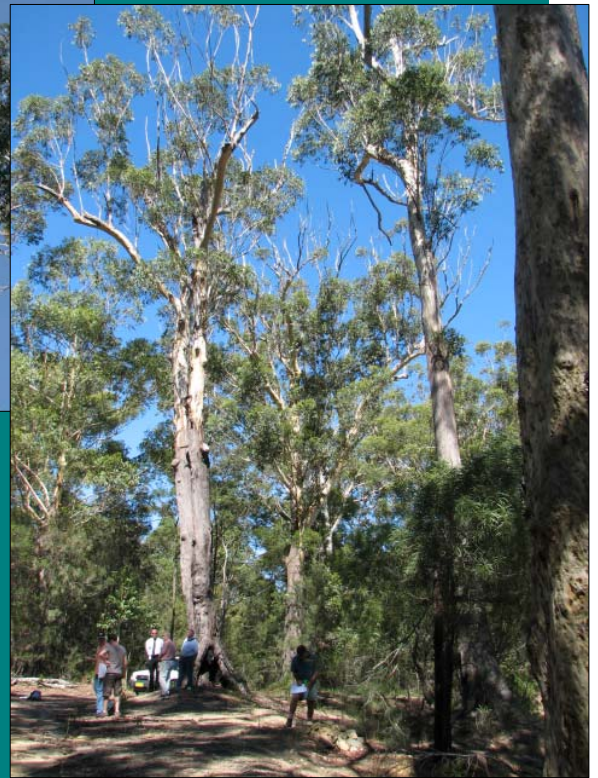


Proposed Mobile Phone Telecommunications Facility at South Durras



Project Application

July 2006

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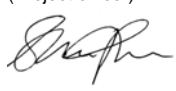
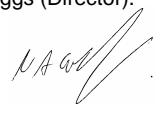
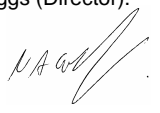
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2		sign.					

Table of Contents

1 EXECUTIVE SUMMARY	2
2 INTRODUCTION.....	3
2.1 Purpose of this document.....	3
2.2 Statutory context	3
3 SCOPE OF PROPOSED WORKS.....	6
3.1 Project justification.....	6
3.1.1 Alternative Sites.....	6
3.1.2 Consultation.....	8
3.2 General description	9
3.2.1 Access	9
4 KEY ISSUES.....	11
4.1 Summary of key issues	11
4.2 Proposed investigation strategies	11
4.2.1 Biodiversity Assessment (including threatened fauna and flora) ..	11
4.2.2 Archaeology	12
5 ISSUES RELATING TO LOW OR INDIRECT IMPACTS	13
6 AUTHORS.....	15

Figures

Figure 2.1 Location of the proposed Telstra mobile phone facility (topographic map).....	5
Figure 2.2 Location of the proposed Telstra mobile phone facility (aerial photo).....	5

Tables

Table 4.1 Key issues (those of moderate to high priority).	11
Table 5.1 Summary of environmental impacts considered to be low or indirect nature	13

Attachments

- Attachment 1 – Draft Concept Drawings
- Attachment 2 – Dept of Planning Consent Letter

1 EXECUTIVE SUMMARY

This Project Application outlines the scope of the construction and ongoing operation of the proposed Telstra mobile phone telecommunications facility on Crown Land Reserve Number 86770, Lot 169 DP 755904, South Durras. It identifies and prioritises the associated potential environmental impacts. The Project Application has been prepared by **ngh**environmental on behalf of Telstra Corporation Ltd (ACN 051 775 556).

The proposal will be assessed under Part 3A of the *Environmental Planning and Assessment Act 1979* (EP&A Act) which provides a consolidated assessment and approval regime for Major Projects. Following the submission of the Project Application and issuing of the Department of Planning's Director-General's Requirements, a detailed Environmental Assessment report (EA) would be prepared. The Project Application and Environmental Assessment report also draw upon the input of local and state government agencies.

The proposed mobile phone base station site is located on elevated Crown land, land immediately adjacent to a former Council rubbish tip, off Durras Road. It is approximately 1 km north-west of the township of South Durras, on the NSW South Coast. The development site is located on and adjacent to a fire trail at the edge of woodland, with existing access from Durras Road. The site contains little or no ground cover. Several large trees (*Eucalypt spp*) are located adjacent to the site although these would **not** require removal (though several limbs may need to be lopped).

The proposal would involve the construction and operation of a 30m monopole fitted with antennas and an equipment hut within a fenced compound (5m x 8m). Country Energy would be engaged separately to install underground power to the site. As the power route would pass through National Park, this component of the work would be assessed separately under Part 5 of the EP&A Act.

Telstra has been awarded the contract to provide land-based mobile phone services under the 'Estens' Inquiry which will be subsidised by the Federal Government of Communications, IT and the Arts (DOCITA). Through funding the Federal Government will invest \$181 million in a comprehensive response that will ensure all Australians have access to adequate telecommunications services, enhance a range of existing services, and ensure that regional Australia continues to share equitably in the benefits of future technologies. This tender includes the installation of a CDMA and GSM mobile telecommunications facility at Durras to provide improved mobile phone coverage, capacity and call quality to the township of South Durras and Durras Lake areas including local roads. North Durras and local roads may also benefit by improved coverage from the proposal.

Key (moderate to high priority) issues associated with the proposal are outlined in Section 4.1 of this Project Application and include impacts on biodiversity (native vegetation, flora and fauna values) and potential impacts on archaeology & Aboriginal heritage values. Key issues would require further investigation/consultation and will be dealt with more fully in the Environmental Assessment report.

Low or indirect impacts are expected to be of a minor nature and/or readily manageable using a range of mitigation measures. Impacts likely to be of a low or indirect nature include impacts on climate and air quality, soils and landforms, noise levels, hydrology (water quality), land use, economic impact, safety, visual, and potential cumulative impacts. These issues would also be defined and assessed in the Environmental Assessment report, and a series of detailed mitigation measures and commitments identified to ensure that impacts on natural and human values are minimised or avoided.

2 INTRODUCTION

2.1 Purpose of this document

This Project Application has been prepared on behalf of Telstra Corporation Ltd. Telstra proposes to install a mobile phone telecommunications facility for the purpose of supplying / improving CDMA and GSM mobile phone coverage to the areas of Durras and Durras Lake where existing coverage services are deficient or non-existent.

This Project Application details the scope of the construction and operation phases of the proposal and prioritises the potential environmental impacts associated with it. In general, potential environmental impacts by the proposal with the proper implementation of appropriate safeguards would be low (and would be addressed in the EA). As some environmental attributes at the site are as yet unknown, as they have not yet been assessed in detail, the proposed works have the potential to have a higher impact on them. These are likely to include assessment of threatened flora species and communities, threatened fauna assessment and archaeological and Aboriginal heritage assessment.

Potential environmental impacts associated with the proposal have been categorised into key (moderate to high priority) and low or indirect impact (low priority) issues. Key issues would be comprehensively investigated and assessed in the Environmental Assessment report, as directed by the Director General's Requirements and would require further investigation/consultation (refer to Section 4.2). Low priority issues are anticipated to generate low scale or indirect impacts of a low level (refer to Section 5).

2.2 Statutory context

Environmental Planning and Assessment Act 1979 (EP&A Act)

The *Environmental Planning and Assessment Act 1979* (EP&A Act) is the main statute for environmental planning and development control in NSW.

The new Part 3A of the *Environmental Planning and Assessment Act 1979* came into force on 1 August 2005. Part 3A integrates the assessment and approval regime for all Major Projects that need the approval of the Minister for Planning, previously dealt with by Parts 4 and 5 of the Act. The associated State Environmental Planning Policy (Major Projects) 2005 defines the proposed Telstra telecommunications facility as a Major Project under Part 3A (refer to SEPP section below).

Projects approved under Part 3A of the *EP&A Act* do not require authorisations under the:

- *Fisheries Management Act 1994* (sections 201, 205 or 219, stop work orders);
- *Heritage Act 1977* (Part 4 or section 139);
- *National Parks and Wildlife Act 1974* (section 87, consent under section 90, interim protection and stop work orders);
- *Native Vegetation Act 2003* (section 12);
- *Rivers and Foreshores Improvement Act 1948* (Part 3A);
- *Rural Fires Act 1997* (section 100B);
- *Water Management Act 2000* (sections 89, 91);
- *Threatened Species Conservation Act 1995* (interim protection and stop work orders);
- *Protection of the Environment Operations Act 1997* (environment protection notices);
- *Local Government Act 1993* (orders under section 124).

Under Part 3A, the proponent of a major project first submits a Project Application for the approval of the Minister for Planning. The Department of Planning then passes on the Project Application to relevant state agency and local government representatives to consider the scope and level of assessment of key issues. The Director-General of DoP then

issues the proponent with requirements for the Environmental Assessment, indicating the issues to be addressed and the level of assessment required and consultation requirements. The Director-General's requirements may also require the proponent to include in an Environmental Assessment a statement of the commitments the proponent is prepared to make for environmental management and mitigation measures on the site.

After an Environmental Assessment has been prepared and accepted by the Director-General, the Report is placed on public exhibition for at least 30 days during which time submissions from the community, local government and state agencies are accepted. Following the consultation period, the Director-General may require the proponent to respond to the comments, revise the proposal or revise the Statement of commitments.

SEPP

It has been identified that as the proposed facility is located within a sensitive coastal location, i.e. less than 100m from a National Park (Murrumbidgee National Park), within *State Environmental Planning Policy (Major Projects) 2005* (under *Schedule 2 Part 3A project – Specified Sites, clause 4*). Also under *clause 1 Coastal Areas, subclause 1 (g) (i)* the structure is greater than 13 metres in height and within a sensitive coastal location. The proposal is therefore considered a major project under this SEPP.

