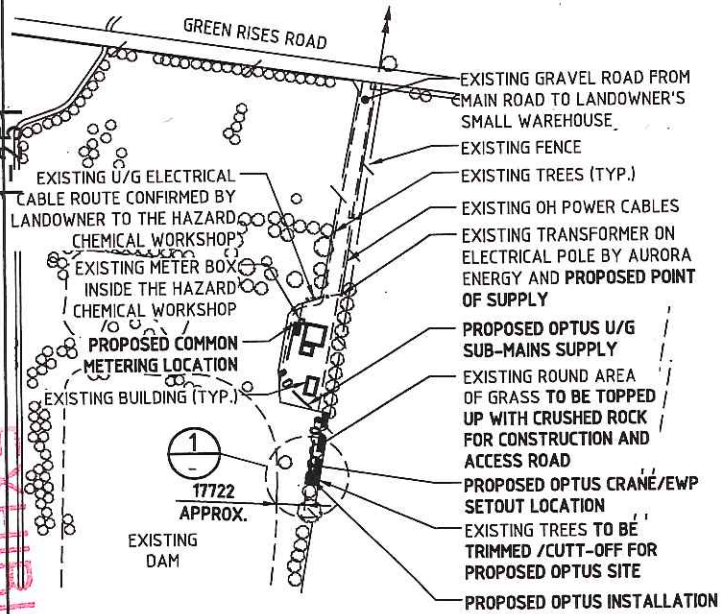
Acceptable Solutions	Performance Criteria	
A1 Building height must not exceed	P.1. Building height must:	The height of the structure of 30 metres (top of antenna is 34

a) 8m for dwellings; or b) 12m for other purposes.	a) Be unobtrusive and complement the character of the surrounding landscape; and b) Protect the amenity of adjoining uses from adverse impacts as a result of the proposal.	metres high) within a rural environment is appropriate as the facility will not impact on the amenity of the area and is not in proximity to sensitive uses. The facility requires the height to provide the coverage to the Cressy area.
A2 Buildings must be set back a minimum of a) 50m where a non-sensitive use or extension to existing sensitive use buildings is proposed; or b) 200m where a sensitive use is proposed; or c) The same as existing for replacement of an existing dwelling.	P.2 Building must be setback so that the use is not likely to constrain adjoining primary industry operations having regard to: a) The topography of the land; and b) Buffers created by natural or other features; and c) The location of development on adjoining lots; and d) The nature of existing and potential adjoining uses; and e) The ability to accommodate a lesser setback to eth road having regard to: 1. The design of the development and landscaping; and 2. The potential for future upgrading of the road; and 3. Potential traffic safety hazards; 4. Appropriate noise attenuation.	The facility will be setback approximately 257 metres from the Green Rises Road frontage.

