



Review of Environmental Factors REF2016/004

>> *Construction of Roundabout – Skennars Head Road and The Coast Road*

Project File PF2016/0004

20 September 2016

ballina
shire council



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Construction of Roundabout – Skennars Head Road and The Coast Road

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Roundabout Intersection of The Coast Road & Skennars Head Road

1. Proposal Identification & Description

1.1 Name and Location of Proposed Activity

The construction of a roundabout at the intersection of Skennars Head Road and The Coast Road Skennars Head

Plans (Refer Appendix D)

Description of Location

Approximately 60m north of the current channelized intersection at Skennars Head Road and The Coast Road located on existing road reserve and on part Lot 12 DP1181479. It was resolved by Council on 25/08/2016,

- That the Council approves the proposed road widening subdivision of Lot 12 DP 1181479 to facilitate the road upgrade at the intersection of The Coast Road and Skennars Head Road, as per the contents of this report.
- That the Council authorises the Council seal to be attached to the subdivision plan and documents necessary to undertake the road widening.

1.2 Council Area

Ballina Shire Council, Skennars Head

1.3 Source of Funding

RMS Safer Roads Program, Project S/09038. \$1,997,095.00 2016\2017.

1.4 Detailed Description of Scope of Works

- Construct a two lane roundabout at the intersection Skennars Head Road and The Coast Road

It is proposed to construct a two lane roundabout at the intersection of Skennars Head Road and The Coast Road. The proposed roundabout has been located approximately 60m to the north of the existing intersection and offset to the west. This was undertaken to flatten the downhill approach gradient from the south to approximately 5%. Concrete medians and splitter islands are to be installed. The island on the southern approach is extended past Rocky Point Road to ensure it is left in and left out only. A street lighting design is currently being undertaken using a V3 category in accordance with AS/NZS 1158. Aero screen lights have been stipulated to be used as these have a flush glass cover and emit no or absolute minimum upward light. This is to minimise the effect of the lighting to residences located above the site.

Stormwater is to be collected via a series of pits and pipework and conveyed to a detention basin on the south western side of the intersection. The detention Basin has batter slopes of between 1 in 5 and 1 in 6 and is to be turfed to allow council staff to keep it mown on a regular basis. From the detention basin the stormwater will be piped through the existing piped network on the southern side of Skennars Head Road and will discharge into the existing drainage channel running behind Shennars Head. It is proposed that no additional runoff will be directed towards the SEPP 14 wetland.

To achieve the desired gradients and the realignment of the intersection the site has to be filled with approximately 18,000m³ of imported fill to bring up the levels to construct the roundabout.

Methodology

To undertake the construction the site has to be filled to sub-grade level. A limit of works will be pegged on site with this being approx. 6m outside the batter limits, on the north western side of the project, to allow for access and maintenance of the sediment control. On the eastern side the site will be cleared to the existing road boundary and sediment control measures installed. Once all sediment control measures are in place the site will be cleared and the top soil stripped and stockpiled. The fill material will then be brought into the work site and compacted in layers of approx. 150mm. This material is to be imported from over burden stockpiles at existing quarries, and excess cut from works being undertaken at the Skennars Head sports fields. Once the imported fill is brought up to subgrade level the batters will be hydro mulched and services will be installed. These include stormwater pipework and cabling conduit for the street lighting. The pavement subgrade will be placed and the new kerb lines constructed. Once the kerb lines are installed the base coarse pavement will be placed graded and rolled. The lights will be installed while the pavement is being placed and rolled. Once this is completed the concrete median islands will be installed then the AC placed and linemarking undertaken to finish the project.

During the project traffic will be disrupted due to the nature of the works with approximately 2m of fill to be placed over sections of the existing road. Traffic will be managed by completing the off line filling works first and traffic using the existing road pavement. Once the offline works reach a point where traffic can then be diverted over the new work the fill material will be placed over the existing pavement. Traffic control will be in accordance with the current Traffic Control at Work Sites Manual and prepared by a current Design and Audit RMS certified personal.

1.5 Timeframe

Work is due to commence in February 2017 and continue to June 2017

2. Statutory Position

2.1 How Does the Activity Constitute a Part V Project?

The proposed works are exempt from requiring a Development Application and therefore assessment under Part IV of the Environmental Planning & Assessment Act 1979 by virtue of the following:

State Environmental Planning Policy (Infrastructure) Division 17 Roads & Traffic, Subdivision 1 Road Infrastructure Facilities, Clause 94(1) and 94(2)(c).

The proposed roadworks are being carried out by or on behalf of Council and Roads & Maritime Services and fall within the provisions of this Division of the Infrastructure SEPP and therefore are permissible without the need for consent.

The works are also considered alterations and additions to an existing road (being pavement rehabilitation and widening works) for the purposes of the Infrastructure SEPP.

2.2 Applicable Legislation

State Environmental Planning Policy (Infrastructure) 2007

94 Development permitted without consent—general

- (1) Development for the purpose of a road or road infrastructure facilities may be carried out by or on behalf of a public authority without consent on any land. However, such development may be carried out without consent on land reserved under the National Parks and Wildlife Act 1974 only if the development:

- (a) is authorised by or under the National Parks and Wildlife Act 1974, or
- (b) is, or is the subject of, an existing interest within the meaning of section 39 of that Act, or
- (c) is on land to which that Act applies over which an easement has been granted and is not contrary to the terms or nature of the easement.
- (2) In this clause and clause 96, a reference to development for the purpose of **road infrastructure facilities** includes a reference to development for any of the following purposes if the development is in connection with a road or road infrastructure facilities:
 - (a) construction works (whether or not in a heritage conservation area), including:
 - (i) temporary buildings or facilities for the management of construction, if they are in or adjacent to a road corridor, and
 - (ii) creation of embankments, and
 - (iii) extraction of extractive materials and stockpiling of those materials, if:
 - (A) the extraction and stockpiling are ancillary to road construction, or
 - (B) the materials are used solely for road construction and the extraction and stockpiling take place in or adjacent to a road corridor, and
 - (iv) temporary crushing or concrete batching plants, if they are used solely for road construction and are on or adjacent to a road corridor, and
 - (v) temporary roads that are used solely during road construction,
 - (b) emergency works, or routine maintenance works, carried out on an existing public road or on land that is adjacent to such a road (including on land to which State Environmental Planning Policy No 14—Coastal Wetlands or State Environmental Planning Policy No 26—Littoral Rainforests applies but, if they are on such land, only if any adverse effect on the land is restricted to the minimum possible to allow the works to be carried out),
 - (c) alterations or additions to an existing road (such as widening, duplication or reconstruction of lanes, changing the alignment or strengthening of the road),
 - (d) environmental management works, if the works are in or adjacent to a road corridor.

3 Consultation

- 3.1.1.1 Consultation with Stakeholders, Landholder Negotiations and Liaison with State Agencies has been undertaken with the following outcomes.

The application for funding was made to the Roads and Maritime Services (RMS) which was successful and detailed design plans and estimates are to be forwarded to the RMS for concurrence.

An AHIMS search was undertaken which revealed that there were 0 sites around the area of the proposed works. The project is referenced in Remnant Archaeology's draft Cultural Heritage Assessment for the Shared Path East – Headlands Drive Skennars Head to Pat Morton Lookout, prepared by Graham Knuckey. No issues or sites have been referenced at the proposed work site location in this report.

The owner of the adjoining property at 5 Skennars Head Road has been informed of the project in writing. A meeting was held on Thursday 15th September 2016 at 5 Skennars Head Road with Mr Malcolm Fox the owner of 5 Skennars Head Road and an adjoining property owner. Issues raised were Rocky Point Road not linking to the roundabout and being left in and left out only, and the effect of the new street lights on residences. The realigning of Rocky Point Road was discussed and the residences were informed that realigning Rocky Point Road was outside the scope of this project as negotiations and the approval process with the Crown would cause significant time delays. Mr Malcolm Fox's mentioned that his personal preferred option would be to provide an underpass for Rocky Point Road in its current location.

Measures Taken to Address Issues

Survey and design work have been undertaken to provide details of the proposed works.

Council staff working on the project have all undertaken a Cultural Heritage Induction course and due diligence will be undertaken. Minimal disturbance to the site is anticipated as the project is

filling over the existing ground levels with only top soil to be removed. All new services will be installed in the fill material.

At the meeting at 5 Skennars Head Road the measures taken that could address issues were, increasing the length of the concrete median toward the crest of the hill to minimise the potential to undertake U turns around the end of the median. It is also proposed to install NO U TURN signage at the end of the median. Lighting affecting local residences was discussed and it was forwarded to the lighting designer and they are looking at using aero screen lights these have a flat lens and emit no or absolute minimum upward light.

4. Specialist Studies and Licensing

4.1 Specialist Studies

4.2 Blackwood Ecological Services has been engaged to undertake a Flora and Fauna assessment of the site. A revegetation plan of management is also being prepared by Blackwood Ecological Services and will be implemented on the completion of the civil works. Plans showing the existing vegetation communities are shown in Appendix E

4.3 Licenses and Permits

A Part V approval is required to undertake the works

5. Strategic Stage

Relationship to Planning and Environmental Background

A Black Spot assessment of The Coast Road and Skennars Head Road Intersection was undertaken and analysis of the crash data was undertaken over a 5 year period from 2009 to 2014. In this 5 year period there were 7 casualty crashes within the limit of works. There were 0 fatal crashes and 7 injury crashes resulting in 0 fatalities and 13 injuries. This is a major T Junction where The Coast Road (north/south) is joined by Skennars Head Road (extending west). There is also a minor T junction with Rocky Point Road, currently 25 m further south that accesses a small coastal parking area. Currently there is a channalised intersection. The intersection is at the foot of a hill that rises southwards along The Coast Road. The intersection is on flat land at the foot of this hill. The landform to the north (The Coast Road), west (Skennars Head Road) and east (Rocky Point Road) is flat. The Coast Road currently carries 10,121 vpd and Skennars Head Road 4,042 vpd. Traffic on Rocky Point Road is minimal as it only services a small coastal car park and one residence.

6. Concept Stage

6.1 Objective of the Activity

To improve the safety for road users and reduce the potential loss of life at an intersection with high speed approach gradients, by constructing a roundabout at a busy intersection located at the base of a hill with approx. 10% gradient.

6.2 Options Considered and Preferred Option

Options considered were to:

- Do Nothing
- Construct a Roundabout slightly north of the existing intersection to flatten the approach gradient.

- Construct an underpass at Rocky Point Road and provide access ramps from the Coast Road

The second was considered the preferred option as it addresses the safety issues of reducing the speed and conflict points of the intersection, provides improved access from Skennars Head Rd. onto The Coast Rd. and can be constructed in the budget provided and can be constructed on land that is currently road reserve and land owned by Ballina Shire Council.

The construction of an underpass at Rocky Point Road can be undertaken at a later date when funding is provided. This could be undertaken as a separate project. To reduce traffic conflicts at this intersection it is proposed to make Rocky Point Road a left in left out only intersection and this will be reinforced by constructing a concrete median along the centre line of The Coast Road.

7. Assessment Stage

7.1 Description of the Affected Environment

All the work is to be undertaken in the existing road reserve, and portion of land being part Lot 12 DP1181479 currently owned by Ballina Shire Council which is to be dedicated as road. The portion of Lot 12 DP1181497 required for the works is currently vegetated with regrowth vegetation after once being farmed with cattle grazing refer Appendix D.

7.2 Environment Impacts of the Proposed Activity

Environmental impacts of the proposed works will be minimal as all work will be undertaken within the road corridor which is currently slashed regularly and on a portion of land with regrowth vegetation. This consists of Coastal Banksia, Tuckeroo and mixed rainforest species, low fern land and mixed grass land fern land and lantana. A large amount of fill is to be imported onto the site, it is proposed that this material will consist of overburden from existing stockpiles at local quarries and excess cut material from the Skennars Head sport field expansion. Other environmental impacts from the works being undertaken are potential visual impacts to residences due to the relocation of the intersection and relocation of light poles.

Perceived noise increases would be mitigated by the new AC service and the flattening out of the gradients on the southern side of the intersection allowing vehicles to increase speed before reaching the steepest section of road. Other environmental impacts during construction include noise and fumes from plant, dust, and possible erosion issues and contamination by fuels and oils.

The use of imported road base material, concrete and bitumen and stone chip is to be from certified suppliers.

7.3 Main Outcomes of the Proposed Activity

Providing a safer road environment to all road users, reducing the potential loss of life by providing a slower intersection environment. Improving access onto The Coast Road from Skennars Head Road. Providing a pedestrian refuge to improve pedestrian access to Boulders Beach. Providing a road pavement requiring less ongoing maintenance, including patching of failures and cleaning of drains. Potential reduction of noise impacts to surrounding residences.

7.4 Summary of Beneficial Outcomes

- Safer Road Environment and driving conditions reducing the potential loss of life.
- Reducing approach speeds along The Coast Road,
- Improving access from Skennars Head Road onto The Coast Road.
- Providing an intersection to meet the increased traffic demands of the future.

7.5 Summary of Adverse Outcomes

- Vegetation removal during construction with potential scouring and erosion.
- Visual impacts to surrounding residences.
- Noise, vibration and dust during construction.

7.6 Consideration of Environmental Factors

This REF has considered the following environmental factors

- **VEGETATION:** The removal of vegetation on the north western side of the current intersection and on the eastern side of The Coast Road to the existing property boundary. However this will be offset by compensatory plantings to be specified in Blackwoods Ecological Services Vegetation Management Plan.
- **SOIL:** The importation of approx. 18,000m³ fill material to be sourced from existing quarries and excess cut material from the Skennars Head Playing field extensions.