It is understood that upon validation of this document the Department of Planning will issue the Director General Requirements within 28 days.

Telstra have consulted with the Eurobodalla Shire Council and the Department of Lands at the outset of the proposal and throughout the planning stage in order to better appreciate the local issues associated with development of the proposed telecommunications facility in the locality. The Department of Environment and Conservation (David Cunningham – Area Ranger) is also aware of Telstra's proposal to construct at the proposed site.

The proposal is within the SEPP 71 boundary and considered a *significant coastal development*; however the proposal is already referred to the Department of Planning, triggered by the recent amendment to the EP&A Act, Part 3A, Major Projects. The Department would also consider proposal against the objectives of SEPP 71 in the assessment of the proposal.

LEP

Consultation with the land use zoning maps (www.iplan.nsw.gov.au) and with the Eurobodalla Shire Council (ESC) planner has confirmed that the land use zoning of the parcel of land is 1(a).

The relevant Local Environmental Plan is the *Eurobodalla Rural Local Environmental Plan 1987* (LEP 1987). Within this plan;

- *Zone No. 1(a) (Rural (Environmental Constraints and Agricultural) Zone) – The proposal is permissible with Council development consent.*

An objective of this zone is:- *to permit the provision, expansion or maintenance of utility services within this zone.* This proposal would meet this objective.

Telecommunications facilities are permitted only with development consent from Eurobodalla Shire Council. It is understood that the Department of Planning would pass the Environmental Assessment on to Council for their concurrence.

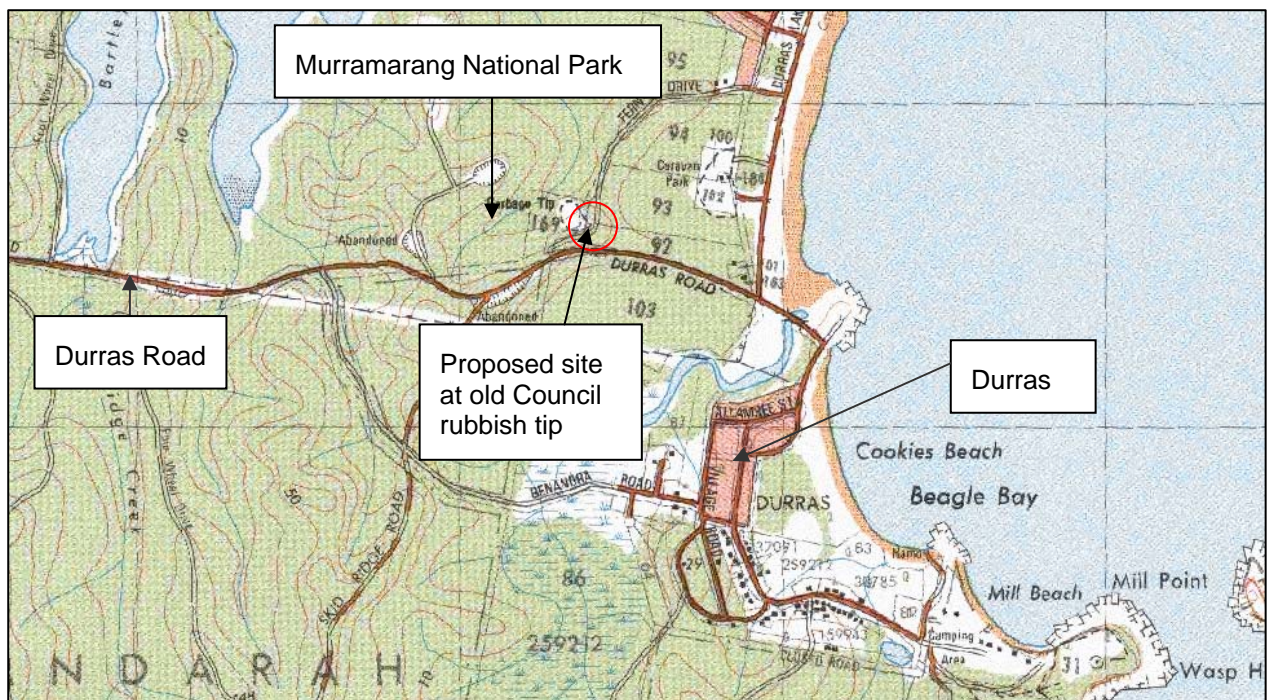


Figure 2.1 Location of the proposed Telstra mobile phone facility (topographic map)

(Source: NSW LPI topographic map series, 8926 – 1S, 1:25000 map sheet).

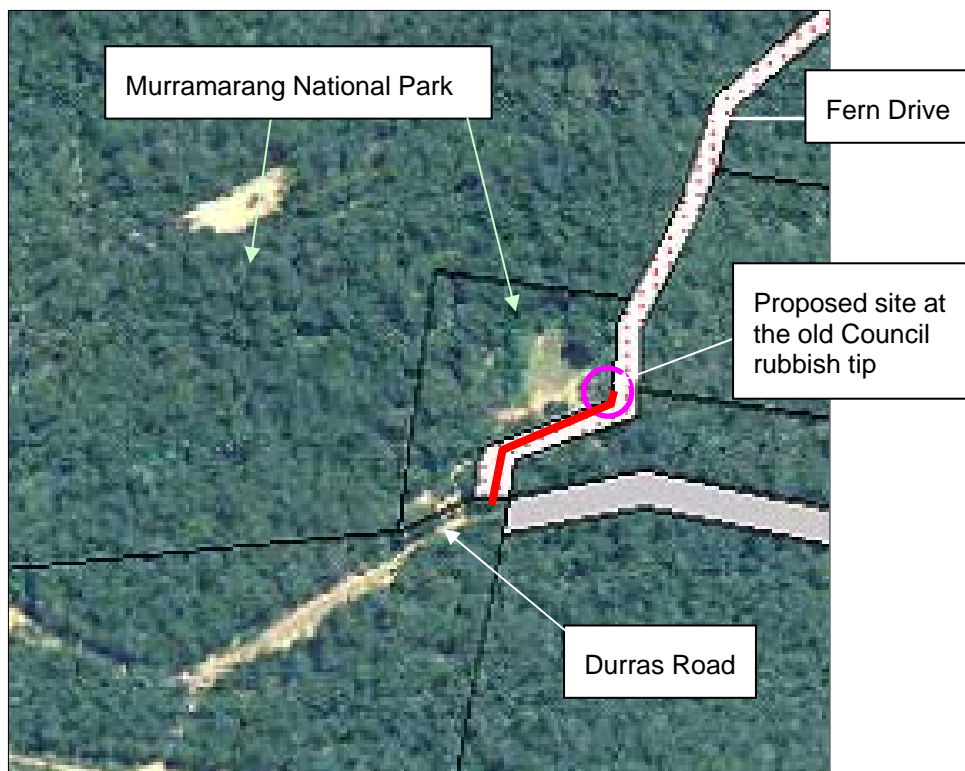


Figure 2.2 Location of the proposed Telstra mobile phone facility (aerial photo)

3 SCOPE OF PROPOSED WORKS

3.1 Project justification

Telstra has been awarded the contract to provide land-based mobile phone services under the 'Estens' Inquiry which will be subsidised by the Federal Government. This tender includes the installation of a CDMA and GSM mobile telecommunications facility at South Durras.

As part of the independent Regional Telecommunications ('Estens') Inquiry, the Federal Government will invest \$181 million in a comprehensive response that will ensure all Australians have access to adequate telecommunications services, enhance a range of existing services, and ensure that regional Australia continues to share equitably in the benefits of future technologies.

The Inquiry recommended that the Government provide additional funding to support the capital costs of extending land-based mobile phone services to small population centres and key highways in regional Australia. The Government has already provided funding to build 915 mobile phone base stations and repeaters along Australia's national highways, on regional highways, and in regional towns, which will result in 98% of the population having land-based mobile phone coverage. The Government will spend an additional \$15.9 million over four years to further extend coverage to small population centres and along highways in regional Australia, such as South Durras.

The proposal involves the installation of CDMA and GSM mobile phone infrastructure and an equipment hut. One of the major considerations in selecting an appropriate site was to improve mobile phone coverage, capacity and call quality to the South Durras area, Durras Lake areas, foreshore, surrounds and major road connecting Durras to the Princes Highway. The basis of the proposed activity is to provide improved coverage, capacity and call quality to the areas of South Durras and North Durras and to major roads including Durras Road and to the Durras Lakes.

Private local individuals, businesses (including Durras Caravan Park and Murramarang Resort), Durras Progress Group and The Friends of Durras all support improved mobile services for Durras and surrounding areas. Mobile infrastructure in this area would greatly improve communications to the emergency services (Police, Rural Fire Services and Ambulance) and search and rescue.

The proposal is further justified in that alternative sites were considered but were considered inappropriate (detailed below).

3.1.1 Alternative Sites

Site investigations identified 4 sites as alternatives for the proposed telecommunications facility. These were;

1. Skid Ridge Road, off Durras Road

Though the site was generally preferred by local community groups, the site was unsuitable due to its location within the Murramarang National Park. This site was originally pursued and a REF prepared and submitted to DEC for determination. This site was rejected on the grounds that other potential sites were available outside of the National Park, under section 153D of the *National Parks and Wildlife Act 1974*.

Reasons this site is not suitable;

- Submission rejected by DEC.

2. Fern Drive, mid way along Fern Drive

This site was originally the preferred site, however nearby residents were concerned that the visual impact of this site would be high due to its proximity to the shoreline and

residential homes. Durras community groups raised opposition to this site based on their concerns relating to visual and environmental sensitivity. On these grounds the community groups in Durras opposed this site and suggested the Carls Mountain site and Skid Ridge Road site be investigated.

