#### Joint Regional Planning Panel (Southern Region) - 14 July 2011

JRPP No	2010STH020
DA Number	RA10/1007
Local	Shoalhaven City Council
Government Area	
Proposed	Telecommunications Facility comprising 40m monopole
Development	and associated infrastructure
Street Address	Lot 385 DP 45117 - 210 Matron Porter Drive, Narrawallee
Applicant/Owner	Aurecon Australia Pty Ltd
Number of	Seven (7)
Submissions	
Recommendation	Approval with Conditions
Report by	Peter Johnston, Senior Planner

#### ASSESSMENT REPORT AND RECOMMENDATION

#### EXECUTIVESUMMARY

#### Reason for Consideration by Joint Regional Planning Panel

The application has been referred to the Joint Regional Planning Panel pursuant to clause 13 C (b) of the State Environmental Planning Policy (Major Development) 2005 as the development is greater than 13 metres in height and within the coastal zone.

#### Proposal

The development application seeks approval for the installation and operation of a Telecommunications Facility that will supply telecommunications services to Narrawallee and surrounding areas comprising 40m monopole and associated infrastructure.

#### Permissibility

The site is zoned 6 (a) (Open Space—Recreation "A" Zone) pursuant to the SLEP 1985. Whilst the proposed use is not defined under the SLEP 1985, development for the purposes of telecommunications facilities on the subject site is permissible with development consent under clause 115 of State Environmental Planning Policy (Infrastructure) 2007 (SEPP Infrastructure).

The objectives of the zone are to identify land where existing recreation facilities for the general use of the community are provided. The proposal is not inconsistent with objectives of the zone.

#### Consultation

The application was notified in accordance with Council's Community Consultation Policy on two occasions. The initial notification related to the original proposed location for the communications facility which resulted in four (4) submissions against the proposal. A second notification for a revised location for the facility resulted in three (3) submissions against the proposal.

#### Main Issues

• Visual and threatened species impact

#### RECOMMENDATION

# It is recommended that RA10/1007 be approved for the construction and operation of a 40m monopole communications facility in accordance with the attached draft conditions of consent (Attachment A).

#### ASSESSMENT REPORT

#### 1. Background

Telstra originally made application on 30 April 2009 for a 35m high monopole communications facility (DA09/1520) over Lot 386 DP 45117 246 Matron Porter Drive, Narrawallee (Site 1). The original site located on the south side of Matron Porter Drive was located on crown land under Council's care and control which is used by the Milton Ulladulla Pony Club for recreational horse riding activities. This application raised substantial community concerns regarding conflict between recreational land use resulting in Telstra putting this proposal on hold until they had fully investigated all other options.

RA10/1007 was lodged on 19 July 2010 for a 35m high monopole communications facility over Lot 385 DP 45117 (Site 2). The applicants were advised prior to submission that visual impact and threatened species impacts were the critical issues for the proposal. The Southern Rivers Catchment Management Authority (CMA) raised native vegetation issues in relation to the location of Site 2 that led to the footprint for the proposed communications facility being revised in consultation with the CMA and land owners closer to Matron Porter Drive.

The current revised proposal for a 40m high monopole communications facility (Site 3) was lodged on 4 April 2011. Initial assessment of the application indicated that a site justification statement, visual assessment and additional threatened species information were required and additional submissions were subsequently received.

The subject site is owned by the Ulladulla Local Aboriginal Land Council and is undeveloped bushland.

## 2. Subject Site and Surrounds

The subject site is located on the northern side of Matron Porter Drive roughly midway between Narrawallee and Mollymook Beach. It:

- has a real property description of Lot 385 in DP 45117;
- is zoned 6 (a) (Open Space—Recreation "A" Zone) pursuant to the SLEP 1985;
- is adjoined by 7(d2) and 1(c) zoned land to the west, 6(a) zoned land to the south, developed residential 2(a1) zoned land to the east, north and south and;
- has a total area of 11.75 hectares of which the proposed development will occupy approximately 60m<sup>2</sup> plus access track;
- has direct frontage and is legally accessed via an existing track from Matron Porter Drive;
- has access to an existing power line which runs along the western side of Matron Porter Drive that has capacity to serve the proposed communications facility;
- contains native vegetation which has proximity to vulnerable fauna species;
- is identified in the coastal zone and is bushfire prone land.

#### # Refer to Attachment B – Site Location

The closest residential properties are 208 Matron Porter Drive (103m approx east), 6 Callemondah Close (117m approx north-east) and 44 Oxley Crescent (126m approx south-east). A 5(c) school zoned land parcel is located on 98 Garside Road (298m approx south-east).

#### 3. Proposal

The development application seeks approval for the installation and operation of a telecommunications facility that will supply telecommunications services to Narrawallee and surrounding areas comprising:

- A 10 m X 5.5 m fenced compound with gates;
- The installation of a 40 m high monopole;
- The installation of a triangular headframe to support an initial set of 3 panel antennas at 41.32 m with provision for 3 additional antennas in the future;
- The installation of a communications equipment shelter (3.28 m long x 2.25 m wide x 2.995 m high) located adjacent to the base of the tower within the fenced compound;
- The installation of a series of cables running from the radio transmission equipment in the shelters to the antennas on the lattice tower;
- The installation of necessary and associated infrastructure for the Telecommunications;
- Facility including antenna feeder cables, electrical connection, earthing, underground cables, above ground cables, safe access infrastructure and safety equipment.

The applicant considered a number of alternative sites in their proposal. The Site Justification Report indicates that eleven (11) sites were investigated. The criteria that were used in the selection process were:

- minimising any visual impact;
- the use of existing telecommunications and public utility infrastructure;
- the possibility of finalising a tenure agreement with the land and infrastructure owners;
- satisfying the intentions of any relevant state and local government planning policies;
- avoiding or minimising any potential effects on any areas or items of environmental significance, including natural and cultural heritage;
- meeting Telstra's coverage and services requirements.

The sites considered were:

**Candidate A** – Water reservoir, 298 Princes Highway - The water reservoir is approximately 3km from Narrawallee but is too high to provide a significant improvement in coverage;

**Candidate B** – Water reservoir, Matron Porter Drive – attaching antenna to the reservoir considered too low to provide a significant improvement in coverage. The installation of a monopole at this location would be visually unacceptable;

**Candidate C** – Pony Club, Matron Porter Drive – technically this site would provide the desired coverage improvements however this proposal would interfere with the existing use – Milton Ulladulla pony club which was strongly resisted by the community;

**Candidate D** - 202 Princes Highway, Milton - too far away from target area and most of the potential coverage improvements would be blocked by the ridgeline between this site and the target area;

**Candidate E** – Lot 4 DP 220678, off Garside Road – estimated to provide a 50 improvement in coverage but no owners consent;

**Candidate F** – Land off Matron Porter Drive – technically meets service coverage needs however no owners consent;

**Candidate G** – Land behind Seaspray Street, Narrawallee - technically meets service coverage needs however this site is identified for future residential subdivision;

**Candidate H** – Land off Matron Porter Drive – site elevation too low (27m AHD) to get signal past ridgeline to target area;

**Candidate I** – Land off Matron Porter Drive - site elevation too low (51m AHD) to get signal past ridgeline to target area;

**Candidate J** - 2A Warden Road, Milton - site elevation too low (57m AHD) to get signal past ridgeline to target area;

**Candidate K** – 275 Matron Porter Drive, Mollymook - technically meets service coverage needs however no owners consent;

**Candidate L** – 210 Matron Porter Drive, Mollymook – (identified as Site 2 in the background) this location provides coverage improvements to target areas and has owners consent. This site was situated approx 354m west of the intersection with Leo Drive and 35m north of the Matron Porter Drive road boundary. Unfortunately this site did not meet the Native Vegetation Act requirements of the CMA resulting in a site meeting between the land owners, CMA and the applicant's consultants to find a more suitable location on the property. A revised location (current Site 3) was agreed between the parties which is located approximately 322m west of the intersection with Leo Drive and 12m north of the Matron Porter Drive road boundary.