Erosion of disturbed areas during construction. Mitigation measures are to be implemented before, during and after construction. These are to include installation of hay bales, silt fencing, silt traps at pit inlets, bunding and reinstatement of disturbed areas including batters with Hydro mulch seeding and turfing.

Ballina Shires Councils Local Environment Plan Acid Sulphate maps indicate that the work area is located within a Class 5 area where the planning instrument applies if "Works are likely to lower the watertable below 1 meter AHD in class 1,2,3 or 4 land. As the works consists of filling with excavation of topsoil only, acid sulphate soils are not expected to be encountered. However testing of the soils will be undertaken and should any samples test positive to acid sulphate the spoil shall be treated accordingly.

- **AIR:** Noise, fumes and dust during construction. Mitigation measures include working times to be limited to 7.00am to 6.00pm between Mondays and Fridays and 8.00am to 1.00pm on Saturday with no noisy work on Sundays and Public Holidays. Dust will be controlled using a water truck when required. Refer Construction Management Plan Appendix F
- **WASTE:** All waste materials are to be disposed of at Councils Landfill and any excess spoil material including top soil and gravel material is to be used to shape the verges and batters.
- **FUEL:** Chemical and fuel spills will be mitigated by not storing any chemicals and fuel on site. The use of chemicals and the refuelling of plant this is to be undertaken in an area that is bunded off so any spills can be contained and cleaned up without any adverse effect to the environment.
- **IMPORTED MATERIAL:** All materials to be imported to the site including Bulk fill material gravel materials (road base) concrete and bitumen will be sourced from certified quarries and suppliers operating within their production limits.

HERITAGE: An AHIMS search was undertaken which revealed that there were 0 sites and places around the area of the proposed works. However the project is referenced in Remnant Archaeology's draft "*Cultural heritage Assessment for the Shared Path East – Headlands Drive Skennars Head to Pat Morton Lookout*", Trim 16/71164, prepared by Graham Knuckey. No issues or sites have been referenced at the proposed work site location in this report. All staff to be working on the site have undertaken a cultural heritage Induction course and are obligated to undertake caution when working on site.

However the project consists of filling the site with minimal excavation being the removal of top soil to be stock piled to be reused on the batter slopes.

- **THREATENED SPECIES:**

Threatened species were considered and a report generated EPBC web page and it provided a list of the following located in the area of the proposed works.

- Threatened Ecological Communities: 0
- Threatened Species: 21
- Migratory Species: 13

The works located on the north western side of the current intersection are located in an old grazing paddock with regrowth vegetation adjacent to a SEPP 14 wetland. As the disturbance is located on a small area of regrowth vegetation, relative to the surrounding wetland and the crown reserves to the east it is anticipated that there will be minimal disturbance to any threatened species.

7.7 NSW and Commonwealth Legislation Outcomes

Not applicable

8. Conclusions

8.1 Summary of Outcomes

The outcomes from this project is to provide a safer intersection by reducing the approach speeds on The Coast Road and providing better access from Skennars Head Road and reducing the potential loss of life. The proposed intersection will also meet the demands of increased traffic volumes into the future.

8.2 Environmental Assessment and EPBC Referral

- Is the proposed action likely to have a significant impact on a matter of national environmental significance?
- Is the proposed action likely to have a significant impact on the environment in general (for actions by Commonwealth agencies or actions on Commonwealth land) or the environment on Commonwealth land (for actions outside Commonwealth land)?

No

Approval is not required from the Minister

8.3 Impacts, Proposed Mitigation Measures and Further Analysis

Impacts expected during construction include vegetation removal and stripping of topsoil, importation of bulk fill material, with potential scouring and erosion. Noise, vibration, dust, chemical and fuel spills.

Erosion of disturbed areas during construction. Mitigation measures are to be implemented during and after construction. These are to include installation of hay bales, silt fencing, silt traps, bunding, and reinstatement of disturbed areas with hydro mulch seeding on the fill batters, and compensatory plantings as set out in Blackwood Ecological Services Ecological Assessment, Offset Recommendations.

Noise and dust during construction. Mitigation measures include working times to be limited to 7.00am to 6.00pm between Mondays and Fridays and 8.00am to 1.00pm on Saturday with no

noisy work on Sundays and Public Holidays. Dust will be controlled using a water truck when required.

Chemical and fuel spills will be mitigated by not storing any chemicals and fuel on site. The use of chemicals and the refuelling of plant this is to be undertaken in an area that is bunded so any spills can be contained and cleaned up without any adverse effect to the environment.

8.4 Implementation of Safeguards and Mitigation Measures

At the commencement of the project a Job Package is produced and included are the sediment and erosion plans, Traffic Control Plans. The proposed traffic disruptions are to be advertised in advance to inform road users of any road closures, detours, and disruptions. Also contained in the package is a copy of the Review of Environmental Factors, the conditions to be implemented and a copy of the environmental Management Plan Checklist. At the commencement of the Project a preconstruction meeting is undertaken and the plans, including the sediment and erosion control plans, are discussed. The sediment and erosion control measures are to be undertaken immediately after the traffic control plan has been implemented and prior to any excavation being undertaken.

8.5 Implementation Procedures Table (Attached)

Refer to the Environmental Management Plan Checklist and the Construction Management Plan CMP in Appendix F

9. Certification

This Review of Environmental Factors provides a true and fair review of the proposed activity in relation to its likely effects on the environment. It addresses possible matters affecting or likely to affect the environment as a result of the proposed activity.



Malcolm Fox

Design Engineer

27 September 2016



Paul Busmanis

Engineering Works Manager

27 September 2016

APPENDIX A – Consideration of Environmental Factors

APPENDIX B – Intersection of The Coast road and Skennars Head Road,
Crash Location Treatment Report.

APPENDIX C – AHIMS Search, Aboriginal Heritage Protection under the National Parks and Wildlife Act
1974 (NSW) Fact Sheet 2, Due Diligence Code of Practice for the protection of
Aboriginal Objects in NSW Fact sheet 7

APPENDIX D – Photographs and Plans

APPENDIX E – Blackwood Ecological Services Vegetation mapping

APPENDIX F – Environmental Checklist, Construction Management Plan (CMP)

APPENDIX A

CONSIDERATION OF ENVIRONMENTAL FACTORS

Notes for completing this section:

Tick appropriate 'Impacts' as follows;

(NA) Not Applicable, (-ve) Negative Impact, (NIL) No Impact, (+ve) Positive Impact.

Provide comments for each factor in support of the opinion circled in the Impacts column, to the degree of detail appropriate to the proposal and its interaction with the environment.

FACTOR (NSW LEGISLATION)

IMPACTS

- | | | | |
|---|---|-----|-------------------------------------|
| a | Any environmental impact on a community? | NA | <input type="checkbox"/> |
| | | -VE | <input checked="" type="checkbox"/> |
| | | NIL | <input type="checkbox"/> |
| | | +VE | <input type="checkbox"/> |
| <p>Comments: During construction there may be adverse environmental impact including vegetation removal, dust, vibration, noise and possible erosion. These are expected to be only during construction and will be mitigated by limiting the clearing to limits shown on the plans, working hours, implementing sediment and erosion control measures and using a water truck to suppress dust in dry and windy conditions</p> | | | |
| b | Any transformation of a locality? | NA | <input type="checkbox"/> |
| | | -VE | <input checked="" type="checkbox"/> |
| | | NIL | <input type="checkbox"/> |
| | | +VE | <input type="checkbox"/> |
| <p>Comments: Minimal transformation is expected due the works being undertaken as there is a intersection located in the area at present. There will be some visual impact to some residence as the intersection is moving to the north and new street lights are to be installed. However the new intersection will provide a safer driving environment which will reduce the potential loss of life.</p> | | | |
| c | Any environmental impact on the ecosystems of the locality? | NA | <input type="checkbox"/> |
| | | -VE | <input type="checkbox"/> |
| | | NIL | <input type="checkbox"/> |
| | | +VE | <input checked="" type="checkbox"/> |
| <p>Comments: Vegetation on the north west side and eastern side of the current intersection will be cleared to allow for construction. A vegetation management plan is being prepared by Blackwood Ecological Services to offset the clearing required</p> | | | |
| d | Any reduction of the aesthetic, recreational, scientific or other environmental quality or value of a locality? | NA | <input type="checkbox"/> |
| | | -VE | <input checked="" type="checkbox"/> |
| | | NIL | <input type="checkbox"/> |
| | | +VE | <input type="checkbox"/> |
| <p>Comments: There will be some aesthetic changes to the locality as the intersection is moving to the north and has a larger foot print than currently exists</p> | | | |

e	Any effect on a locality, place or building having aesthetic, anthropological, archaeological, architectural, cultural, historical, scientific or social significance or other special value for present or future generations?	NA	<input type="checkbox"/>
		-VE	<input type="checkbox"/>
		NIL	<input type="checkbox"/>
		+VE	<input checked="" type="checkbox"/>
	Comments: Minimal effects are anticipated an AHIMS search was undertaken and no Aboriginal Sites or Places registered. The project is referenced in Remnant Archaeology's draft "Cultural heritage Assessment for the Shared Path East – Headlands Drive Skennars Head to Pat Morton Lookout" Trim 16/71164 and no concerns or potential issues were raised in this area.		
f	Any impact on the habitat of any protected fauna (within the meaning of the National Parks and Wildlife Act, 1974)?	NA	<input checked="" type="checkbox"/>
		-VE	<input type="checkbox"/>
		NIL	<input type="checkbox"/>
		+VE	<input type="checkbox"/>
	Comments: Nil		
g	Any endangering of any species of animal, plant or other form of life, whether living on land, in water or in the air?	NA	<input checked="" type="checkbox"/>
		-VE	<input type="checkbox"/>
		NIL	<input type="checkbox"/>
		+VE	<input type="checkbox"/>
	Comments: Minimal is expected as the area to be disturbed is on the edge of a larger area including a SEPP 14 Wetland and the Crown Reserve on the eastern side of The Coast Road		
h	Any long-term effects on the environment?	NA	<input checked="" type="checkbox"/>
		-VE	<input type="checkbox"/>
		NIL	<input type="checkbox"/>
		+VE	<input type="checkbox"/>
	Comments: Minimal long term effects anticipated due to the scope of works , and the proposed compensatory plantings		
i	Any degradation of the quality of the environment?	NA	<input type="checkbox"/>
		-VE	<input type="checkbox"/>
		NIL	<input type="checkbox"/>
		+VE	<input checked="" type="checkbox"/>
	Comments: Minimal degradation of the quality is expected due to some road widening. Which will be offset by improvement of fish habitat		
j	Any risk to the safety of the environment?	NA	<input type="checkbox"/>
		-VE	<input checked="" type="checkbox"/>
		NIL	<input type="checkbox"/>
		+VE	<input type="checkbox"/>
	Comments: During construction there maybe the possibility of safety to the environment refer clause 7.6. Mitigation measures will be implemented to minimise any effect.		
k	Any reduction in the range of beneficial uses of the environment?	NA	<input checked="" type="checkbox"/>
		-VE	<input type="checkbox"/>
		NIL	<input type="checkbox"/>
		+VE	<input type="checkbox"/>
	Comments: None		

l	Any pollution of the environment?	NA	<input type="checkbox"/>
		-VE	<input checked="" type="checkbox"/>
		NIL	<input type="checkbox"/>
		+VE	<input type="checkbox"/>
		Comments: Possible pollution to the environment may occur during construction. Mitigation measures are to be implemented to minimise any pollution, including hay bales, silt fencing, and bunding.	
m	Any environmental problems associated with the disposal of waste?	NA	<input type="checkbox"/>
		-VE	<input checked="" type="checkbox"/>
		NIL	<input type="checkbox"/>
		+VE	<input type="checkbox"/>
		Comments: All waste material will be disposed of at the Councils land fill site located in the Southern Cross Industrial Estate	
n	Any increased demands on resources, natural or otherwise which are, or are likely to become in short supply?	NA	<input type="checkbox"/>
		-VE	<input checked="" type="checkbox"/>
		NIL	<input type="checkbox"/>
		+VE	<input type="checkbox"/>
		Comments: Gravel pavement materials and concrete and Bituman products will be used during construction. These will be sourced from certified quarries and suppliers operating within their production limits. The bulk fill will be sourced from over burden stock piles at quarries and excess fill from the Skennars Head Sports Field expansion.	
o	Any cumulative environmental effect with other existing or likely future activities?	NA	<input checked="" type="checkbox"/>
		-VE	<input type="checkbox"/>
		NIL	<input type="checkbox"/>
		+VE	<input type="checkbox"/>
		Comments: None	

FACTOR (COMMONWEALTH LEGISLATION)

IMPACTS

a	Any environmental impact on a World Heritage property?	NA	<input checked="" type="checkbox"/>
		-VE	<input type="checkbox"/>
		NIL	<input type="checkbox"/>
		+VE	<input type="checkbox"/>
		Comments: None located in the area	
b	Any environmental impact on wetlands of international importance?	NA	<input checked="" type="checkbox"/>
		-VE	<input type="checkbox"/>
		NIL	<input type="checkbox"/>
		+VE	<input type="checkbox"/>
		Comments: None located in the area	

c	Any environmental impact on Commonwealth listed threatened species or ecological communities?	NA	<input type="checkbox"/>
		-VE	<input type="checkbox"/>
	Comments: None	NIL	<input checked="" type="checkbox"/>
		+VE	<input type="checkbox"/>
d	Any environmental impact on Commonwealth listed migratory species?	NA	<input checked="" type="checkbox"/>
		-VE	<input type="checkbox"/>
	Comments: Minimal impacts	NIL	<input type="checkbox"/>
		+VE	<input type="checkbox"/>
e	Does any part of the proposal involve a nuclear action?	Yes	<input type="checkbox"/>
		No	<input checked="" type="checkbox"/>
	Comments: Not applicable		
f	Any environmental impact on a Commonwealth marine area?	NA	<input checked="" type="checkbox"/>
		-VE	<input type="checkbox"/>
	Comments: Not applicable No Commonwealth marine area in this location.	NIL	<input type="checkbox"/>
		+VE	<input type="checkbox"/>
g	Any direct or indirect effect on Commonwealth land?	NA	<input checked="" type="checkbox"/>
		-VE	<input type="checkbox"/>
	Comments: Not Applicable	NIL	<input type="checkbox"/>
		+VE	<input type="checkbox"/>



Transport
for NSW

Northern

0

NSW ROAD SAFETY PROGRAM

PROJECT PROPOSAL FORM

Ballina Council

Intersection of The Coast Road and Skennars Head Road

30-July-2015

Purpose

This form must be used when nominating a project for the Australian Government Black Spot Program and the Safer Roads Program. Nominations received will only be considered for approval if they meet the following conditions:

- All available information required on this application is provided
- The proposed project meets the minimum Benefit Cost Ratio (BCR) for the nominated program
- The proposed project meets the minimum Road Safety Impact Index (RSII) for the nominated program
- Treatments proposed addressed targeted crash types and uphold safe system principles.
- The total cost of the project is less than the project cap outlined in the program frameworks.