Reasons this site is not suitable;

- Visual sensitivity
- Environmental sensitivity, site is surrounded by sensitive environments
- Very close proximity to residential areas, within 100 metres
- Proximity to shoreline, within 250 metres
- Proximity to road and unauthorised public access
- Opposition from local community groups

3. Carls Mountain, Carls Mountain Road, Murramarang National Park

This site was seen as a possibility with support from the Durras Community and DEC (Durras community groups have approached Dave Cunningham, DEC Ranger regarding this site). This site would have been ideal if co-location was a possibility, as the site currently has a Vodaphone tower and antennae servicing the highway. However the Telstra radio frequency engineer, after making tests, concluded that this site would not provide the required coverage and quality of mobile services to Durras as stipulated by the 'Estens' Inquiry. Also an investigation of extending the tower height at this site was ruled out because Durras is shadowed by a number of ridges which this extension would be unable to clear. Therefore this site is unsuitable on technical grounds.

Reasons this site is not suitable;

- The location of the tower would not provide mobile coverage to Durras on technical grounds.

4. Big Bit Lookout, Big Bit Road, Benandarah State Forest

This site was seen as a possibility with support from the Durras Community. This site would have been ideal if co-location was a possibility, as the site currently has antennae servicing the Princes Highway and surrounds. However the Telstra radio frequency engineer, after making tests, concluded that this site would not provide the required coverage and quality of mobile services to Durras as stipulated by the 'Estens' Inquiry. Also an investigation of extending the tower height at this site was ruled out because Durras is shadowed by a number of ridges which this extension would not be able to clear. Therefore this site is unsuitable on technical grounds.

Reasons this site is not suitable;

- The location of the tower would not provide mobile coverage to Durras on technical grounds.

5. To do nothing

Because of the 'Estens' Inquiry the Federal Government will invest \$181 million in a comprehensive response that will ensure all Australians have access to adequate telecommunications services, enhance a range of existing services, and ensure that regional Australia continues to share equitably in the benefits of future technologies. The Inquiry recommended that the Government provide additional funding to support the capital costs of extending land-based mobile phone services to small population centres and key highways in regional Australia. In response the Government will spend an

additional \$15.9 million over four years to further extend coverage to small population centres and along highways in regional Australia.

A 'do nothing' option would not improve mobile phone service coverage to Durras as stipulated by the 'Estens' Inquiry and would mean that the Durras Community could miss out on an opportunity for mobile communication in the area. This may also affect other services such as emergency (police, fire and ambulance) and DEC activities in the area. Therefore the 'do nothing' alternative is not considered viable.

3.1.2 Consultation

Extensive consultation has been carried out with relevant stakeholders since the outset of the proposal to install a Telstra mobile phone telecommunications facility in the locality of Durras (since February, 2005).

These have included consultation with the following groups and Departments:

Dept Environment and Conservation (Parks and Wildlife Division) (DEC)

Dave Cunningham, Ranger, NSW Dept of Environment & Conservation (DEC), Parks and Wildlife Division (PWD) regarding siting of the proposed telecommunications facility in the Murrumbidgee National Park, which was rejected. Mr. Cunningham appeared supportive of the proposed site at the old tip following conversations by phone (31.05.06).

Dept of Lands

Ray Walton (of the Parramatta Office) has been liaised with and attended a site visit (17.03.06) and was in principle happy with the site. A letter giving Dept of Lands consent to lodge carry out the Project Application has been received and attached (Attachment 2).

Eurobodalla Shire Council

Property Manager Rob Addison was present at the site design visit (17.03.06) and confirmed that the proposal was located appropriately from a Council property viewpoint.

Local Community Groups

Representatives from local community action groups (including Friends of Durras and the Durras Progress Society) have been liaised with closely since their interest was recognised during initial site reconnaissance visits. Since that time (February 2005) representatives of the groups have assisted in locating a suitable site, by indicating the likelihood of community support for a given site.

A number of representatives were present during the site design visit (17.03.06) and indicated that they were happy with the proposed site at the old tip, given that it was located an acceptable distance from local residents and visual impacts would be low. Ian Edwards an adjacent landowner was initially concerned that the proposed headframe may be seen from his property, and requested that a balloon be flown (April 2006) at the site to determine the nature of any visual impacts (refer to Section 3.2.1.5 for visual impacts). The balloon was not visible from Mr. Edwards' property, and Mr. Edwards indicated that he was pleased with the proposed site.

3.2 General description

Telstra propose to install a fenced compound housing a telecommunications pole and equipment shelter to provide CDMA800 and GSM900 mobile phone coverage to the township of Durras, Durras Lakes and surrounds.

The proposed Durras telecommunications facility will include:

- i) Mounting the following to a 30m steel monopole on concrete foundations:
 - ii) 6 panel antennas (2 antennas per sector) at the 29.5m level for CDMA800 and GSM900 service,
 - iii) a 0.6m diameter solid parabolic antenna at the 27m level, and
 - iv) 2 TMA's behind the CDMA800 panel antennas (a total of 6 DDLNA's) mounted on the antenna mounting pipes.
- v) Construction of a Telstra equipment shelter (3.28m x 2.28m x 3.0m high) of 'pale eucalypt' colour conforming to ICS National Standard. Concrete slab footings would measure 4.4m x 2.6m x 0.15m),
- vi) Construction of a Telstra compound (10m by 5m) to be finished with crushed rock over geotextile membrane with timber border, surrounded by a 2.4m high security fence (coated in black PVC) with double access gates,
- vii) Installation of a 450mm wide galvanised cable tray and supports from equipment shelter to tower, and
- viii) Installation of a GPS antenna (approximately 0.16m diameter x 0.13m high) on the equipment shelter at 3.2m high.

The total proposed Telstra lease area is 50m² (10m x 5m).

Refer to the concept drawings provided as Attachment 1 for the concept drawings of the proposed telecommunication development at the Durras old tip site.

3.2.1 Access

3.2.1.1 Access route

Access would be via Fern Drive off Durras Road. This represents the shortest, most direct and easily trafficable route from Durras Road. The existing cleared easement is highly disturbed containing little or no vegetation and is generally over 4m wide (considerably wider in some places). A large clearing, possibly derived from old log dump or parking area associated with the tip, also exists at the beginning of Fern Drive (off Durras Road) that could be utilised for a vehicle parking and/or stockpile site. If utilised, it would appear that part of this area may fall within National Park Estate.

This track is currently inaccessible directly from Durras Road as a roadside drainage line has been constructed to limit access to the old tip site. Telstra propose to install a culvert in the existing roadside drainage and to reinstate this access. Telstra may also consider installing a lockable chain across track at the entrance to limit access to illegal dumpers or vandals.

An adjacent track also runs west from the cleared area (referred to above) to Durras Road, opposite Skid Ridge Road. This track would not be utilised due to its narrow nature, the presence of *Allocasurina littoralis* (Glossy Black-Cockatoo feed trees) and because it is located within the Murrumbidgee National Park.

To reiterate, as per Drawing S1 (attached), the "existing dirt access track" would only be used if required during the construction of the new construction access, shown as "blocked access" in the drawing. It is only likely to be utilised to ensure that 4wd vehicles are parked off the road, no clearing or works would occur along the "existing dirt access track" section.

3.2.1.2 Power supply

Power would be supplied to the site by Country Energy and does not form part of the proposal. From discussions with Country Energy it is expected that this would be supplied underground from the High Voltage powerlines that run parallel with Durras Road. Methodology is likely to include trenching along disturbed easements and along the Skid Ridge Road verge and underboring Durras Road.

3.2.1.3 Ongoing maintenance and access arrangements

The proposed telecommunications facility operates unattended. After installation, the proposed facility will require only routine maintenance (up to 5 times annually) limiting the need for personnel on site. This would generally be carried out using 4wd vehicles accessing the site via Fern Drive from the north.

3.2.1.4 Clearing

Clearing of vegetation would be restricted to the removal of overhanging limbs that may pose an OH&S hazard, hinder vehicle movement or place the facility at risk of damage from falling branches. All pruning is to be carried out in accordance with the *Australian Standard 4373: Pruning of Amenity Trees* and in accordance with relevant OH&S legislation and standards.

The proposed site has been chosen specifically to minimise impacting on native vegetation. The only large branches that would require removal are from the large trees immediately adjacent to the proposed compound site. At least one limb identified for removal contains a hollow, though it is unlikely that this is being utilised by any fauna. This will be assessed in detail within the Environmental Assessment report to be prepared once the Director General's Requirements are provided. Other limb removal would be superficial and unlikely to impact native vegetation or habitat values at the site.

3.2.1.5 Visual Impact

The potential visual impact of the proposed tower was considered in detail during the site selection process. A balloon (approximately 600mm diameter) was flown from the proposed site at a height of 35m, 5m above the height of the tower. The balloon was well shielded by trees and only just visible from Durras Road, between trees though only temporarily from passing vehicles. It is likely that the tower would not normally be visible from this location as the balloon is visually more prominent due to its red colour. The proposed tower would be grey, with a pale eucalypt coloured compound. As such, the visual impacts of the proposal would be low.

The site was viewed from a number of vantage points including the township of South Durras, along Durras Road, from Mr. Edwards' property (northeast of the site) from the along the coastal strip of Durras Lake Road, and from Durras Beach dunes (due east of the site). The balloon was **not** visible from these locations.

4 KEY ISSUES

Key issues have been considered to be those issues potentially able to generate moderate to high level impacts and are therefore of greater priority in terms of investigation and mitigation of impacts. These have been considered relative to the scale of the works. They will require additional investigation/consultation and will be dealt with more fully in the Environmental Assessment report.

