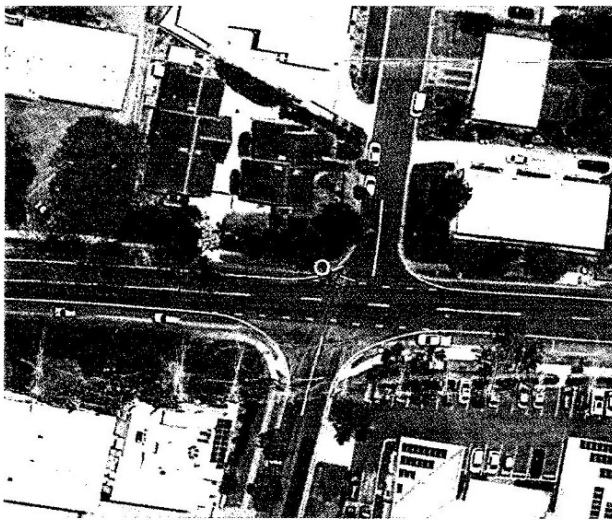


27 June 2019

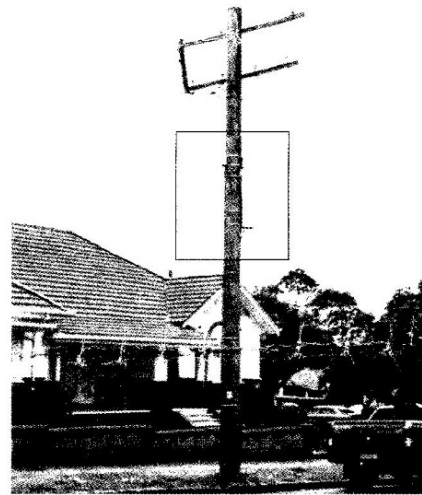
Attention: Owner/Occupier

**Notification of Proposed Optus Small Cell (Radiocommunications Facility) on power pole No. 4945 on Road Reserve, adjacent to 49 King Street, Buderim QLD 4556.**

I am writing on behalf of Optus to inform you of a proposal to install a Small Cell facility at the above address. This notification is being undertaken in accordance with the requirements of Section 6 of the *Mobile Phone Base Station Deployment Code 2018*.



**Location**



**Indicative Installation**

A Small Cell is a low powered base station designed to provide mobile phone coverage to an area of 100-300m. The equipment is of a much smaller scale than a regular base station (see indicative installation above and description on following page). The Small Cell will improve and maintain local mobile network services (including voice calling and SMS), as well as video calling, video-based content services (like news, finance and sports highlights) and internet browsing.

This facility is exempt from local Council planning approval as it complies with the *Telecommunications (Low-impact Facilities) Determination 2018*.

Further details about the proposed facility are enclosed within the envelope. The enclosures include the proposed drawings, Environmental EME Report and an Optus Small Cells FAQ information sheet. The proposed facility will be in full compliance with the *ACMA EME/EMR regulatory arrangements*. All contact details are provided on the attached sheet.

As part of Optus's consultation process, we invite you to provide us with your feedback about this proposal. You can do this by contacting us by letter, email or by contacting the number outlined below. We will accept comments on the proposal until 19<sup>th</sup> July 2019. We will then prepare a report on the outcomes of the consultation process which will be available upon request. Should you wish to receive a copy of this report, please contact us directly.

Any changes to this or other dates in this letter will be advised.

Further details about this proposal, including sources of additional information, are provided on the following page.

If you have any questions or would like further information about the proposed installation, please contact BMM Group from the below contact details.

We remind you that any feedback about this proposal should be provided in writing by 19<sup>th</sup> July 2019.

Yours sincerely,



Zac Coombes  
BMM Group Pty Ltd  
Town Planner & Project Manager

*Attachments:*

1. *Proposed Drawings*
2. *Environmental EME Report*
3. *Optus Small Cells FAQ information sheet*



## Additional Information – Frequently Asked Questions

The proposed site at Pole No. 4945, adjacent to 49 King Street, Buderim is considered to be a Complying Development in accordance with the *Telecommunications (Low-impact Facilities) Determination 2018*.