Further information

For further information please contact:

Manager, Safer Roads
NSW Centre for Road Safety

Principal Manager Road Safety Coordination
Roads and Maritime Services

Contact Details:

Title (Dr/Mr/Mrs/etc)	Mr
First Name	David
Surname	Kelly
Organisation (Council / RMS Region)	Council
Council Name (if applicable)	Ballina Shire Council
RMS Region Name (if applicable)	Northern
Position Title / Occupation	Manager Infrastructure Planning
Postal Address	PO Box 450, Ballina 2478
Postcode	2478
Telephone Number	266861253
Fax Number	266869514
Email address	davek@ballina.nsw.gov.au
Date of Submission	30/07/2015

Program Selection:

Please indicate which of the following road safety programs you would like to have this nomination considered for funding.
(Note: the nomination should meet the criteria of the individual programs)

	Percent funding	Submit application for?	
		Option 1	Option 2
Australian Government Black Spot Program	100%	Yes	
Safer Roads Program - State Black Spot	50%	No	
Safer Roads Program - Run-Off Road and Head On Safety	100%	Yes	
Safer Roads Program - Pedestrian Safety Infrastructure	100%	No	
Safer Roads Program - Local Government Safety Infrastructure	100%	Yes	
Safer Roads Program - Intersection Safety Infrastructure	100%	Yes	
Safer Roads Program - Motorcycle Safety Infrastructure	100%	No	
Safer Roads Program - Cycle Safety Infrastructure	100%	No	

1. Location details

Primary road name	The Coast Road
Intersecting road name (if any) or description of length (from and to)	Skennars Head Road
Suburb	Skennars Head
Postcode (of site)	2478
Local Government Area 1	Ballina
Local Government Area 2	
Local Government Area 3	
State Electoral District 1	Ballina
State Electoral District 2	
State Electoral District 3	
RMS Region	Northern
Location description	T junction on The Coast Road between Lennox Head and Ballina. The junction is with Skennars Head Road which provides access to urban areas further to the west.
Intersection / Length	Intersection
Total length (km)	
Current Speed Limit (km/h)	80
State, Regional or Local road?	Regional
Road Classification	Other classified road
Is this an Urban or Rural LGA?	Rural
National Highway?	No
Is the road part of the National Land Transport Network? (Y/N)	No

Geographic location (Please provide at least one geo-reference)	Longitude / Easting (X)	Latitude / Northing (Y)
Start coordinates	153.604201	-28.823638
End coordinates		
Start RMS Lambert94		
End RMS Lambert94		
Start RMS Roadloc references		
End RMS Roadloc references		

2. Existing Conditions

2.1 Site description

Major T Junction where The Coast Road (north/south) is joined by Skennars Head Road (extending west). There is also a minor T junction with Rocky Point Road, currently 25 m further south that accesses a small coastal parking area. Currently there is a channelised intersection with a seagull facility. The intersection is at the foot of a hill that rises southwards along The Coast Road. The intersection is on flat land at the foot of this hill. The landform to the north (The Coast Road), west (Skennars Head Road) and east (Rocky Point Road) is flat. The Coast Road currently carries 10,121 vpd and Skennars Head Road 4,042 vpd. Traffic on Rocky Point Road is minimal as it only services a small coastal car park and one residence.

2.2 Nature of Concern

The intersection has been the site of a number of intersection accidents, particularly involving turning manoeuvres to/from The Coast Road and Skennars Head Rd, which indicate there is insufficient separation of conflicting turning/through manoeuvres provided by the current intersection geometry.

2.2 Traffic Statistics

AADT (Vehicles/day)	The Coast Rd 10,131, Skennars Hd Rd 4,062
85th percentile speed (km/h)	75kph (Estimate)

2.2.1 Traffic Signal Modelling (SIDRA Analysis)

--

2.2.2 Other additional traffic information not already listed above

--

2.3 Political and Community Issues

There has been considerable community and political concern regarding accidents at this intersection. A number of letters are in attached Word file "The Coast Rd Skennars Hd Rd Intersection Additional Information.docx."

2.4 Description of previous works and project proposals at location

The current channelised intersection with seagull was constructed in 2007 under the State Blackspots Programme. It is understood at the time the redesign was "primarily undertaken because of the number of rear end collisions involving vehicles turning right from the Coast Road into Rocky point Road." The speed limit was also lowered on The Coast Road from 100 kph to 80 kph.

3. Road Safety Audit:

Is the proposal supported by a Road Safety Audit?	No
If yes is a copy of the relevant report (or section of the report) attached?	

If no crash history has been specified above, the proposal must be supported by a Road Safety Audit. For report format refer to AUSTROADS Publication No. AP-30/94 or AP-G30/02, 'Road Safety Audit')

COMPLETE BCR MODEL BEFORE PROCEEDING

4. Analysis of Crash Data

Crash Data Period - From (dd/mm/yyyy)	1/07/2009
Crash Data Period - To (dd/mm/yyyy)	30/06/2014
Crash Data Period - Years	5.00
Fatal Crashes	0
Injury Crashes	7
Total Casualty Crashes	7
Fatal crashes per km	#DIV/0!
Injury crashes per km	#DIV/0!
Total casualty crashes per km	#DIV/0!
What is the calculated crash rate per kilometre per annum for this site?	#DIV/0!
Primary crash-type code (RUM), if available.	13, 21, , , ,

4.1 Problem Diagnosis

In the 5 year period between 01/07/2009 and 30/06/2014, there were 7 casualty crashes within the limit of works. There were 0 fatal crashes and 7 injury crashes resulting in 0 fatalities and 13 injuries.

The predominant crash types were: Adjacent-Right Near (2), Adjacent-Other (1), Head-On (1), Right Through (2), Out of control on curve (1), .

4.2 Other additional information not already listed above

The crash record indicates there is insufficient separation of conflicting traffic manoeuvres at this intersection as indicated by the RUM 13 and 21 crashes.

4.3 Detailed Crash Map / Collision Diagram

This diagram is the fundamental tool for a site specific crash diagnosis. Analyses of the individual crashes at this site are represented as a schematic in the following collision diagram.

If attached please provide file name:

Otherwise insert below:



4.4 Crash factor matrix

This matrix emphasises the importance of the road user movements that lead up to the crash in the determination of appropriate treatments.

Crash type groups	Number of crashes each year						Surface condition			Natural lighting			
	2009	2010	2011	2012	2013	2014	Dry	Wet	Snow or ice	Dawn	Daylight	Dusk	Darkness
Adjacent-Cross Traffic (RUM 10)													
Adjacent-Right Near (RUM 13)		1	1				1	1			2		
Adjacent-Other (RUM 11,12, 14-19)				1			1				1		
Head-On (RUM 20, 50)				1				1			1		
Right Through (RUM 21)		2					2				1	1	
Other Opposing Vehicle Turning (RUM 22-29)													
U-turn (RUM 40)													
Rear-End (RUM30-32)													
Lane Change (RUM 33-35)													
Parallel Lanes Turning (RUM 36-37)													
Vehicle Accessing Road (RUM 42,47,48)													
Reversing Vehicles (RUM 43-46)													
Overtake: Turning Vehicle (RUM53)													
Overtake: Same Direction (RUM 51, 52, 54, 55)													
Hit Stationary Vehicle (RUM 41, 60-63, 94)													
Hit Railway Train (RUM92)													
Hit Pedestrian (RUM 0-9)													
Object on Road (RUM64-66, 91)													
Hit Animal (RUM 67)													
Runoff road on straights (70-74)													
Off end of T-junctions (RUM75)													
Runoff road on curves (RUM 80-88)		1					1				1		
Others (RUM 39, 49, 59, 69, 79, 89, 90, 93, 95, 98, 99)													
TOTAL		4	1	2			5	2			6	1	

5. Site Inspection

A site inspection should be carried out during daylight hours and also during darkness.

Date of Site Inspection:

13 July 2015, daylight and night inspection.

5.1 Overview map of location

If attached please provide file name:

Otherwise insert below:



6. Proposed Treatments Options

6.1 Treatment Option 1 (\$1,998,095)

Estimated capital cost	\$1,998,095
Other contributions to this project	
Contribution source	
Cost to program	\$1,998,095
Treatments:	2, 26, , , ,
Install 2-lane roundabout (including all traffic calming, line marking, lighting and signage), Reduce speed limit by 20 km/h, , , ,	

6.1.1 Description of proposed treatment

It is proposed to install a two lane roundabout to accommodate The Coast Road/Skennars Head intersection and retain the Rocky Point Rd junction as left in/left out, 60 m south of the roundabout on the Coast Road. It is also proposed to lower the speed limit on approaches to the roundabout from 80 kph to 60 kph. In order to accommodate Austroads compliant approach grades and roundabout cross falls, the roundabout has been shifted 60 m north west and its level will be 2 m higher than the current adjacent level of The Coast Road. This level change can be accommodated by fill earthworks on the flat natural landform. The roundabout will encroach on adjacent Lot 12 DP 1181479 which is already owned by Council and can be part transferred to the road reserve. The left in/left out arrangement for Rocky Point Road will accommodate the same movements currently provided, with the no right turn prohibition out of Rock Point Road being retained. Current street lighting will be upgraded to roundabout standard. The traffic calming effect of the roundabout and lower speed limit on the Coast Road will improve safety for vehicles exiting Rocky Point Road merging with southbound traffic on The Coast Road.

Expected start date (physical construction)	01/10/2016
Expected completion date (physical construction)	01/06/2017

	Australian Government Black Spot	Safer Roads Program					
		State Black Spot	Run-off Road / Head-On	Pedestrian Safety	Local Government Safety	Intersection safety	Motorcycle Safety
No. Treated Fatal Crashes	0	-	0	-	0	0	-
No. Treated Injury Crashes	7	-	2	-	7	5	-
No. Treated Casualty Crashes	7	-	2	-	7	5	-
Estimated Cost to Program	\$1,998,095	-	\$1,998,095	-	\$1,998,095	\$1,998,095	-
Road Safety Impact Index	15.061	-	4.143	-	15.061	10.918	-
Benefit Cost Ratio	3.51	-	0.98	-	3.51	2.53	-
Sensitivity Ratio	9.286	-	2.561	-	9.286	6.725	-

6.1.2 Project Deliverables and Costings

Year 1 Deliverables (2016/17)

Cost

Survey, detailed design, utilities adjustment, stormwater drainage and earthworks. Construction of roundabout and approaches, install streetlighting, signage, delineation, linemarking.	\$1,998,095
--	-------------

Year 2 Deliverables (2017/18)

Cost

--	--

Year 3 Deliverables (2018/19)

Cost

--	--

6.1.3 Is this project proposed to be completed in conjunction with other works?
(e.g. asset maintenance, other program)

No

If yes provide details

--

6.1.4 Are there any environmental or heritage concerns with this project?

No

If Yes, have approvals been obtained?

If Yes, please attach. - File Name:

--

6.1.5 Are there any known risks or constraints to the delivery of the proposed treatments?
(e.g. relocation of services, property acquisition, endangered species etc)

No

If yes provide details

--

6.1.6 Site sketch including exact location of treatments

If attached please provide file name:

Otherwise insert below:



Estimated capital cost _____
Other contributions to this project _____
Contribution source _____
Cost to program _____
Treatments: _____

\$0
\$0
1 1 1 1 1
1 1 1 1 1

Expected start date (physical construction)	
Expected completion date (physical construction)	

	Australian Government Black Spot	Safer Roads Program					
		State Black Spot	Run-off Road / Head-On	Pedestrian Safety	Local Government Safety	Intersection safety	Motorcycle Safety
No. Treated Fatal Crashes	-	-	-	-	-	-	-
No. Treated Injury Crashes	-	-	-	-	-	-	-
No. Treated Casualty Crashes	-	-	-	-	-	-	-
Estimated Cost to Program	-	-	-	-	-	-	-
Road Safety Impact Index	-	-	-	-	-	-	-
Benefit Cost Ratio	-	-	-	-	-	-	-
Sensitivity Ratio	-	-	-	-	-	-	-

6.2.2 Project Deliverables and Costings

Year 1 Deliverables (2016/17)

Cost

--	--

Year 2 Deliverables (2017/18)

Cost

--	--

Year 3 Deliverables (2018/19)

Cost

--	--

6.2.3 Is this project proposed to be completed in conjunction with other works?
(e.g. asset maintenance, other program)

--

If yes provide details

--

6.2.4 Are there any environmental or heritage concerns with this project?

If Yes, have approvals been obtained?