4.1 Summary of key issues

The sources of impact and proposed strategy for investigation are described for each item of moderate to high priority, in Table 4.1, below.

Table 4.1 Key issues (those of moderate to high priority).

Issue	Sources of impact	Strategy
Flora (biodiversity)	<ul style="list-style-type: none"> ▸ Clearing of vegetation during construction and maintenance. ▸ Impact on hollow bearing trees. ▸ Potential for spread of weeds through soil disturbance during construction. ▸ Impact on threatened species or endangered ecological communities. 	Further investigation via biodiversity assessment including desktop literature review and onsite field work.
Fauna (biodiversity)	<ul style="list-style-type: none"> ▸ Loss or modification of habitat (e.g. tree hollows, forage habitat such as Glossy Black-Cockatoo feed trees). ▸ Impact on threatened species. ▸ Direct impact of construction and operation on fauna. 	Further investigation via biodiversity assessment including desktop literature review and onsite field work.
Archaeology & Aboriginal heritage values	<ul style="list-style-type: none"> ▸ Potential to impact archaeological and Aboriginal heritage values and items. 	Further investigation via archaeological assessment including site assessment by representatives of the Local Aboriginal Land Council to determine the nature and extent of any sites of archaeological or Aboriginal heritage.

4.2 Proposed investigation strategies

The proposed site has already been visited and the risk of potential impacts has been identified but not assessed in detail. The following sections refer to issues that have the potential to be moderate to high, dependant on the findings and recommendations of the Environmental Assessment report (EA). These include biodiversity impacts (flora and fauna) and archaeology impacts. Investigations associated with the preparation of the EA would be guided by the Director General's Requirements for the EA and would involve liaison with relevant authorities.

4.2.1 Biodiversity Assessment (including threatened fauna and flora)

The biodiversity assessment would include a desktop analysis of threatened fauna and flora (including ecological communities) under the *Threatened Species Conservation Act 1995* and *Environmental Protection & Biodiversity Conservation Act 1999* from the relevant databases (National Parks and Wildlife Atlas and EPBC Database) based on potential habitat that occurs at the site, identified during the site assessments.

The proposal would not impact on any Endangered Ecological Communities. As the impact of proposal on native vegetation is only limited to the removal of several branches, a comprehensive general flora assessment (or species list) is not considered necessary.

Direct impact to fauna habitat would also be low given the lack of clearing proposed. These impacts are likely limited to the removal of the hollow bearing limbs which could provide habitat for a number of threatened fauna. Indirect impacts are likely to be low but would be considered in the EA.

Fieldwork would be required to determine if any threatened fauna are likely to utilise the trees adjacent to the site, particularly those with hollows identified for removal. Fauna survey techniques proposed during the assessment would include:

- Recording of bats ultrasonic calls for analysis over a period of 1 nights for a minimum of 1.5 hrs focussed on the hollow bearing trees;
- Stag watch and on dusk for a period of 3 people hours (2 observers) to determine if the trees immediately adjacent to the site (in particular those containing hollows) provide habitat to any entering or emerging fauna.

4.2.2 Archaeology

As the proposed site is contained in areas with a history of disturbance and restricted to tracks within or adjacent to the old tip, the engagement of an archaeologist is not considered to be necessary. It is recognised however that the site may still have the potential to have significance to the local Aboriginal community and may contain Aboriginal artefacts of Aboriginal cultural heritage or archaeological value, e.g. on the track verges.

Aboriginal community consultation would be carried out through via contact with and employment of the representative Batemans Bay Local Aboriginal Land Council (LALC). The LALC would carry out a site survey to determine the potential of the site to contain artefacts/places of aboriginal significance and whether or not any artefacts are present.

If any suspected artefacts are located at the site during construction, works would be halted immediately and the LALC and DEC notified.

5 ISSUES RELATING TO LOW OR INDIRECT IMPACTS

It is considered that the proposal has the potential to generate a range of environmental impacts. Many of these however are likely to be caused indirectly during the construction of the proposed facility or only have the potential for low environmental impact, considering the scale and nature of the proposal.

The mitigation of these impacts expected to be of a low/indirect nature would be achieved through Telstra implementing the environmental safeguards that will be developed in the preparation of the EA (which would include, but not be limited to, the examples below – Table 5.1). It is anticipated that no further studies or consultation (other than a desk top analysis) would be required for these potential impacts.

Issues that are identified as having the potential for low or indirect environmental impacts are summarised in Table 5.1.

Table 5.1 Summary of environmental impacts considered to be low or indirect nature

Issue	Sources of impact	Environmental safeguards
Climate, air impacts and noise	<ul style="list-style-type: none"> ▸ Dust and emissions generated during excavation, transport of machinery during the construction period. ▸ Operation of equipment. ▸ Transportation of equipment and materials to and from the site. 	<ul style="list-style-type: none"> ▸ Noise attenuators would be fitted to all plant and machinery used during the works and minimised through the use of high quality equipment and best practice management objectives. ▸ Construction works would be restricted to the following times: Monday to Friday 7 am to 6 pm, and Saturday 8 am to 1 pm.
Soils and landforms	<ul style="list-style-type: none"> ▸ Soil disturbance during excavation of footings. ▸ Erosion of disturbed soils. ▸ Soil compaction from the transport of heavy equipment. 	<ul style="list-style-type: none"> ▸ The works site should be delineated by temporary site fencing. ▸ Excavated soils would be stockpiled and reused where possible (e.g. for use along the access track). The stockpile sites would be restricted to disturbed hard stand areas outside of any natural drainage paths. Excess material would be transported to an approved waste transfer station or landfill site on completion of the works. ▸ Works would be staged to avoid leaving soils exposed for long periods of time. ▸ Refuelling of machinery would take place in a bunded, hard stand area, away from drainage lines. ▸ Peripheral vegetation and soils would not be impacted unless absolutely necessary. ▸ Concrete would not be batched on site. ▸ Any concrete washout material including excess concrete and construction material should be removed to an appropriate site (eg. managed wash down area), and not disposed of at the site. ▸ Concreting would only take place during stable weather conditions, when there is a low risk of a rainfall event, to ensure concrete wash would not flow over the surrounding vegetation.

Issue	Sources of impact	Environmental safeguards
Hydrology (water quality)	<ul style="list-style-type: none"> ▸ Mobilisation of sediment and pollutants generated during excavation, transport of machinery. ▸ Risk of oil leaks during operation and maintenance. 	<ul style="list-style-type: none"> ▸ Appropriate erosion and sediment controls, in line with the "Blue Book" (Landcom, 2004), should be installed at the site in key areas to prevent turbid runoff downslope. ▸ Sediment fencing placed along the contour downslope of all expected runoff points. ▸ Hay bales would not be used as they encourage weed infestation. ▸ Sediment fences and other temporary sediment and water quality control devices will be inspected daily and maintained so that they remain effective at all times. Any failure of the system shall be immediately repaired and reported to the Site Supervisor so that, if required, modifications can be made and recorded. They would be removed on completion of the works. ▸ Natural banks and vegetation would not be impacted on where possible. ▸ Any chemicals, including hydrocarbons and herbicides, would be stored in a bunded, hard stand area, away from any water courses or natural depressions or drainage lines. ▸ Works would avoid times of predicted rainfall.
Land uses	<ul style="list-style-type: none"> ▸ Impact on onsite and adjacent land uses during the construction phase. 	<ul style="list-style-type: none"> ▸ Restrict works to the proposed delineated works site. ▸ An appropriate traffic management program (to be prepared by Telstra or its contractors) would be implemented (including the use of signs) to the requirements of the relevant road authority.
Economic Impact	<ul style="list-style-type: none"> ▸ Local employment would be created during construction - net economic gain to the local community. 	<ul style="list-style-type: none"> ▸ Ensure that no adverse impacts to local infrastructure occurs.
Safety	<ul style="list-style-type: none"> ▸ Potential to cause injury. 	<ul style="list-style-type: none"> ▸ Hazards would be minimised by ensuring that works are completed in accordance with relevant standards and O,H&S guidelines. ▸ The provision of appropriate garbage receptacles, and disposal of materials at the local land fill or recycling depot. ▸ The provision of toilets (e.g. portaloos) for construction workers.
Visual	<ul style="list-style-type: none"> ▸ Loss of visual amenity. 	<ul style="list-style-type: none"> ▸ Rehabilitated of disturbed soils would be carried out as soon as possible, if required. ▸ Revegetation and rehabilitation works would utilise plant species that are indigenous to the immediate area, if required. ▸ The works site should be kept clean and orderly at all times, ensuring that no waste is left at the site following completion of the works.
Cumulative Impacts	<ul style="list-style-type: none"> ▸ Combined impact with other proposed and existing developments. 	<ul style="list-style-type: none"> ▸ N/A