<p><b>Where is it being installed?</b></p>	<p>Pole No. 4945 on Road Reserve, adjacent to 49 King Street, Buderim QLD 4556.</p>
<p><b>What equipment is being installed and how big will it be?</b></p>	<p>Two (2) x panel antennas mounted on to the existing utility pole (280mm x 160mm x 80mm);</p> <p>Ancillary equipment cabinet located at the base of the pole, associated with the operation of the facility, including but not limited to Radio Remote Units (RRU's); cabling, earthing and electrical works.</p>
<p><b>EME/EMR compliance:</b></p> <p><b>Does it comply with Australian Standards for Electromagnetic Energy (EME)?</b></p>	<p>The facility will comply with Australian government regulations in relation to emission of electromagnetic energy (EME), this specifically being Australian Standard Radiation Protection Standard – Maximum Exposure Levels to Radiofrequency Fields –3 kHz to 300 GHz, published by the Australian Radiation Protection and Nuclear Safety Agency (ARPANSA) in 2002.</p> <p>Further information is available at <a href="http://www.rfnsa.com.au">www.rfnsa.com.au</a></p>
<p><b>Where can I find out more information?</b></p>	<p>Support information about mobile phone base stations, the <i>Mobile Base Station Deployment Code (C564:2018)</i>, your rights, health, and low impact facilities, is available from this website: <a href="http://www.commsalliance.com.au/mobile-phone-tower-information">www.commsalliance.com.au/mobile-phone-tower-information</a></p> <p>Site specific information can be found at: <a href="http://www.rfnsa.com.au/4556030">www.rfnsa.com.au/4556030</a></p>

## Useful resources

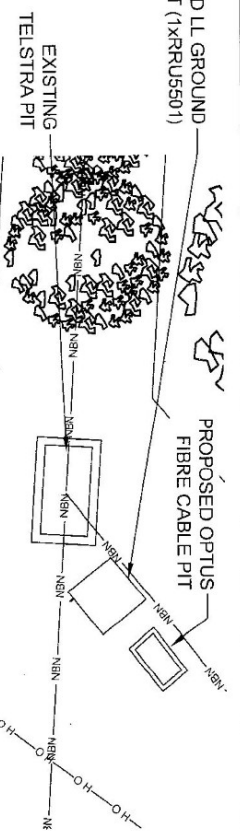
Further information about this proposal is available from BMM Group from	<a href="mailto:submissions@bmmgroup.com.au">submissions@bmmgroup.com.au</a> 1300 260 834
You can submit a comment on the proposed facility at	Address: BMM Group Pty Ltd – PO Box 430, Toowong QLD 4066
	Email: <a href="mailto:submissions@bmmgroup.com.au">submissions@bmmgroup.com.au</a>
Information about this proposal is available in other languages	Available on request from contact details provided above.
Support information about: <ul style="list-style-type: none"> <li>• Mobile phone base stations</li> <li>• The Base Station Code (C564)</li> <li>• Your rights</li> <li>• Health</li> <li>• State planning laws</li> </ul> Is available from	<a href="http://www.commsalliance.com.au/mobile-phone-tower-information">www.commsalliance.com.au/mobile-phone-tower-information</a>



PROPOSED OPTUS BASE  
STATION SITE B1776

PROPOSED LL GROUND  
CABINET (1XR RU5501)