# Refer to Attachment C for a copy of the development application plans and site justification statement and visual impact assessment for Site 3.

## 4. Community Consultation

In accordance with Council's Community Consultation Policy the development application was notified as follows:

- Individual property owners within a 120 metre radius of the site were notified of the proposal with the original site. The notification period was from 28 July 2010 to 27 August 2010 with revised location notified from 6 April 2011 to 6 May 2011;
- The proposal was advertised in the local press (Milton Ulladulla Times) on 8 July 2010 and 11 August 2010 and revised location readvertised on 6 April 2011 and 20 April 2011; and
- The application and supporting documentation were on display at Council's Ulladulla Offices and on Council's website.

A total of seven (7) submissions were received against the proposal within the notification periods.

#### 5. Statutory Considerations

The following planning instruments and controls apply to the proposed development:

- i. State Environmental Planning Policy (Major Development) 2005;
- ii. State Environmental Planning Policy (Infrastructure) 2007;
- iii. State Environmental Planning Policy No.71 Coastal Protection;
- iv. Illawarra Regional Environmental Plan;
- v. Shoalhaven Local Environmental Plan 1985 (as amended);
- vi. Development Control Plan No. 93 Waste Not (Site Minimisation and Management);

Additional information on the proposal's compliance with the above documents is detailed below.

## 6. Statement of Compliance / Assessment

The following provides an assessment of the submitted application against the matters for consideration under 79C(1) of the Environmental Planning and Assessment Act 1979 (EP&A Act).

# (a) Any planning instrument, draft instrument, DCP's and regulations that apply to the land

# 6.1 State Environmental Planning Policy (Major Development) 2005 (SEPP 2005)

The provisions of SEPP 2005 apply to the proposed development as the facility is located within a 'coastal zone' and is greater than 13m in height (40m proposed). In accordance with the requirements of Clause 13C (coastal development to which this part applies), Subclause (b) the submitted application is classified as 'regional development' with the determining authority for the application being the Joint Regional Planning Panel (Southem Region).

# 6.2 State Environmental Planning Policy (Infrastructure) 2007 (SEPP2007)

The provisions of SEPP 2007 apply to the proposed development as the proposed facility is consistent with the SEPP definition of 'telecommunications facility'. In accordance with the requirements of SEPP 2007, the proposal does not satisfy the criteria of Clause 114 (development permitted without consent) and therefore is considered as development permitted with development consent under Clause 115. The currently submitted application is seeking to obtain the required development consent.

Before determining a development application under clause 115 the consent authority must take into consideration the NSW Telecommunications Facilities Guideline concerning site selection, design, construction or operating principles for telecommunications facilities:

Relevant principle requirements	Comment
Principle 1: A telecommunications facility is to be designed and sited to minimise visual impact.	
(c) Where telecommunications facilities protrude from a building or structure and are predominantly backgrounded against the sky, the facility and their support mounts should be either the same as the	The pole and equipment will be coloured 'pale eucalypt' and screened by large existing trees up to 35m in height.

NSW Telecommunications Facilities Guideline Principles:

Relevant principle requirements	Comment
prevailing colour of the host building	
or structure, or a neutral colour such	
as grey should be used.	
(d) Ancillary facilities associated with	Shade cloth will be affixed to the
the telecommunications facility should	compound fence and additional
be screened or housed, using the same colour as the prevailing	native screening plants will be planted on the Southern compound
background to reduce its visibility,	perimeter. These measures are
including the use of existing	intended to reduce potential visual
vegetation where available, or new	impact of the equipment to the
landscaping where possible and	absolute minimum whilst allowing the
practical.	facility to operate effectively.
Principle 2: Telecommunications	Being a new facility the draft
facilities should be co-located	conditions of consent include a
wherever practical.	condition requiring the facility to be
The explicently served there is have	capable and made available for co-
The applicant's consultants have advised that at the time the site was	location.
designed by Telstra there was no	
indication any other carriers were	
interested in co-locating; however, the	
pole Telstra is installing does have	
structural capacity to allow co-location	
if this is progressed by another Carrier	
at a date in the future.	
Principle 3: Health standards for	Complies with the public exposure
exposure to radio emissions will be met.	standard. Refer to the public interest comments below.
met.	comments below.
The applicant's consultants have	
advised that the EME Report as been	
prepared for the 'Proposed' antennas	
only. The reason for this is because it	
is not known at this time what type of	
antennas may be installed as 'Future'	
antennas and hence the EME Report	
cannot be prepared to include them. If	
the facility is proposed to be upgraded	
at a later date to install the 'Future'	
antennas, then Telstra will follow the	
ACIF 5.6 process to do this, which means that a revised EME Report will	
be prepared which includes both	
existing and future antennas and	
Council and the community would be	
notified accordingly of the proposed	
alteration to the site under the 5.6	

Relevant principle requirements	Comment
notification process.	
Principle 4: Minimise disturbance and risk, and maximise compliance.	
(k) Disturbance to flora and fauna should be minimised and the land is to be restored to a condition that is similar to its condition before the work was carried out.	Refer to draft conditions of consent for mitigation measures required in the Biosis report.
(I) The likelihood of impacting on threatened species and communities should be identified in consultation with relevant state or local government authorities and disturbance to identified species and communities avoided wherever possible.	As above. In addition the Southern Rivers Catchment Management Authority has advised that the revised site does not require the preparation of a property vegetation plan (PVP) due to the negligible impact on a landscape scale and threatened species.

# 6.3 State Environmental Planning Policy No.71 – Coastal Protection (SEPP 71)

The provisions of SEPP 71 apply to the site. The subject site being within the 'coastal zone' as defined by SEPP 71 (i.e. one kilometre landward of the westem boundary of coastal waters). SEPP 71 requires a consent authority to take certain matters into account when determining a development application that is located within the coastal zone. The dauses/matters contained in the SEPP71 that have relevance to this application are overviewed below:

- Part 1 (Preliminary): clause 2 (d, e, g & k) (Aims of Policy): the current proposed site (3) does not impact on Aboriginal cultural heritage or Aboriginal places, values, customs, beliefs and traditional knowledge, and will minimise the impact on native coastal vegetation. Due to its location within dense vegetation, the visual amenity of the coast will be protected and the type, bulk, scale and size of development are considered appropriate for the location.
- Part 2 (Matters for consideration) clause 8 (a, d, f, & g): the current proposal (Site No.3) is consistent with the requirements of this clause.