APPENDIX B

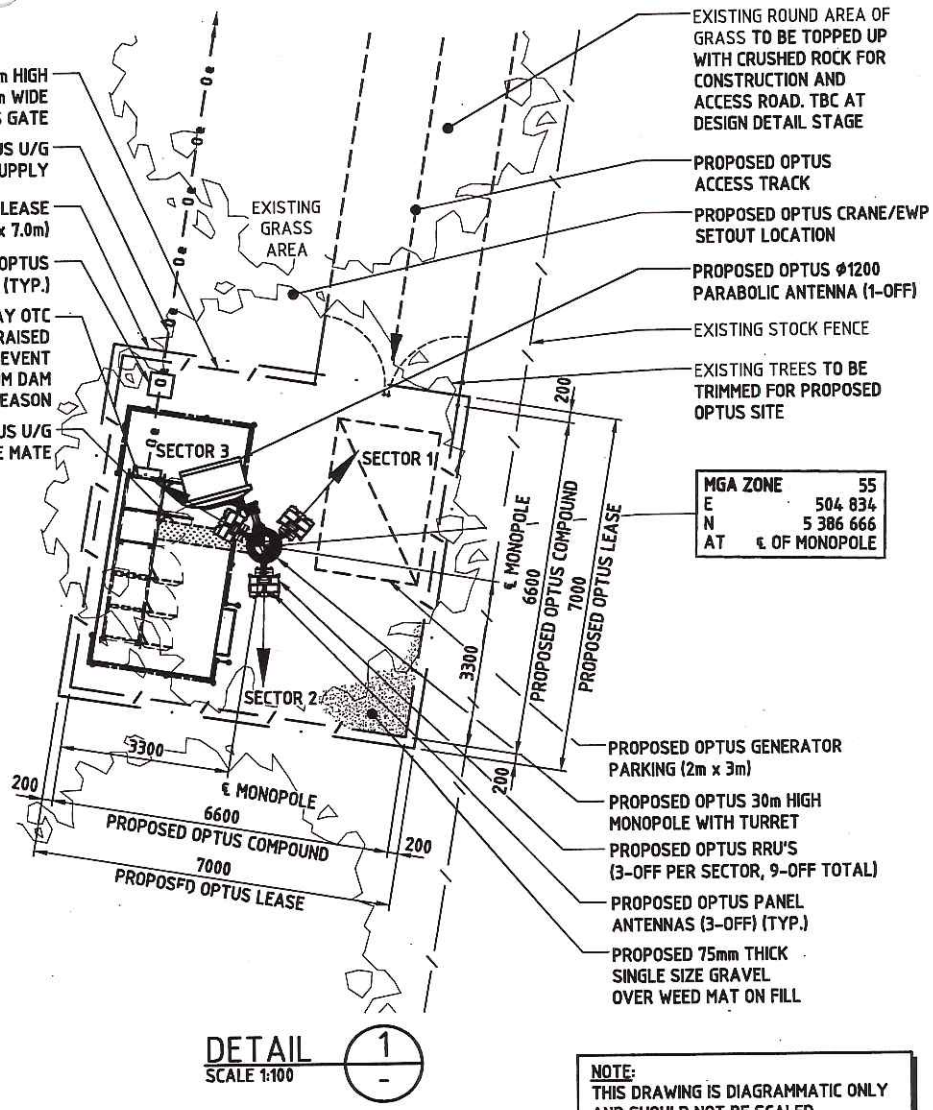


LOCALITY MAP



OVERALL SITE PLAN

NTS



MGA ZONE	55
E	504 834
N	5 386 666
AT	℄ OF MONOPOLE

DETAIL 1

SCALE 1:100

NOTE:
THIS DRAWING IS DIAGRAMMATIC ONLY AND SHOULD NOT BE SCALED. DIMENSIONS, COORDINATES, AND LEVELS SHOWN ARE NOMINAL AND SUBJECT TO CONFIRMATION BY SURVEYOR.

SITE ADDRESS:
105 GREEN RISES ROAD,
CRESSY,TAS 7302

NOTES:

1. **BASIS OF DESIGN**
   - SITE INSPECTION 13/07/2018
2. **PANEL ANTENNAS**
   - 1-OFF PER SECTOR (EACH MAX. 2.6m LONG) AT EL 32.60m
   - SECTOR 1 - 40°, SECTOR 2 - 180°, SECTOR 3 - 300°
   - MOUNTED ON TURRET AND MOUNTS
1. **RRU'S & ANCILLARY EQUIPMENT**
   - RRU'S 9-OFF, 3-OFF PER SECTOR
   - COMBINERS 6-OFF, 2-OFF PER SECTOR
4. **TRANSMISSION**
   - ϕ1200 PARABOLIC ANTENNA (1-OFF) AT EL 26.00m
   - LINK SITE: TO BE CONFIRMED BY OPTUS
5. **EQUIPMENT SHELTER/OTC**
   - OPTUS ICS OTC (2-BAY AND 3-BAY FUTURE) SUPPORTED ON CONCRETE SLAB
6. **STRUCTURE**
   - OPTUS 30m HIGH CONCRETE MONOPOLE WITH TURRET AT TOP OF MONOPOLE
7. **FEEDER CABLES (HYBRID TRUNK CABLES)**
   - SIZE: 1 & 1/4" FIBRE TRUNK CABLE FOR ALL SECTORS (1-OFF)
   - LENGTH: 36m ALL SECTORS
   - SIZE: 1/2" (1-OFF)
   - LENGTH: 36m APPROX.
   - TO RUN IN OPTUS 300mm WIDE CABLE LADDER & INTERNALLY IN MONOPOLE
8. **SITE ACCESS**
   - VIA UPGRADED EXISTING ACCESS ROUTE OFF GREEN RISES ROAD, TAS. CONTACT PROPERTY OWNER 1 WEEK IN ADVANCE IF VEHICLES ARE REQUIRED TO ACCESS THE PROPOSED SITE
9. **ANTENNA ACCESS**
   - VIA EWP
10. **POWER SUPPLY**
    - EXISTING CONSUMER MAINS TO BE UPGRADED APPROX. LENGTH 200m
    - NEW SITE GROUP METER ON FREE STANDING CABINET TO HOST OPTUS METER WITH RELOCATED WATER PUMP ONE
    - REINSTATE THE POWER TO WATER PUMP DISTRIBUTION BOARD ON PUMP SHED
    - FINAL DESIGN TBC AT DESIGN DETAIL STAGE
11. **OTHER**
    - EXISTING PUMP HOUSE IN DILAPIDATED CONDITION

EXHIBITED

Rev	Date	Revision Details	Consultant	CAD	Designer	Verifier	Approver
03	29.08.18	ISSUED FOR APPROVAL	METASITE	JM	JL	MB	PJ
02	27.03.18	ISSUED FOR APPROVAL	METASITE	JM	JL	MB	PJ
01	23.10.17	ISSUED FOR APPROVAL	METASITE	JM	JL	MB	PJ

HUAWEI TECHNOLOGIES (AU) PTY LTD
ABN 44 103 780 340
SYDNEY
LEVEL 5 TOWER B 799 PACIFIC HIGHWAY
CHATSWOOD NSW 2067
TEL: +61 2 9938 3888 FAX: +61 2 9411 8533
MELBOURNE
LEVEL 24 459 COLLINS STREET
MELBOURNE VIC 3000
TEL: +61 3 8610 0600 FAX: +61 3 9621 1575