PROPOSED OPTUS  
FIBRE CABLE PIT



MGA ZONE 56  
E 506042.070  
N 7048730.458  
LAT -26.882483°  
LONG 153.060729°  
AT ENERGEX POLE 4945

LOCALITY MAP  
COPYRIGHT © GOOGLE MAPS

PROPOSED PANEL ANTENNAS 12  
OFF ON EXISTING 11.20m HIGH  
TIMBER POLE 4945

EXISTING 11.20m HIGH  
TIMBER POLE 4945

EXISTING 11.20m HIGH  
TIMBER POLE 4945

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TIMBER POLE 4945

EXISTING 11.20m HIGH  
TIMBER POLE 4945

DETAIL  
1:50



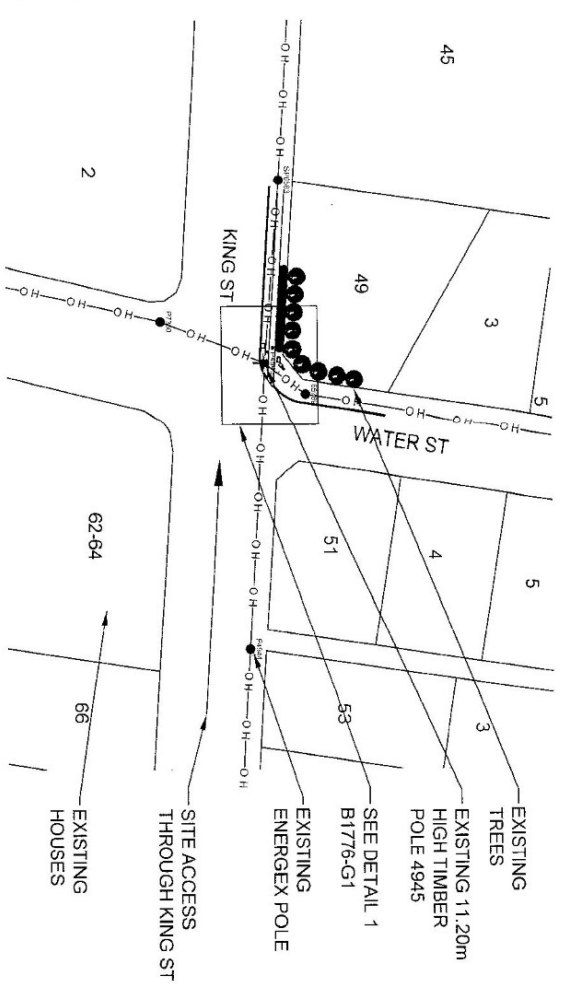
LEGEND

- PROPOSED UNDERGROUND ELECTRICAL
- OPTUS UNDERGROUND FIBRE
- EXISTING OVERHEAD CABLES
- EXISTING WATER
- EXISTING COMMS

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

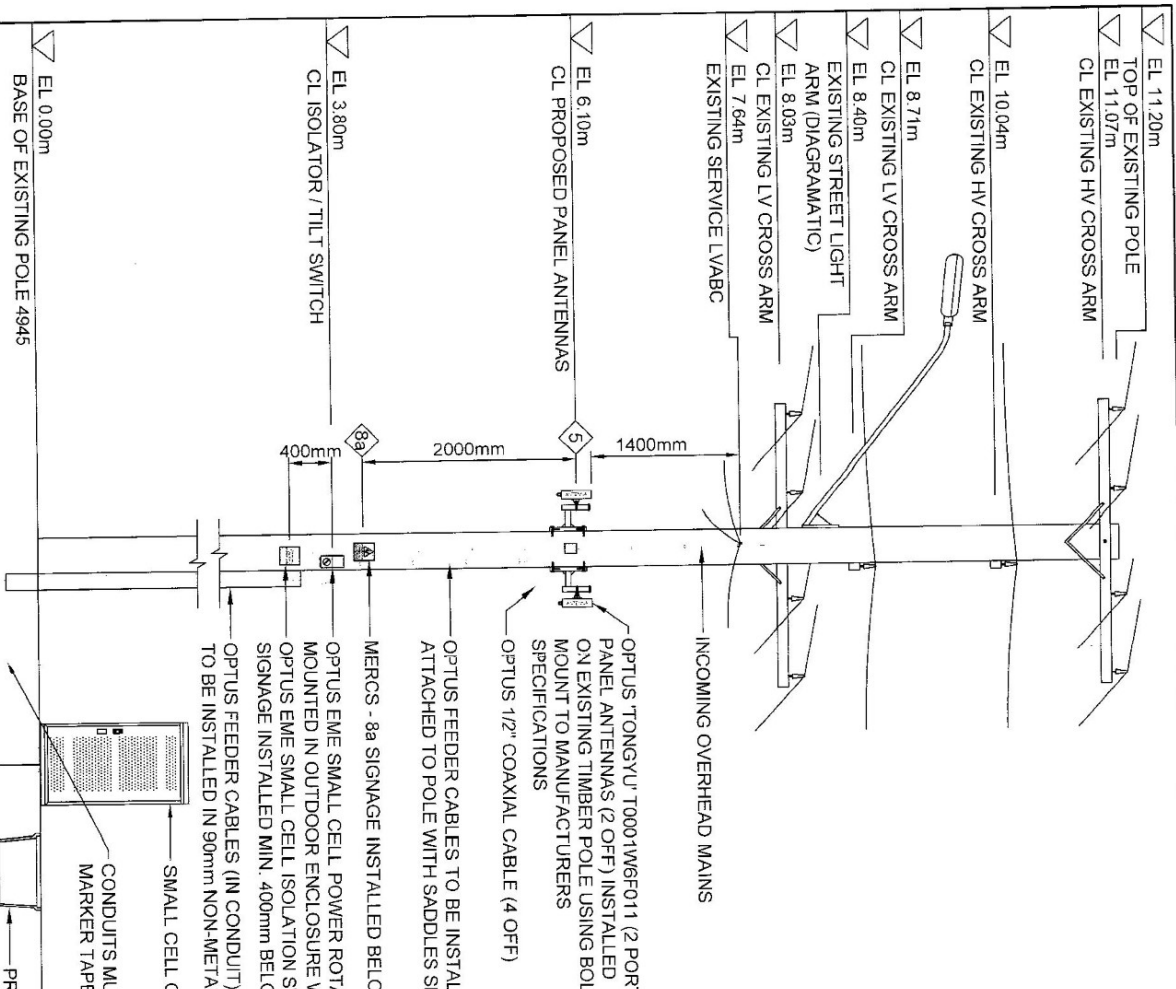