In summary, the proposed development is consistent with the aims and applicable provisions of SEPP 71.

# 6.4 Illawarra Region Environmental Plan (IREP)

The subject land is affected by the provisions of IREP. An assessment against the requirements of the IREP has indicated that the subject land is not identified as, land

of prime crop and pasture potential, land supporting rainforest vegetation, land containing extractive materials, land containing coal resources nor is the land part of the sub regional commercial centre.

The proposal is more than 11 m in height and the assessment of visual impact elsewhere in this report deals with the considerations in clause 139 (Development applications-high rise buildings) relevant to this proposal.

# 6.5 Shoalhaven Local Environmental Plan 1985 - as amended (SLEP 1985)

The provisions of SLEP 1985 apply to this site. The clauses/matters contained in SLEP 1985 that have relevance to this application are:

- Clause 2 (Aims and objectives): It is considered that site No.3 is consistent with the general aims and objectives as outlined in this clause
- Clause 9 (Zone objectives and development control table): The site is zoned 6(a) Open Space Recreation. Whilst the proposed use is not defined under the SLEP 1985, development for the purposes of telecommunications facilities on the subject site is permissible with development consent under clause 115 of State Environmental Planning Policy (Infrastructure) 2007 (SEPP Infrastructure).
- Clause 28 (Danger of bushfire): The site is identified as being bushfire prone. A bushfire protection assessment provided by the applicants was reviewed by the NSW Rural Fire Service (RFS) who have concurred with the bushfire assessment and have not raised any concerns or special consideration in relation to bushfire matters for the proposed development. Recommendations within the applicants report have been included within the draft conditions of consent.
- Clause 37A (Notification of certain development): The submitted application was notified in accordance with Council's Community Consultation Policy. Refer to Community Consultation section of this report for further details.

In summary, the proposed development does not conflict with the aims and objectives of SLEP 1985.

# 6.6 Development Control Plan 93 - Controls for Waste Minimisation and Management (DCP 93)

The provisions of DCP 93 apply to this development. A waste minimisation and management plan (WMMP) for the construction and the on-going use of the proposed development has not been submitted with the development application. In accordance with the requirements of DCP 93, a WMMP is required to be lodged prior to the release of the Construction Certificate.

# (b) likely impact of that development on the natural and built environment and social and economic impacts in the locality.

#### Context and Setting

The proposed monopole will project above the tree line however it will not impact on any views of the coast in the proposed location. The pole and associated infrastructure are to be painted in 'pale eucalypt 'that will tend to blend with the trees and not stand out against the sky. The ground level support facilities will be screened by existing and augmented vegetation and shade cloth fixed to the compound fence.

#### Visual Impact Assessment

The applicants provided a series of before and after photo montages for the proposed facility on 30 March 2011:

- View 1 was shot from Woodalla Way (north ease of the site). The post development image indicates a very small distant projection above the tree line that has minimal visual impact.
- View 2 was shot from Matron Porter Drive (approx 320m north-east of the site) looking west. The post development image indicates a small projection above the tree line that has minimal visual impact.
- View 3 was shot from 192 Matron Porter Drive looking North West. The post development image indicates a projection above the tree line that does not dominate the skyline.

The pole and equipment will be coloured 'pale eucalypt' with the ground level structures screened from view by existing and new vegetation and shade doth fixed to the perimeter security enclosure. The proposed facility has an acceptable visual impact and should be supported.

# Refer to Attachment C for a copy of the applicant's visual impact assessment.

#### Threatened Species

The original application was submitted with a flora and fauna report by Biosis that was considered inadequate by council's threatened species officers. A revised report was reviewed by council's threatened species officers who have advised that in relation to the additional s5A "assessment of significance" by Biosis, and based on the revised location (which reduces the impact on remnant native vegetation) Council can concur with conclusion of non-significance pursuant to s5A of the NSW EP&A Act though there are concerns re the impacts on Osprey. It is likely the species will not attempt to nest on the mono-pole design specified for the site but Biosis has recommended the issue be revisited should the species attempt to nest

on the communications tower. Please refer to the draft conditions of consent which include the mitigation measures documented in the Biosis report.

## Social and Economic Impacts

The proposed development will provide improved mobile phone coverage and wireless internet coverage to the surrounding areas for day to day and emergency use which will improve social connectivity of the residents to other areas.

The proposed development is likely to have positive economic impact for the area generally in terms of improved mobile phone and wireless internet coverage for small business operators or people wanting to telecommute however the negative impact on tourism for a number of accommodation businesses north-west of the proposed facility could be significant.

## (c) the suitability of the site for the development

Site 3 is located within undeveloped bushland and is permissible with development consent. The revised site is considered to be positioned a satisfactory distance from the coast to minimise visual impacts of the structure on the coastline and complies with the electromagnetic emissions (EME) health impact criteria under legislation while providing the best fit location to improve mobile phone/internet service for Narrawallee and surrounding areas.

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

The application was notified by way of a public notification as outlined in Section 4 (Community Consultation). Seven (7) submissions were received objecting to the proposal. A summary of the main issues raised by submissions includes:

- electromagnetic radiation health concern that the location of the proposed facility is too close to community sensitive residential area that includes homes, a preschool, a church, a pony club and a designated Department of Education site for a future school
- health concerns generally regarding use of mobile phones
- alleged negative impact on property values for nearby residential properties
- visual impact of the proposed location

# Refer to Attachment D for applicant's response to submissions.

#### (e) the public interest

#### EME and associated health impacts

The emission of radiation from the tower (EME) and associated health impacts is an issue that needs to be considered as part of this application's assessment. ARPANSA is the Federal government agency charged with the responsibility for protecting the health and safety of people and the environment from the harmful effects of radiation. The limits as set by ARPANSA have been subsequently set by Australian Communications and Media Authority (ACMA) who administer the

Commonwealth legislation and associated regulations. The applicant in their submitted Statement of Environmental Effects advised:

"The maximum cumulative radiofrequency electromagnetic energy (RF EME) levels for the communications facility proposed at the site is estimated to be less than **0.17%** of the ACMA mandated public exposure limit. The proposed telecommunications facility will always operate well within the limits of the ACMA Standard or any amendment to that standard endorsed by the Government. No compliance report on the actual expected levels of EME were provided with the application;

	iel Aleas of Interest- i Toposeu
Distance from antennas at 210 Matron	Maximum Cumulative EME Level – All
Porter drive in 360 degrees circular	carriers at this site
bands	(% of ARPANSA exposure limits)
	Public exposure limit = 100%
0m to 50m	0.0013%
50m to 100m	0.0073%
100m to 200m	0.17%
200m to 300m	0.16%
300m to 400m	0.076%
Baptist Church	0.094%
Childcare centre	0.061%

#### Table of predicted EME Levels and Other Areas of Interest- Proposed

# Refer to Attachment E for revised EME report.

#### 7. Other Issues:

#### Telecommunications Legislation / Requirements

The activities proposed by this application are subject to a range of Federal legislation which includes the *Commonwealth Telecommunications Act, 1997, Telecommunications Code of Practice 1997, Telecommunications Low Impact Determination 1997, Telecommunications Regulations 1997* and the *Australian Communications Industry Code of Practice 2004 (C564:2004).* The proposal under the above legislation is not classified as a "low impact facility" (i.e. no development approval required) and is therefore classified as a "high impact" determination and subject to the provisions of the EP&A Act. In accordance with the Code of Practice, the applicant has applied the precautionary principles in respect of site selection, designing the infrastructure and operation of the site in order to demonstrate compliance with the regulations regarding maximum human exposure limits for radio frequency fields and to take appropriate measures to restrict general public access to the radio frequency hazard areas.