If Yes, please attach. - File Name:

--

6.2.5 Are there any known risks or constraints to the delivery of the proposed treatments?
(e.g. relocation of services, property acquisition, endangered species etc)

--

If yes provide details

--

6.2.6 Site sketch including exact location of treatments

If attached please provide file name:

Otherwise insert below:

6.3 Network and Safety Management Comments on Deliverability of Treatment Options

--

Network and Safety Manager Details

Name

Date of Review

--

6.4 Network Optimisation Comments

--

Network Optimisation Representative Details

Name

Date of Review

--

6.5 Centre for Road Safety Comments

--

Centre for Road Safety Representative Details

Name

Date of Review

--

APPENDIX C



Office of
Environment
& Heritage

AHIMS Web Services (AWS) Search Result

Purchase Order/Reference : Skennars Head Rd Roundabo

Client Service ID : 242529

Ballina Shire Council

Date: 02 September 2016

po box 450

ballina New South Wales 2478

Attention: Malcolm Fox

Email: malcolmf@ballina.nsw.gov.au

Dear Sir or Madam:

AHIMS Web Service search for the following area at Lat, Long From : -28.8244, 153.6019 - Lat, Long To : -28.8224, 153.605 with a Buffer of 50 meters, conducted by Malcolm Fox on 02 September 2016.

The context area of your search is shown in the map below. Please note that the map does not accurately display the exact boundaries of the search as defined in the paragraph above. The map is to be used for general reference purposes only.



A search of the Office of the Environment and Heritage AHIMS Web Services (Aboriginal Heritage Information Management System) has shown that:

0	Aboriginal sites are recorded in or near the above location.
0	Aboriginal places have been declared in or near the above location. *

If your search shows Aboriginal sites or places what should you do?

- You must do an extensive search if AHIMS has shown that there are Aboriginal sites or places recorded in the search area.
- If you are checking AHIMS as a part of your due diligence, refer to the next steps of the Due Diligence Code of practice.
- You can get further information about Aboriginal places by looking at the gazettal notice that declared it. Aboriginal places gazetted after 2001 are available on the NSW Government Gazette (<http://www.nsw.gov.au/gazette>) website. Gazettal notices published prior to 2001 can be obtained from Office of Environment and Heritage's Aboriginal Heritage Information Unit upon request

Important information about your AHIMS search

- The information derived from the AHIMS search is only to be used for the purpose for which it was requested. It is not be made available to the public.
- AHIMS records information about Aboriginal sites that have been provided to Office of Environment and Heritage and Aboriginal places that have been declared by the Minister;
- Information recorded on AHIMS may vary in its accuracy and may not be up to date. Location details are recorded as grid references and it is important to note that there may be errors or omissions in these recordings,
- Some parts of New South Wales have not been investigated in detail and there may be fewer records of Aboriginal sites in those areas. These areas may contain Aboriginal sites which are not recorded on AHIMS.
- Aboriginal objects are protected under the National Parks and Wildlife Act 1974 even if they are not recorded as a site on AHIMS.
- This search can form part of your due diligence and remains valid for 12 months.



Aboriginal Heritage Protection under the *National Parks and Wildlife Act 1974 (NSW)*

2

This Fact Sheet provides an overview of the way that Aboriginal heritage is managed in NSW, through the *National Parks and Wildlife Act 1974 (NSW)* and the *National Parks and Wildlife Regulation*.¹

This is one of a series of Fact Sheets which have been developed for Local Aboriginal Land Councils (LALCs) and the Aboriginal community by the NSW Aboriginal Land Council (NSWALC). Copies of the Fact Sheets are available from www.alc.org.au or by calling the NSWALC Policy & Programs Unit on 02 9689 4444.

While all care has been taken in the preparation of this fact sheet, it is not a substitute for legal advice in individual cases. This Fact Sheet is current as of February 2015.

Note: The NSW Government is conducting a review of Aboriginal culture and heritage laws in NSW. For more information, please visit: www.environment.nsw.gov.au/achreform

How is Aboriginal heritage protected in NSW?

The *National Parks and Wildlife Act 1974 (NPW Act)* is the main law for protecting Aboriginal culture and heritage sites and in NSW. The Office of Environment and Heritage (OEH) is responsible for administering this Act. The NPW Act gives the Chief Executive of OEH responsibility for the proper care, preservation and protection of 'Aboriginal objects' and 'Aboriginal places'.ⁱⁱ The protections for Aboriginal objects cover objects on both public and private lands.

The Chief Executive can give permission to developers, government agencies and others to disturb, damage or destroy Aboriginal heritage through the issuing of an Aboriginal Heritage Impact Permit (or AHIP). See NSWALC *Site Protection Factsheet 5* for more detail.

The Chief Executive also has the power to prosecute people who unlawfully destroy or damage Aboriginal objects or places, and can take other action to protect cultural heritage such as issuing a stop work order. **Note:** other laws, such as State Significant development process under the *Environmental Planning and Assessment Act 1979 (NSW)*, may allow developments to harm a site without the need to obtain an AHIP.

2010 changes to the NPW Act

In June 2010, the NSW Parliament passed the *National Parks and Wildlife Amendment Bill 2010*, also known as the **Omnibus Bill**ⁱⁱⁱ. The Bill made significant changes to the Aboriginal heritage provisions of the NPW Act. These changes and the *National Parks and Wildlife Amendment (Aboriginal Objects and Aboriginal Places) Regulation 2010* came into effect on **1 October 2010**.

What were the specific changes?

New offences and increased penalties for harm to Aboriginal places and objects: Previously a person could only be prosecuted for harming an Aboriginal object or place if they knew they were causing such harm. A new offence has now been added to the Act for when a person damages an Aboriginal object or place accidentally or without knowing (this is referred to as a '**strict liability**' offence). Also added were new powers for the Chief Executive and Courts to make remediation or restorations directions if damage has been caused.

Significantly increased fines have also been introduced of up to \$34,000 for individuals, or \$1.7 million in the case of corporations (see NSWALC *Site Protection Fact Sheet 6*)

Introduction of a wide range of defences: Along with the new offences, new defences have been

SITE PROTECTION

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introduced which will apply where a person harms an Aboriginal object without knowing and without a permit from OEH, including:

A '**due diligence**' defence may be available if a person followed certain steps to determine if an Aboriginal object exists. Due diligence is a legal concept which generally means taking reasonable and practicable steps to determine whether a person's actions are likely to cause harm.

The NPW Act allows for Codes of Practice to be adopted into the Regulations which outline what steps will constitute due diligence – that is, what steps a person should take if they want to proceed *without* a permit from OEH^{iv}. If a person proves they have followed these steps they may be able to avoid a penalty for damage to an Aboriginal object.

The Regulation includes several Codes, including:

- OEH Due Diligence Code of Practice for the Protection of Aboriginal Objects in NSW,
- Plantations and Reafforestation Code,
- Private Native Forestry Code of Practice,
- NSW Minerals Industry Due Diligence Code of Practice for the Protection of Aboriginal Objects,
- Aboriginal Object Due Diligence Code for Plantation Officers Administering the Plantations and Reafforestation (Code) Regulation 2001,
- Forests NSW Operational Guidelines for Aboriginal Cultural Heritage Management.

The due diligence defence is not available if the person *knows* an Aboriginal object exists.

A '**low impact**' defence will be available if a person was undertaking an activity listed in the Regulations as 'low impact' activities, which include several mining and farming related works.

IMPORTANT NOTE: These defences only apply to harm to Aboriginal objects – not Aboriginal places. This is because Aboriginal places are clearly defined.

New administrative processes for permits: Provisions have been introduced to make permits more 'flexible' and to allow permits to be issued for classes of objects, places, land, activities or persons (at section 90, NPW Act). It will also be easier to transfer permits.

Factors that the Chief Executive must consider: A defined list of factors that the Chief Executive must

consider before issuing a permit is now listed in the Act (at section 90K, NPW Act).

Definition of harm: A definition of harm has been added to the NPW Act (at section 5). Activities may be excluded from being defined as harm by the NPW Regulation.

A *Code of Practice for Archaeological Investigations in NSW*, has been included in the Regulations which removes some 'routine' archaeological activities from being defined as harm.

Regulations relating to consultation: Clause 80C of the Regulations outlines requirements for consultation. These generally reflect OEH's Community Consultation Requirements policy. For more info refer to NSWALC's Fact Sheet on *Community Consultation*.

Requirement to maintain a heritage register: OEH currently maintains a database of known Aboriginal objects and places, called the Aboriginal Heritage Information Management System (AHIMS). The NPW Act now includes a requirement that the Chief Executive keep AHIMS as the database of known Aboriginal objects and related information (at section 90Q), and also a public register (section 188F), parts of which are now accessible online at: www.environment.nsw.gov.au/awssapp.

Do traditional activities need a permit?

There is an exemption from the need to get a permit for certain activities that may harm an Aboriginal object or place if the person is an Aboriginal person undertaking traditional cultural activities (except commercial activities).

Where can I get more information?

Visit the 'Culture and Heritage' pages of the NSWALC website at www.alc.org.au or contact the NSWALC Policy and Programs Unit on 02 9689 4444. The OEH Heritage Division can be contacted on 02 9873 8500.

ⁱ A current version of the *National Parks and Wildlife Act 1974* and *National Parks and Wildlife Regulation* can be found at <http://www.legislation.nsw.gov.au> - Go to 'Browse', then 'Acts' or 'Regulations', then 'N'.

ⁱⁱ 'Aboriginal places' refers to those places gazetted by the Minister. There are 96 Aboriginal places in NSW. See <http://www.environment.nsw.gov.au/conservation/AboriginalPlacesNSW.htm> for more information.

ⁱⁱⁱ An 'omnibus bill' is a bill which makes changes to more than one Act of Parliament.

^{iv} See OEH website for Copies of the NPW Act, Regulation and Codes: <http://www.environment.nsw.gov.au/legislation/NPWamendmentACT2010.htm>

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Due Diligence Code of Practice for the Protection of Aboriginal Objects in NSW



This Fact Sheet provides an overview of the new Office of Environment and Heritage (OEH) *Due Diligence Code of Practice of the protection of Aboriginal objects in NSW*

This is one of a series of Fact Sheets which have been developed for Local Aboriginal Land Councils (LALCs) and the Aboriginal community by the NSW Aboriginal Land Council (NSWALC). Copies of the Fact Sheets are available from www.alc.org.au or by calling the NSWALC Policy and Programs Unit on 02 9689 4444.

Please note: While all care has been taken in the preparation of this fact sheet, it is not a substitute for legal advice in individual cases. This Fact Sheet is current as of February 2015.

What are the new offences for damaging or destroying Aboriginal culture and heritage?

The *National Parks and Wildlife Act 1974* (NSW)¹ (NPW Act) is the main Act for protecting Aboriginal culture and heritage in NSW.

In 2010, the NSW Government amended the NPW Act to include a new 'strict liability' offence for harming an Aboriginal object or place.

For someone to be guilty of this offence, it is not necessary for them to have actually known that they were causing harm to an Aboriginal object or place.

For more info, see NSWALC Site Protection Fact Sheet 6 – *New fines and offences for the destruction of Aboriginal heritage*.

The NSW Government also introduced defences to this strict liability offence:

- Where harming activities were authorised by an Aboriginal Heritage Impact Permit (AHIP). For more information please see NSWALC Site Protection Fact Sheet 5; or

- Where harming activities are listed as exempt or 'low impact' activities by the *National Parks and Wildlife Act and Regulation*; or
- Where someone has exercised 'due diligence' to determine whether an activity will harm an Aboriginal object and has decided that it won't before undertaking a harming activity.

What is due diligence?

Due diligence refers to taking *reasonable and practical measures* to protect Aboriginal culture and heritage.

If a person can prove that they did this, they may have a defence against prosecution for the strict liability offence where they have harmed an Aboriginal object without an Aboriginal Heritage Impact Permit (AHIP).

However, due diligence is not a defence if the person knew that they were harming an Aboriginal object.

What is the Due Diligence Code of Practice?

The NSW Office of Environment and Heritage (OEH) have published a Code of Practice² that sets out the steps they expect individuals and corporations to follow in order to exercise due diligence to:

- identify whether or not Aboriginal objects are, or are likely to be, present in an area
- determine whether or not their activities are likely to harm Aboriginal objects (if present)
- determine whether an AHIP application is required.

It is not mandatory to follow the steps outlined in the OEH code. An individual or corporation can take other measures, provided that such measures are objectively *reasonable and practicable* and meet the ordinary meaning of exercising *due diligence*.

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What are main steps in exercising due diligence?