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1100  
BEFORE  
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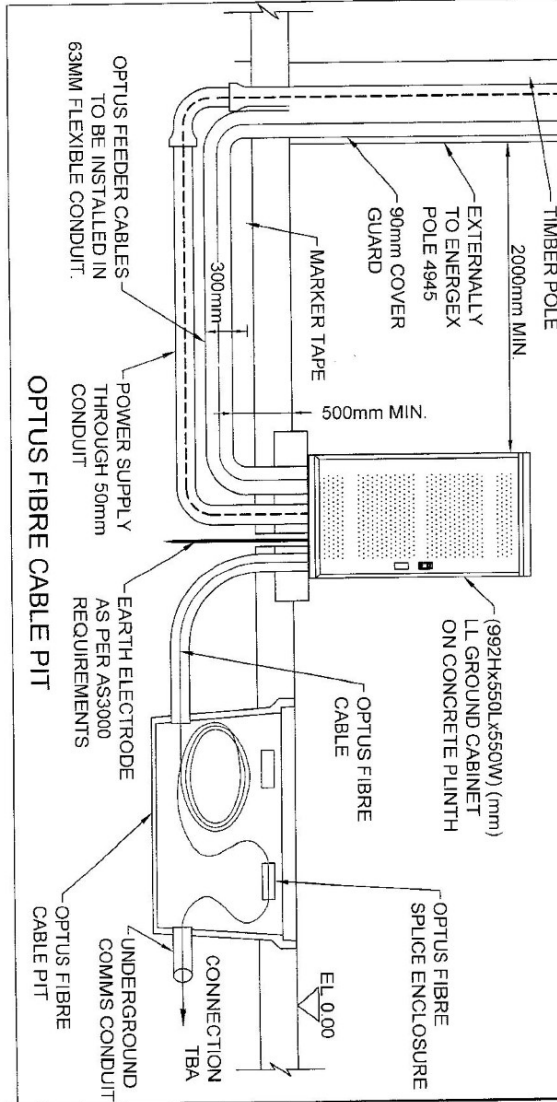
OVERALL SITE PLAN  
1:1000

Project:	MOBILE NETWORK AUSTRALIA SITE No.: B1776 MOOLY-4-UC ADJ TO 49 KING ST, BUDEFIRM, QLD, 4561			
Client:	OPTUS			
APD	LR	LR	CC	CC
Consultant	CAU	Designer	Verifier	Approver
Key:	DATE	Revision	DATE	Revision
01	09/03/18	01	18/03/18	01
FOR APPROVAL		Drawing No	B1776-G1	Revision
				01



SCALE 1:50 - REFER PLAN LAYOUT FOR CORRECT ROTATION OF EQUIPMENT

POLE DIAGRAMMATIC ELEVATION



NOTE:  
 1. ALL DIMENSIONS ARE IN MILLIMETRES AND LEVELS ARE IN METRES, U.N.O.  
 2. THIS DRAWING IS DIAGRAMMATIC ONLY AND SHOULD NOT BE SCALED.