6 AUTHORS

Authors	Experience
Nicholas Graham-Higgs Bachelor of Applied Science	<p>Nick has worked as an environmental planning consultant since 1992, specialising in environmental impact assessment and natural resource management. His work demands an in-depth knowledge of current planning and environmental legislation coupled with a comprehensive understanding of development-related impacts, especially those relating to the provision of recreational facilities. Nicholas has acquired his knowledge in this field over the last 17 years, during which he has worked with a number of land management organisations within and outside Australia.</p> <p>Much of the work undertaken has been within sensitive areas, including major works for infrastructure development; the augmentation of water supplies at Perisher Range and Adaminaby, environmental assessment for a wind farm on the Snowy Plains, near Kosciuszko National Park.</p>
Shane Priddle Bachelor of Marine Science	<p>Since commencing work with nghenvironmental, Shane has prepared and assisted in the preparation of a number of environmental impact assessment, biodiversity and management documents, for clients such as Telstra, Siemens Thiess, Dept of Commerce, Country Energy, RTA, NSW Ambulance Service, Snowy Hydro, Eurobodalla and Bega Valley Shire Councils and the Parks & Wildlife Division of the Department of Environment and Conservation (DEC). A notable proportion of Shane's time is dedicated to assisting Telstra in providing environmental planning advice and services, to facilitate the process associated with the installation of mobile phone towers throughout southern New South Wales and northern Victoria.</p> <p>Shane has had field experience in environmental impact assessments, basic auditing and biodiversity assessments including terrestrial fauna and estuarine flora and fauna surveys. He has also had experience in the application of GIS (Geographic Information Systems) in the area of resource management, carrying out the majority of nghenvironmental's in-house mapping. This has included data collection, manipulation, analysis, interpretation and map generation for a variety of projects for both government and non-government organisations.</p>

Contact: Shane Priddle

nghenvironmental
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 Bega NSW 2550
 Phone: (02) 64947771
 Fax: (02) 64947773
 Email: shane@nghenvironmental.com.au
 Web: www.nghenvironmental.com.au

Attachment 1

Concept Drawings

Site Specific Notes

Equipment Cabin

Type: Low Impact MLIS2 Hut
Size (m): 3.280 (L) x 2.280 (W) x 3.0 (H)
Base Type: Steel Frame
Wall Type: Steel Sandwich Panel
Support Type: Concrete Slab
Colour: Pale Eucalypt

Structure

Type: Concrete Pole
Model No.: Rocla 'SR2-H30-540'
Size At Top: Ø 540mm
Size At Base: Ø 990mm
Height: 30.00m
Colour: Concrete

Headframe

Type: Standard Headframe
Model No.: N/A
Colour: Galvanised Finish

Antennas

Colour: Natural Product Colour

Antenna Mounts

Type: Antenna Pipe Mount
Colour: Galvanised Finish

Antenna Access

Telstra: By Cherry Picker
Others: By Climbing Pegs & Lad-Saf

Feeder Cable Ladder

Type: Nema 20B
Size: As shown on drawing
Colour: Galvanised Finish

Site Access

Turn left from Durras Drive to Access Track

Power Supply

Indicative power supply (3 phase/63 Amp) from existing street supply, metered separately and/or as directed by local Supply Authority.
Refer to Easement Detail Survey Plan N27864 Sheet G3.2 Issue 1.

Existing Services

Services, where shown are indicative only. Location of all relevant existing services shall be identified and confirmed prior to commencing work. Contractor to liaise with relevant authorities for directions and permits required. Dial 1100 before you dig.

Fibre Link

Indicative Fibre Link Route Shown. Exact Route to be confirmed after detailed investigation.

Services Legend

- F F Fibre Link Route
- AE AE Above ground Electrical Supply
- UE UE Below ground Electrical Supply
- HV HV High Voltage Electrical Supply
- W W Water Supply
- S S Sewer Line
- SW SW Storm Water
- T T Below ground Feeder Cables

Proposed Telstra Antenna Configuration Table

Antenna										Feeder		
Sector	No.	System	Status	Antenna Type	Size H x W x D	Orientation	Tilt		C/L Height	Qty	Length	Type
							Elec	Mech				
1	A01	CDMA850	PROPOSED	1 x Argus CPX310DR-CI Panel	2620 x 370 x 150	40°TN	4°	0°	29.50m A.G.L.	2	APPROX. 33m	ANDREW VXL5-50
2	A02	CDMA850	PROPOSED	1 x Argus CPX310DR-CI Panel	2620 x 370 x 150	140°TN	4°	0°	29.50m A.G.L.	2	APPROX. 33m	ANDREW VXL5-50
3	A03	CDMA850	PROPOSED	1 x Argus CPX310DR-CI Panel	2620 x 370 x 150	270°TN	3°	0°	29.50m A.G.L.	2	APPROX. 33m	ANDREW VXL5-50
1	A04	GSM900	PROPOSED	1 x Argus CPNX310DR-CF Panel	2620 x 370 x 155	40°TN	4°	0°	29.50m A.G.L.	2	APPROX. 33m	ANDREW VXL5-50
2	A05	GSM900	PROPOSED	1 x Argus CPNX310DR-CF Panel	2620 x 370 x 155	140°TN	4°	0°	29.50m A.G.L.	2	APPROX. 33m	ANDREW VXL5-50
3	A06	GSM900	PROPOSED	1 x Argus CPNX310DR-CF Panel	2620 x 370 x 155	270°TN	3°	0°	29.50m A.G.L.	2	APPROX. 33m	ANDREW VXL5-50
-	A07	GPS	PROPOSED	1 x Hewlett Packard HP58510A Omni	Ø160 x 130	0°TN	-	-	3.50m A.G.L.	1	APPROX. 1m	ANDREW LDF2-50
-	A08	Network to T.B.A.	PROPOSED	1x Andrew VHP2-105 Solid Parabolic	Ø600 x 640 x 600	T.B.A.	-	-	27.00m A.G.L.	1	APPROX. 30m	RFS HCF12-50

① Denotes Telstra antenna sector as shown on sheet S2

Telstra DDLNA Configuration

Sector	Antenna No.	System	Type	Size H x W x D	Qty
1	A01	CDMA850	Triax CY166	320 x 250 x 155	2
2	A02	CDMA850	Triax CY166	320 x 250 x 155	2
3	A03	CDMA850	Triax CY166	320 x 250 x 155	2

Attach DDLNAs to antenna mounting pipe behind antenna using stainless steel straps

M.G.A. Co-Ordinates

Proposed C of Concrete Pole

Zone	56
Easting (m)	254491.5 (MGA)
Northing (m)	6050816.5 (MGA)
Latitude (S)	35° 39' 27.25" (GDA)
Longitude (E)	150° 17' 12.67"(GDA)
A.H.D. (R.L.)	26.1m

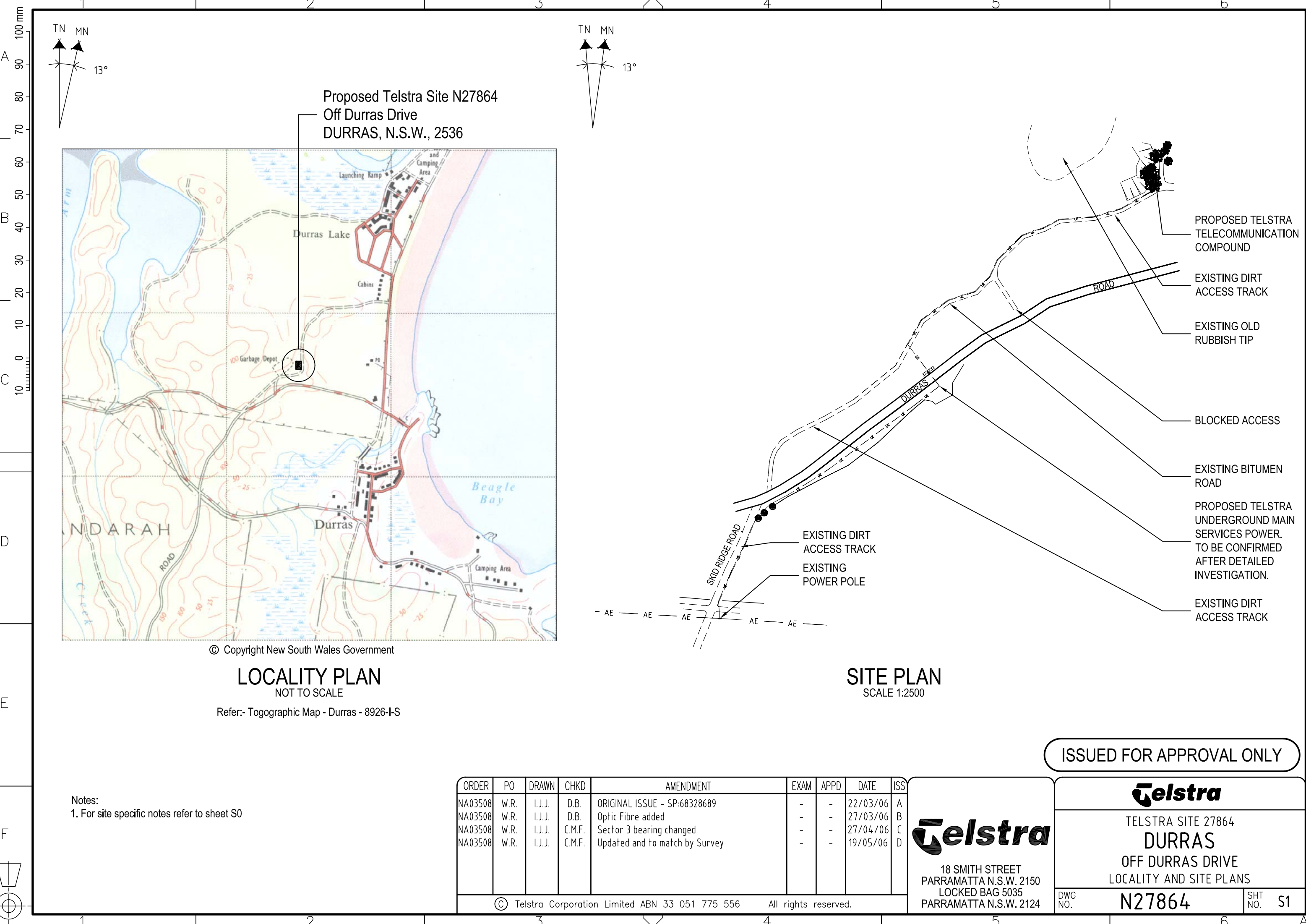
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- General Notes:
- All dimensions are in millimetres unless specified otherwise.
 - All dimensions to be checked on site.
 - This drawing set is a concept only and is issued for comment. It is not a detailed survey / structural drawing and therefore could be subject to change.