Client: OPTUS

Project: MOBILE NETWORK AUSTRALIA
SITE NO:- H0093F
CRESSY NORTH
105 GREEN RISES ROAD

Drawing Title: DRAFT SITE LAYOUT

Drawing Status: FOR APPROVAL

Drawing No. H0093F-P1

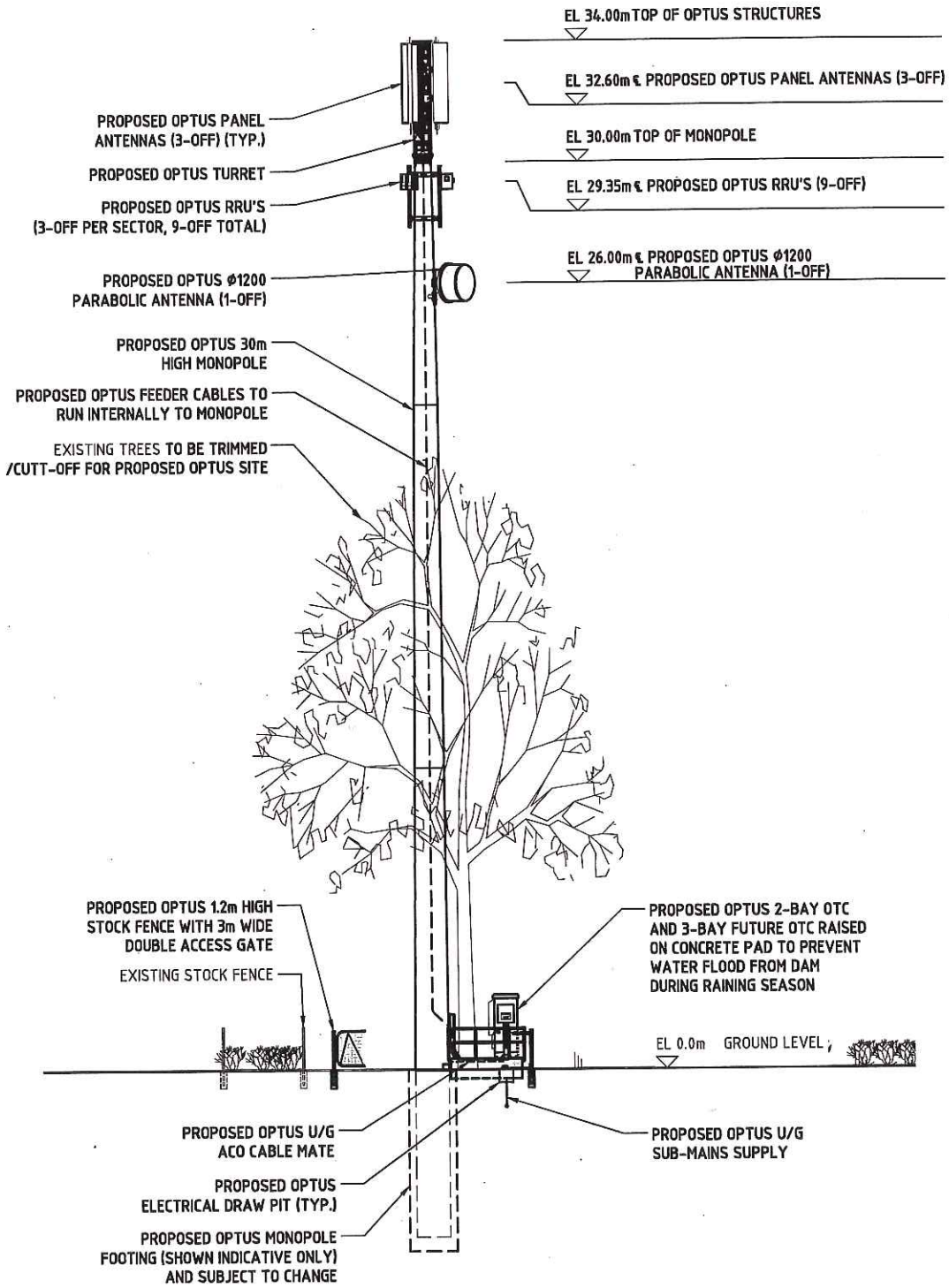
Revision 03

20 10 0 10 20 30 40 50mm

A3

CAD File: D:\SOFIJA\METASITE\H0093F CRESSY NORTH DSL\H0093F_DSL.dwg Date: 26.03.2018 3:42 PM

NOTE:
THIS DRAWING IS DIAGRAMMATIC ONLY AND SHOULD NOT BE SCALED.



NORTH ELEVATION

SCALE 1:150

EXHIBITED

Rev	Date	Revision Details	Consultant	C/AD Designer	Verifier	Approver
03	28.8.13	ISSUED FOR APPROVAL	METASITE	JM	MB	PJ
02	27.8.13	ISSUED FOR APPROVAL	METASITE	JM	MB	PJ
01	23.8.13	ISSUED FOR APPROVAL	METASITE	JM	MB	PJ

HUAWEI TECHNOLOGIES (AU) PTY LTD
ABN 48 133 731 346
SYDNEY
LEVEL 1, TOWER B 799 PACIFIC HIGHWAY
CHATSWOOD NSW 2067
TEL:+61 2 9993 3888 FAX:+61 2 9411 6333
MELBOURNE
LEVEL 5, 31 QUEENS ROAD MELBOURNE VIC 3004
TEL:+61 3 8656 6600 FAX:+61 3 9521 1975

Client: OPTUS

Project: MOBILE NETWORK AUSTRALIA
SITE NO:- H0093F
CRESSY NORTH
105 GREEN RISES ROAD

Drawing Title: DRAFT SITE ELEVATION

Drawing Status: FOR APPROVAL

Drawing No. H0093F-P2

Revision 03

20 10 0 10 20 30 40 50mm

A3

APPENDIX C

OPTUS

Environmental EME Report
105 Green Rises Road, CRESSY TAS 7302

This report provides a summary of Calculated RF EME Levels around the wireless base station

Date 13/06/2018 **RFNSA Site No. 7302008**

Introduction

The purpose of this report is to provide calculations of EME levels from the existing facilities at the site and any proposed additional facilities.

This report provides a summary of levels of radiofrequency (RF) electromagnetic energy (EME) around the wireless base station at 105 Green Rises Road CRESSY TAS 7302. These levels have been calculated by Huawei using methodology developed by the Australian Radiation Protection and Nuclear Safety Agency (ARPANSA).

The maximum EME level calculated for the proposed systems at this site is 0.29% of the public exposure limit .

The ARPANSA Standard

ARPANSA, an Australian Government agency in the Health and Ageing portfolio, has established a Radiation Protection Standard specifying limits for general public exposure to RF transmissions at frequencies used by wireless base stations. The Australian Communications and Media Authority (ACMA) mandates the exposure limits of the ARPANSA Standard.