01 Rev Date Revision Details Issued from APPROVAL Approved Date	APD L.R. L.R. C.C. C.C.	Consultant CAD Designer Checker Approver	Client <b>OPTUS</b>	Project <b>MOBILE NETWORK AUSTRALIA</b> SITE No. - B1776 MOOLY-4-UC ADU TO 49 KING ST. BUDERIM, QLD 4861	Drawing Title <b>SITE ELEVATION</b>	Drawing Status <b>FOR APPROVAL</b>	Drawing No. <b>B1776-G3</b>	Revision <b>01</b>
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## An in-depth look at calculated EME levels at this site

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. All EME levels are relative to 1.5 m above ground and all distances from the site are in 360° circular bands.

Distance from the site	Existing configuration			Proposed configuration		
	Electric field (V/m)	Power density (mW/m <sup>2</sup> )	Percentage of the public exposure limit	Electric field (V/m)	Power density (mW/m <sup>2</sup> )	Percentage of the public exposure limit
0-50m				7.69	156.86	1.66%
50-100m				3.067	24.94	0.26%
100-200m				1.58	6.65	0.07%
200-300m				0.79	1.64	0.017%
300-400m				0.53	0.74	0.0078%
400-500m				0.39	0.41	0.0043%

## Calculated EME levels at other areas of interest

This table contains calculations of the maximum EME levels at selected areas of interest, identified through consultation requirements of the [Communications Alliance Ltd Deployment Code C564:2018](#) or other means. Calculations are performed over the indicated height range and include all existing and any proposed radio systems for this site.

### Maximum cumulative EME level for the proposed configuration

Location	Height range	Electric field (V/m)	Power density (mW/m <sup>2</sup> )	Percentage of the public exposure limit
No locations identified				

# Environmental EME Report

**Location** Utility Pole No.4945 on Road Reserve adjacent to 49 King Street, BUDERIM QLD 4556

**Date** 02/05/2019

**RFNSA No.** 4556030

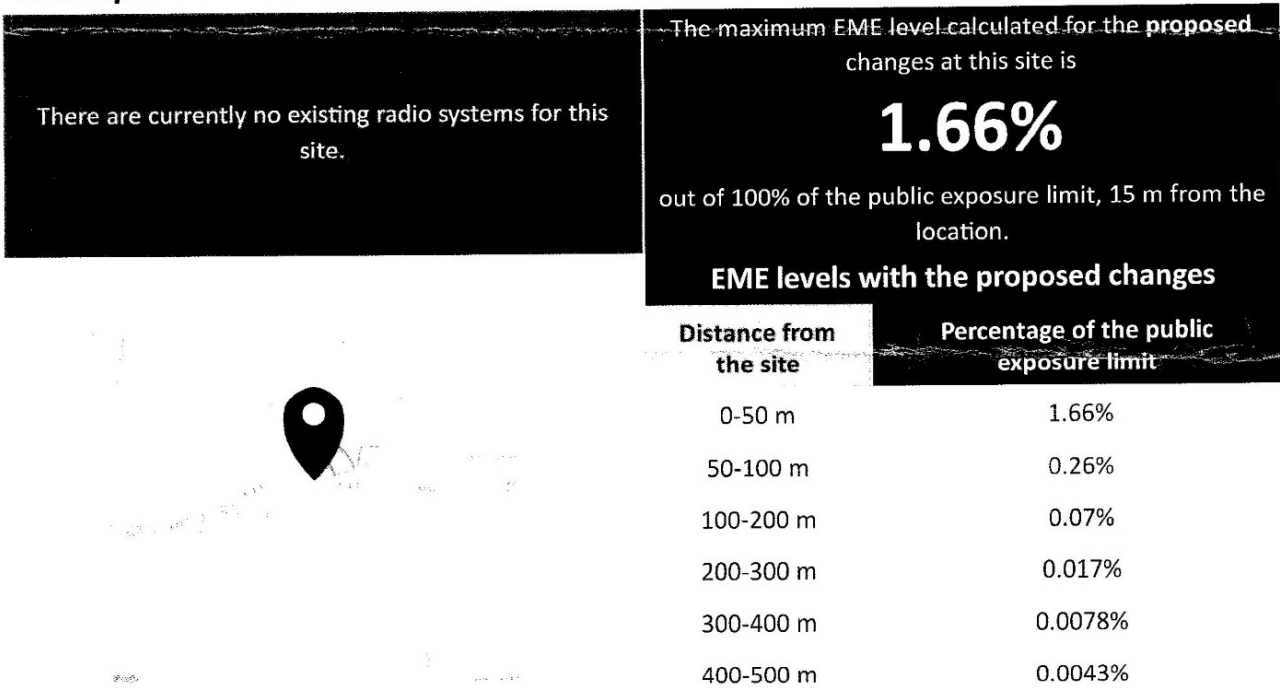
## How does this report work?