Where proposed activities will disturb the ground or any culturally modified trees, the OEH Due Diligence Code of Practice requires proponents to take the following steps:

1. Search the Aboriginal Heritage Information Management System (AHIMS), and any other sources of information that the person is aware of eg. Local Environment Plans, cultural heritage studies or assessments; and also assess whether there are any landscape features that indicate Aboriginal objects are likely to be found. Where Aboriginal objects or relevant landscape features are not identified an AHIP may not be required to proceed;
2. Where the presence of Aboriginal objects have been identified from AHIMS or other sources, or where relevant landscape features have been identified in 'undisturbed lands', and the proponent's activities cannot be modified to avoid harming the identified Aboriginal objects or landscape features, a desktop assessment of the broader area and a visual inspection of the specific area, must be conducted (the inspection must be conducted by someone with experience in identifying Aboriginal objects). Where objects are not located or are reasonably thought not likely to be present, an AHIP may not be required to proceed;
3. If Aboriginal objects are found or are likely to be found at the location, further investigation and impact assessment is required.

Do proponents need to consult with Aboriginal people in the due diligence process?

Consultation with the Aboriginal community is not a formal requirement of the due diligence process.

However, proponents are encouraged to undertake consultation as the above methods may not be adequate to determine whether there are Aboriginal objects in the area.

Will the standard of due diligence be the same for all activities?

Not all activities will have to comply with the OEH Due Diligence Code of Practice.

Under the *National Parks and Wildlife Regulation 2009* industry-specific codes of practice may be adopted and followed for due diligence purposes..

Codes which have been adopted include:

- Plantations and Reafforestation Code,
- Private Native Forestry Code of Practice,

- NSW Minerals Industry Due Diligence Code of Practice for the Protection of Aboriginal Objects,
- Aboriginal Object Due Diligence Code for Plantation Officers Administering the Plantations and Reafforestation (Code) Regulation 2001,
- Forests NSW Operational Guidelines for Aboriginal Cultural Heritage Management.

Does due diligence need to be followed for all activities?

The *National Parks and Wildlife Act 1974* provides exemptions for certain activities such as emergency fire fighting, and traditional Aboriginal cultural activities that are not carried out for commercial purposes. For these activities due diligence is not required.

Activities that involve 'trivial or negligible' harm, such as simply picking up and replacing a small stone artefact, do not require due diligence to be followed.

Also due diligence may not be required for the so called 'low impact' activities listed in the *National Parks and Wildlife Regulation 2009*, which includes certain mining and farming activities.

PLEASE NOTE: The 'low impact' defence does not apply to situations where a proponent already knows or becomes aware of Aboriginal objects they harm as a result of their low impact activities.

The low impact defence does not authorise harm to known Aboriginal objects.

Please also note: The due diligence process can still apply to an activity that is exempt or complying development within the meaning of the *Environmental Planning and Assessment Act 1979*.

Where can I get more information?

Visit the 'Culture and Heritage' pages of the NSWALC website at www.alc.org.au or contact the NSWALC Policy and Programs Unit on 02 9689 4444.

The Environmental Defender's Office (EDO) is a community legal centre that specialises in environmental law and may be able to provide assistance. **Contact the EDO on their free advice line 1800 626 239 or 02 9262 6989.**

The OEH Heritage Division can be contacted on 02 9995 5000.

¹ A current version of the *National Parks and Wildlife Act 1974* can be found at <http://www.legislation.nsw.gov.au> - Go to 'Browse', then 'Acts', then 'N'.

² The *OEH Due Diligence Code of Practice for the protection of Aboriginal Object in NSW*, is available from the OEH website at: <http://www.environment.nsw.gov.au/resources/cultureheritage/ddcop/10798ddcop.pdf>

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APPENDIX D



The Coast Road looking north-west towards the new roundabout



The Coast Road looking north-east towards the new roundabout



The Coast Road looking from the approx. location of the new roundabout to the south



The Coast Road looking from the approx. location of the new roundabout to the north



The Coast Road looking from the approx. location of the new roundabout to the west



Skennars Head Road looking east towards the proposed roundabout



Site of proposed roundabout 2010



Site of proposed roundabout 2016



Site of proposed roundabout 1973



Site of proposed roundabout 1980


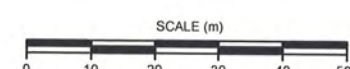



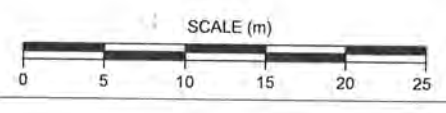
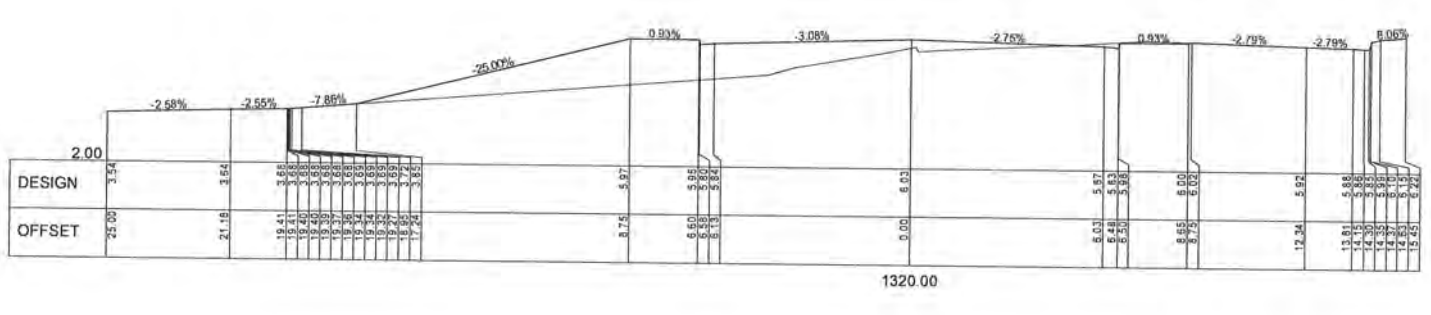
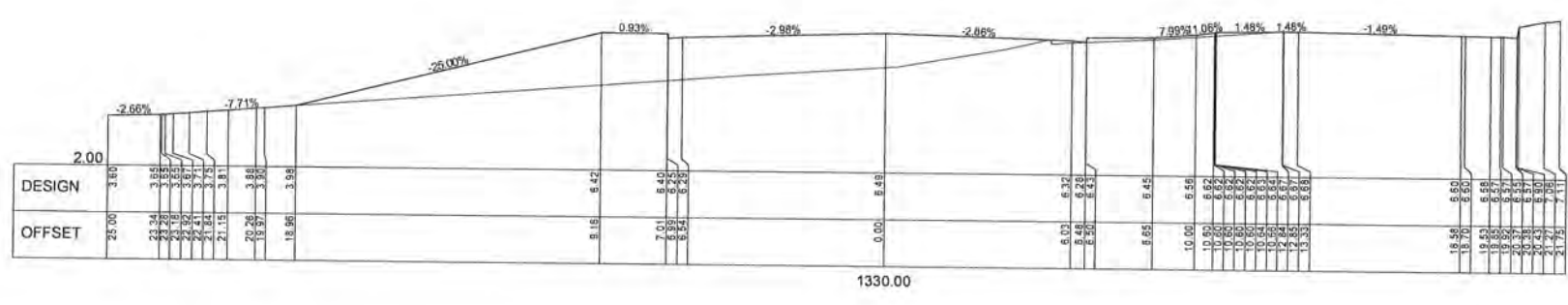
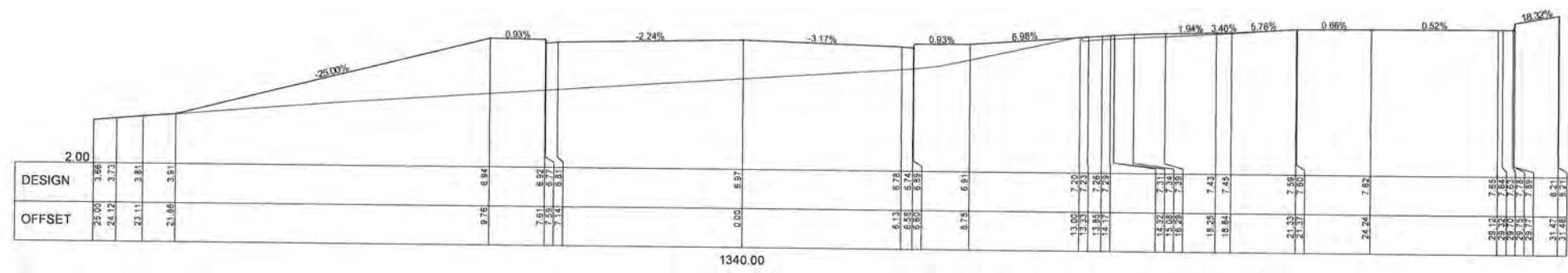
Site of proposed roundabout 1999



Site of proposed roundabout 2003



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			No.	Date	By	Change	X'd											
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SHEET 1 OF 8	Scale SCALE [H] 1 : 500	Plan No. MR545/0040	A1															

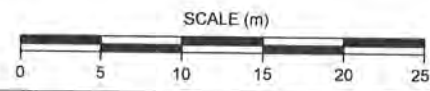
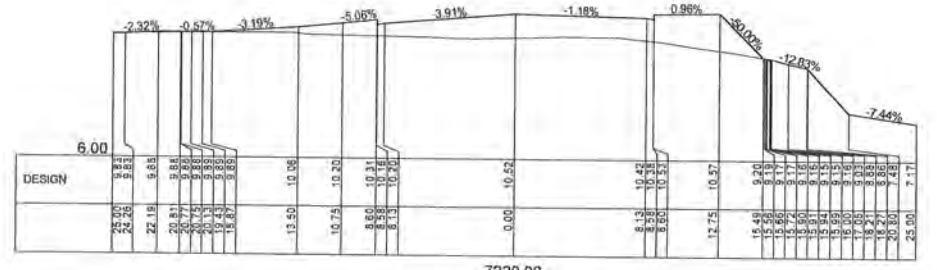
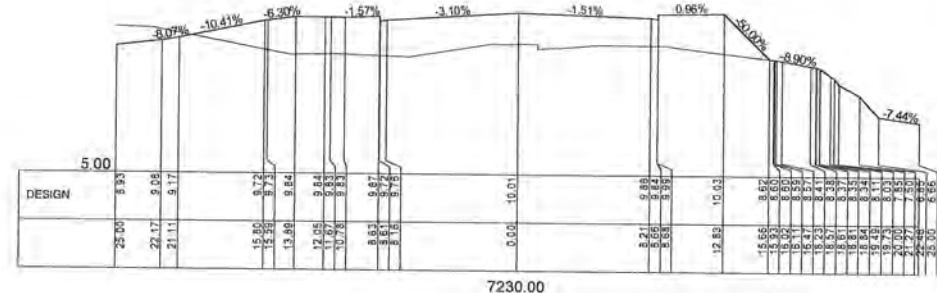
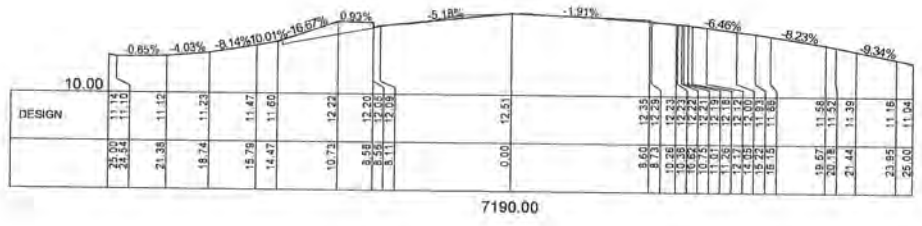
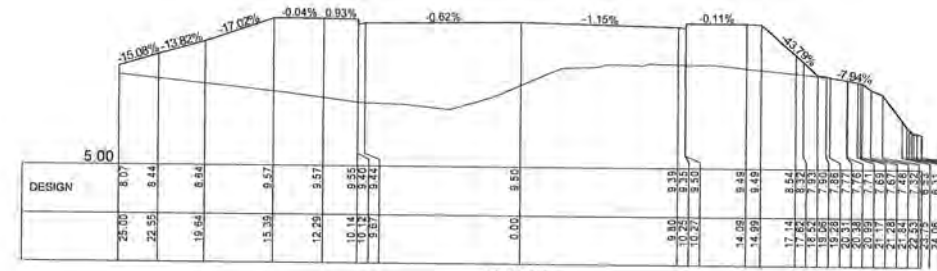
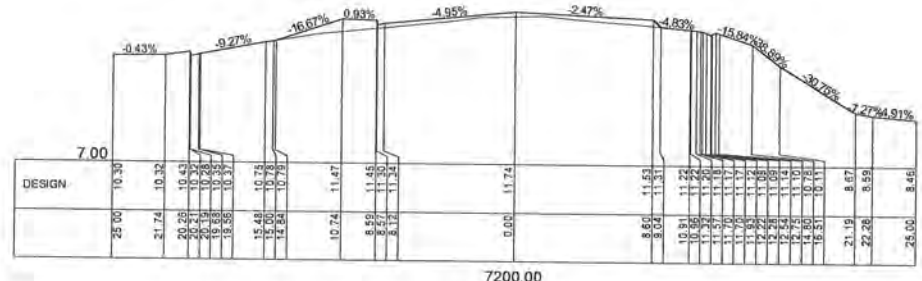
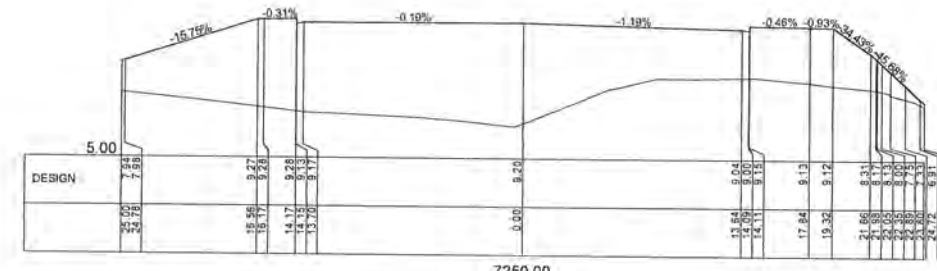
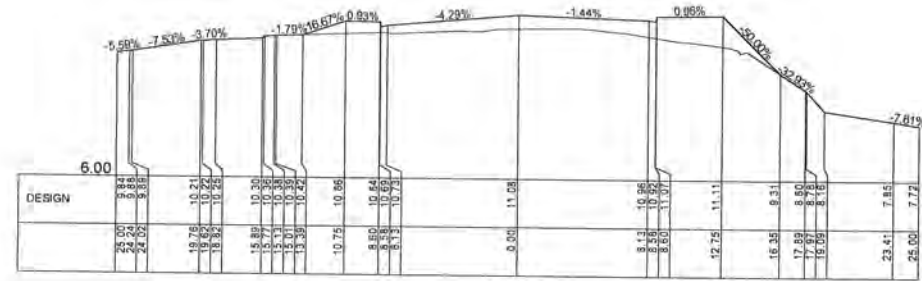