ORDER	PO	DRAWN	CHKD	AMENDMENT	EXAM	APPD	DATE	ISS
NA03508	W.R.	I.J.J.	D.B.	ORIGINAL ISSUE - SP:68328689	-	-	22/03/06	A
NA03508	W.R.	I.J.J.	D.B.	Optic Fibre added	-	-	27/03/06	B
NA03508	W.R.	I.J.J.	C.M.F.	Sector 3 bearing changed	-	-	27/04/06	C
NA03508	W.R.	I.J.J.	C.M.F.	Updated and to match by Survey	-	-	19/05/06	D
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Telstra
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Telstra	
TELSTRA SITE 27864 DURRAS OFF DURRAS DRIVE SITE SPECIFIC NOTES	
DWG NO.	SHT NO.
N27864	S0

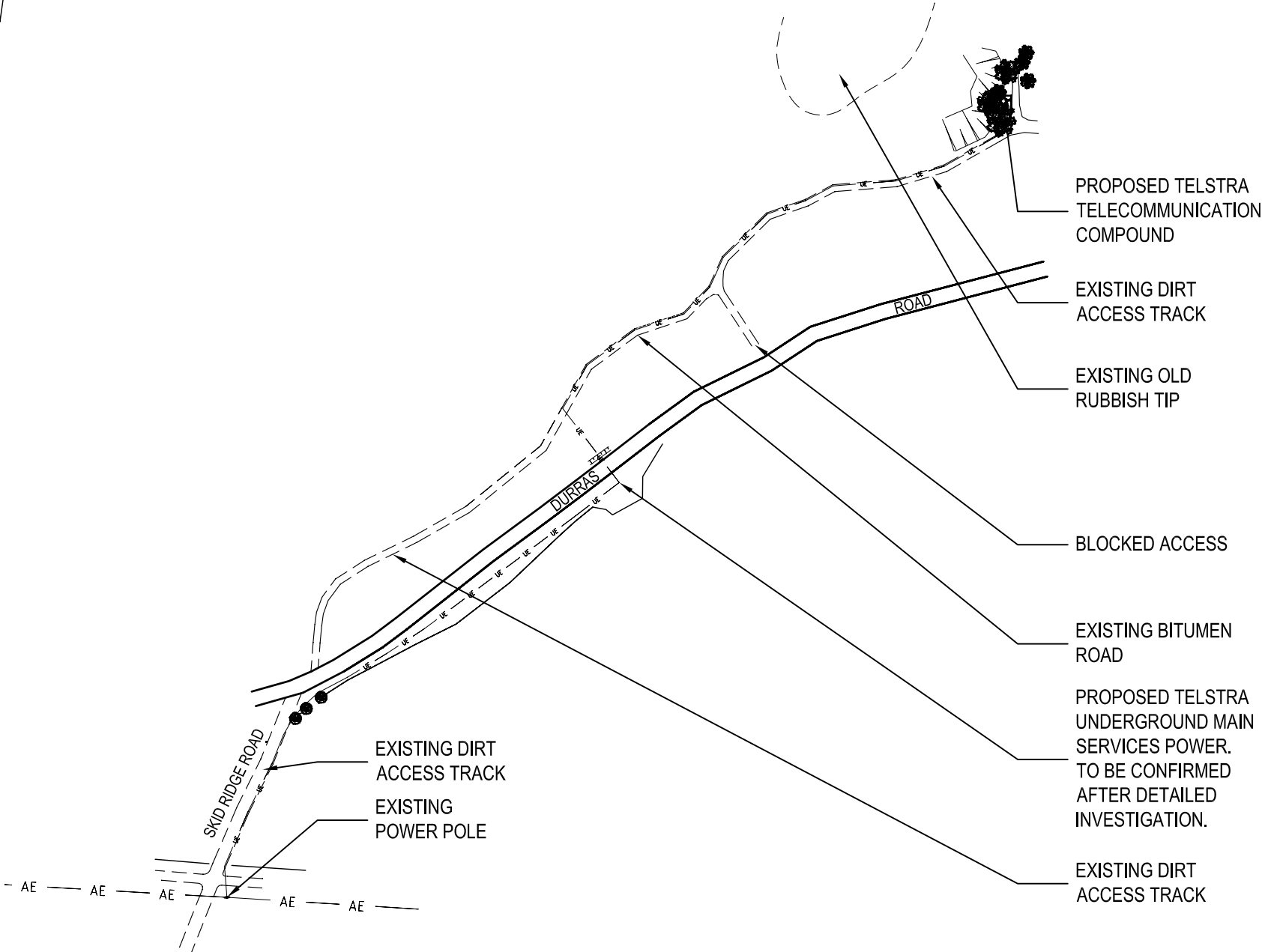
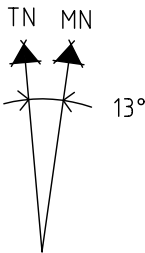


Proposed Telstra Site N27864
Off Durras Drive
DURRAS, N.S.W., 2536

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LOCALITY PLAN
NOT TO SCALE

Refer:- Topographic Map - Durras - 8926-I-S



SITE PLAN
SCALE 1:2500

Notes:
1. For site specific notes refer to sheet S0

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NA03508	W.R.	I.J.J.	D.B.	ORIGINAL ISSUE - SP:68328689	-	-	22/03/06	A
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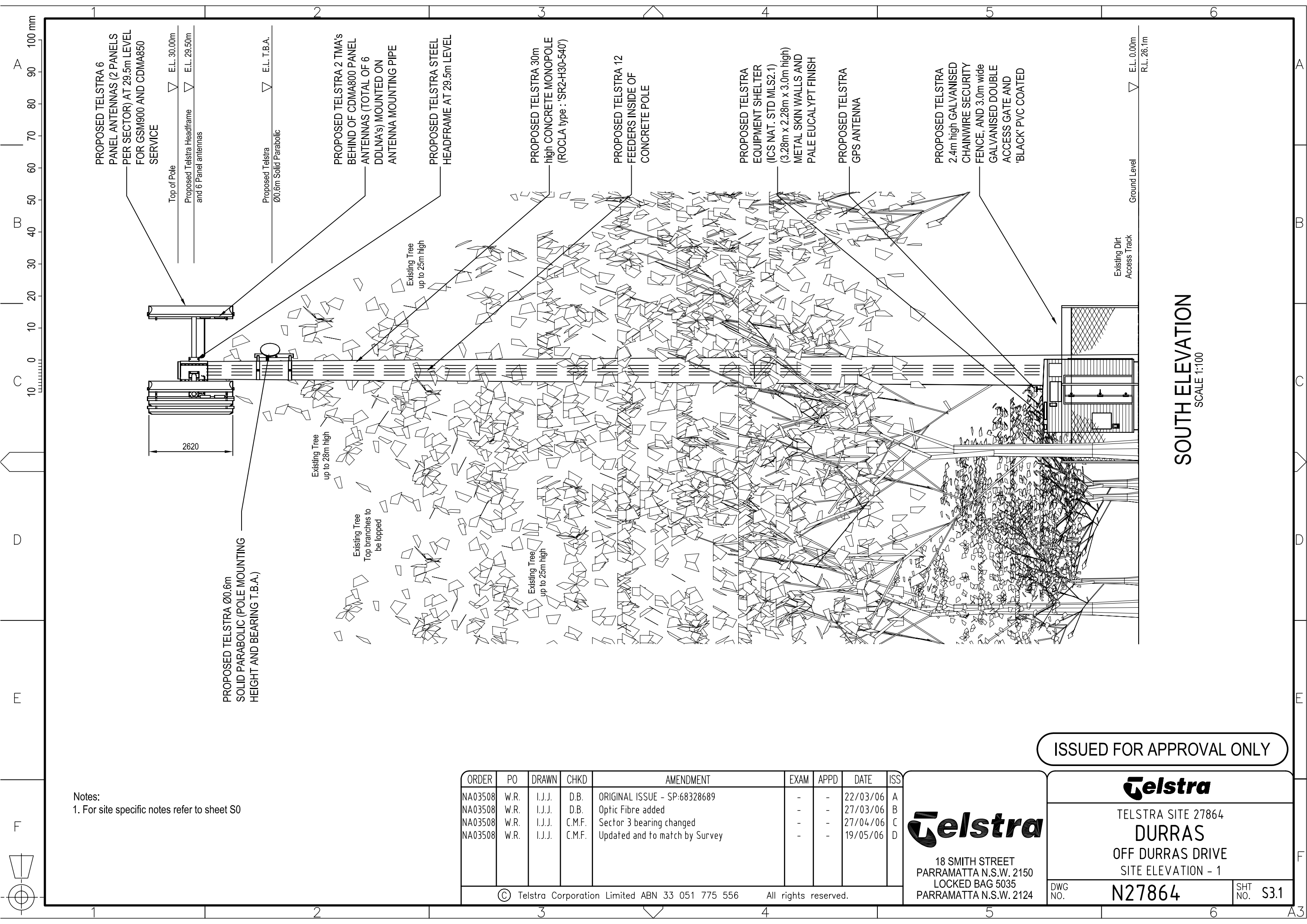
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TELSTRA SITE 27864
DURRAS
OFF DURRAS DRIVE
LOCALITY AND SITE PLANS