## 8. Referrals

#### Internal:

- Threatened Species Officer: Comments included in discussion on Threatened Species
- Development Engineer: Conditions included within draft development consent.

#### External:

- Rural Fire Service: Supported applicant's Bush Fire Report recommendations.
- Civil aviation authority: No comment
- **Department of Defence:** No objection to the proposal and no conditions recommended for imposition on any issued development consent.

#### 9. Options

The JRPP may:

- a) Resolve to refuse the application; or
- b) Resolve to approve the application subject to conditions; or
- c) Write to the applicant requesting them to amend/modify the proposal and subject to the matters being satisfactorily resolved a further report be submitted to the Joint Regional Planning Panel (Southern Region) for its consideration.

#### 10. Conclusion

This application has been assessed having regard to the Matters for Consideration under Section 79C of the Environmental Planning and Assessment Act 1979. Following a detailed assessment, it is considered that Development Application No RA10/1007 should be approved subject to the conditions in the attached draft development consent.

#### 15. Recommendation

# RECOMMENDED that, in respect of RA10/1007for the proposed telecommunications facility at Lot 385 DP 45117, No. 210 Matron Porter drive, Narrawallee, the application be approved in accordance with the subject to the conditions in the attached draft development consent (Attachment A).

Signed: Peter Johnston

Date: 16 June 2011

# ATTACHMENT A

# NOTICE TO APPLICANT OF DETERMINATION OF APPLICATION DEVELOPMENT CONSENT

#### Environmental Planning and Assessment Act, 1979 RA10/1007

**TO:** Aurecon Australia Pty Ltd PO Box 538 Neutral Bay NSW 2089

#### being the applicant(s) for RA10/1007 relating to:

Lot 385 DP 45117, No.210 Matron Porter Drive, Narrawallee

#### APPROVED USE AND OR DEVELOPMENT:

Mobile phone telecommunication facility (comprising a 40m high monopole and associated headframe with 3 initial panel antennas and provision for 3 additional future antennas, an equipment building, security fencing and associated power supply/optic cable works).

BCA CLASSIFICATION(s):

10a and 10b

#### **DETERMINATION DATE:**

Pursuant to the Section 81 of the Act, notice is hereby given that the above application has been determined by granting consent, subject to the conditions listed below.

#### CONSENT TO OPERATE FROM: CONSENT TO LAPSE ON:

#### **DETAILS OF CONDITIONS**

The conditions of consent and reasons for such conditions are set out as follows:

#### PARTA

#### CONDITIONS OF A GENERAL NATURE, INCLUDING A DESCRIPTION OF THE PROPOSED DEVELOPMENT

#### General

1. This consent relates to a mobile phone telecommunication facility (comprising a 40m high monopole and associated headframe with 3 initial panel antennas and provision for 3 additional future antennas, an equipment building, security fencing and associated power supply/optic cable works) as illustrated on the plans with the following references:

Plan No./	Version	Prepared by	Dated
Supporting			
Document			
Site Layout and	69104208W001A	Telstra	25/02/2011
Access Plan -			
N109046 Sheet 1			
Western Elevation	69104208W001A	Telstra	25/02/2011
- N109046 Sheet 3			
Statement of	NA05473.01	Daly International	May2010
Environmental			
Effects			
Revised Statement		Aurecon Australia	18/05/2011
of Environmental		Pty Ltd	
Effects Letter			
Revised Bushfire	2	Eco Logical	4/04/2011
Protection		Australia Pty Ltd	
Assessment			
Revised Flora and	4	Biosis Research	22/03/2011
Fauna Impact		Pty Ltd	
Assessment			
Revised Radio	Narrawallee NSW	Telstra	22/03/2011
Frequency	2539 –		
Electromagnetic	20110322161832		
Energy (EME)			
Report			
Photomontage 1	M01 - A	Telstra	16/03/2011
Photomontage 2	M02 - A	Telstra	16/03/2011
Photomontage 3	M03 - A	Telstra	16/03/2011

In the event of any inconsistency between conditions of this consent and the drawings/documents referred to above, the conditions of this consent prevail.

Notes:

- Any alteration to the plans and/or documentation shall be submitted for the approval of Council. Such alterations may require the lodgement of an application to amend the consent under s96 of the Act, or a fresh development application. No works, other than those approved under this consent, shall be carried out without the prior approval of Council.
- Where there is an inconsistency between the documents lodged with this application and the following conditions, the conditions shall prevail to the extent of that inconsistency.
- 2. The approved development/use shall not commence until all relevant conditions of development consent have been met or unless other satisfactory arrangements have been made with council (i.e. a security).

#### **Prescribed Conditions**

3. The Applicant shall comply with the prescribed conditions of development consent under clause 98 of the Regulation.

#### **Occupation Certificate**

4. An **Occupation Certificate** shall be issued by the Principal Certifying Authority (PCA) before the approved building/development is used or occupied.

Note: Refer to Part F of this development consent for additional requirements in relation to this condition.

## PARTB

# CONDITIONS THAT MUST BE COMPLIED WITH BEFORE WORK CAN COMMENCE

#### Notice of commencement

5. Notice must be given to Council **at least two (2) days** prior to the commencement of building work.

#### Principal Certifying Authority/Construction Certificate

- 6. The following must be undertaken before any building works can commence:
  - a) A Principal Certifying Authority (PCA) must be appointed; and
  - b)A Construction Certificate must be obtained from either Council or an accredited certifier.

#### Builders' toilet

7. Before commencing building operations, a builder's water closet accommodation must be provided to Council's satisfaction. A chemical toilet may be used on the site or alternatively the site may be provided with temporary closet accommodation connected to Council's sewer where sewer is available and operational.

Under no circumstances will pit toilets or similar be accepted by Council.

#### Existing services and damage to public assets

- 8. Prior to the commencement of any work(s) associated with this development:
  - a) The developer or his agent shall undertake a site inspection of the adjacent kerbs, gutters, carriageway, reserves and the like and document evidence of any damage to existing assets. Failure to identify existing damage will result in all damage detected after completion of the building work being repaired at the applicant's expense. Any damage to the adjacent kerb, gutter, footpath/road reserve area, carriageway and the like that occurs during development works shall be repaired by the applicant; and
  - b) The developer or his agent must check that the proposed works are not affected by any Council, Integral Energy, telecommunications, gas service or other services. Any required alterations to services will be at the developer's expense.