This report provides a summary of levels of radiofrequency (RF) electromagnetic energy (EME) around the wireless base station at Utility Pole No.4945 on Road Reserve adjacent to 49 King Street, BUDERIM QLD 4556. These levels have been calculated by Lend Lease using methodology developed by the Australian Radiation Protection and Nuclear Safety Agency (ARPANSA).

A document describing how to interpret this report is available at ARPANSA's website:

[A Guide to the Environmental Report.](#)

## A snapshot of calculated EME levels at this site



For additional information please refer to the EME ARPANSA Report annexure for this site which can be found at <http://www.rfnsa.com.au/4556030>.

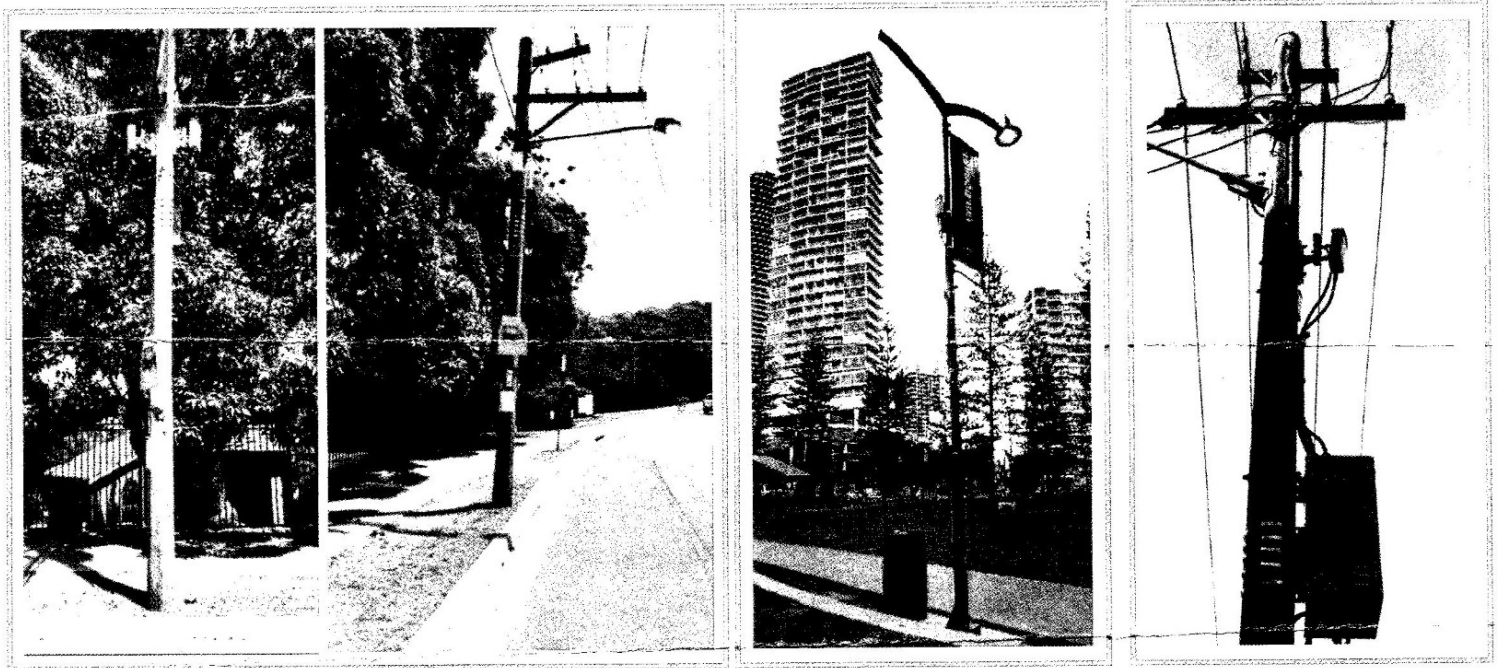
## Radio systems at the site

This base station currently has equipment for transmitting the services listed under the existing configuration. The proposal would modify the base station to include all the services listed under the proposed configuration.