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SHEET 3 OF 8	

BALLINA SHIRE COUNCIL			
THE COAST ROAD SKENNARS HEAD ROAD			
ROUNDABOUT			
CROSS SECTIONS SKENNARS HEAD ROAD			
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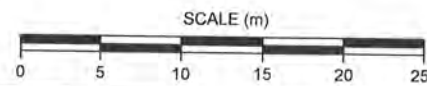
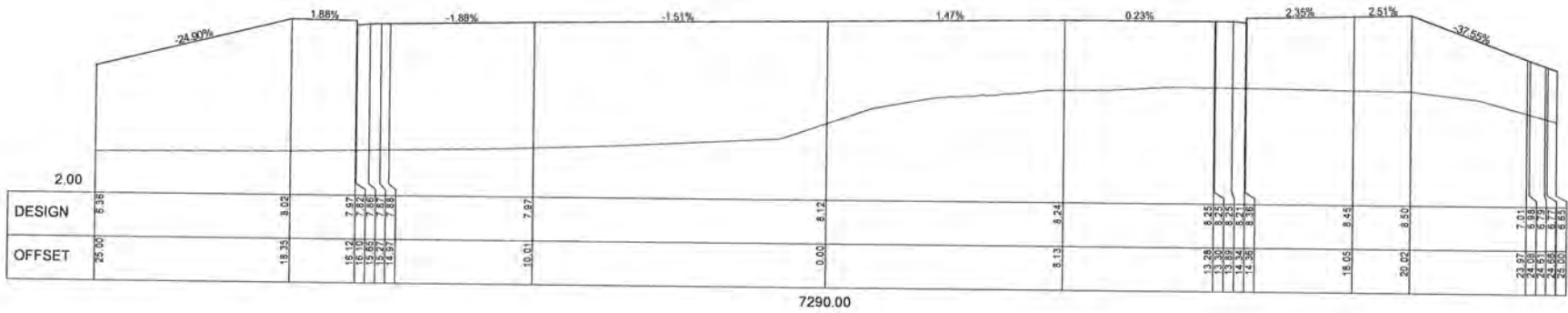
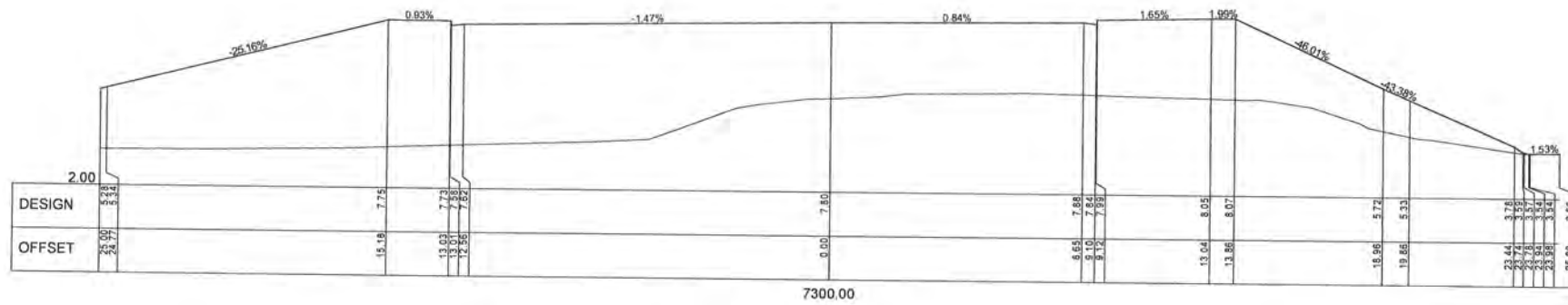
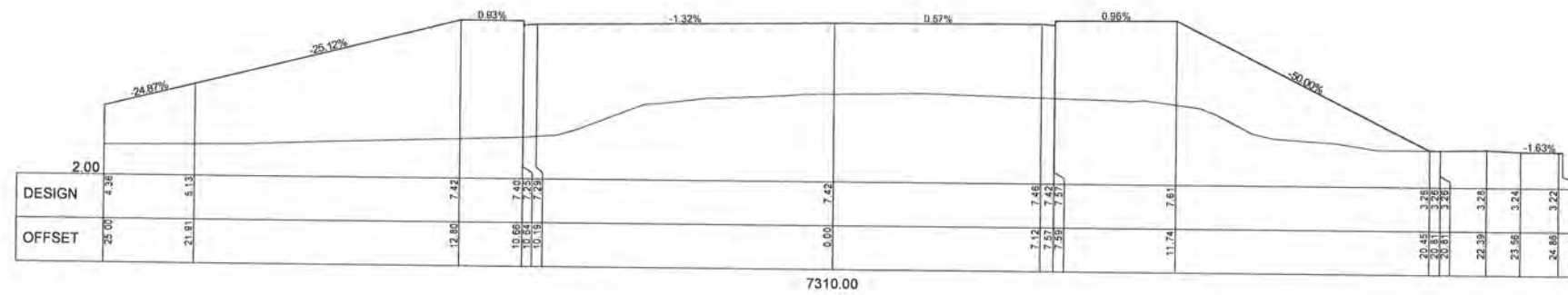


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SHEET 5 OF 8	

BALLINA SHIRE COUNCIL			
THE COAST ROAD SKENNARS HEAD ROAD ROUNDABOUT			
CROSS SECTIONS THE COAST ROAD			
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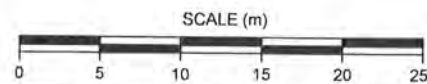
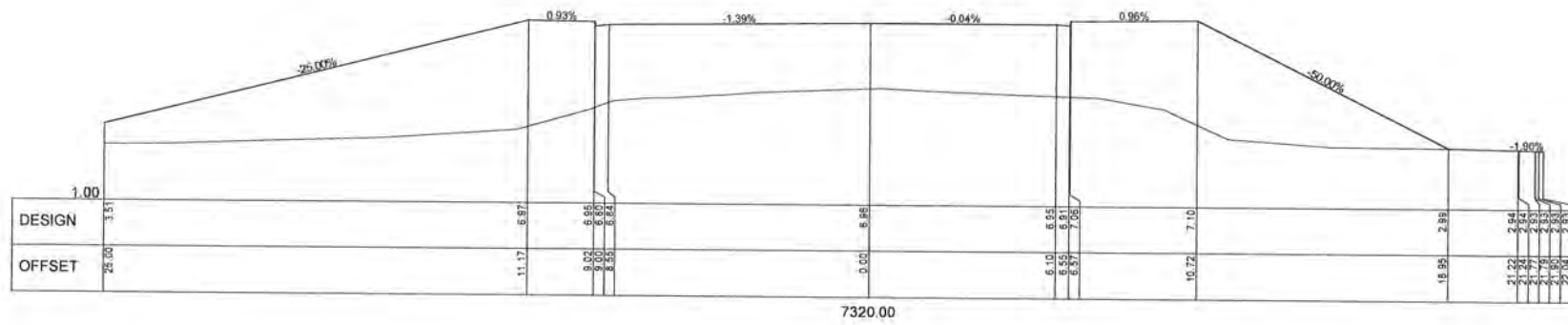
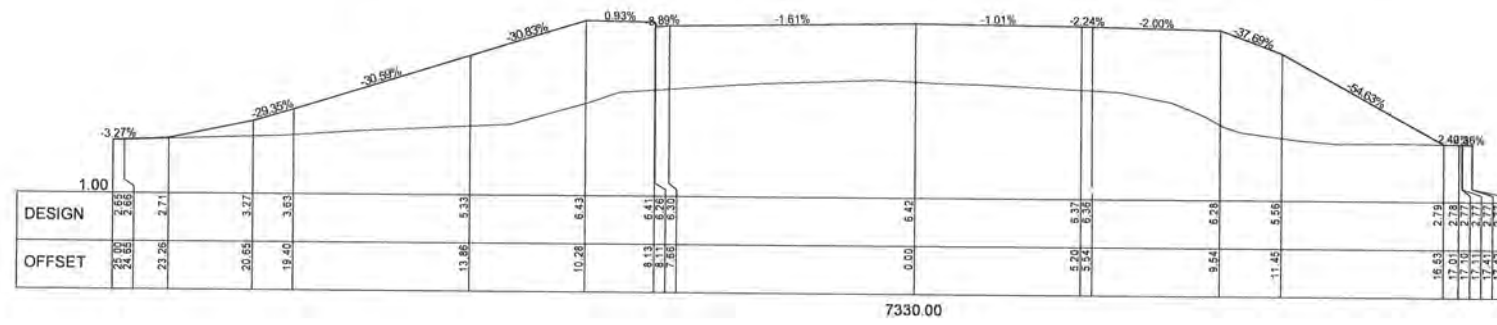
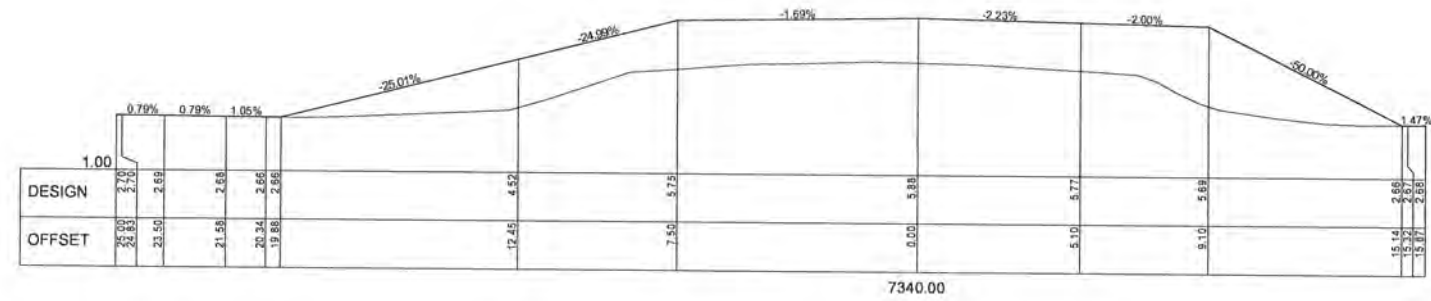


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SHEET 6 OF 8	

BALLINA SHIRE COUNCIL	
THE COAST ROAD SKENNARS HEAD ROAD ROUNDABOUT	
CROSS SECTIONS THE COAST ROAD	
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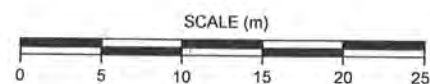
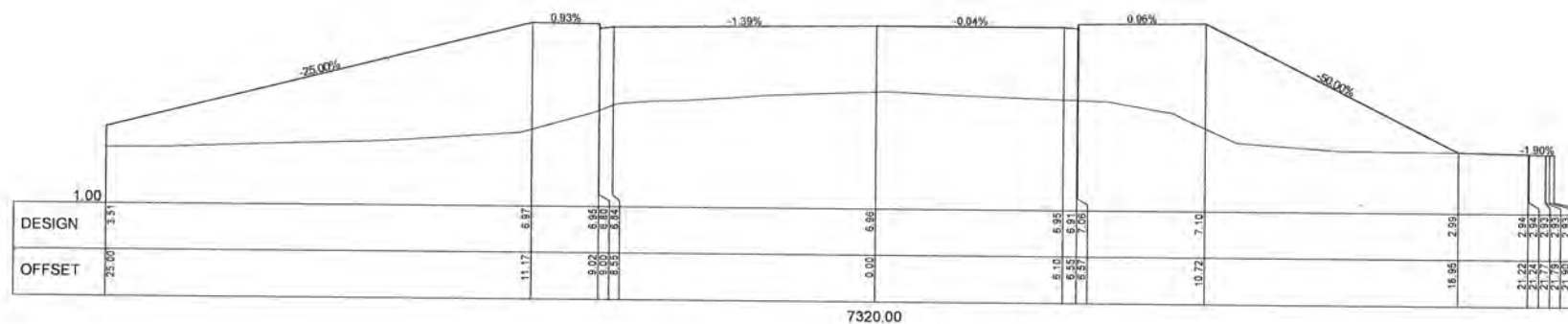
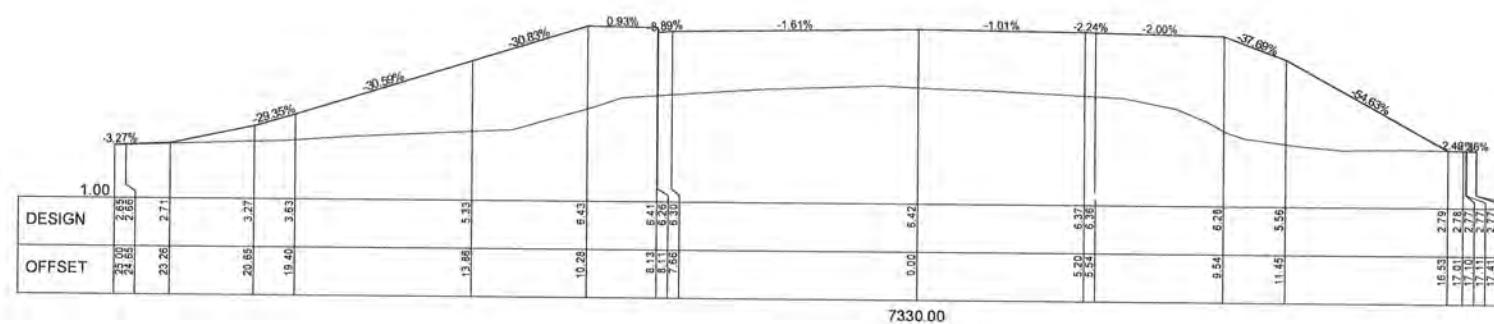