How the EME is calculated in this report

The procedure used for these calculations is documented in the ARPANSA Technical Report "Radio Frequency EME Exposure Levels - Prediction Methodologies" which is available at http://www.arpansa.gov.au.

RF EME values are calculated at 1.5m above ground at various distances from the base station, assuming level ground.

The estimate is based on worst-case scenario, including:

- wireless base station transmitters for mobile and broadband data operating at maximum power
- simultaneous telephone calls and data transmission
- an unobstructed line of sight view to the antennas.

In practice, exposures are usually lower because:

- the presence of buildings, trees and other features of the environment reduces signal strength
- the base station automatically adjusts transmit power to the minimum required.

Maximum EME levels are estimated in 360° circular bands out to 500m from the base station.

These levels are cumulative and take into account emissions from all wireless base station antennas at this site.
The EME levels are presented in three different units:

- volts per metre (V/m) – the electric field component of the RF wave
- milliwatts per square metre (mW/m²) – the power density (or rate of flow of RF energy per unit area)
- percentage (%) of the ARPANSA Standard public exposure limit (the public exposure limit = 100%).

Results

The maximum EME level calculated for the proposed systems at this site is 2.67 V/m; equivalent to 18.89 mW/m² or 0.29% of the public exposure limit.

Radio Systems at the Site

There are currently no existing radio systems for this site.

It is proposed that this base station will have equipment for transmitting the following services:

Carrier	Radio Systems
Optus	LTE700 (proposed), WCDMA900 (proposed), LTE1800 (proposed), LTE2100 (proposed)

Calculated EME Levels

This table provides calculations of RF EME at different distances from the base station for emissions from existing equipment alone and for emissions from existing equipment and proposed equipment combined.

Distance from the antennas at 105 Green Rises Road in 360° circular bands	Maximum Cumulative EME Level at 1.5m above ground – all carriers at this site					
	Existing Equipment			Proposed Equipment		
	Electric Field V/m	Power Density mW/m²	% ARPANSA exposure limits	Electric Field V/m	Power Density mW/m²	% ARPANSA exposure limits
0m to 50m				2.097	11.66	0.16%
50m to 100m				1.8	8.64	0.11%
100m to 200m				2.099	11.69	0.19%
200m to 300m				2.67	18.89	0.29%
300m to 400m				2.56	17.35	0.26%
400m to 500m				2.01	10.72	0.16%
Maximum EME level				2.67	18.89	0.29
				249.61 m from the antennas at 105 Green Rises Road		

Calculated EME levels at other areas of interest

This table contains calculations of the maximum EME levels at selected areas of interest that have been identified through the consultation requirements of the Communications Alliance Ltd Deployment Code C564:2011 or via any other means. The calculations are performed over the indicated height range and include all existing and any proposed radio systems for this site.

	Additional Locations	Height / Scan relative to location ground level	Maximum Cumulative EME Level All Carriers at this site Existing and Proposed Equipment		
			Electric Field V/m	Power Density mW/m²	% of ARPANSA exposure limits
1	No locations identified				

RF EME Exposure Standard

The calculated EME levels in this report have been expressed as percentages of the ARPANSA RF Standard and this table shows the actual RF EME limits used for the frequency bands available. At frequencies below 2000 MHz the limits vary across the band and the limit has been determined at the Assessment Frequency indicated. The four exposure limit figures quoted are equivalent values expressed in different units – volts per metre (V/m), watts per square metre (W/m^2), microwatts per square centimetre ($\mu W/cm^2$) and milliwatts per square metre (mW/m^2). Note: 1 W/m^2 = 100 $\mu W/cm^2$ = 1000 mW/m^2.

Radio Systems	Frequency Band	Assessment Frequency	ARPANSA Exposure Limit (100% of Standard)
LTE 700	758 – 803 MHz	750 MHz	37.6 V/m = 3.75 W/m^2 = 375 $\mu W/cm^2$ = 3750 mW/m^2
WCDMA850	870 – 890 MHz	900 MHz	41.1 V/m = 4.50 W/m^2 = 450 $\mu W/cm^2$ = 4500 mW/m^2
GSM900, LTE900, WCDMA900	935 – 960 MHz	900 MHz	41.1 V/m = 4.50 W/m^2 = 450 $\mu W/cm^2$ = 4500 mW/m^2
GSM1800, LTE1800	1805 – 1880 MHz	1800 MHz	58.1 V/m = 9.00 W/m^2 = 900 $\mu W/cm^2$ = 9000 mW/m^2
LTE2100, WCDMA2100	2110 – 2170 MHz	2100 MHz	61.4 V/m = 10.00 W/m^2 = 1000 $\mu W/cm^2$ = 10000 mW/m^2
LTE2300	2302 – 2400 MHz	2300 MHz	61.4 V/m = 10.00 W/m^2 = 1000 $\mu W/cm^2$ = 10000 mW/m^2
LTE2600	2620 – 2690 MHz	2600 MHz	61.4 V/m = 10.00 W/m^2 = 1000 $\mu W/cm^2$ = 10000 mW/m^2
LTE3500	3425 – 3575 MHz	3500 MHz	61.4 V/m = 10.00 W/m^2 = 1000 $\mu W/cm^2$ = 10000 mW/m^2

Further Information

The Australian Radiation Protection and Nuclear Safety Agency (ARPANSA) is a Federal Government agency incorporated under the Health and Ageing portfolio. ARPANSA is charged with responsibility for protecting the health and safety of people, and the environment, from the harmful effects of radiation (ionising and non-ionising).