Carrier	Existing		Proposed	
	Systems	Configuration	Systems	Configuration
Optus			4G	LTE1800 (proposed), LTE2100 (proposed)



## Small Cells - Frequently Asked Questions



### What is being proposed?

Optus is proposing to install new innovative mobile technology known as small cells across Australia. This technology is designed to enable improvements in voice and data services. Small cells enable faster data speeds and larger data downloads on devices including mobile phones, laptops, tablets and smart modems.

Small cells are already in suburbs of Sydney, Melbourne and Brisbane but we need more.

### What is a small cell?

Small cells are physically small radio base stations. Small cells complement the existing network of tower and rooftop sites. They improve coverage, add capacity and should improve your user experience.

Small cells allow us to provide wireless services on a small scale. Small cells operate at lower power levels and typically, a small cell has a coverage range of 100m-300m.

### What will these small cells look like?

Small cells are significantly smaller, discreet, and visually unobtrusive. Some examples of small cells are shown above. Small cells, in most circumstances will be installed on to existing infrastructure which allows the equipment to blend within the urban context. You have most likely walked past one on the street without noticing.

### Why are small cell sites required?

Small Cells are being deployed to supplement the existing network. Small cells can provide additional network capacity to an area identified as exhibiting high demand for mobile network usage.

Each small cell will have its own individual coverage objectives which will influence its' location.

Small cells work best when deployed in clusters to allow for a continuous service within the selected area. Small cells are needed in high network traffic areas such as train stations, local shopping precincts, sports and recreation precincts and residential precincts.

### Will small cells benefit me?

Optus network users located near a small cell are likely to benefit from improved Optus mobile voice coverage and improved, data flow experience to and from devices. We note that users will need to ensure that they have a 4G enabled device to benefit.

### How could this impact my health?

Optus understands that there may be some negative perceptions in the general public surrounding electromagnetic energy (EME) emitted from radio frequency equipment, including mobile phone base stations.

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

*“Health authorities around the world, including ARPANSA and the World Health Organization, have examined the scientific evidence regarding possible health effects from base stations. Current research indicates that there are no established health effects from the low exposure to the RF EME from mobile phone base station antennas.*

ARPANSA Fact sheet **“Mobile Base Stations and Health”** August 2016 .

Additional information about small cells and EME can be found here:

<https://www.acma.gov.au/theACMA/a-guide-to-small-cells>

### How do mobile phone networks work?

A mobile wireless network is made up of multiple overlapping cells covering a geographic area. When you make a call or download data, your device sends and receives radio signals to and from a nearby base station. As you move across an area, the device will switch to an adjoining cell. More devices and more data flowing across the network means we need to continually improve and grow our network to keep pace with demand.

### Does the proposal meet the safety standard?

The ARPANSA standard has safety limits built into it to ensure sites operating within the standard are safe for all people at all times. Optus ensures all its facilities comply with the ARPANSA standard which is the Radiation Protection Standard for Maximum Exposure Levels to Radiofrequency Fields – 3kHz to 300GHz (2002), commonly referred to as RPS3. The safety limit itself has a significant safety margin built into it.

To demonstrate compliance with the safety standard, an Environmental EME Report for each proposal is available via the Radio Frequency National Site Archive (RFNSA) website at [www.rfnsa.com.au](http://www.rfnsa.com.au). You can obtain information using the site reference number, address, name or search a suburb. All operating facilities are required to have a Compliance Certificate to demonstrate ongoing compliance with the Australian Standard. These are also available on the RFNSA.

### Where can I find further information about EME?

Australian Radiation Protection and Nuclear Safety Agency [www.arpansa.gov.au](http://www.arpansa.gov.au)  
Australian Communications and Media Authority (ACMA) [www.acma.gov.au](http://www.acma.gov.au)  
World Health Organisation (WHO) [www.who.int/en/](http://www.who.int/en/)

### What if I want to talk to someone further?

If you have received a notification letter about a new small cell proposal and would like to speak further about it then please use the contact details within the letter. Alternatively, you can find additional information about a proposal at [www.rfnsa.com.au](http://www.rfnsa.com.au).