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BALLINA SHIRE COUNCIL	
THE COAST ROAD SKENNARS HEAD ROAD ROUNDABOUT	
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Plan No.	MR545/0040
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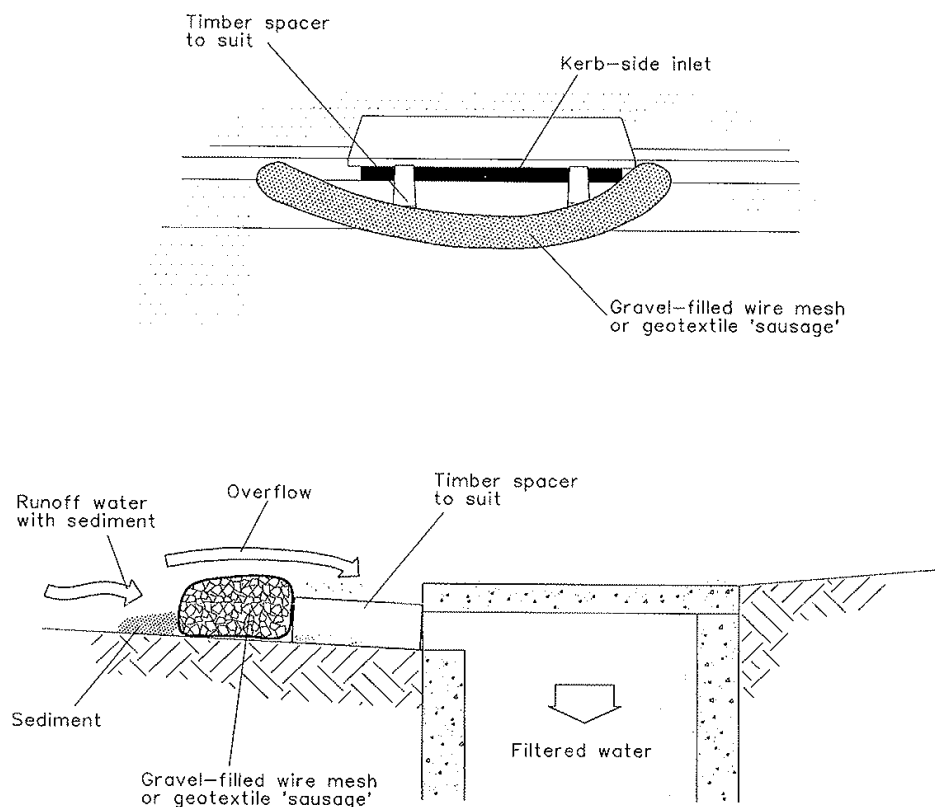
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	BALLINA SHIRE COUNCIL
	THE COAST ROAD SKENNARS HEAD ROAD
	ROUNDABOUT
	CROSS SECTIONS THE COAST ROAD

Scale	SCALE [H] 1:100 SCALE [V] 1:100	Plan No. MR545/0040	A1
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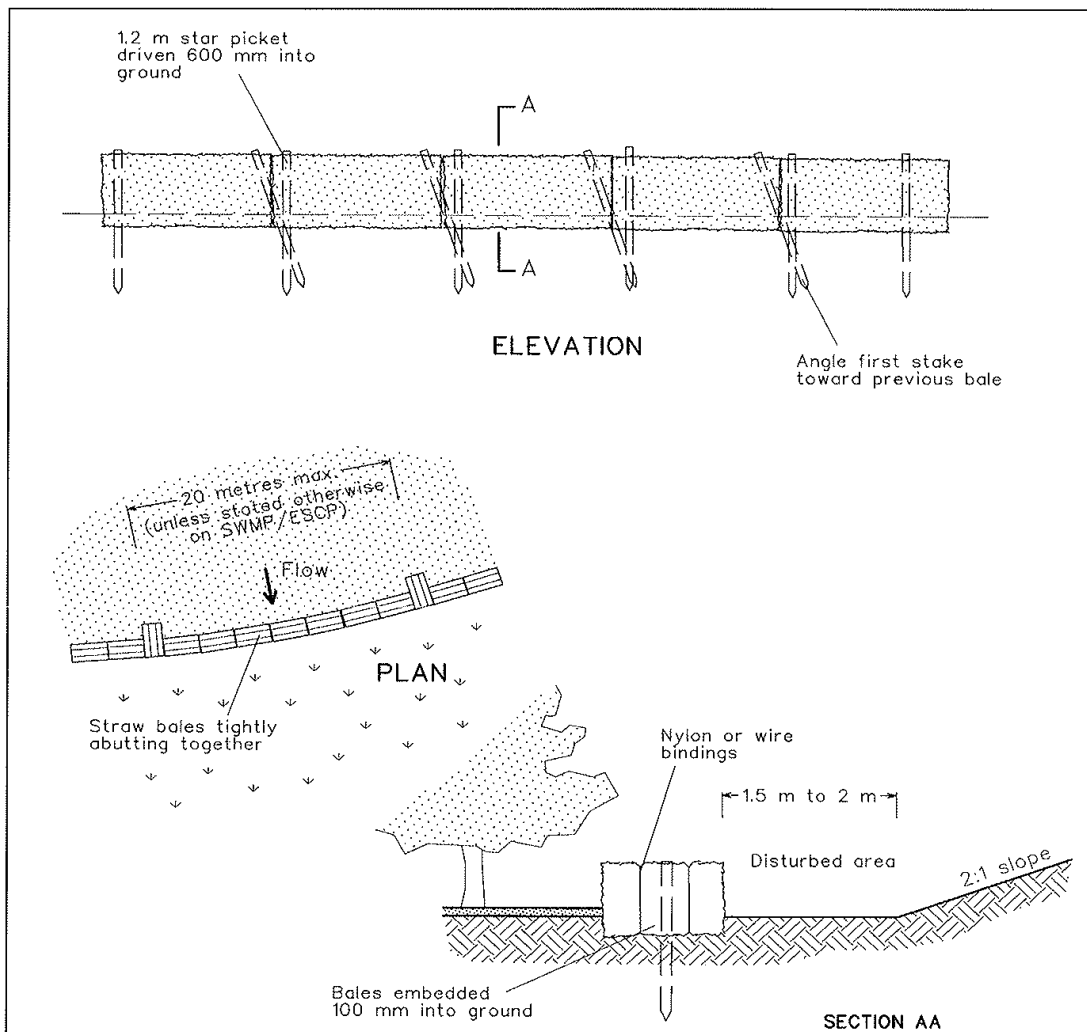
NOTE: This practice only to be used where specified in an approved SWMP/ESCP.

Construction Notes

1. Install filters to kerb inlets only at sag points.
2. Fabricate a sleeve made from geotextile or wire mesh longer than the length of the inlet pit and fill it with 25 mm to 50 mm gravel.
3. Form an elliptical cross-section about 150 mm high x 400 mm wide.
4. Place the filter at the opening leaving at least a 100-mm space between it and the kerb inlet. Maintain the opening with spacer blocks.
5. Form a seal with the kerb to prevent sediment bypassing the filter.
6. Sandbags filled with gravel can substitute for the mesh or geotextile providing they are placed so that they firmly abut each other and sediment-laden waters cannot pass between.

MESH AND GRAVEL INLET FILTER

SD 6-11



Construction Notes

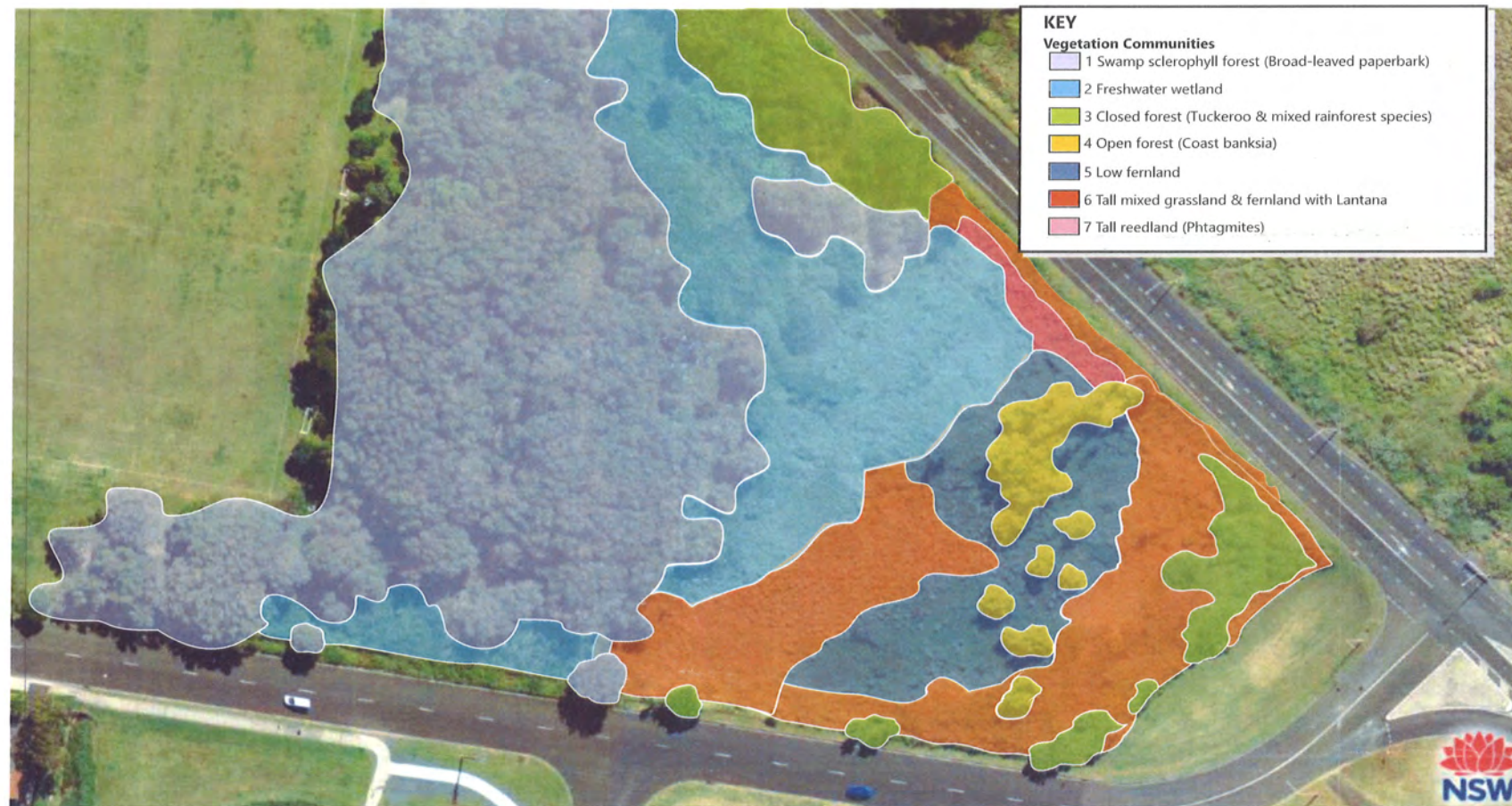
1. Construct the straw bale filter as close as possible to being parallel to the contours of the site.
2. Place bales lengthwise in a row with ends tightly abutting. Use straw to fill any gaps between bales. Straws are to be placed parallel to ground.
3. Ensure that the maximum height of the filter is one bale.
4. Embed each bale in the ground 75 mm to 100 mm and anchor with two 1.2 metre star pickets or stakes. Angle the first star picket or stake in each bale towards the previously laid bale. Drive them 600 mm into the ground and, if possible, flush with the top of the bales. Where star pickets are used and they protrude above the bales, ensure they are fitted with safety caps.
5. Where a straw bale filter is constructed downslope from a disturbed batter, ensure the bales are placed 1 to 2 metres downslope from the toe.
6. Establish a maintenance program that ensures the integrity of the bales is retained - they could require replacement each two to four months.