DWG NO. **N27864** SHT NO. **S1**



Notes:
1. For site specific notes refer to sheet S0

ORDER	PO	DRAWN	CHKD	AMENDMENT	EXAM	APPD	DATE	ISS
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NA03508	W.R.	I.J.J.	D.B.	Optic Fibre added	-	-	27/03/06	B
NA03508	W.R.	I.J.J.	C.M.F.	Sector 3 bearing changed	-	-	27/04/06	C
NA03508	W.R.	I.J.J.	C.M.F.	Updated and to match by Survey	-	-	19/05/06	D
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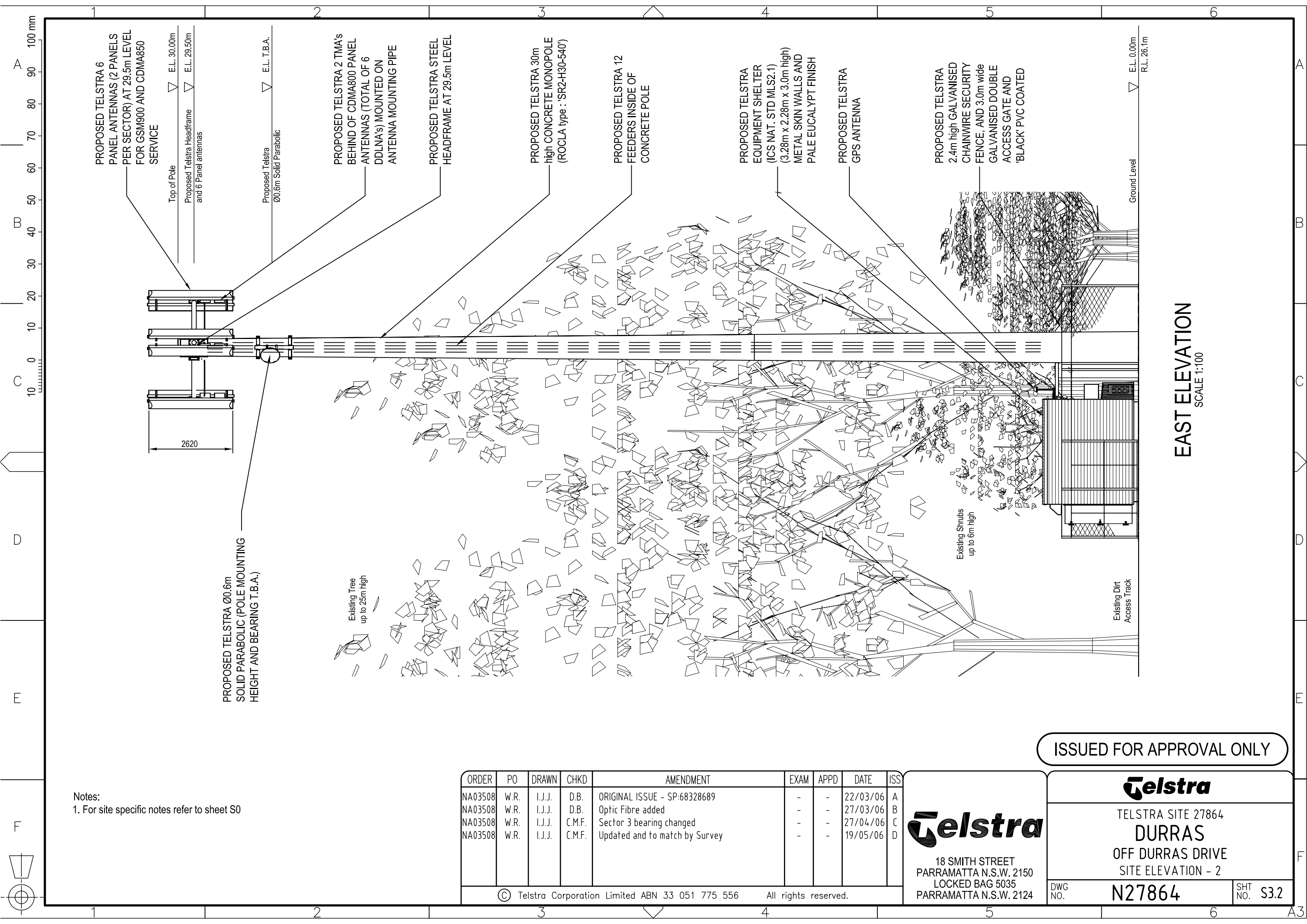
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TELSTRA SITE 27864
DURRAS
OFF DURRAS DRIVE
SITE ELEVATION - 1


DWG NO. **N27864**

SHT NO. **S3.1**




Notes:
1. For site specific notes refer to sheet S0

ORDER	PO	DRAWN	CHKD	AMENDMENT	EXAM	APPD	DATE	ISS
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NA03508	W.R.	I.J.J.	D.B.	Optic Fibre added	-	-	27/03/06	B
NA03508	W.R.	I.J.J.	C.M.F.	Sector 3 bearing changed	-	-	27/04/06	C
NA03508	W.R.	I.J.J.	C.M.F.	Updated and to match by Survey	-	-	19/05/06	D
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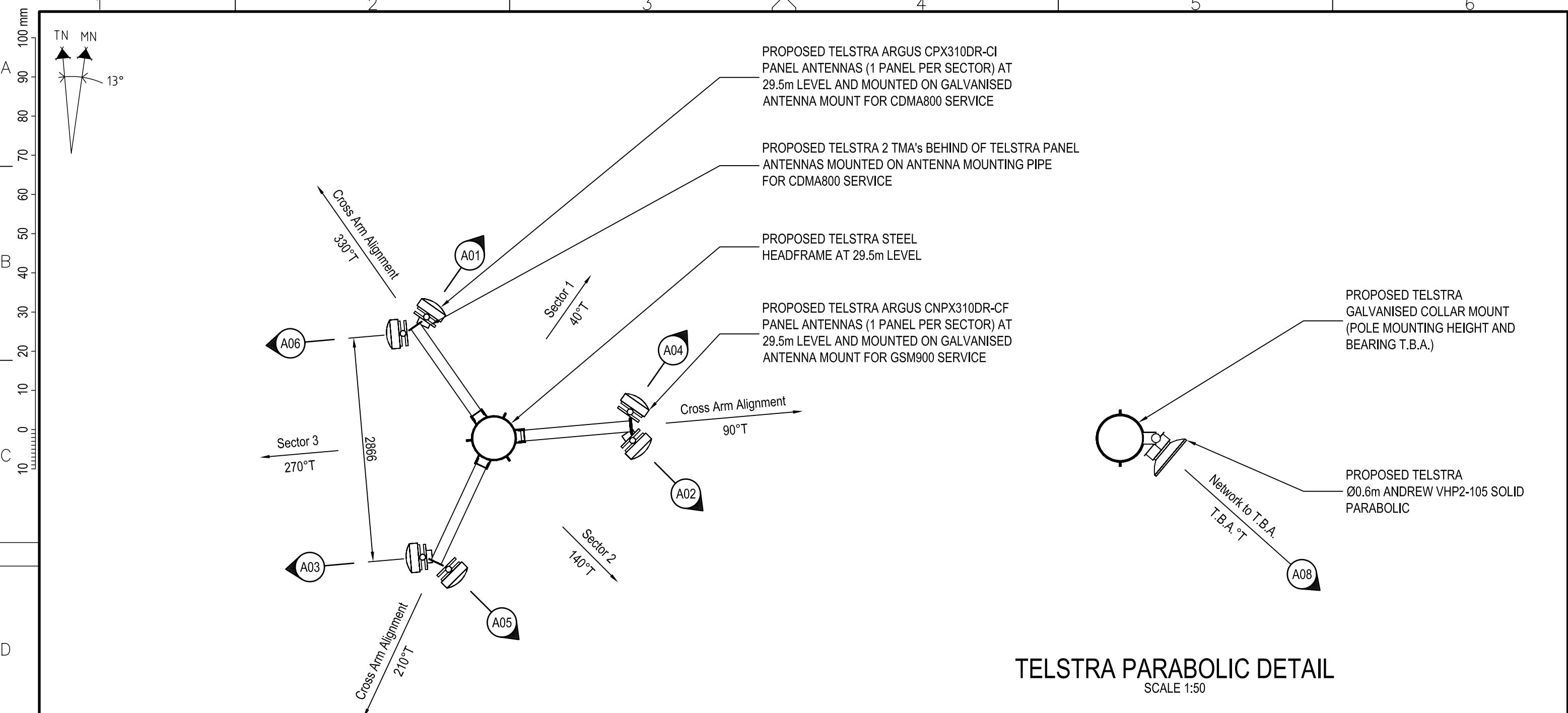
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TELSTRA SITE 27864
DURRAS
OFF DURRAS DRIVE
SITE ELEVATION - 2

DWG NO. **N27864**

SHT NO. **S3.2**




TELSTRA HEADFRAME DETAIL AT 29.5m LEVEL
SCALE 1:50

TELSTRA PARABOLIC DETAIL
SCALE 1:50


Notes:
1. For site specific notes refer to sheet S0

ORDER	PO	DRAWN	CHKD	AMENDMENT	EXAM	APPD	DATE	ISS
NA03508	W.R.	I.J.J.	D.B.	ORIGINAL ISSUE - SP:68328689	-	-	22/03/06	A
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TELSTRA SITE 27864
DURRAS
OFF DURRAS DRIVE
ANTENNA LAYOUT

DWG NO.	N27864	SHT NO.	S4
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Attachment 2

Dept of Lands consent letter

Mr Shane Priddle
Project Officer
ngh environmental
PO Box 470
BEGA NSW 2550

CROWN LANDS NSW
Sydney Metropolitan Office
Level 12, 10 Valentine Ave
P.O. Box 3935
PARRAMATTA 2124
Telephone: 8836 5361
FAX: 8836 5362

17 July, 2006

Our ref: MN06H15

Dear Mr Priddle

**REQUEST FOR OWNER'S CONSENT FOR TELECOMMUNICATION FACILITY AT
SOUTH DURRAS**

I refer to previous correspondence regarding the proposal by Telstra Corporation Limited to the installation of telecommunication equipment on the Crown road adjoining lot 169, DP 755904 comprising Reserve 86770 for the purpose of "Rubbish Depot".