#### Soil and water management

9. The relevant sedimentation and erosion controls required by this consent (refer to Condition 14) must be implemented **prior to commencement of any work** and maintained until the work is completed and the site stabilised. Soil and water management including siltation and erosion controls shall be inspected and approved prior to the commencement of any site works.

#### Supervision of works

10. **Prior to the commencement of any works**, Council shall be advised in writing of the name of a designated person/company nominated by the applicant to be responsible for construction of all engineering works including erosion and sediment control measures.

#### Structural Details

- 11. Prior to the commencement of construction, the Applicant shall submit to the satisfaction of the PCA structural drawings prepared and signed by a suitably qualified practising Structural Engineer that comply with:
  - a) the relevant clauses of the Building Code of Australia,
  - b) the relevant development consent,
  - c) drawings and specifications comprising the Construction Certificate, and

d) the relevant Australian Standards listed in the BCA (Specification Al.3).

# Approval REQUIRED for work within the Road Reserve – Section 138 Roads Act

- 12. Prior to undertaking any works within the road reserve, the contractor must obtain the approval of Council under Section 138 of the Roads Act, 1993. The following details must be submitted to Council for in order to obtain the s.138 approval:
  - Traffic Control Plan (TCP) to provide protection for those within and adjacent to the work site, including the travelling and pedestrian public. The TCP must comply with the RTA's manual –"*Traffic Control at Work Sites*". Warning and protective devices shall comply with the provisions of AS 1742.3 – 2002 Traffic Control Devices for Works on Roads. The plan must be prepared and certified by a person holding the appropriate RTA accreditation, a copy of which is to be submitted with the plan.
  - Insurance details

Should the Traffic Management Plan require a reduction of the speed limit, a Direction to Restrict shall be obtained from the relevant road authority (Council or the RTA - Traffic Operations Unit).

#### PARTC

#### CONDITIONS THAT MUST BE COMPLIED WITH BEFORE A CONSTRUCTION CERTIFICATE CAN BE ISSUED

#### Australian Government Civil Aviation Safety Authority

13. Prior to the release of the Construction Certificate, the Australian Government Civil Aviation Safety Authority Advisory Circular 139-08 (0) Tall Structures Report Form is to be completed and forwarded to RAFF AIS. A copy is to be provided to Council.

#### Erosion Sediment Control Plan

14. The preparation of an Erosion and Sediment Control Plan (ESCP) and accompanying specifications for the construction phase of the works, prepared by a suitably qualified/experienced person and based on the Landcom manual "Soils and Construction, Managing Urban Stormwater, Vol 1 4<sup>th</sup> Edition, March 2004", shall be lodged for approval with the application for a construction certificate. The ESCP controls shall be implemented, inspected and approved prior to the commencement of any site works and maintained for the life of the construction period and until revegetation measures have taken hold. The ESCP shall include, but not be limited to:

- a) Location and type of proposed erosion and sediment control measures;
- b) Location of and proposed means of stabilisation of site access;
- c) Proposed staging of construction and ESCP measures;
- d) Clearance of sediment traps on a regular basis and after major storms;
- e) Proposed site rehabilitation measures, including seeding of all bare ungrassed areas and turfing where erosion or scouring is likely to occur;
- f) Standard construction drawings for proposed erosion and sediment control measures.

#### Waste minimisation and management

15. A Waste Minimisation and Management Plan (WMMP) must be prepared that complies with the requirements of Development Control Plan No. 93 – Waste Minimisation and Management. The plan must clearly detail how the management of waste material(s) on site will be carried out in accordance with NSW DECC Environmental Guidelines: Classification and Management of liquid and Non-liquid Wastes.

The WMMP shall be lodged for approval with the application for a Construction Certificate. A copy of the approved WMMP shall be lodged with Council prior to the issue of the Construction Certificate.

**Note**: "Waste" has the same meaning as the definition of "Waste" in the Protection of the Environment Operations Act 1997.

#### Engineering APPROVAL – works in Road Reserve prior to CC

16. Engineering design plans for all works within the road reserve shall be submitted to Council for approval **prior to the issue of a construction certificate for building works**. All work must be carried out in accordance with the approved plans.

**Note:** Fees apply to the checking of engineering plans and inspections. Contact shall be made with Councils Development Engineer for a fee estimate. All fees must be paid prior to plans being released for construction approval.

#### PARTD

#### CONDITIONS RELATING TO THE APPROVED WORK AND SITE MANAGEMENT

#### Building Code of Australia

17. All building work must be carried out in accordance with the requirements of the Building Code of Australia.

**Note:** This condition is prescribed under the Environmental Planning and Assessment Regulation 2000.

#### Design and construction

18. All design and construction shall be in accordance with DCP 100 - Subdivision Code.

#### **Threatened Species**

19. The facility must be operated for the life of the development in accordance with the recommendations detailed under Section 5 of the revised Biosis Flora and Fauna report, dated 22/03/2011.

#### Impact of Below Ground (Sub-surface) Works – Aboriginal Relics

20. If any Aboriginal archaeological relics are exposed during construction works, the Applicant shall immediately notify the National Parks and Wildlife Service and obtain any necessary approvals to continue the work. The Applicant shall comply with any request made by the NPWS to cease work for the purposes of archaeological recording.

#### Waste minimisation and management

21. All waste must be contained within the site during construction and then be recycled in accordance with the approved Waste Minimisation and Management Plan (WMMP) or removed to an authorised waste disposal facility (i.e. Ulladulla Transfer Station). No waste shall be placed in any location or in any manner that would allow it to fall, descend, blow, wash, percolate or otherwise escape from the site.

Compliance with the WMMP shall be demonstrated by the retention of relevant receipts. These must be submitted to Council, upon request.

#### Disposal of excavated material

22. All excavated surplus material shall be hauled to an approved landfill site. Details of fill storage and/or disposal and haulage routes shall be submitted to Council for approval prior to the commencement of works.

#### Construction hours/storage

- 23. To limit the impact of the development on adjoining owners/occupiers, the following must be complied with:
  - a) All construction work shall be restricted to the hours of 7.00am to 6.00pm Monday to Friday and 8.00am to 1.00pm Saturdays. No construction work shall take place on Sundays or Public Holidays; and

b) The parking of machinery/vehicles or the storing of construction equipment/materials, soil, spoil, or rubbish external to Lot 385 DP 45117 is prohibited.

#### Electromagnetic energy levels

24. The applicant is to provide certification of the operation of the communication facility in accordance with the approved electromagnetic energy (EME) levels, prior to commissioning of the facility (i.e. levels at distances from the facility do not exceed the predicated EME levels in the submitted EME Report, Dated 22/03/2011, NSA Site No. 2539016).

#### RURAL ACCESS

#### Rural Access – Driveway Crossing Pavement

25. A gravel driveway crossing with 200mm minimum compacted pavement thickness shall be constructed 4 Metres wide (minimum) at the property boundary splayed to 5 metres wide at the pavement edge line in accordance with Council's Plan SC 263734 (Fig. D.19 of DCP100). Council's Subdivision Manager or his nominee shall inspect and approve the work in accordance with DCP 100.