STRAW BALE FILTER

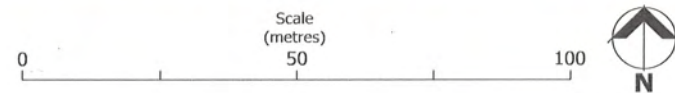
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6-35

Appendix E



DRAFT 11/8/2016



BLACKWOOD
ECOLOGICAL SERVICES
WWW.BLACKWOODECOLOGY.COM.AU



Project
Skennars Head Road/Coast Road Roundabout

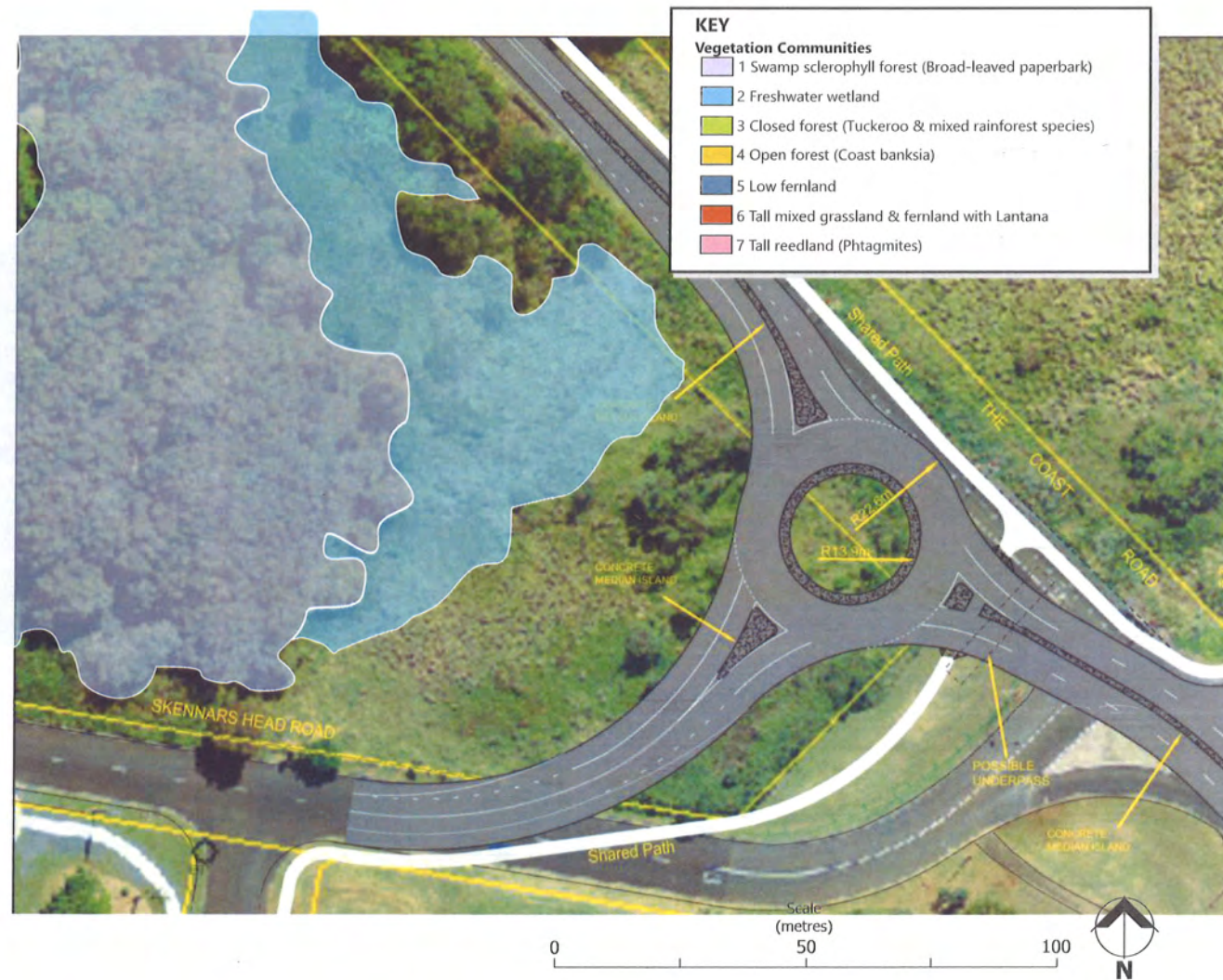
Project No.
1625

Author
MF

Date
3/8/2016

Source
NSW LPI SixViewer

Figure 3
Site vegetation



DRAFT 11/8/2016

BLACKWOOD
ECOLOGICAL SERVICES
WWW.BLACKWOODECOLOGY.COM.AU



Project
Skennars Head Road/Coast Road Roundabout

Project No.
1625

Author
MF

Date
3/8/2016

Source
NSW LPI SixViewer

Figure 3
Site vegetation

Appendix F

Environmental Management Plan Checklist

Job Location:

The Coast Road Skennars Head Road Roundabout

Environmental Plan

Compliance Checklist

Tick Box if applicable	Mon	Tues	Wed	Thurs	Fri	Sat	Sun	All Items Clear	Checked by Initials	Time	Date	Comments
<input type="checkbox"/> Silt Fencing Item Location _____	<input type="checkbox"/> am	<input type="checkbox"/> am	<input type="checkbox"/> am	<input type="checkbox"/> am	<input type="checkbox"/> am	<input type="checkbox"/> am	<input type="checkbox"/> am	<input type="checkbox"/>				
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<input type="checkbox"/> Hay Bales Item Location _____	<input type="checkbox"/> am	<input type="checkbox"/> am	<input type="checkbox"/> am	<input type="checkbox"/> am	<input type="checkbox"/> am	<input type="checkbox"/> am	<input type="checkbox"/> am	<input type="checkbox"/>				
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<input type="checkbox"/> Floating Surface Boom Item Location _____	<input type="checkbox"/> am	<input type="checkbox"/> am	<input type="checkbox"/> am	<input type="checkbox"/> am	<input type="checkbox"/> am	<input type="checkbox"/> am	<input type="checkbox"/> am	<input type="checkbox"/>				
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<input type="checkbox"/> Sediment Ponds Item Location _____	<input type="checkbox"/> am	<input type="checkbox"/> am	<input type="checkbox"/> am	<input type="checkbox"/> am	<input type="checkbox"/> am	<input type="checkbox"/> am	<input type="checkbox"/> am	<input type="checkbox"/>				
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<input type="checkbox"/> Enviro-bags Item Location _____	<input type="checkbox"/> am	<input type="checkbox"/> am	<input type="checkbox"/> am	<input type="checkbox"/> am	<input type="checkbox"/> am	<input type="checkbox"/> am	<input type="checkbox"/> am	<input type="checkbox"/>				
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CMP - CONSTRUCTION Management Plan Skennars Head Road, The Coast Road Roundabout

Legend: **P** - Pre construction, **C** - Construction, **A** - After construction,
BSC - Ballina Shire Council, **EWM** - Engineering Works Manager,
CE - Construction Engineer, **TL** - Team Leader, **F** - Foreman
REF – Review of Environmental Factors

Item	Action Strategy	Reference Document	Timing	Position Responsible	Verification (name, date & signature)
Aboriginal and Indigenous Heritage					
	<p>No reported sites are located within the work site and the proposed works consists of filling over the existing site. However due diligence by all staff is required and should any potential objects be uncovered Chapter 6 Cultural heritage Management should be implemented.</p> <p>If any potential heritage objects are unearthed the following must be undertaken</p> <ol style="list-style-type: none"> 1. Stop work immediately 2. Contact Jali Local Aboriginal Land Council & NSW Office of Environmental Heritage 3. In case of uncovering human remains contact Jali Local Aboriginal Land Council, Office of Environmental Heritage & Police 	OEH due diligence guidelines	P / C	BSC/TL/F	
Flora and Fauna					
	An erosion and sediment control plan has been developed and is to be carefully implemented on site with due regard to vegetation along the alignment.	REF	P / C	CE / F	
	An ecological assessment and compensatory plan is being prepared by Blackwood Ecological Services and is to be implemented on completion of the project	Blackwood Ecological Services revegetation plan	C/A	CE	
Soils and Water					
	Installation of Hay Bale Filters and other erosion and sedimentation controls in accordance with the Blue Book (NSW Government), for sediment containment from excavation areas and soil stockpiles.	REF	C	F	
	Hydro mulch seeding of batters, re-laying of surfaces as soon as practicable after	REF	C	F	

Item	Action Strategy	Reference Document	Timing	Position Responsible	Verification (name, date & signature)
	construction.				
	Minimising vehicle movements over exposed or unconsolidated soils.	REF	C	F	
	Minimising the area of disturbance including delineation of access, construction and storage areas.	REF	C	F	
	Inspect and maintain such as re-erect and de-silt erosion / siltation control structures weekly and after heavy rainfall.	REC	C	F	
	Maintain silt filters until the proposed activity route has been revegetated, stabilised and is no longer prone to erosion.	REF	C / A	F	
	Use of sand bags to maintain the drainage regime of the adjacent wetlands when work is done in proximity to these areas and when works is done on culverts.	REF	C	F	
Traffic					
	The RMS TCP 195 is to be used while the bulk imported fill is brought in and placed off the existing road way which will remain open. Once the bulk fill is imported traffic control plans are to be developed to direct traffic around the site. This could involve detouring traffic down Headlands Drive, and could possibly require the closure of The Coast Road for a period of time.	REF Traffic Control at Work Sites Manual	P	CE/TL	
	Consult with Council's traffic engineers for any works in local road corridor.	REF	P	CE/TL	
	Use signage to explain the temporary disruption to normal traffic movements and car parking to inform the community of the project and seek their understanding of the temporary disruption.	REF	C	CE/TL	
	Ensure that safety fencing and signage used in the construction corridor to either prohibit pedestrian access to certain work areas and / or allow safe access around work areas. Maintain these safety measures over weekends and holiday periods.	REF	C	F	
	Monitor the performance of the local road network during construction and implement required actions in response to that performance	REF	C	CE / TL	
Noise					
	Construction work would be undertaken between 7.00 am and 6.00 pm Monday to Friday and 8.00 am to 1.00pm on Saturday unless varied by Council, in consultation with residences. No work would be undertaken on Sundays or public holidays.	REF	C	F	
	Work in the vicinity of individual residences will be planned so as to minimise the time required..	REF	C	F	
	Construction equipment would be maintained to manufacturer's requirements to ensure efficient operation. When not in use, machinery would be turned off where possible.	REF	C	F	
	Where work is proposed in the vicinity of residences, affected residents would be advised of the proposed construction period.	REF	C	F	
	Noise muffling equipment would be used on noise generating equipment and	REF	C	F	

Item	Action Strategy	Reference Document	Timing	Position Responsible	Verification (name, date & signature)
	machinery where practical.				
	As part of jobs-site induction on-site, training in awareness of noise related issues at noise sensitive sties would be undertaken.	REF	C	F	
	All combustion engine plant, such as generators, compressors and welders should be checked to ensure they produce minimal noise with particular attention to residential grade exhaust silencers.	REF	C	F	
	Vehicles should be kept properly serviced and fitted with appropriate mufflers. The use of exhaust brakes should be eliminated, where practicable.	REF	C	F	
	Where practical, all vehicular movements to and from the construction site must be made only during normal working hours.	REF	C	F	
	Where practical, machines should be operated at low speed or power and should be switched off when not being used rather than left idling for prolonged periods.	REF	C	F	
	Machines found to produce excessive noise compared to industry best practice should be removed from the site or stood down until repairs or modifications can be made.	REF	C	F	
	Schedule the noisiest activities during least sensitive periods of the day where possible.	REF	C	F	
	Aim to minimise movements of equipment and mobile plant during noise sensitive periods such as early mornings.	REF	C	F	
	Where possible, without interference to safe and efficient operation, engine exhaust and noise emitting components should be orientated away from the nearest residential receivers.	REF	C	F	
Air Quality					
	Machinery is to be maintained to manufacturers' requirements to minimise exhaust emissions.	REF	C	F	
	Turning vehicles and machinery off when not in use.	REF	C	F	
	Minimising the area of exposed soils where possible.	REF	C	F	
	Ceasing work or increase water spraying if considerable visible dust is generated and windblown in the direction of nearby sensitive receptors.	REF	C	F	
	Delineating area of disturbance to limit the potential for dust generation.	REF	C	F	
	Water spraying of exposed soils and stockpiles, where required.	REF	C	F	
	Where stockpiling is required, the quantity would be minimised.	REF	C	F	
	Temporary covering of stockpiles if required.	REF	C	F	
	Minimising vehicle movements over exposed areas or unsealed surfaces.	REF	C	F	
		REF	C	F	
Waste					
	Ordering materials as close as possible to the required quantity to avoid oversupply of waste.	REF	C	F	

Item	Action Strategy	Reference Document	Timing	Position Responsible	Verification (name, date & signature)
	Minimising use of packaging materials and where possible returning packaging products.	REF	C	F	
	Promoting efficient use of resources.	REF	C	F	
	Undertaking a daily site clean-up and managing waste in accordance with the waste reduction hierarchy of avoidance, reduce, re-use and recycle.	REF	C	F	
	Any green waste containing native trees would be mulched and removed from site or if appropriate stockpiled temporarily and then used in soil stabilisation and rehabilitation of disturbed areas.	REF	C	F	
	Any green waste containing weeds would be stockpiled separately and disposed of at a licensed waste management facility.	REF	C	F	
	A portable toilet would be provided on site and would be emptied as appropriate by a licensed contractor.	REF	C	F	
	Excavated material, including rock and dirt, and ballast will be reused on site where suitable.	REF	C	F	
	Material unsuitable for reuse on site will be disposed of at a licensed waste management facility.	REF	C	F	



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