Upon investigation of the application, there are **no objections to the lodgement of a Project Application with the Department of Planning.**

A copy of this letter must accompany the lodgement of the Application.

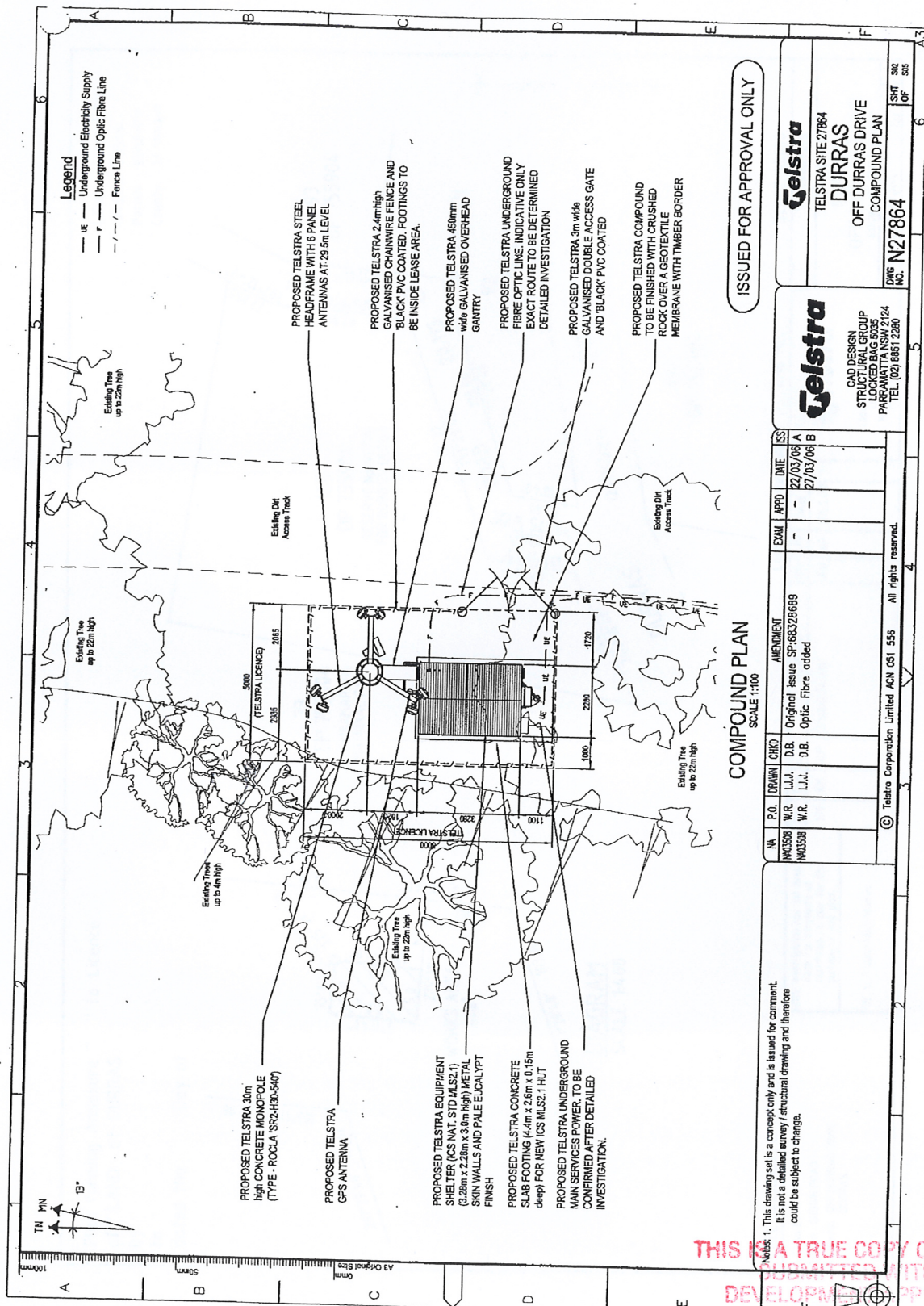
The attached Consent is subject to the following:-

1. It does not imply or presume the Minister's approval or support of the proposal and is granted in accordance with the Environmental Planning and Assessment Act, 1979, as amended.
2. Prior to any final approval by the Minister, it will be necessary to produce evidence that the proposal is lawful and meets the requirements of all relevant authorities.
3. Any approval by the Minister may be subject to additional requirements to those imposed by other authorities.
4. This Consent, which is valid for a period of up to six (6) months from the date stamped hereon, is for attachment to the Development Application and remains valid until the application is determined by Council or the Land and Environment Court or the Consent is withdrawn by the Minister in writing.
5. The Consent to the lodgement of a Development Application in respect of the affected Crown land is given only to enable the investigation and the planning process to proceed.

Yours faithfully

A handwritten signature in black ink, appearing to read 'Ray Walton', with a stylized, cursive script.

Ray Walton
Project Leader
Communication Sites Project
Crown Lands NSW



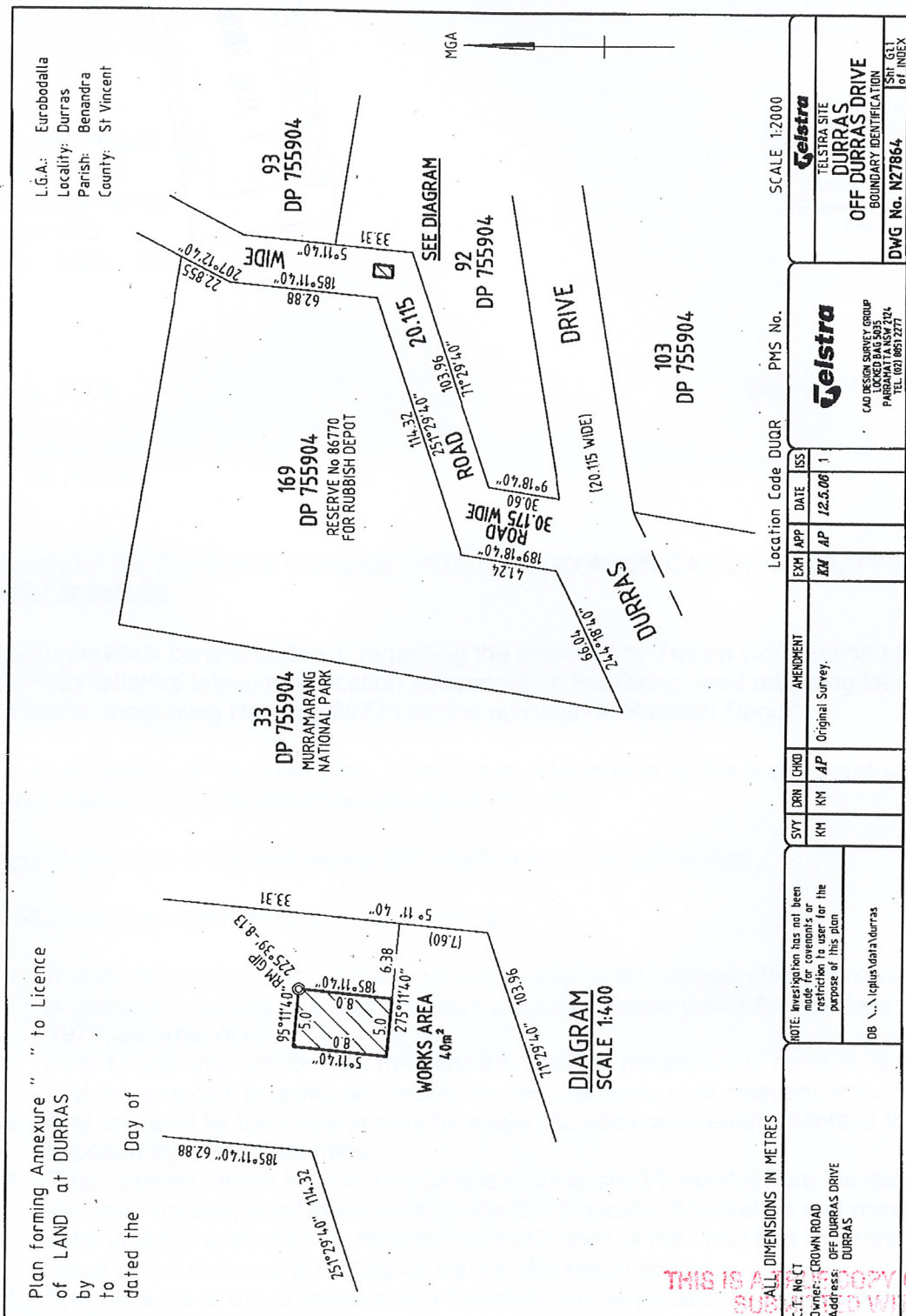
THIS IS A TRUE COPY OF THE PLAN
SUBMITTED WITH THE
DEVELOPMENT APPLICATION
FOR OWNER'S CONSENT
TO LODGEMENT

TO LODGEMENT
Bulldozer

Signed by the
Delegate of the Minister Administering
the Crown Lands Acts

Date: 17 JULY 2006

DIAGRAM "A"



A4