#### Indented Rural Access, min width

26. An indented rural access shall be provided at the approved location in accordance with Council's Plan No. D1.21. The access shall be a minimum of 4m wide at the gate and configured to accommodate a minimum distance of 13 metres between the gate and the table drain or 15 metres to the road shoulder if there is no table drain. The standard of pavement construction of the driveway crossing shall extend from the property boundary to the access gate.

#### Rural Access-dish crossing

27. A standard concrete dish crossing shall be constructed in line with the existing table drain for the full width of the access in accordance with Council's Plan No. 263709.

#### INTERNAL DRIVEWAY AND CAR PARK

#### Internal Driveway and Car Parking - GRAVEL

28. The internal driveway and car park shall be constructed to an all-weather gravel standard, with a minimum compacted pavement thickness of 200mm. The driveway carriageway within the site shall be 3.0m wide with 0.5m wide gravel shoulders.

#### Car park to comply with DCP18

29. The car park shall be designed, constructed, line marked and signposted in accordance with Council's Car Parking Code (Development Control Plan No 18).

#### ENGINEERING PLANS, DESIGNS AND APPROVALS

#### SITE DRAINAGE

#### Stormwater Drainage Design – 10 year ARI

30. All drainage works shall be designed and constructed for a 10 year average recurrence interval unless otherwise specified.

#### PARTE

#### CONDITIONS THAT RELATE TO ONGOING MANAGEMENT OF THE PROPOSED DEVELOPMENT

#### **Co-location**

31. The communications facility must be designed and constructed to permit future co-location for other carriers to be accommodated.

#### Road reserve to be kept clear of debris

32. The road, kerb and gutter and footpath area adjacent to and nearby the site shall be kept clear of soil and debris.

#### Site management and maintenance

- 33. The proprietor shall at all times be responsible for on-going site management and maintenance in accordance with the following:
  - a) The use of the approved development must not:
    - Cause transmission of vibration to any place of different occupancy;
    - Cause 'Offensive Noise' as defined in the Protection of the Environment Operations Act 1997;
    - Impact upon the amenity of any adjoining property or tenancy by reason of the emission of noise, dust, fumes, odour, vibration, electrical interference or otherwise;
  - b)Loading and unloading in relation to the use of the approved development must occur within Lot 385 DP 45117.

#### Noise

34. The L<sub>A10</sub> (Source) noise level emitted from the Telecommunications facility shall not exceed the background noise level in any octave band (measured using the L<sub>90</sub> noise level descriptor) by more than 5 dB(A) when measured at the boundary of the nearest affected residence.

#### Electromagnetic energy levels

35. The telecommunications facility is to comply with the Australian Radiation Protection and Nuclear Safety Agency Protection Standard – Maximum exposure levels to radiofrequency fields – 3kHz to 300Hz as amended from time to time. 36. A validation report shall be submitted to Council within 12 months of the facility commencing operations. This report shall demonstrate that emissions levels for adjoining areas (i.e. at the distances as shown in the submitted EME Report, Dated 2/7/09, NSA Site No. 2539016) have not exceeded the predicated EME levels and comply with the Australian Radiation Protection and Nuclear Safety Agency Protection Standard – Maximum exposure levels to radiofrequency fields – 3kHz to 300Hz as amended from time to time.

#### PARTF

#### CONDITIONS THAT MUST BE COMPLIED WITH BEFORE AN OCCUPATION CERTIFICATE CAN BE ISSUED

37. Prior to the issue of an Occupation Certificate for the approved development the requirements of conditions 18 (Design and construction), 24 (Electromagnetic energy levels) must be complied with and completed.

#### PARTG

#### **REASONS FOR CONDITIONS**

#### Conditions of consent have been imposed to:

1. Ensure the proposed development:

a) achieves the objects of the Environmental Planning and Assessment Act, 1979;

b) complies with the provisions of all relevant environmental planning instruments;

- c) is consistent with the aims and objectives of Council's Development Control Plans, Codes and Policies.
- 2. Ensure that the relevant public authorities and the water supply authority have been consulted and their requirements met or arrangements made for the provision of services to the satisfaction of those authorities.
- 3. Meet the increased demand for public amenities and services attributable to the development in accordance with Section 94 of the Environmental Planning and Assessment Act, 1979.
- 4. Ensure the protection of the amenity and character of land adjoining and in the locality of the proposed development.
- 5. Minimise any potential adverse environmental, social or economic impacts of the proposed development.
- 6. Ensure that all traffic, carparking and access requirements arising from the development are addressed.
- 7. Ensure the development does not conflict with the public interest.

#### PARTH

#### ADVICE ABOUT RIGHTS OF REVIEW AND APPEAL

# Development Determination under Environmental Planning and Assessment Act, 1979

Under section 82A of the Environmental Planning and Assessment Act, 1979 an applicant may request the council to review its determination except where it relates to a complying development certificate, designated development or integrated development. The request must be made **within twelve (12) months** of the date of the receipt of the determination, with a prescribed fee of 50% of the original DA fee.

Section 97 of the Environmental Planning and Assessment Act, 1979 confers on an applicant who is dissatisfied with the determination of a consent authority a right of appeal to the Land and Environment Court which can be exercised within twelve (12) months after receipt of this notice.

#### Approvals under Local Government Act, 1993

Section 100 of the Local Government Act, 1993 provides that an applicant may request Council to review its determination of an application.

Section 176 of the Local Government Act, 1993 provides that an applicant who is dissatisfied with the determination of the Council may appeal to the Land and Environment Court. The appeal must be made within **twelve (12) months** of the date of determination.

#### PARTI

#### ADVICE ABOUT WHEN THIS CONSENT LAPSES

This consent is valid for five years from the date hereon.

In accordance with Section 95 of the Act, development consent of the erection of a building does not lapse if building, engineering or construction work relating to the building or work is physically commenced on the land to which the consent applies before the lapse date.

#### PARTJ

#### GENERAL ADVICE TO APPLICANT

# Commonwealth Environment Protection and Biodiversity Conservation Act 1999

The Commonwealth Environment Protection and Biodiversity Conservation Act 1999 provides that a person must not take an action which has, will have, or is likely to have a significant impact on

- a) A matter of national environmental significance (NES) matter; or
- b) Commonwealth land

without an approval from the Commonwealth Environment Minister.

This application has been assessed in accordance with the New South Wales Environmental Planning & Assessment Act, 1979. The determination of this assessment has not involved any assessment of the application of the Commonwealth legislation.

It is the proponent's responsibility to consult Environment Australia to determine the need or otherwise for Commonwealth approval and you should not construe this grant of consent as notification to you that the Commonwealth Act does not have application.

The Commonwealth Act may have application and you should obtain advice about this matter.

There are severe penalties for non-compliance with the Commonwealth legislation.

#### Disclaimer – s88B restrictions on the use of land

The applicant should note that there could be covenants in favour of persons other than Council restricting what may be built or done upon the subject land. The applicant is advised to check the position before commencing any work.

Under clause 37 of Shoalhaven Local Environmental Plan 1985 agreements, covenants or instruments that restrict the carrying out of the proposed development do not apply to the extent necessary to enable the carrying out of that development, other than where the interests of a public authority is involved.