Information about RF EME can be accessed at the ARPANSA website, http://www.arpansa.gov.au, including:

- Further explanation of this report in the document "Understanding the ARPANSA Environmental EME Report"
- The procedure used for the calculations in this report is documented in the ARPANSA Technical Report; "Radio Frequency EME Exposure Levels - Prediction Methodologies"
- the current RF EME exposure standard
  Australian Radiation Protection and Nuclear Safety Agency (ARPANSA), 2002, 'Radiation Protection Standard: Maximum Exposure Levels to Radiofrequency Fields — 3 kHz to 300 GHz', Radiation Protection Series Publication No. 3, ARPANSA, Yallambie Australia.
  [Printed version: ISBN 0-642-79400-6 ISSN 1445-9760] [Web version: ISBN 0-642-79402-2 ISSN 1445-9760]

The Australian Communications and Media Authority (ACMA) is responsible for the regulation of broadcasting, radiocommunications, telecommunications and online content. Information on EME is available at http://emr.acma.gov.au

The Communications Alliance Ltd Industry Code C564:2011 'Mobile Phone Base Station Deployment' is available from the Communications Alliance Ltd website, http://commsalliance.com.au .

Contact details for the Carriers (mobile phone companies) present at this site and the most recent version of this document are available online at the Radio Frequency National Site Archive, http://www.rfnsa.com.au.

ATTACHMENT B
1-257

Michelle Campbell

From: TasWater - Development <Development@taswater.com.au>
Sent: Wednesday, 9 January 2019 11:58 AM
To: NMC Planning
Subject: TasWater Advice RE: Planning Authority Notice, TWDA 2019/00004-NMC, for Council permit PLN018-0319

Follow Up Flag: Follow up
Flag Status: Completed

Dear Sir/Madam

Pursuant to the Water and Sewerage Industry Act 2008 (TAS) Section 56P(1) TasWater has assessed the application for the above mentioned permit and has determined that the proposed development does not require a submission from TasWater.

If you have any queries, please contact me.

Sam Bryant
Assessment Officer

D (03)6237 8642
F 1300 862 066
A 169 Main Road, Moonah, TAS 7009
E sam.bryant@taswater.com.au
W http://www.taswater.com.au/

Have I been helpful? Please provide feedback by clicking here.

LAUNCESTON AIRPORT
In the heart of Tasmania

P.O. BOX 1220
LAUNCESTON, TASMANIA 7250
PHONE: (03) 6391 6222
FAX: (03) 6391 8580

11 Jan 2019

Erin Boer
Planning Officer
Northern Midlands Council
13 Smith Street
LONGFORD TAS 7301

Dear Erin

RE: Planning Application P18-0319 – Telecommunications Facility 105 Green Rises Road, Cressy

I refer to the above development application and after review of the proposal and prescribed airspace regulations, provide the following comments:

- The site does not lie within the ANEF contours mapped and laid out in the Launceston Airport Masterplan 2015,
- The proposed development will not infringe the Launceston Airport Obstacle Limitation Surfaces, and;
- The proposed use will not unduly attract wildlife which would have an effect on the safety of airport operations.

Therefore: Launceston Airport does not object to the development planning permit **P17-0319 – Telecommunications Facility 105 Green Rises Road, Cressy.**

If you or the applicant has any questions relating to the above comments, please don't hesitate in contacting me.

Yours sincerely,

Ilya Brucksch-Domanski
Manager Planning and Development
Australia Pacific Airports (Launceston) Pty. Ltd.

 ATTACHMENT C

8th January 2019

Attn: The General Manager
Northern Midlands Council
PO Box 156
Longford 7301

Edward Casey
265 Greenrises Road
Cressy 7302
Ph. 0409 140 317

PLN-18-0319

Dear Sir,

I am writing regarding the proposed erection of a telecommunications facility at 105 Greenrises road, Cressy. My wife and I own the property at 265 Greenrises road, Cressy located next door to the proposed site. We strongly object to this proposal and ask that you consider our argument before deciding.

I have read the application and the applicant has referred to the visual impacts of the telecommunications facility several times throughout the article. Our house is located in the paddock beside the proposed structure and it will have an immense visual impact for our family. The structure will be in full view from our kitchen, laundry and family area at the rear of the house. Furthermore, it is stated the telecommunications facility has several air conditioning units operating daily, this will also impact on noise level experienced at my home as it will be positioned in such proximity. Over the past years there have been farm contractors working out of the shed in the proposed location of this facility. Every noise can be heard from our home including the starting of machinery and we believe the constant sound of the air conditioners will have a similar effect. The increased noise level will disturb the peaceful serenity of our home in which our family and guests relish.

Overall my principle concern is the health risk to my family. I understand health and safety regulations must be adhered to regarding telecommunication facility. However, I have reviewed recent research regarding electromagnetic energy (EME) emissions and I am not convinced there will be no long-term effects on my family and the rural community. I would be extremely disappointed to discover my family

had contracted health care issues or a terminal illness as a result of the radiation emissions from the facility. I have attached an article supporting my concern.

Additionally, my family use another major carrier for phone and internet services. This service provides excellent coverage, therefore the statement of improved service for Optus clients is of no value to us. The proposed facility has the potential to affect the future health of my family but impact visually, increase noise level and essentially devalue our property.

Finally, the final statement makes no reference to our residential property only the surrounding area. I understand this company believes there is a need for this facility in the rural community, but I request alternative sites are considered, with an increased distance from residing farms. However, if it is imperative the telecommunications facility is erected on Greenrises road, why is it not positioned closer to the homestead on the property that has been approved rather than such close proximity to our home?

I ask that serious consideration be given to this before going forward with this proposal.