**SIGNED** on behalf of Shoalhaven City Council:

#### Signature

Name Peter Johnston Senior Development Planner Development & Environmental Services Group



# RA10/1007 - Site Locality Map – 210 Matron Porter Drive Narrawallee



RA10/1007 – Site Zoning Map – 210 Matron Porter Drive Narrawallee



#### RA10/1007 - Site Area Context Plan – 210 Matron Porter Drive Narrawallee

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# ATTACHMENT C











#### Alternative Monopole Location Candidates Considered



- Candidate A Water Reservoir, 298 Princes Hwy;
- Candidate B Water Reservoir, Matron Porter Dr;
- Candidate C Pony Club, Matron Porter Dr;
- Candidate D 202 Princes Hwy, Milton;
- Candidate E Lot 4 DP 220678, off Garside Rd;
- Candidate F Land off Matron Porter Dr;
- Candidate G land behind Seaspray St, Narrawallee;
- Candidate H land off Matron Porter Dr;
- Candidate I land off Matron Porter Dr;
- Candidate J 2A Warden Rd, Milton;
- Candidate K 275 Matron Porter Dr, Mollymook
- Candidate L (Site 3) 210 Matron Porter Drive, Narrawallee





# PUBLIC SUBMISSIONS

Three responses were received following the public exhibition of the SEE (listed in Table 1). The submissions received were variations on three issues. These issues are addressed in Table 2, below.

# Table 1. List of respondents

Name	Submission Number
Concerned Local Resident'	1
Vichelle Boyle	2
vonne and John Dwyer	3

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Issue	U		Comment	nt
÷	Electro-magnetic energy (perceived health effects and	energy effects and	It is un commu	It is understood that the health effects of mobile base stations are a key issue for many members of the community. The importance given to this issue by Telstra is demonstrated by:
	proximity to community sensitive locations)	unity sensitive	•	Consideration of electro-magnetic energy (EME) as a key issue in the SEE; independent EME modelling of the proposal and assessment of compliance with the Radio-communications (Electromagnetic
Subr	Submission Numbers 1, 2, 3	~		Radiation - Human Exposure) Standard 2001 - a worst case scenario is modelled (operating a maximum power, simultaneous calls on all channels, unobstructed line of sight to antennae).
			•	As noted in the EME Report submitted to Council with the Development Application, at ground level the maximum signal strength at any distance from the proposed telecommunications antennas at Narrawallee is just 0.17% of the allowable public health and safety limit. This is over <u>588 times</u> below the applicable standard.
			The fac	The facts of this issue are:
			•	Modelled levels are minute by comparison to the Standard, because of the low power output of the facility proposed. Mobile network facilities contribute a very small fraction of radiofrequency energy in the environment, because the transceivers themselves are extremely low powered, and provide coverage to relatively small areas (typically several kilometres). Telstra's antennas typically require about 60W of power to operate -less than many household light globes;
			•	Scientific evidence currently considers the health risks are low and acceptable;
			•	EME is an issue that provokes strong responses, often fuelled by a fear of the unknown.
			The pro	The proposal is compliant with current regulations on EME issues. The magnitude of the EME risk is very small.
			Telstra mobile expert Nuclear and saf	Telstra acknowledges some people are genuinely concerned about possible health effects from EME from mobile phone base stations and is committed to addressing these concerns responsibly. Telstra relies on the expert advice of national and international health authorities such as the Australian Radiation Protection and Nuclear Safety Agency (ARPANSA) - and the World Health Organisation (WHO) for overall assessments of health and safety impacts.
			Compre mobile	Comprehensive reviews of over 2500 research publications, including more than 600 studies specifically on mobile phones and base stations by governments and health authorities continue to find that there is no

Issue	Comment
	substantiated evidence of adverse health effects. This includes studies in relation to infants, children, the infirm and the elderly.
	The WHO states that the research has found no adverse health effects from the low level RF signals emitted by mobile network base stations:
	"From all evidence accumulated so far, no adverse short or long term health effects have been shown to occur from the RF signals produced by base stationsconsidering the very low exposure levels and research results collected to date, there is no convincing scientific evidence that the weak RF signals from base stations and wireless networks cause adverse health effects"
	(WHO Fact Sheet No. 304 "Electromagnetic fields and public health: base stations and wireless technologies" May 2006).
	It is noted that all Telstra mobile phone equipment complies with strict health and safety standards, and is regularly assessed to ensure ongoing compliance.
	The Radiation Protection Standard (RPS3) set by ARPANSA specifies continuous exposure limits, and is based on strict WHO guidelines. The safety regulations operate by placing a limit on the strength of the signal (or radiofrequency EME) that Talstra can transmit. They are not based on distance or creating "buffer zones" for
	residential areas. The environmental standard limits the network signal strength to a level low enough to protect all people, in all environments, 24 hours a day. The safety limit itself, recommended by the WHO, has a significant safety margin, or a precautionary approach built into it.
	This is why telecommunications facilities are permissible in any environment, including on apartment buildings and hospitals, and even within school grounds.
	With regard to the point raised as to the proximity to the day care facility. Telstra does recognise the sensitivity associated with a proposal in a community sensitive location and tries hard to strike a balance between providing services and minimising impact on the community and the local environment.
	The concept of "exclusion zones" for schools and residential areas is not supported by the WHO or ARPANSA as an effective precautionary measure to reduce the general public's exposure to radiofrequency EME.

Issue	Comment
	ARPANSA advises that exclusions zones do not provide precautionary protection to the community:
	"The ACIF Deployment of Mobile Phone Network Infrastructure 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 APANCA confirms that evidence levels in public grads are twicelly hundreds or thousands of times less
	than the exposure limit set by ACMA." (See ARPANSA Base Station Fact Sheet 6, 2008).
	Furthermore, it is noted that predicted EME levels are well within Australian Standards as discussed specifically in Issue 1, above. The location of a day care facility within approx 350m of the proposed facility is not incongruous with Australian Standards. The magnitude of the EME risk is very small.
	Finally, we would note that the Australian regulation of EME limits is adaptive to ongoing research. The ARPANSA Radiofrequency Radiation Exposure Standard Fact Sheet No. 4 states that:
	"significant safety factors are incorporated into the exposure limits – that is, the limits are set well below the lovel of which adverse health effects are known to accur. The Markina Groun developing the Standard reviewed
	research at low levels of exposure published since after the ICNIRP review to ensure that more recent research did not reveal problems. Eurthermore, there is an extensive world wide research effort to investigate any odverse
	low-level effects. The research aims to address the World Health Organization's research agenda. However, if evidence of any adverse effects does come to hand, ARPANSA will certainly review the limits of the Standard."
	In the event of ARPANSA adapting the EME limits, Telstra would also adapt its own sites if so required to ensure ongoing and continued compliance at all times.
2. Visual amenity Submission Number 1	It is understood that the visual impact of the tower is a concern for some members of the community. The importance given to this issue by Telstra is demonstrated by:
	Consideration of visual impact as a key issue in the SEE;
	<ul> <li>Provision of photomontages to the Council in order to demonstrate the anticipated impact and measures taken to reduce it;</li> </ul>

Issue	Comment
	<ul> <li>Design of site – The pole and equipment will be coloured 'pale eucalypt' and screened by large existing trees up to 35m in height. Shade cloth will be affixed to the compound fence and additional native screening plants will be planted on the Southern compound perimeter. These measures are intended to reduce potential visual impact of the equipment to the absolute minimum whilst allowing the facility to operate effectively.</li> </ul>
	<ul> <li>Location of the site – set within significant mature tree screening and located within an area of disturbed land so no significant vegetation will be removed under the proposal.</li> </ul>
	While it is recognised that the proposed pole and associated infrastructure will add to the visual impact of this locality. Telstra considers that the justification for the project, to improve mobile coverage to the area, warrants consideration of the additional visual impact in this area.
3. Possible devaluation of property Submission Numbers 1, 2, 3	In response to this point, Telstra would note that property values may increase or decrease for a variety of reasons. However, Telstra is not aware of any credible evidence to suggest that the installation of the telecommunication facility in the vicinity of a neighbouring property would influence property values.
	There are many thousands of base stations in all environments throughout Australia. Like other infrastructure including lighting and utility poles it is considered that this necessary infrastructure is a common feature of suburban streetscapes and unlikely to influence opinions of property value.

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# ATTACHMENT E



#### Summary of Estimated RF EME Levels around the Proposed Mobile Phone Base Station at 210 Matron Porter Dr, Narrawallee NSW 2539

#### Introduction:

Date 22/3/2011

#### NSA Site No (2539016)

This report summarises the estimated maximum cumulative radiofrequency (RF) electromagnetic energy (EME) levels at ground level emitted from the proposed Mobile Phone Base Station antennas at 210 Matron Porter Dr, Narrawallee, NSW 2539. Maximum EME levels are estimated in 360° circular bands out to 500m from the base station. The procedures for making the estimates have been developed by the Australian Radiation Protection And Nuclear Safety Agency (ARPANSA)<sup>1</sup>. These are documented in the ARPANSA Technical Report; "Radio Frequency EME Exposure Levels - Prediction Methodologies" which is available at <a href="http://www.arpansa.gov.au">http://www.arpansa.gov.au</a>

#### **EME Health Standard**

ARPANSA, an Australian Government agency in the Health and Ageing portfolio has established a Radiation Protection Standard<sup>2</sup> specifying limits for continuous exposure of the general public to RF transmissions at frequencies used by mobile phone base stations. Further information can be gained from the ARPANSA web site.

The Australian Communications and Media Authority (ACMA)<sup>3</sup> mandates exposure limits for continuous exposure of the general public to RF EME from mobile phone base stations. Further information can be found at the ACMA website <a href="http://emr.acma.gov.au">http://emr.acma.gov.au</a>

#### Proposed Site Radio Systems

Proposed Telstra WCDMA850		

#### Table of Predicted EME Levels - Proposed

Distance from the antennas at 210 Matron Porter Dr in 360° circular bands	Maximum Cumulative EME Level – All carriers at this site (% of ARPANSA exposure limits <sup>2</sup> ) Public exposure limit = 100%
0m to 50m	0.0013%
50m to 100m	0.0073%
100m to 200m	0.17%
200m to 300m	0.16%
300m to 400m	0.076%
Maximum EME level 180.8 m, from the antennas at 210 Matron Porter Dr	0.17%

**Table:** Estimation for the maximum level of RF EME at 1.5m above the ground from the proposed antennas assuming level ground. The estimated levels have been calculated on the maximum mobile phone call capacity anticipated for this site. This estimation does not include possible radio signal attenuation due to buildings and the general environment. The actual EME levels will generally be significantly less than predicted due to path losses and the base station automatically minimising transmitter power to only serve established phone calls<sup>6</sup>. Where applicable, particular locations of interest in the area surrounding the base station, including topographical variations, are assessed in Appendix A " Other areas of Interest" table on the last page.

#### Summary - Proposed Radio Systems

RF EME levels have been estimated from the proposed antennas at **210 Matron Porter Dr**, Narrawallee, NSW 2539. The maximum cumulative EME level at 1.5 m above ground level is estimated to be **0.17** % of the ARPANSA public exposure limits.

Environmental EME report

(2007 ARPANSA Format)

Page 1 of 3

Existing Site Ra	dio Systems
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There are currently no existing radio systems for this site.

Refer 1.	the Health and Ageing portfolio.	ion and Nuclear Safety Agency (ARPANSA) is a Federal Go ARPANSA is charged with responsibility for protecting the	
	The Australian Radiation Protect the Health and Ageing portfolio, environment, from the harmful e Australian Radiation Protection a	ARPANSA is charged with responsibility for protecting the iffects of radiation (ionising and non-ionising). nd Nuclear Safety Agency (ARPANSA), 2002, 'Radiation Pr — 3 kHz to 300 GHz', Radiation Protection Series Publicatio 400-6 ISSN 1445-9760]	health and safety of people, and the otection Standard: Maximum Exposure
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1.	The Australian Radiation Protect the Health and Ageing portfolio. environment, from the harmful e Australian Radiation Protection a Levels to Radiofrequency Fields. [Printed version: ISBN 0-642-7940] Web version: ISBN 0-642-7940] The Australian Communications radiocommunications, telecomm The EME predictions in this repor- base station transmitters opera - simultaneous telephone calls o - an unobstructed line of sight vi In practice a worst-case scenari networks automatically adjust fr	ARPANSA is charged with responsibility for protecting the iffects of radiation (ionising and non-ionising). nd Nuclear Safety Agency (ARPANSA), 2002, 'Radiation Pr — 3 kHz to 300 GHz', Radiation Protection Series Publicatio 400-6 ISSN 1445-9760] 2-2 ISSN 1445-9760] and Media Authority (ACMA) is responsible for the regulati unications and online content. Information on EME is avai rt assume a near worst-case scenario including: ating at maximum power (no automatic power reduction) n all channels	health and safety of people, and the otection Standard: Maximum Exposure on No. 3, ARPANSA, Yallambie Australia on of broadcasting, lable at <u>http://emr.acma.gov.au/</u> the immediate vicinity, and cellular of EME may also be affected where
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#### Appendix A

#### **Table of Other Areas of Interest**

Additional Locations	Height / Scan relative to location ground level	Maximum Cumulative EME Level All Carriers at this site (% of ARPANSA exposure limits <sup>2</sup> ) Public exposure limit = 100%
Baptist Church	Om to 2m	0.094%
Childcare centre	0m to 2m	0.061%
Neighbouring Residence 1	0m to 2m	0.006%
Neighbouring Residence 2	0m to 2m	0.006%

Table: Estimation for the maximum EME levels at selected areas of interest over a height range relative to the specific ground level at the area of interest. This table includes any existing and proposed radio systems.

Estimation Notes / Assumptions – Other Areas of Interest Variable ground topography has been included in the assessment of the "Other Areas of Interest" as per ARPANSA methodology Insert other data / notes as required

Environmental EME report

(2007 ARPANSA Format)

Page 3 of 3

#### RA10/1007 - Site Plan – Distance to Sensitive Receivers Proposed Monopole Communications Facility – 210 Matron Porter Drive Narrawallee