Yours sincerely,

Edward Casey

Mobile phone towers – the price of connectivity

Mobile phone towers or antennas are a phenomenon of the age of instant connectivity and they affect us all. They emit radio-frequency radiation that affects our bodies and potentially our health, yet legislation presently gives extensive rights to the telecommunications industry at the expense of the public.

LYN McLEAN

Chances are that, wherever you live, you are being affected by the radiation from at least one mobile phone antenna. Chances are that, wherever your children go to school, preschool or playgroup, they are being affected, too. Wherever you live, work or play, if your mobile phone is receiving a signal from a mobile phone antenna, then so are you.

There are already tens of thousands of mobile phone antennas in Australia. With another 7000 expected to be built in the next two years alone, mobile phone antennas are an issue that affects every one of us, especially if we live in an urban area. What are their implications for our health, where can they be erected, and what are our rights?

Mobile phone antennas, sometimes called phone towers or base stations, are the price we pay for instant connectivity. They range from the looming scaffold-like towers that dominate the suburban skyline to arrays of panel antennas located on poles or rooftops to tiny microcells located on inner-city traffic lights, in train stations or in shopping complexes.

Each of these antennas services the mobile phones in its local area or cell (hence the description "cell phones"). These cells can be anything from metres to kilometers in diameter, depending on the power of the antenna's signal.

Each of these antennas relays signals to and from the mobile phones it services in the form of radio-frequency radiation. If these signals were visible, we would see ourselves bathed in multiple layers of radiation. Imagine a blue signal from one mobile phone antenna overlaid with a red signal from another and a yellow signal from a third.

What is the impact of this radiation? It is generally accepted that radio-frequency radiation affects our bodies. What is less certain is just how seriously.

The Australian Government and the telecommunications industry take the view that the radiation from telecommunications networks is not a health risk. "The weight of national and international scientific opinion is that there is no substantiated evidence that RF emissions associated with living near a mobile phone base station or telecommunications tower poses a health risk."

Put simply, this means that a considerable number of studies have found that there is no evidence of risk from radio-frequency. This is hardly surprising given that much scientific research on this issue has been conducted and/or funded by the telecommunications industry itself.

Evidence of risk

Even so, many studies *have* found evidence of risk. Researchers have found that radio-frequency radiation from various sources is *associated with* brain tumours, cancer, leukemia, heart problems, reproductive problems and effects on the nervous system, learning and performance, sleep, immunity, hormones and genes.

Only a few studies have been conducted specifically on mobile phone antennas themselves. In France, Dr Roger Santini conducted a survey of people living near mobile phone antennas. He found an increased rate of unpleasant symptoms within 300 metres of the antennas. People living within 10m of an antenna experienced symptoms of nausea, loss of appetite, visual disruptions and difficulty in moving. People living within 100m of an antenna experienced symptoms of irritability, depression, concentration problems, memory loss, dizziness and reduced libido. People living 100-200m from an antenna experienced headaches, sleep problems, "feelings of discomfort" and skin problems. People living between 200 and 300m from an antenna experienced a high rate of fatigue.[1]

A study in Spain produced similar results. Dr Gerd Oberfeld and his team assessed the impact of two GSM antennas on the population of the town of Murcia. They found that exposure resulted in increased reports of fatigue, irritability, headaches, nausea, loss of appetite, sleeping disorders, depression, feelings of discomfort, difficulty in concentration, memory loss, visual disorder, dizziness and cardiovascular problems.[2]

Not surprisingly, people are beginning to report uncomfortable effects from living near mobile phone antennas. Over the years I've been contacted by people experiencing motion sickness, fatigue, concentration problems, illness and seizure-like symptoms.

In the UK communities concerned about mobile phone antennas have begun collecting data. They have found a surprising number of cancer cases in the areas of highest exposures near towers that have been in place for many years. Although this is not a scientific study, it does suggest the need for further investigation, particularly of the long-term health impacts.

The effects of radio-frequency radiation on the general population have already come to the attention of medical practitioners. On 9 October 2002 a group of German doctors expressed their concerns that this radiation was having an adverse effect on their patients in what has come to be known as the Freiburger Appeal. They wrote, "we can see ... a clear temporal and spatial correlation between the appearance of disease and exposure to pulsed high-frequency microwave radiation (HFMR), such as installation of a mobile telephone sending station in the near vicinity [and] intensive mobile telephone use."[3]

The standard argument

The emissions from mobile phone antennas are well within Australia's safety standard.[4] Typically, the amount of radiation you might expect to receive in the area around a base station is around 1-2 microwatts per square centimetre (W/cm2). This is around one thousandth of the standard which allows people to be exposed to around 1000 W/cm².

This would be extremely reassuring – if the standard were in fact protecting public health.

The Australian standard protects people primarily from health problems that are known to be caused when radiation heats the body by 1 degree C. And this it does admirably. However, considering only the heating effects of radiation may be like considering only the sound of a bullet being fired from a gun.

There is now a great deal of evidence that radiation is producing non-heating (athermal) effects on the body and this could explain the health problems that are being reported. There are now hundreds of studies that show adverse effects from radiofrequency radiation at non-heating levels of exposure – levels that are far below international standards. However, the standard provides no protection against any of them.

The Spanish phone antenna study mentioned above found unpleasant symptoms at levels a thousand times lower than the Australian standard. The authors wrote, "based on the data of this study the advice would be to strive for levels [of exposure] ... equal to a power density of ... 1 W/cm²."

Some scientists have suggested mechanisms to explain how the effects at non-heating levels of exposure might occur. For example, radio-frequency radiation has been shown to lower levels of the hormone melatonin, a free-radical scavenger that protects against cancer. Exposure has been shown to result in cells releasing heat shock proteins (HSPs) which have also been associated with cancer. While none of these effects has yet been proven to cause health problems, they are certainly suggestive of risk.

Whatever the scientific and anecdotal evidence, for radio-frequency radiation to be a risk to health would be a monumental inconvenience to Australia's Government and telecommunications industry. The Federal Government has received billions of dollars from spectrum sales and licence fees and reaps lucrative income from the latter each year.

David vs Goliath

The telecommunications legislation enacted by the Federal Government gives extensive rights to the telecommunications industry and leaves precious few for the community. A 1997 Determination allows carriers to override local government and state government regulations and install what is known as "low impact" antennas without the approval of the council or local community.[5] (More on low impact facilities later.)

In fact, until two years ago, carriers could install these facilities without even notifying councils or communities and surprised neighbours would often arrive home to find an antenna being built next to their home. Subsequently a code was introduced to improve matters slightly. The Code for the Deployment of Radiocommunications Infrastructure, introduced in 2002, ensures that councils and local neighbours are notified and/or consulted about low impact facilities but does not empower them to reject the antenna.

Yet the carriers' powers extend far beyond the ability to construct low impact facilities without council or community approval.

Legislation currently allows a carrier to enter your land and build an antenna on it with or without your approval. The 1997 Telecommunications Act allows carriers to enter any land to assess it. It empowers them to build a "low impact" facility on the land without the landowner's approval. Further, it provides the option for the carrier to obtain a special permit to construct a non-low impact antenna on the land without the landowner's permission.[6]

While legislation allows carries to override state and council legislation in building these antennas, it allows the community, at best, the opportunity to submit comments about a proposed antenna to the carrier or council. Needless to say, these submissions carry no real weight and their recommendations are not always heeded. The failure of telecommunications legislation to provide democratic rights for the community has led to a plethora of impassioned anti-phone-tower protests in this and other countries.

Is it really "low impact"?

The Australian Government has exempted "low impact" facilities from state and council planning regulations in order to facilitate the rapid rollout of telecommunications networks, using the argument that they are an essential service.

However, are these facilities "low impact" and do they represent an essential service?

First, let me make it clear that so called "low-impact" facilities are not low impact in terms of the radiation that they emit. They can emit exactly the same amount of radiation – or theoretically even more – than an antenna that is not classified as

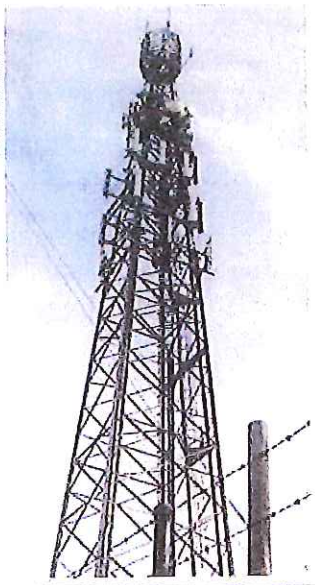


PHOTO: LYN McLEAN

continued from page 20

"low impact".

The basis for classifying antennas as "low-impact" is their appearance! Theoretically, smaller antennas fit the classification as "low-impact". Yet in reality "low impact" facilities are not low visual impact at all, for they are often to be found in clusters on rooftops or on the top of tall poles.

Many of the antennas that are currently being built, including antennas of the new 3G (third generation -Ed) networks, are classified as "low impact". Because network requirements mean that these antennas must be built more closely together (sometimes as close as 900m), they are being constructed throughout residential areas, next to homes, schools and children's playing fields.

Nor, it might be argued, are mobile phones an essential service. While the ability to make phone calls has obvious benefits for convenience and safety, newer, more novel features do not. The ability to connect to the internet, to take photos and videos, to text friends, to act as an alarm clock, to download interesting ring tones – are hardly essential services. Yet these are the features that are driving the construction of at least four 3G networks and the building of thousands of antennas in our communities.

Inasmuch as mobile phone antennas facilitate the operation of mobile phones, their construction is driven by our use of this technology. As long as we continue to use the technology often, we create demand for the antennas. As long as we continue to delight in the novel features of mobile phone technology, we create the demand for third generation – and subsequent generation – networks that that will provide us with connectivity. And it may just be connectivity from an antenna quite close to our house.

LYN McLEAN IS DIRECTOR OF EMR AUSTRALIA PL, AUTHOR OF THE BOOK "WATT'S THE BUZZ? UNDERSTANDING AND AVOIDING THE RISKS OF ELECTROMAGNETIC RADIATION" AND EDITOR OF THE QUARTERLY NEWSLETTER "EMR FOCUS".

Biography
1 ARPANSA Fact Sheet no 9, www.arpansa.gov.au
2 Santini et al, Pathol Biol 50: 369-373, 2002
3 Oberfeld, G et al, "The Microwave Syndrome – Further Aspects of a Spanish Study" soon to be published.
4 http://www.emrnetwork.org/news/AGUMED
5 "Radiation Protection Standard – Maximum Exposure Levels to Radiofrequency Fields – 3 kHz to 300 GHz"
6 Telecommunications (Low-Impact Facilities) Determination 1997 (as amended)
7 This is known as a Facilities Installation Permit and it can be obtained from the Australian Communications Authority

metasite 1-263 OPTUS

Site Reference: H0093 Cressy North

11 February 2019

Erin Boer
Planning Department
Northern Midlands Council
PO Box 156
LONGFORD TAS 7301

Dear Erin,

105 Green Rises Road, Cressy North TAS (PLN-0319) – Response to Representation

Thank you for providing a copy of the one (1) representation received for the above planning application. A response to the matters raised within these objections are outlined below.

Visual Impact of the Facility

Visual impact concerns has been largely covered within the submitted planning report. The structure height of 30 metres with a monopole design and headframe is a reduction and slimmer design than the previous proposals put forward from 40m high monopoles with larger headframes.

The proposed position of the facility has also been relocated to a property that is a rural property and located further away from residential dwellings. The nearest dwelling is over 530 metres from the site to the northwest. It is noted that within the view-line from this property towards the site has a background of a large dual electricity high voltage line that runs line north and south with lattice pylon towers along the route.

The second nearest dwelling is over 950 metres from the site towards the northeast and it is also noted that between the dwelling and the site is the dual electricity high voltage line run north south.

Telecommunication facilities by their very nature need to be elevated above obstructions and terrain to be able to propagate the coverage signal to the intended area. The facility has been design to achieve the optimum coverage objective. Therefore, given the advantages to be gained by the public by receiving improved telecommunications services, it is considered that the facility provides an acceptable level of impact which outweighs any loss of visual amenity that in this case is considered minor.

sydney Level 2, 71 Alexander Street
Crows Nest NSW 2065

p PO box 31 Crows Nest NSW 1585

t +61 2 9439 1006
f +61 2 9436 1089

melbourne Tandem Corp, Level 1 / 417 St Kilda Road,
Melbourne VIC 3004

abn 79 145 899 458

t +61 3 9868 6678

METASITE.COM.AU

Electromagnetic Energy

Optus acknowledge that some people are concerned about the possible health effects of electromagnetic energy (EME) from mobile phone base stations and is committed to addressing these concerns responsibly. Optus, along with the other mobile phone carriers, must strictly adhere to Commonwealth Legislation and regulations regarding mobile phone facilities and equipment administered by the Australian Communications and Media Authority (ACMA). The ACMA standard, known as the Radiation Protection Standard for Maximum Exposure Levels to Radiofrequency Fields – 3kHz to 300GHz, was prepared by the Australian Radiation Protection and Nuclear Safety Agency (ARPANSA) and is based upon recommendations from ICNIRP (International Commission for Non-Ionising Radiation Protection), an agency associated with the World Health Organisation (WHO). Mobile carriers must comply with the Australian standard on exposure to EME set by the ACMA. The ARPANSA Standard considers the safety of all the community on a 24hr basis.

We advise that the proposed facility will be in compliance with the ACMA EMR regulatory arrangements. The maximum cumulative EME level at 1.5m Above Ground Level is estimated to be 0.29% of the mandated ARPANSA public exposure limit, which is comparable to the existing facility. ARPANSA states that the standards which protect people from EME exposure do not set any distances between mobile base station locations and areas, which may be considered sensitive. ARPANSA highlights that:

> *"Similarly, the Deployment Code does not specify arbitrary distances at which infrastructure must be sited from community sensitive locations, because arbitrary distances do not necessarily reflect a precautionary approach. In fact, infrastructure sited further from a community sensitive area may need to operate at a higher power and may result in higher EME exposures in that sensitive area. Furthermore, it must be remembered that evidence gathered by ARPANSA confirms that exposure levels in public areas are typically hundreds or thousands of times less than the exposure limit set by the ACMA."*

Optus relies on the expert advice of national and international health authorities such as ARPANSA and 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 similar to those 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 Optus's responsible approach to EME and mobile phone technology.

Optus follows industry standards to apply a precautionary approach to the site selection, design and operation of its facilities. This is done in accordance with the Deployment Code: Section 4.1 – Application of the Precautionary Approach to Mobile Phone Radiocommunications Infrastructure Placement and Design, Section 4.2 – Mobile Phone Radiocommunications Infrastructure Design and Section 8 – Application of Precautionary Approach to Site Operation. We advise that the Australian EME are designed to protect all members of the public including those sometimes thought to be particularly vulnerable (the elderly, the infirm, pregnant women and children).

In your submission you express concerns in relation to the EME and health, and raise matters relating to health impacts. The ARPANSA website includes a significant amount of material in relation to the concerns you have raised. We encourage you to review the material which can be found at the following webpage:

https://www.arpansa.gov.au/understanding-radiation/radiation-sources/more-radiation-sources/reducing-exposure-to-mobile-phones/radio-waves-frequently-asked-questions

Noise Concerns

The proposed cabinets have air-conditioning fans within the doors. The air-conditioning will only operate at times to keep the temperature below certain heated levels so as to keep the equipment cool. The air-conditioning units noise levels are expected to only emit levels of noise that would be the similar as a domestic household air-conditioner. There is no dwellings within 500 metres of the facility.

Devaluation of Property Values

In regards to impact on property values, research in this area indicates that there is currently no substantive evidence to suggest that telecommunication facilities cause a reduction in property prices. The presence of mobile and wireless telecommunications services generally encourages further growth and development. Having access to a reliable mobile network is an essential service for local businesses throughout the area and is a desirable asset when new businesses and potential home buyers are looking to obtain new premises. It is considered that the proposed facility will therefore be in the public interest and will outweigh any minor loss in visual amenity by providing the users of the surrounding area with access to enhanced telecommunications services.

If there are any other concerns please do not hesitate to contact me.

sydney Level 2, 71 Alexander Street
Crows Nest NSW 2065

p PO box 31 Crows Nest NSW 1585

t +61 2 9439 1006
f +61 2 9436 1089

melbourne Tandem Corp, Level 1 / 417 St Kilda Road,
Melbourne VIC 3004

abn 79 145 899 458

t +61 3 9868 6678

METASITE.COM.AU

Yours sincerely

David Hodgkinson
Acquisition and Environment Consultant
Metasite Pty Ltd on behalf of Optus
david.hodgkinson@metasite.com.au
(03) 9868 6659